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Private Equity Challenge – Capital Structure

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Abstract

CVS Group plc is a leading British veterinary service provider and an ideal LBO target. It operates in a strong growing market with a great positioning and shows great value creation potential. By creating value via buy and build, a growing membership program as well as leveraging the online retail unit, fund returns of 3.4x can be achieved within five years. Given the economic uncertainty, this is based on a defensive financing structure with only 5.5x EBITDA on a 13.9x EV/EBITDA valuation. These returns can be realized in a secondary buyout, given the high interest of investors in that market.

Keywords

Private Equity, Leveraged Buyout, Veterinary Services, Value Creation

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1.0 Group part

We have chosen to scrutinize CVS Group PLC as a potential LBO target, because of its strong positioning in a fast-growing market, great target size, strong potential for value creation, its experienced management team as well as great exit routes. In the following, we present every aspect in detail, starting with the company, followed by a market overview. Followingly, we present the developed value creation strategies as well as the resulting LBO model and the valuation including capital structure and returns. To realize these returns, we present the key areas of due diligence, as well as the exit options. For further details please refer to the accompanying excel model as well as Investment Committee Paper.

1.1 Stage 1

1.1.1 Company Overview

CVS Group is one of the leading integrated veterinary service providers to companion, equine and farm animals in the UK. Headquartered in Diss (UK) and founded in 1999, CVS employs 7,913 people (2022), including 2,079 veterinary surgeons and 2,839 nurses, and generates revenue of £554.2m in 2022. With most of its veterinary practices located in the UK (428 out of 472) together with its 7 crematories and 3 laboratories, CVS has great geographical coverage which is further enhanced by an online pharmacy, food, and accessory shop. Besides the UK, CVS operates 17 practices in Ireland and 27 practices in the Netherlands.

The group operates in four business segments of which “Veterinary Practices” generates the biggest share of revenue (85.5%, +8.5% growth from 2021 to 2022), followed by “Animed Direct” (8.1%, +11.8% growth from 2021 to 2022) which is the online pet food and pharmacy retailer, “Laboratories” (4.7%, -2.9% from 2021 to 2022) and “Crematoria” (1.7%, +18.8% growth from 2021 to 2022).

The biggest business unit (Veterinary Practices) generates most of their revenue from treatment of equine, companion and farm animals in first-opinion and referral practices. Among others,

CVS' own brand products (nutrition supplements, prescription only medicine, pet accessories and pet food) and health care schemes are accompanying activities that boost and diversify the business unit's revenue. Their two healthcare schemes offer preventative healthcare for companion animals or equine: "Healthy Pet Club" reports 470,000 active members (450,000 in 2021, +4.4%) which accounts for c. 40% of CVS' active client base and "Healthy Horse Programme" reports 10,000 members. With over 1.2m initial touchpoints with customers (1.1m in 2021), CVS is therefore able to treat animals directly, refer them to specialty practices, receive follow-up work from initial touchpoints or even grow their customer base for their healthcare schemes.

CVS's Online Retail business unit, which accounts for 8.1% of total revenue, grew tremendously in the last year (+11.8%). Through their retail platform "Animed Direct", CVS sells a portfolio of over 2,000 products, including pet food, medication, and accessories across the UK. In the financial year 2020, the business benefited largely from Covid-19 lockdowns since consumers were forced to switch from offline to online retail. Even though offline retail opened again later, CVS' good customer service allowed to retain a high number of these new customers in the following years, together with an incline in value per customer.

CVS' laboratory business was the only business unit which faced a slight decline in revenues (-2.9%) after having a sharp incline in revenues from 2020 to 2021 (+32.7%). The business unit provides in-practice desktop analyzers and diagnostic services to CVS' practices and to third-party customers. In the financial year 2022, this business unit performed 445,000 tests, which shows a slight decline in comparison to 497,000 performed tests in financial year 2021.

CVS' crematory business, which offers services for both CVS and third-party practices, grew by 18.8% in financial year 2022. The services range from clinical waste disposal to communal and individual cremation. The latter gained attractiveness in the past years since customers can step away from low-budget procedures to luxurious versions including pickup, golden urns, a

variety of casquets and consideration of final wishes.

The variety of service offerings around the business model's core of first opinion practices makes CVS a fully integrated veterinary platform that allows top-notch end-to-end care and can maximize the transaction value per customer. When looking at the whole business, 74% of revenues come from one-time sales which are mainly sales of veterinary services, and 26% are recurring revenues. CVS generates recurring revenue via the lease of analyzers and their two preventative healthcare schemes.

CVS has several advantages in comparison to their competitors, the first one being the only veterinary service provider with a fully integrated business model and own labs in the UK. The latter is a business with high entry barriers due to the highly specialized work which is a clear advantage for CVS. Furthermore, the strong geographical coverage grants customers access to high-quality veterinary care in the form of first-opinion and referral hospitals. Their successful M&A history allows for deployment of synergy effects, greater buying power and thus an increase in margins. Since consumer preferences are continuously shifting towards the online channel, CVS' online retail platform together with their own branded products reveal immense potential for future growth. Lastly, their sophisticated graduate program together with retention bonuses enables CVS to be successful in the war for talent in the long run even though the UK healthcare market has been threatened by a veterinary shortage.

On the financial side, CVS has been able to grow total revenues by 18.7% per year, namely from £108.7m in 2012 to £554.2m in 2022 and their EBITDA by 16.8%, from £22.7m in 2012 to £107.4m in 2022. While CVS' gross margin increased steadily from 36% (2012) to 44% (2022), EBITDA margin remained stable at 18.4% on average. Until 2019, an aggressive M&A strategy, aiming at increased geographical coverage, was in place. Even though it was successfully executed and the growth driver behind CVS' returns, the newly installed management shifted the focus to organic growth after the market heated up and acquisition

strategies became less profitable.

1.1.2 Market Overview

CVS' product and service offerings range over several markets within the veterinary sector. The total addressable market in the United Kingdom amounts to £17.9b and is expected to grow at a compounded annual growth rate (CAGR) of 8.4% from 2022 to 2027. It is composed of the equine market, which amounts to £4.7b, the laboratory market (£3.4b), the crematory market (£0.1b) as well as the addressable pet care market (aPCM). The aPCM itself consists of the following markets: pet food (£3.1b), veterinary activities (£5.4b), accessories (£1.0b) as well as grooming (£0.2b). Since all markets are expected to grow at different CAGRs, the overall CAGR of 8.4% is computed as the weighted average of all single market CAGRs. The strong market growth is driven by several factors, foremost the increased willingness of people to spend money on the health of their pets. This is due to the increasing humanization of pets; people tend to treat their pets as family members. As a result, they are more willing to buy high quality food, accessories and specially to finance high quality diagnostics and treatments. This trend was strong before the Covid-19 pandemic but is even increasing since people spend more time at home and want a companion, not to feel alone. This also leads to an increase in registrations for pet insurance schemes, which allows pet care providers, such as CVS, to generate stable recurring revenue. The value creation chapter describes how CVS can exploit this growth after the acquisition. Furthermore, the online retail market, in which CVS is present with "Animed direct" is experiencing solid growth, due to the shifting consumer preference from in-store to online purchases of anything that does not require consultation.

