iscte

INSTITUTO UNIVERSITÁRIO DE LISBOA

Private Equity Powerhouse – An Equity Valuation of KKR & Co.

Gianluca Paolo Grassi

Master in Finance

Supervisor: PhD, Renato Telo de Freitas Barbosa Pereira, Assistant Professor with Aggregation, Iscte - Iul

October, 2023



BUSINESS SCHOOL

Department of Finance

Private Equity Powerhouse – An Equity Valuation of KKR & Co.

Gianluca Paolo Grassi

Master in Finance

Supervisor: PhD, Renato Telo de Freitas Barbosa Pereira, Assistant Professor with Aggregation, Iscte - Iul

October, 2023

Abstract

The main purpose of this project is to determine fair value of the listed shares of KKR & Co, a prominent private equity firm, in order to make informed investment decisions. This equity report also aims at exploring its historical trajectory and diverse business segments, as well as conducting a comprehensive analysis of its financial health.

KKR is an American investment company that manages multiple alternative asset classes, an in particular private equity investment. Founded in 1976 by three cousins, soon became a prominent player in the newly innovative industry of private equity, and more specifically of leveraged buyouts. To this date the company has benefited of its expertise and network in the market.

Our aim is twofold: to provide insightful guidance on the potential for investment in KKR and to shed light on the prevailing market and company-specific trends that inform such an investment decision.

Keywords:

Private Equity; Alternative Investments; Valuation; Financial Analysis; Fair Value; Investment Recommendation

Resumo

O principal objetivo deste projeto é determinar o justo valor das acções cotadas da KKR & Co, uma proeminente empresa de capitais privados, a fim de tomar decisões de investimento informadas. Este relatório sobre acções visa igualmente explorar a sua trajetória histórica e os seus diversos segmentos de negócio, bem como efetuar uma análise exaustiva da sua saúde financeira.

A KKR é uma empresa de investimento americana que gere várias classes de activos alternativos e, em particular, investimentos em participações privadas. Fundada em 1976 por três primos, rapidamente se tornou um ator proeminente no recém-criado sector dos capitais não abertos à subscrição pública e, mais especificamente, das aquisições alavancadas. Até à data, a empresa tem beneficiado da sua experiência e da sua rede no mercado.

O nosso objetivo é duplo: fornecer uma orientação perspicaz sobre o potencial de investimento na KKR e lançar luz sobre o mercado prevalecente e as tendências específicas da empresa que informam essa decisão de investimento.

Palavras-chave:

Private Equity; Investimentos alternativos; Avaliação; Análise financeira; Justo valor; Recomendação de investimento

Private Equity Powerhouse: An Equity Valuation of KKR & Co.

Table of Contents

Abstract	i
Resumo	iii
Abbreviations	vii
1. Introduction	.1
a. Factsheet	. 3
2. Literature Review	. 5
a. Valuation	. 5
b. Valuation Approaches	. 5
i. Discounted Cash Flow (DCF)	.7
ii. Valuation Multiples	12
c. Private Equity	14
i. Definition	14
ii. Characteristics and Participants	14
iii. Fund Structure	16
iv. Fund Lifecycle	17
d. Value Generators for Private Equity firms	19
i. Operational Enhancement	19
ii. Financial Engineering	21
iii. Governance Engineering	22
iv. Exit Strategy Optimization	24
v. Performance Measurements	25
vi. Risk Management	27
3. Market Overview	29
a. Private Markets Landscape	29
i. Private Markets Overview	29
ii. Key Investment Sectors	30
iii. Porter's Five Forces	31
b. Market Assessment	31
i. Market Size and Growth Trends	31
ii. Competitive Landscape	32
c. Market Opportunities and Risks	33
i. Economic Cycles Performance – PE vs Public Equity comparison	33
ii. Monetary Policy changes	34