However, there are also restraints harming the market growth. In the past, the number of pets increased faster than the number of veterinary professionals, leading to a shortage of doctors and a high pet per doctor ratio. For the employing pet care companies this led to an increasing labor cost – if they could even find vets to employ – which made it difficult for the players in

the market to exploit the full market potential. Furthermore, even though Covid-19 boosted the pet market, the resulting economic uncertainty, which was further increased by the energy crisis, inflation, and the fear of an upcoming recession, lowers spendings for non-essential products and services. While households that already have a pet might still spend money on pet care, the purchase of new pets may decrease.

International markets

Next to the UK, all four business segments are also expected to grow significantly across Europe. The overall pet care market in Europe is valued at £32.4b and is expected to grow at a CAGR of 4.0% until 2027. Moreover, the international market is driven by the United States and the APAC region. The worldwide market is valued at £183.0b and is expected to grow at a CAGR of 5.6% until 2028. The North American market alone accounts for 34% of that (£62.2b). Given the international buy and build strategy described in the value creation chapter, the most important market outside of the UK for the investment period is going to be France. While the French market does not show the biggest growth expectations (Size: £ 4.5b; Growth: 3.2% CAGR until 2027), it is defined by comparably low consolidation, 19% of all practices belong to one of the 12 major companies (consolidators). Furthermore, pet care spendings per person are among the highest in the world.

Competitive landscape

Among the UK, four players define the competitive landscape next to individual practices.

IVC Evidensia is owned by EQT, a Swedish PE fund, since 2014, where it was acquired as IVC. In 2017 IVC was combined with Evidensia, to form one of Europe's biggest pet care providers. In their 2,300 clinics across Europe, the 28,000+ employees offer a broad spectrum of pet care products, veterinary services, crematories as well as pet insurance programs. In 2021 IVC Evidensia started internationalizing in North America, by acquiring 270 practices and clinics (4,000 employees) in Canada. In 2021 IVC Evidensia generated £1.8b revenue and

£373m EBITDA, which results in an EBITDA margin of 20.7%.

Pets at home is a publicly traded competitor that derived from in-store and online retail and has entered the veterinary market in the UK. It was acquired by Bridgepoint in 2004, sold to KKR in 2010 who brought it to the public market in 2014. It generated £1.3b revenue in 2021, with over 80% of that coming from retail. The EBITDA in 2021 was £70.8m resulting in an EBITDA margin of 5.4%, due to the high retail focus. Pets at home reward customer loyalty with pet insurance schemes (1.5m registrations) and a frequent buyer bonus club (6m registrations).

VetPartners was established in 2015 in York, UK, with three veterinary practices. Today it is owned by BC Partners, a London based PE-fund and runs 163 practices with 7,500 employees across the UK. In 2021, VetPartners generated a revenue of £430.6m and an EBITDA of £88.9m resulting in an EBITDA ratio of 20.6%. It offers veterinary services, an online retail store called VetUK and crematory facilities (“Time Right”) across Europe. Unlike other large players, the veterinary practices who are acquired by VetPartners get to keep their brand to maintain the local identity.

Lastly **Medivet** is a smaller veterinary care provider focused on the UK. It was founded in 1987 and is today owned by the PE fund CVC. Medivet generated £220.3m revenue in 2021 on an EBITDA ratio of 19.1%, resulting in 2021 EBITDA of £42.1m.

Amongst all, CVS is the third biggest, but offers the most integrated approach by offering services among their veterinary, crematory, laboratory, and online retail unit. Furthermore, CVS is the only competitor without any PE involvement.

1.2 Stage 2

1.2.1 Value creation

As explored in the previous chapters, CVS is a very promising company which reported constant growth across all four business units. They proved to be able to successfully implement strategic redirections and still have potential to make use of the overall market growth in all four business units due to their unique and therefore excellent market positioning. The strategy for value creation over the proposed 5-year investment horizon consists of three pillars that drive both organic and inorganic growth.

Buy and build

The first pillar describes the inorganic European internationalization strategy that creates £26.1m additional EBITDA which contributes +0.3x MM to the exit in 2027. Two of the rationales behind the strategy are to lever the network of veterinary practices outside the UK to expand geographical footprint and to exploit cross-selling opportunities and margin internalization. After looking into several geographically close European markets like France, Germany, Italy and Belgium, France appeared to be the most attractive one for the upcoming five years. The other markets remain to be interesting opportunities for further growth and internationalization after the successful expansion to France. France sticks out in terms of attractiveness due two factors: solid market growth expectations of c. 3.2% (CAGR 2022-2027) and comparably low consolidation rate of c. 19%. To expand to France, a platform acquisition of “Centre Hospitalier Veterinaire Fregis” plus selective acquisitions of stand-alone practices are planned. Including the platform, CVS would therefore acquire 15 practices per year and the average EV/EBITDA multiple on acquisitions is expected to be 7.0x in the investment case and 7.7x in the bank case. Since the acquired EBITDA will be valued with 13.9x when CVS is being sold, it allows for multiple arbitrage. Besides the objective to establish a footprint in France, selective acquisitions are also planned for the UK to strengthen CVS’ brand name and

market share. This ambition is not as strong as in CVS' past since advanced consolidation and regulatory restrictions are harming great numbers of acquisitions there. The total value creation of this first value creation pillar would then account for £26.1m EBITDA growth and +0.3x MM accounts for 15.1% of total value created during the investment period.

Membership Programs

The second pillar, namely the Membership Programs ("Healthy Pet Club"), generates an EBITDA growth of £48.8m during the investment period. The growth can be split into two actions with one being the increase in active members, which accounts for EBITDA growth of £21.4m, and one being the introduction of an add-on service, which generates EBITDA growth of £27.3m. Together, this second pillar contributes 0.6x MM throughout the entire holding period. The rationale behind this pillar is firstly, that active members only account for 40% of companion animal active client base of c. 1.2m in 2022. Even though count of members grew at a CAGR of 11% between 2016 and 2022, CVS still has enough space to exploit this growth potential, especially since they are planning further inorganic and organic growth which even increases the potential for new memberships. Since the membership increases customer loyalty and retention while generating steady recurring cash flows, growing and expanding the offering is a logical step for CVS' growth story. Growth of memberships is planned to be accelerated by advertising and temporary discounts for new joiners to increase conversion into the program. Estimated total marketing expenses of £10.0m during the first three years are deducted from the projected revenue growth. Besides growing the number of members, the second value creation pillar also includes introducing a new add-on offering: 24/7 emergency hotline. With this new offering, CVS' focus on healthcare treatment will be reinforced. The new service will cost additional £2.99 per month and includes online veterinary consultation at any time. With an adoption rate of c. 50% of current and new customers, this offering makes CVS unique and sets it apart from competitors, strengthens its healthcare focus and positions the group as an

innovative service provider. The estimated additional marketing costs of £10.0m are deducted from the membership's returns during the first three years. Each of the two building blocks will generate an additional +0.3x MM in value creation which together accounts for 28.2% of total value created during the investment period.

Online retail

The third pillar is grounded in CVS' second biggest business unit, online retail. Since consumer preferences are increasingly shifting towards online purchases and away from offline purchases, and in-store purchases will be surpassed by online ones by 2025, growing the online shop further will enable both long- and short-term growth and stability for CVS. The strategy is backed by the favorable UK pet care e-commerce market which is expected to grow at a CAGR of 11.3% until 2027. Four actions are defined to achieve this growth, the first one being an VIP online program and subscription models to strengthen the customer base. The program allows customers to earn bonus points which can be later used as discounts. Furthermore, VIP customers will be granted first access to promotions and their pets will receive a birthday gift every year. Personalized subscription models for pet food will increase convenience drastically while generating recurring revenue for CVS. This more loyal customer base is expected to increase their value per customer since CVS will expand the product offerings by e.g. adding premium products of higher quality. Lastly, enhanced customer loyalty will make it easier for CVS to cross-sell to their veterinary services and the other way around. Retail booths with top sellers will be placed in big practices to increase awareness and convert more veterinary service clients to online shop customers. The increased marketing efforts are incorporated in the model. Lastly, cultural change within the company needs to be accelerated by a cultural change coming from new experienced hires. With that, CVS will take the next step in getting closer to their vision of being one of the leading pet care online retailers. Overall, the online shop growth generated additional £1.7m EBITDA which equals +0.02x MM and 1.0% of total value

creation. Even though the short-term effect is modeled defensively and thus is limited, a grown online shop will enhance CVS' exit story and will still leave room for improvement.

1.2.2 Operating model

In the following paragraph, the structure of the operating model, the assumed planning logic and the most crucial assumptions will be explained and set into context. This section aims to cover the most relevant aspects; however, it is not sufficient to fully explain every single detail of the operating model. The operating model is set up in a structure that allows the group to develop and plan the financials of the firm's business divisions individually and in the most exact and intuitive way. For each one of CVS's divisions (veterinary, laboratories, crematoria and online retail) individual logics and assumptions were applied. The planning horizon starts with the first year 2023 (i.e. Jul. 2022 – Jun. 2023) and ends in 2027. Even though the model is modelled until 2031, we only focus on the first 5 years since this is the time horizon assumed until the fund expects to exit the case.

The revenue of the veterinary division is calculated as revenue per practice. At the end of 2022 (base year) CVS has 472 practices generating £1.0m revenue per practice on average. Revenue growth is determined by two factors. The number of veterinary practice acquisitions and the revenue growth expectation of the existing veterinary practices. Between 2023 and 2027 it is assumed that CVS acquires 75 additional practices. To account for the fact that the planned acquisitions will be executed throughout the year and not all at the beginning of the financial year, it is assumed that only 50% (time factor) of the acquired 12-month revenue contributes to CVS's total revenue in the first year of acquisition. After the first year 100% of its revenue can be realized and revenue per practice will grow in line with the revenue per practice of the existing practices. Growth of revenue per practice equals the weighted expected veterinary market growth rate (CAGR '22-'27) and amounts to 9.4% p.a. In our model, the revenue generated by veterinary practices includes the revenue CVS generates through its several

membership programs like the Healthy Pet Club. This membership program generated revenue of £67.3m in 2022. As part of our value creation strategy, we identified the opportunity to increase revenue and grow the value of CVS by expanding the membership programs in its size (i.e. increasing the share of members in the active customer base, which has been stable at c. 40% during the past years) and increase the revenue per member. Since the published financial statements and reports of CVS only publish the generated revenue of the membership programs but not the associated costs, we decided to assume a base case for the share of active membership in the customer base (40%) and the realized revenue per customer to add the additionally generated revenues and costs to the profit and loss statement. We set up a separate and simplified P&L statement for the newly created 24/7 emergency hotline which is a highly profitable add-on service to the existing membership programs and will contribute additional EBITDA to the group. Revenue and expenses were finally added up to the main operating model.

Revenue of the laboratory business is modelled based on revenue per test in 2022 and amounts to £58.9 for 445,000 tests performed. Expected growth rates for revenue per test equals weighted expected inflation rate for CVS's core markets (UK, Netherlands, Ireland, France) and amounts to 8.5% in 2023 and declines steadily to 2.1% in 2027. The growth rate for the number of tests performed equals the expected market growth of the veterinary market CVS operates in. For the revenue of the crematory division an annual growth rate of 12.0% has been derived from market studies and is applied throughout the whole investment period.

Online retail revenue is modeled as average revenue per customer multiplied with number of customers. Starting with the year 2022, revenue per customer grows with the weighted expected inflation rate for CVS's core markets while the number of customers grows with the expected market growth of 8.3% p.a.

For all four divisions, the historic EBITDA margin has been calculated and used as a basis to

calculate total operating expenses and SG&A for each division. In the investment case, EBITDA margin for the veterinary and laboratory division is expected to improve by 0.8% p.a. compared to the last year. Expenses for depreciation and amortization (D&A) are calculated as a percentage of revenue. In the past three years D&A rate of revenue amounted to 9.6%. This rate is carried forward with an annual improvement of 1.0%. Other expenses and costs relating to business combinations were evaluated historically and modelled for the investment period in a plausible and conservative approach.

In total, revenue of CVS grows by 15.9% annually from £544.2m in 2022 to £1,160.6 in 2027. At the same time EBITDA grows by 21.2% annually from £107.4m in 2022 to £280.5m in 2027.

Working Capital has been modelled based on the group's average "days inventory outstanding" (DIO), "days sales outstanding" (DSO) and "days payables outstanding" (DPO) of the past three years. No working capital metric improvements have been assumed. Maintenance capex, which is used by the firm to maintain the profit, has been derived as percentage of revenue over the past three years and amounts to 1.9% p.a. Expansion capex, which is used by the firm to increase profit (i.e., investments in new sites, relocations etc.) has been derived as percentage of revenue over the past three years and amounts to 1.7% p.a. For both, no improvement is assumed. Acquisition capex, which is used to acquire new practices has been determined by applying an EBITDA multiple of 7.0x to the acquisition targets. In total, free cash flow of CVS grows by 29.1% annually from £45.7m in 2022 to £163.8m in 2027.