iv. Opportunities	
v. ESG Factors	
e. Market Outlook	35
4. Kohlberg Kravis Roberts & Co – KKR & Co	
a. Company Overview	
b. History	
c. Road to Initial Public Offering	
d. Operating Model	40
i. Segments	40
ii. Revenue Streams	45
e. Organizational Structure	47
f. Governance	
g. Shareholder Structure	51
h. Financial Analysis with Ratios	52
i. Dividends and Analyst Coverage	53
I. Stock Performance	55
5. Valuation	57
a. Preliminary Assumptions	57
b. Discounted Cash Flow Model	58
i. WACC	
ii. Free Cash Flow to the Firm (FCFF) and Terminal Value	59
iii. Target Price and Sensitivity Analysis	61
c. Relative Valuation	61
i. Peers and Multiple Selection	61
iii. Valuation	62
6. Investment Thesis	65
7. Conclusion	67
8. References	69
9. Appendices	73
Annex A – Management Team' Biographies	73
Annex B – Dividend History and Yield	75
Annex C – Trading Volumes since IPO	76
Annex D – Breakdown of Revenues from Total Fees	77
Annex E – Geographical Breakdown of Revenues from Total Fees	77
Annex F – Selected peers overview	77

Abbreviations

- # Number
- % Percentage
- \$ US Dollars
- \$'000 Thousand Euros
- β Beta
- 20XXA Actual Period
- 20XXE Forecasted Period
- CAGR Compound Annual Growth Rate
- CAPEX Capital Expenditures
- CAPM Capital Asset Pricing Model
- CF Cash Flow
- CRP Country Risk Premium
- D Debt
- D/E Debt-to-Equity ratio
- D&A Depreciation and Amortization
- DCF Discounted Cash Flow
- EBIT Earnings Before Interest and Taxes
- EBITDA Earnings Before Interest, Taxes, Depreciation and Amortization
- ESG Environmental, Social, and Governance
- EV Enterprise Value

EV/EBITDA – Enterprise Value to Earnings Before Interest, Taxes, Depreciation, and Amortization

- FCF Free Cash Flows
- FCFF Free Cash Flow to the Firm
- FY Fiscal Year
- g Growth Rate
- GDP Gross Domestic Product
- rd Cost of Debt
- re Cost of Equity
- M&A Mergers and Acquisitions
- n Period
- PE Private Equity

- PE ratio Price to Earnings ratio
- rf Risk-free rate
- ROA Return on Assets
- ROE Return on Equity
- ROIC Return on Invested Capital
- t Corporate Tax Rate
- TV Terminal Value
- WACC Weighted Average Cost of Capital
- WC Working Capital

1. Introduction

"Unlocking Opportunities in Alternative Asset Management"

In a world where financial markets are characterized by increasing complexity and volatility, the allure of alternative investments has never been more compelling. Investors seeking diversified portfolios, higher returns, and innovative financial solutions have turned to alternative asset managers to navigate these dynamic landscapes. KKR & Co. Inc., also known as Kohlberg Kravis Roberts & Co. (hereafter referred to as "KKR", "KKR & Co." or the "Company") stands at the forefront of this transformative financial paradigm.

This equity research report embarks on a journey to dissect the multifaceted world of KKR, exploring its historical trajectory, breaking down its diverse business segments, and conducting a comprehensive analysis of its financial health. Our aim is to provide insightful guidance to potential investors interested to allocate investment capital in the company KKR and to better understand the market dynamics of the Private Equity (PE) industry and company-specific trends.

Founded in 1976 by Jerome Kohlberg, Henry Kravis, and George Roberts, KKR has evolved from its pioneering roots in the leveraged buyout industry to become a global investment firm with a diversified portfolio spanning private equity, credit, and real assets. With assets under management (AUM) in excess of \$519 billion as of 30 June 2023, KKR has demonstrated a remarkable ability to navigate the complexities of global financial markets, harnessing innovative strategies to create value for its investors and clients alike.

The allure of KKR lies in its unwavering commitment to generating alpha for its stakeholders. Through a meticulous approach to asset management, a dedication to environmental, social, and governance (ESG) principles, and a relentless pursuit of growth opportunities, KKR has established itself as a formidable player in the alternative asset management arena.

This report seeks to provide an in-depth examination of the following key facets of KKR:

1. Market Overview:

- An exploration of the broader alternative asset management industry, highlighting market size, growth prospects, and competitive dynamics. We will delve into the trends that shape this sector and how they impact KKR's position within it.

2. Company Analysis:

- A comprehensive examination of KKR's business segments, including private equity, credit, and real assets. We will evaluate the performance of each segment, assessing their strengths, weaknesses, and growth potential.