1.3 Stage 3

1.3.1 Valuation

In the following, we explain the methods we used to arrive at our overall valuation result of 13.9x EV/EBITDA and the results of the individual methods. The three most common methods were used to value CVS Group plc. These methods include the relative valuation and within this the Comparable Company Analysis (CCA) and the Comparable Transaction Analysis (CTA) as well as the intrinsic valuation method and within this the Discounted Cash Flow method (DCF).

To apply the CCA, we screened various databases and websites for comparable publicly traded companies. By doing so we identified 12 true comparable companies of which eight are in the primary industry of veterinary services, two within medical products and two within online pet supplies/pharmacy. The selection of the trading comparable aims to best cover CVS' diverse business model. The trading comparable indicates a maximum EV/Sales of 6.0x (Vimian Group), minimum of 0.5x (Patterson Companies), mean of 2.0x and a median of 2.0x. For the EV/EBITDA multiple the following numbers were obtained: maximum of 20.8x (Vimian Group), minimum of 6.4x (Pets at home), mean of 13.0x and a median of 12.2x. For the second part of the relative valuation, we looked at comparable transactions for the past five years. Therefore, we screened various databases and websites such as Reuters, Cision and other more general news websites for past relevant transactions. Thereby we identified ten relevant transactions ranging from 2017 until 2022. These transactions include both financial and strategic buyers from the universe of buyers and are all in the primary veterinary services industry. The CTA indicates a maximum EV/Sales ratio of 6.2x (nutravet (UK) limited) in 2020, minimum of 1.1x (Greencross) in 2018, mean of 3.1x and a median of 2.8x. For the EV/EBITDA the following values were obtained: Maximum multiple of 20x (Vetone) in 2021, minimum of 9.0x (Perrigo) in 2019, mean of 14.6x and a median of 14.1x. The CTA results in

higher median multiples than CCA, which can be traced back to the control premiums paid in the acquisitions.

The intrinsic valuation method applied is the discounted cash flow method. To determine the implied EV, several assumptions had to be made about the discount rate as well as the terminal value. To apply the method, the Unlevered Free Cash Flows (UFCF) were taken from the operating model. A crucial factor of this method is the discount rate and since we used UFCF, the weighted average cost of capital (WACC) was chosen. The calculation of the cost of equity is based on the Capital Asset Pricing Model (CAPM), where the Risk-free Rate (RFR) is the UK 10Y Government yield, the Market Risk Premium (MRP) the average of the UK Equity Market Premium during the last six months and Leveraged Equity Beta (LEB) is based on the average of the last five years' financial data. We have assumed that although the capital structure will change over the years, the LEB will remain the same as the inherent business risk increases over the years due to the high volume and complexity of strategic add-on acquisitions. Taken those thoughts into account the cost of equity is 9.4% (RFR (3.5%), MRP (6.0%), LEB(0.99)). For the cost of debt, we took the average from November's 2022 SONIA (2.6%) and the average credit costs. For the average credit cost (1.5%) the average interest rate between 2021 and 2022 was taken from CVS' annual report 2021/2022. Those numbers totaled to cost of debt of 4.08%. As a last step the tax rate was assumed to be 19.0% and to remain at that level for the next years and a risk-adjustment of 1.7% was added as a lump-sum adjustment to account for the risky expansion, growth strategy, international supply chain and political uncertainties. Those figures lead to a WACC of 8.5% for 2023, 8.6% for 2024, 8.6% for 2025, 8.8% for 2026 and 9.0% for 2027. The UFCF were then discounted with the respective discount rates. For the terminal value three methods were applied the Gordon Growth (GGM), Trading and Transaction multiple. For the GGM the expected growth rate is 1.0% which equals the expected GDP growth rate for UK from 2024 onwards. For the Trading (16.3x) and Transaction (18.0x) EV/EBITDA multiple the

75th percentile figures were applied to account for CVS' high profitability resulting from its strong integrated value creation and customer offerings. Those figures led to an EV in the forecasted period of £389m. The terminal value amounts to £1,594m when using the GGM, £3,448m using Trading and £3,797m using Transaction multiples. The overall EV is therefore £1,983m when applying GGM, which leads to an EV/EBITDA multiple of 18.5x.

Using the average EV of the three presented valuation methods we derived an EV for CVS of £1,489m. This leads to an EV/EBITDA multiple of 13.9x, on which we base our further LBO valuation.

1.3.2 Leveraged Buyout

Financing structure

As it is the typical private equity approach, the acquisition of CVS is modeled as a leveraged buyout. This suggests a high usage of debt to improve the return on equity, however the debt ratio is also subject to market conditions. Therefore, we have chosen a more conservative approach with 5.5x EBITDA debt on the described 13.9x EV/EBITDA multiple (D/V of 37.5%) in the light of a possibly upcoming recession and increasing interest rates. Total sources and uses amount to £1,578.0m and are split on the sources side amongst debt and equity as well as the enterprise value and arising fees on the uses side.

Sources of Funds	£ M	x EBITDA	%	Uses	£ M
Debt					
<u>Senior debt</u>				EBITDA 2022	107.4
Term Loan A	128.9	1.2x	8.2%	Multiple	13.9x
Term Loan B	171.8	1.6x	10.9%	Enterprise Value	1,488.7
Term Loan C	171.8	1.6x	10.9%	Cash	49.0
<u>Subordinated debt</u>				Debt	84.3
Mezzanine	118.1	1.1x	7.5%	Net debt adjustment	35.3
Total debt	590.7	5.5x	37.4%	Lease liabilities	104.5
		TRUE		Pensions	5.9
				Total other adjustments	110.4
Equity				Equity Purchase Value	1,343.0
Fixed Return Instrument	895.6	8.3x	56.8%		
Ordinary Equity	91.7	0.9x	5.8%	Total Fees	6.0%
Institutional Ords	80.7			IB	2.0%
Sweet Equity	11.0		12.0% of ordinary shares	DD	1.0%
Total Equity	987.3	9.2x	62.6%	Arrangement Fee	1.0%
Total sources	1,578.0	14.7x	100.00%	Banking Fees	2.0%
				Total Uses	1,578.0

Figure 1 Sources and Uses

The debt is split between three senior tranches, Term loan A to C as well as a mezzanine part.

Term loan A (1.2x EBITDA) has a term of 6 years and is amortized over the years. The amortization is split into 0% in the first year, 15% in the second year, 20% in the third and fourth year, 25% in the fifth year as well as 20% in the sixth and last year. The interest rate amounts to 7.8% based on the five-year swap rate and a 4.0% margin. Term loan B and C (both 1.6x EBITDA) have a term of 7 and 8 years and are structured as a bullet loan, that only pays interest during the period. The interest rates on Term loan B and C amount to 7.9% and 8.2% respectively. The Mezzanine debt accounts for £118.1m (1.1x EBITDA) and is paid a total interest of 13.7% (5.7% cash and 8.0% PIK). Total debt therefore amounts to £590.7m, 5.5x EBITDA.

The total equity sums up to £987.3m and is split between ordinary shares and the fixed return instrument. The ordinary shares account for £91.7m and are divided into the institutional strip and sweet equity, which is supposed to incentivize the management team to achieve the desired targets. The (non-) executive management team is paying £11m for 12.0% of the ordinary shares, with the aim to achieve close to £300m exit proceeds for the management.

Name	Salary in £k	Shares	Value of shares in £k ¹	Expected contribution in £k
Richard Fairman	821.0	29,462.0	709.4	2,843.0
Robin Jay Alfonso	534.0	2,000.0	48.2	1,435.6
Benjamin David Jacklin	610.0	5,446.0	131.1	1,716.1
Richard Connell	116.0	164,500.0	3,960.6	4,261.2
Deborah Kemp	47.0	6,559.0	157.9	279.1
Richard Gray	45.0	5,000.0	120.4	237.4
David Wilton	37.0	5,500.0	132.4	227.6
Sum	2,210.0	218,467.0	5,260.0	11,000.0

Figure 2 Sweet equity contribution and distribution

Note 1: Based on the share price of the 24.11.2022 as well as a 20% acquisition premium, amounting to £24.08 per share

The split within the team is based on their current salary as well as current stake in the company, on which they would cash out during the acquisition. The institutional ordinary equity accounts for the remaining £80.7m of ordinary shares. The fixed return instrument amounts to £895.6m and is paid a PIK-structured interest of 8.0%.

Covenants

Given the defensive approach due to the uncertain economic conditions, the financing structure is set up in a way that the covenants are met with significant headroom. Like this the pressure on the company is lower, in case the overall economic situation worsens, and the cash generation is lower than projected in the defensive bank case.

Covenant	2023	2024	2025	2026	2027	2028
Cash Cover	1.4x	1.4x	1.6x	1.6x	1.8x	2.4x
Interest Cover	2.7x	3.0x	3.6x	4.6x	5.4x	6.5x
Net Debt / EBITDA	4.5x	3.7x	2.9x	2.0x	1.4x	0.8x

Figure 3 Development of Covenants

While this may harm returns, it significantly decreases the risk profile of the deal. As shown below, even with the conservative approach, returns are still in a strong range. The minimum projected cash cover in the bank case 1.4x, interest cover is 2.7x and maximum leverage cover (net debt/EBITDA) is 4.5x.

Exit returns

CVS is projected to reach an enterprise value of £3,887.6m in 2027, the targeted exit year, based on an EBITDA of £280.5m and an EV/EBITDA multiple of 13.9x, assuming no multiple arbitrage. Given the described financing structure, this results in a money multiple (MM) of 3.4x and an internal rate of return (IRR) of 28.0%. The management receives £278.9m in total, leading to a MM of 25.4x. This additional compensation is targeted close to £300m.

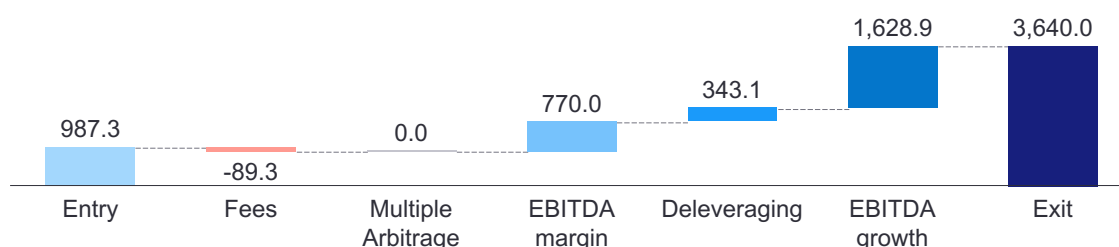


Figure 4 Return Breakdown

The return can be broken down into deleveraging (£343.1m, 12.5%), EBITDA growth (£1,628.9m, 59.4%) and EBITDA margin improvement (£770.0, 28.1%) amounting to a total

created value of £2,742.0m. The EBITDA increase can be broken down into growth, that can be directly linked to CVS' actions and growth due to an increasing market.

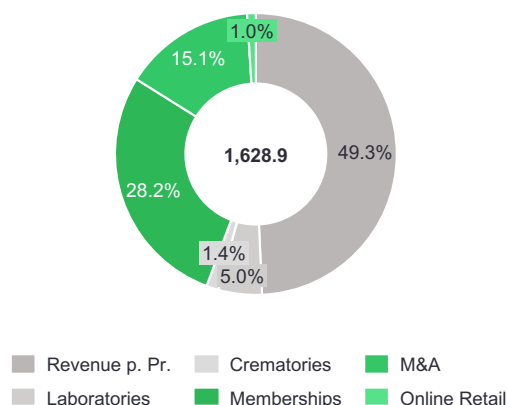


Figure 5 EBITDA growth breakdown

With a contribution of 49.3%, the increasing revenue per practice is the major driver of overall revenue growth. Together with the smaller contributors laboratory (5.0%) and crematory growth (1.4%), this can be attributed to the growing overall market. For the additional revenue stemming from the 24/7 emergency hotline offer for members of the pet clubs, as well as the growth of the entire membership program, which create a value of £675.9m (28.2%), together with the buy and build value add of £362.0m (15.1%), it is crucial, that the right actions towards the presented value creation strategies are taken by the management, hence the significant incentives via sweet equity. The returns prove to be robust, even the downside scenarios show good returns.

Additional value creation strategies

Furthermore, there are additional value creation opportunities not in a primary scope and not included in the operating model. These options include the early refinancing of loans either to remain the debt ratio, but at lower costs in case of a better debt market situation, or dividend recapitalization, that re-levers CVS back to 5.5x EBITDA to payback money to the fund early to improve the IRR and decrease the risk of the investment. Additionally, due the positive market outlook, it is realistic that the veterinary sector remains interesting for investors and that

CVS can be sold at a higher multiple than it has been acquired, leading to a significant value increase by multiple arbitrage.

Alternative financing structure

Since the presented structure shows strong returns, the question arises, how the returns work out without the least subordinated mezzanine debt. Not including mezzanine debt into the financing structure decreases the leverage severely, which negatively influences the returns. However, due to their low subordination, mezzanine debt providers are much more demanding, both financially (13.7% interest rate) as well as when it comes to restructuring processes after covenant breaches. In economically challenging times, not including mezzanine debt provides the company with much more freedom and headroom to covenants in downside scenarios. As returns prove to be still strong, 3.2x fund MM in the investment case, it is worth considering not to include mezzanine. However, as we strongly believe in the robust business plan, we suggest using mezzanine to further improve returns.

1.3.4 Due Diligence

To gain the necessary confidence about the described assumptions, an extensive due diligence (DD) must be performed for the potential acquirer to reveal major risks, to better understand financial and operational capabilities and to find potential “deal breakers”. We defined five major topics; Commercial, Financial, Legal & Tax, Valuation & Exit, Human Resources, which we perceive as highly relevant to further elaborate our case, grow our understanding of CVS and define the “deal breakers”. The first three topics are classified with a high priority while the last two topics have a medium priority in the order of execution. Key task for the commercial DD includes assessment and verification of the UK and France veterinary market and growth expectations, CVS’s brand image and market positioning as well as conducting a representative study to verify the pricing and adoption assumptions of the membership programs and its additional new 24/7 emergency hotline. In case the DD would find out that the expected market

growth for CVS's relevant markets within the next year would be below 5% and/or the 24/7 emergency hotline adoption rate would be below 20%, we would not advise on going forward with the acquisition of CVS. Key task for the financial DD comprises assessment of the required financial resources to enter the French veterinary market through the acquisition of veterinary practices/platforms, conduction of a holistic financial analysis for each business division and market as well as a verification of the financial forecast (operating model) per business unit. The most critical outcome and potential "deal breaker" would be required resources that are too high to enter the French market and unsuitable and too expensive acquisition targets. The focus of the Legal & Tax DD is to analyze currency and interest rate risks, potential (tax) law conflicts and risks as well as potential threats and limitations through the antitrust law in UK and France since these represents CVS's largest markets. Too restricted laws prohibiting further market consolidation in CVS's core markets and uncontrollable exchange and interest rate risk were set as potential deal breakers as well. Through the valuation & Exit DD, the presented valuation should be critically assessed and verified, and the proposed exit options and strategy should be confirmed. As part of the HR DD, it is crucial to investigate the existing shortage of veterinary specialists in the UK which has the potential to limit growth and expansion.

1.3.5 Exit Options

In the case of CVS and in the context of our presented value creation strategy, we are convinced that there are two major exit strategies worth considering. First, a secondary buyout to another PE firm with deep expertise in the veterinary sector looks very appealing. We identified several PE funds which already operate in the veterinary and pet food and supplies sector, including major funds such as EQT and KKR. The acquiring fund could realize synergies with its existing portfolio, however selling to another PE fund which intends to maximize its own return might lower the achievable exit price. Therefore, including strategic buyer into the sell side process would increase bidding competition and would potentially lead to higher exit returns. Strategic

buyers are normally able to realize more synergies with its existing firms and are consequently willed to pay higher prices. Currently, there are some major players in the market, such as Mars and Chewy, which entered the pet and veterinary business through add-on acquisitions to their existing portfolio and might be interested in making further add-on acquisitions of considerable size. At the same time, there are only a few strategic buyers which might possess the financial resources to acquire a firm with the size of CVS. In short, we consider the secondary buyout as the most favorable exit choice because the high interest of PEs in this sector, the resilient character of CVS and its recent attractive growth record show strong future growth opportunities. Alternative exit routes include the initial public offering, which however is highly dependent on the market situation and is a high effort process.

2.0 Individual Part

2.1 Capital Structure – Max Gartner

A company's capital structure is defined by the mix of debt and equity used to finance its operations and investments. It includes the amount of debt financing, the type of debt securities issued, the percentage of equity ownership, and the sources of equity financing. Capital structures differ severely depending on many factors, including the industry, company size, ownership type and many more. The theory behind the optimal capital structure is a broad and well-studied field, with the Modigliani-Miller theorems I and II as the most known theories. However, due to the nature of the thesis and the focus on the private equity sector, the following chapter will focus on private equity related capital structures as well as their background and outlook.

For private equity deals, it is crucial to find the capital structure that fits best to your desired risk profile and at the same time allows to achieve the required returns. For leveraged buyouts, the structure evolves around the usage of debt to increase the return on equity and is the outcome of a leveraged buyout valuation. Across the different types of private equity funds, the usage of debt as well as the acquired stake in the company may differ severely. Hence, it is crucial to understand the underlying fund dynamics. Therefore, in the following part, the different types of funds will be described, before going into detail regarding the fund structures and the specifics of the leveraged buyout valuation method as well as the resulting capital structure of leveraged buyouts. Lastly, the described capital structure is set into the context of traditional capital structure theories.

2.1.1 Private Equity fund structure

Regardless of the later explained type of fund, the funds capital and organizational structure remains similar. The four most important entities, the limited partners, the general partners, the fund, and the portfolio are described in the following. A deep dive regarding their return

expectations can be found in chapter 2.4.

Limited Partners

The limited partners (LPs) are the main investors in the fund, providing the capital, that is necessary to perform the acquisitions. Given the risk profile as well as long illiquidity, it is typically restricted to professional investors ranging from high-net-worth individuals to large professional investors such as insurance companies and pension funds. Furthermore, public institutions such as the European Investment Fund can act as LPs, especially with fund of funds investment vehicles. The typical investment horizon is 10 years; however, in the beginning, the capital is only promised (committed) to the fund. Only after the cash-call, the committed capital must be provided. However, fund fees of around two percent p.a. are paid on committed capital by the fund to the general partners, even if it has not been drawn. (Brown, Harris and Munday 2021)

General Partners and PE firm

The general partners (GPs), together with their employees form the PE firm, that manages the fund, and therefore the money of the LPs. They advise on the acquisitions of the portfolio companies and work closely with different types of consulting firms, mostly on due diligence topics. The GPs finance the costs for their employees, offices etc. with the annual fees paid by the fund as well as carried interest successful deals. However, to be incentivized and have “skin in the game” they also invest in the fund, but typically a rather insignificant amount compared to the fund size. (Cendrowski 2012)

The fund

As the investment vehicle, that acquires the companies with the LPs money, the fund is managed by the GPs. It has a closed-end structure and typically has a term of 10 years (Brown, Harris and Munday 2021). Prior to that it takes around two years of fundraising to collect sufficient LPs to reach the desired fund size. The difficulty of that depends on the historical

successes of the GPs and their connections to the LPs. Funds can have a broad scope or be sector or region specific, typically this is the case for larger PE firms with several funds. (Cendrowski 2012)

Portfolio

The portfolio includes all companies that have been acquired by the fund under the advice of the GPs. The GPs typically receive a performance-based fee of 20.0% of profits, the so called carried interest. This fee is only paid out after the fund has been fully paid back and a hurdle rate of typically 8.0% is reached. (Cendrowski 2012)

2.1.2 Private Equity fund types

In principle, a distinction is made between venture capital (VC), growth and leveraged buyout (LBO) funds. In the following, all types, and their key specifications are redescrbed.

Venture Capital

The focus of VC funds lies on younger companies with more disruptive business models, from early-stage to scale-up. Those investments carry a significant risk since the business models tend to be less proven. However, the growth potential is large, thanks to the disruptive character of the business models. Furthermore, the upside potential of returns is large, since equity is acquired at an early, cheap stage. The VC fund uses equity to finance the deal, since debt financing would be too expensive, given the high risk due to the non-profitability and little cash generation of the companies. Typical exit routes include initial public offerings (IPO), trade sales as well as secondary buyouts by LBO funds. (Demaria 2013)

Growth funds

Growth funds focus on investing in companies with potential for rapid growth and normally acquire minority stakes. They typically target so called scale-ups, companies that have exceeded the start-up stage and have a proven business model, but still have a potential for significant growth over a short period of time. These funds invest in a variety of industries, including

technology, healthcare, consumer, and industrial sectors and have similar exit routes to VC funds. (Zeisberger, Prah1 and White 2017)

Leveraged buyout funds

LBO funds are specialized in acquisitions of profitable companies with a proven business model, from SMEs to small, listed companies. They acquire a controlling stake, which allows them to restructure the targets' financial, operational and governance structures. The use of severe debt to finance the deal, hence the name leveraged buyout, significantly improves the return on equity, but also leads to higher risk and collaboration with many stakeholders among the debt providers. The company can tolerate the high debt ratio, since the targets are already profitable and generate cash, that can be used to repay the debt and decrease net debt (Zeisberger, Prah1 and White 2017). The capital structure of leveraged buyout deals is in the focus of this chapter and is described in detail in the next part.

In addition to the described fund types, specialized funds, such as distressed buyout funds or real estate funds, focus on specific assets or acquisition types.

2.1.3 Leveraged Buyout valuation method

The LBO valuation method is typically used in private equity, on top of the classic valuation approaches presented in the valuation chapter. The key differences of the LBO method are that the valuation evolves around pre-defined return expectations, and that it considers a new capital and operational structure. As inputs, the valuation requires a financial forecast in the form of an operating model that has operational improvements as well as specific new value driver, such as a M&A strategy, included. Furthermore, it requires company details, including management salaries and equity stake, as well as an entry valuation based on classic methods such as CCA, CTA and DCF. Lastly, the return expectations of the fund investors are needed to determine the price the fund could be willing to pay for a target company. In classic buyouts, these are typically 25.0%-30.0% IRR, which equals a money multiple of 2.5x to 3.5x in an

investment horizon of five years. The capital structure, which is described in detail in the following, is applied to the firm's projected performance and defined in a way, that all covenants are met with comfortable headroom and the desired returns can be achieved. (Rosenbaum and Pearl 2013)

2.1.4 Leveraged Buyout capital structures

Considering the focus of the private equity challenge, the following chapter focuses on the capital structure of LBOs. The described capital structure is the outcome if the previously explained LBO model and may differ from fund to fund, but in general, follows a similar structure.

Debt structure

The debt is typically divided into senior and subordinated debt. Even though details of the debt characteristics are dependent on the specific deal, a typical structure can be seen across most acquisitions. Across all debt subordination levels, the overall debt normally amounts to 5.0-6.0x EBITDA, resulting in debt over enterprise value ratios (D/V) of 50% to 75% (Zeisberger, Prah and White 2017). The amount of debt used to finance the deal depends on the capital market environment as well as the company's ability to generate cash and the industry it operates in. The high leverage ratios allow for significantly improved returns on equity. The senior debt portion itself is also divided into tranches, commonly referred to as Term Loan A, B and C. Term Loan A has an amortizing repayment structure and a term of about six years. The repayment is split over the six years, often with bigger parts being repaid at the end of the term. This is due to the financial covenants, which are explained in detail below. The interest rate is based on a swap rate as well as a margin. The swap rate depends on the currency and the accompanying responsible central bank, as well as the term and repayment of the loan. The margin is dependent on the capital market situation, as well as the credit statistics and rating of the company. Term Loan A normally amounts to 1.0-2.0x EBITDA and is the smallest tranche

of the senior debt. The average life of the facility varies from deal to deal, but should typically not exceed 80% of the term, because the bank wants the debt to be appropriately amortizing to reduce the risk.

Term Loan B as well as Term Loan C are repaid at the end of their term which is typically after seven and eight years respectively. Both pay an annual, non-accruing, interest, which is composed in the same way as the interest rate of Term Loan A, however, given the bullet character as well as the longer term, the loans are riskier, and banks therefore require a higher margin. Since the late repayment is favorable for the cash flow, term loan B and C are larger tranches and typically range from 1.5x to 2.5x EBITDA.

The subordinated junior debt is riskier than senior debt, since it is repaid in case of a liquidation, for example due to bankruptcy. However, since it is still senior to equity, the investors into junior debt require lower returns than equity investors, making it cheaper compared to raising more equity. This layer is often necessary to increase leverage, that would have not been funded by senior debt providers. Subordinated is sometimes referred to as mezzanine, since it is located in the middle of the balance sheet. It is often structured as a combination of cash paid interest and accrued interest, which is also referred to as the PIK-element. PIK stands for “Payment in Kind” and means that the interest on a part of the loan is not paid annually, but it sums up till the end of the loan term, which tends to be eight to ten years. This leads to interest payments on the accrued interest from the years before and therefore to higher overall costs. However, the PIK character of the mezzanine debt has a positive impact in the cashflows and therefore on the covenants since the annual paid interest decreases. Sub-loans only have little to no repayment of principal and are fully repaid at the end of their term. (Zeisberger, Prahel and White 2017) Next to the presented mezzanine debt, high yield bonds are also used as junior debt, typically provided by insurance companies and arrangers of instruments that pool debt securities as collateralized debt obligations (Brown, Harris and Munday 2021).

In general, debt for private equity deals is typically provided by larger banks with dedicated leveraged finance teams and other financial institutions, such as asset-based lenders, mezzanine lenders, hedge funds and collateralized debt obligation funds. Other specialized private equity firms may also provide debt financing as part of their investments (Rosenbaum and Pearl 2013). During the debt structuring process, in principle, the talks with debt providers can lead to three different loan underwriting options. The fully underwritten deal is the best case for the PE manager, since the banks guarantee the entire capital and syndicate the loan on their risk. In the best effort syndication, the banks do not commit for the full capital and will try to syndicate the loans with best efforts. This leads to higher effort and risk, since it adds uncertainty, and all involved banks want insights into the company's books. The least favorable way, which is more applicable for smaller deals, is a club deal in which the PE managers talk to all banks separately and no underwriter is involved.

Equity structure

The equity is divided into preferred equity, sometimes referred to as the fixed return instrument (FRI), and ordinary equity. The preferred equity typically accounts for about 90.0% of the total equity and represents the main part of the funds stake in the company. As described in detail in the returns analysis section, investors expect a high return, given the positioning in the subordination: Equity holders are repaid last in case of bankruptcy. They expect an IRR of 25.0%-30.0%, which equals a money multiple of 2.5x to 3.5x in an investment horizon of five years. This growth is achieved because the company pays a PIK-structured interest of 8.0% to 12.0% that increases value of the preferred equity, hence the name fixed return instrument. The initial value of the preferred equity plus the accrued interest is repaid to the fund at the exit of the company. (Zeisberger, Prahel and White 2017)

The ordinary equity makes up the remaining 10.0% of the total equity and is divided into institutional ordinary shares and sweet equity. While institutional ordinary shares are held by

the fund, the sweet equity is held by the management team of the acquired company. This share in the company after the acquisition has the goal to align the investors and the managements interests and to incentivize the key part of the management to support the deal to go through and to perform and achieve targets afterwards. (Demaria 2013) The value growth of sweet equity in case of a successful exit is significant, often providing the management with returns above a 10.0x money multiple. However, the management is expected to contribute for that equity stake, so that it has skin in the game and an increased interest to perform according to the forecast. The level of contribution depends on the compensation of the managers and is a crucial point because it must be structured in a way, such that the managers are incentivized, but not overly invested. Next to the salary, the current stake of the management in the company is important since they would cash out in case of the acquisition. Especially in the buy-out of private firms, it is common, that the senior management holds a significant stake, for example if they are the founders. In that case a management roll-over may come into play, where a portion of the ownership stake is rolled over into the new equity structure, typically as an investment into the FRI. This arrangement is interesting for the seller, since they cash-out and de-risk their overall investment but still participate in further upside scenarios. The PE fund benefits from the interest alignment with the management and the lower cash outlay for equity. (Zeisberger, Prah and White 2017) The distribution of the shares across the management team can also depend on the future strategy in a way that key people for a strategies success have more “skin in the game”. For example, if the investment story is heavily based on buy and build, the manager in charge for M&A needs to be more incentivized.

Revolving facilities

A revolving credit facility, also referred to as a revolver, is a line of credit that is arranged with a bank and is defined by a beforehand agreed maximum that the company can access at any time it's needed. The bank receives a commitment fee for providing the option to access the

capital as well as interest on the drawn funds. It is especially helpful to finance operational expenses and is typically used for capital expenditures and acquisition needs. Both facilities, acquisition, and capex, are typically structured with a drawdown period, where funds are used and a repayment period, where funds are paid back. It helps improving cash-flows and increases the cash available for debt service and therefore the covenants. (CFI 2022)

Covenants

As mentioned previously, the covenants play an important role when it comes to the structuring of the future capital structure after the acquisition. The covenants serve as early warning signs for the debt providing banks and can show that the company might have issues with repaying the debt in the future. The covenant levels are agreed on during the negotiations with the banks and most typically include the cash cover, the interest cover as well as the leverage cover. The cash cover derives from dividing the cash flow generated over the last 12 months divided by the sum of debt repayments and cash interest payments and should not fall below 1.0x throughout the entire investment period. It is supposed to ensure a sufficient cash available for debt service. The interest cover is calculated by dividing the EBITDA of the last 12 months by the net interest expenses and is set as an agreed percentage headroom to the bank case EBITDA. The leverage cover is also agreed as a percentage headroom above the bank case and aims to identify insufficient cash generation. It is calculated as net debt divided by the EBITDA of the last 12 months. Common headrooms for the leverage and interest cover are around 20%. While the breach of a covenant legally must be seen as a default on debt, in practice, the debt providers, who now have the right to withdraw the debt, use this to discuss further step to avoid default and improve the terms for them with the newly gained negotiation power. (CFI 2022)

2.1.5 Private Equity capital structures and traditional theories

In classic theories, the optimal capital structure of a firm derives from the tax-shield provided by the deductibility of interest expenses from taxes as well as bankruptcy costs, which increase

with risk added with leverage. The tradeoff theory states that the capital structure of firms with similar characteristics and financial conditions should be similar, no matter if they are public or private (Berk and DeMarzo 2017). It therefore suggests that PE owned firms should have a similar capital structure and do not operate with significantly more leverage, given their similar exposure to tax and bankruptcy laws. However, the pecking order, which states, that managers will always prefer internal funds over debt and debt over equity, given lower costs for internal and debt financing compared to equity may explain a higher use of debt (Brown, Harris and Munday 2021). It becomes obvious, that the differences between normal and PE backed companies, must affect leverage beyond the traditional theories. A typical constraint to high leverage ratios is the agency problem between managers and equity investors. In the PE backed companies, a single investor has full control, which reduces the costs arising from the agency problem. However, interest alignment is an important part of a successful deal, both, between the company management and GPs as well as GPs and LPs. Furthermore, the PE seems to affect the cost of bankruptcy and reduce them significantly due to the good connection between the PE managers and the banks. As their regular deal flow and large loan sizes make PEs valuable clients for banks and the PEs rely heavily on bank financing, a good relationship is crucial for both sides. In the light of the pecking order, this reduces the information gap between the equity and debt investor. Furthermore, past evidence shows that private companies backed by reputable PEs are less likely to experience financial distress (Brown, Harris and Munday 2021). A study conducted by the private equity council has shown that the default rate of PE backed firms during the 2008-2009 recession was 2.8% compared to 6.2% for similar public companies (Thomas 2010).

Overall, it turns out that the role of the PE management is significant when it comes to finding the optimal capital structure. The ownership by one investor who has full control, governance experience and strong connections to debt providers allows for much higher leverage, which

allows for much greater return on equity for that investor.

Bibliography

- Berk, Jonathan, and Peter DeMarzo. 2017. *Corporate Finance*. Essex: Pearson Education Limited.
- Brown, Greg, Robert Harris, and Shawn Munday. 2021. "Capital Structure and Leverage in Private Equity Buyouts." *Journal of applied corporate finance* (Columbia Business School) 33 (3): 42-58.
- Cendrowski, Harry. 2012. *Private Equity: History, Governance, and Operations*. New Jersey: John Wiley & Sons.
- CFI. 2022. Corporate Finance Institute. 12 05. Accessed 12 08, 2022.
<https://corporatefinanceinstitute.com/resources/commercial-lending/debt-covenants/>.
- CFI. 2022. Corporate Finance Institute. 12 07. Accessed 12 08, 2022.
<https://corporatefinanceinstitute.com/resources/commercial-lending/revolving-credit-facility/>.
- Demaria, Cyril. 2013. *Introduction to private equity: venture, growth, LBO & turn-around capital*. New Jersey: John Wiley & Sons Ltd.
- Rosenbaum, Joshua, and Joshua Pearl. 2013. *Investment Banking; Valuation, Leveraged Buyouts, and Mergers & Acquisitions*. New Jersey: John Wiley & sons.
- Thomas, Jason M. 2010. *The Credit Performance of Private Equity-Backed Companies in the 'Great Recession' of 2008–2009*. Private Equity Council.
- Zeisberger, Claudia, Michael Prah, and Bowen White. 2017. *Mastering private equity: transformation via venture capital, minority investments*.

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