3. Financial Evaluation:

- A deep dive into KKR's financial health, analyzing income statements, balance sheets, and cash flow statements. We will scrutinize key financial ratios and metrics to gauge the company's profitability and sustainability.

4. Investment Potential:

- A forward-looking assessment of KKR's investment potential, considering market dynamics, growth prospects, and the company's strategic initiatives. Our goal is to provide valuable insights to aid investment decision-making.

As we navigate this journey through the elements of the alternative asset management industry, it is our aspiration that this equity research report serves as a compass for investors, offering both the seasoned and the novice a clearer understanding of KKR's position within the industry and the potential it holds as an investment opportunity.

Please note that the financial data and market conditions discussed herein are based on information available as of October 2023. Furthermore, it is strongly advised to conduct due diligence and consult with financial experts to ensure the most up-to-date and accurate assessment of KKR & Co. Inc. is performed before making any investment decisions.

a. Factsheet

- Company Name: KKR & Co
- **Description:** KKR & Co. Inc., also known as Kohlberg Kravis Roberts & Co., is an American global investment company that manages multiple alternative asset classes, including private equity, energy, infrastructure, real estate, credit, and, through its strategic partners, hedge funds
- Firm Category: Private Equity / Asset Manager
- Ticker: NYSE: KKR
- Founded: 1976
- **Employees:** 4,150
- Assets Under Management: \$500B+
- Flagship Private Equity Fund Size: Fund XIII (<u>\$19B raised in 2022</u>)
- Co-CEOs: Joseph Bae, Scott Nuttall
- Headquarters: New York City, USA



Share Price KKR since IPO

2. Literature Review

a. Valuation

Valuation stands at the core of financial decision-making, representing the process of determining the intrinsic worth of financial firms with emphasis also on the need to comprehend the intricate mix of factors underpinning its value, and thus guiding investors toward rational choices that align with their financial objectives (Damodaran, 2006).

Valuation represents an instrument for evaluating present and future investments within a firm (Brealey et al., 2011) and plays a crucial role in strategic decision-making and the allocation of resources within financial institutions.

Havnaer (2013) delves deeper into the intricate world of valuation, casting it as the process of ascertaining the fair market value of a financial firm. Considering the firm's assets, liabilities, and projections of future cash flows, the author reiterates the indispensable role valuation plays for investors and decision-makers within the financial industry. In this context, the primary beneficiaries of valuation are investors and board members (Frykman et al., 2003), from the principle that having a comprehensive understanding of the intrinsic value of financial firms empowers stakeholders and management to make judicious decisions regarding investments and capital allocation.

Moreover, the unique characteristics inherent to financial institutions, such as their capital structure, tax implications, and risk profiles, profoundly influence the valuation process. Various researches offer valuable insights into these critical facets.

An example is given by the interplay between equity and debt and the resulting leverage, which significantly impacts the risk profile and cost of capital, and thus shaping the overall valuation (Graham, 2006). His work highlights the pivotal importance of capital structure, illuminating its direct impact on the valuation of financial firms. On this subject, also the work from Modigliani and Miller (1958) helped introduce the groundbreaking concept that leverage, when judiciously managed within certain bounds, can positively influence the capital structure of financial firms. Their work underpins how financing decisions interlace with the valuation process.

Aa said, another influence factor when valuing firms is underscored by the critical role of corporate tax considerations when calculating the value of financial firms, and elements like the effective tax rate come into play, impacting cash flow projections and, as a result, the ultimate valuation (Nejadmalayeri & Singh, 2012).

b. Valuation Approaches

As discussed by Damodaran in 2012, valuation in financial analysis constitutes a multifaceted field with a range of methodologies that may differ depending on the expert's perspective. This diversity underscores the susceptibility to price misestimations arising from biases in the analyst's assumptions.

Categorizing these methods, Damodaran (2002) delineates three primary approaches: the discounted cash flow (DCF approach), relative valuation, and contingent claim valuation. Within the Discounted Cash Flow (DCF) model, various components such as Free Cash Flow to the Firm (FCFF), Free Cash Flow to Equity (FCFE), and the Dividend Discount Model (DDM) contribute to the estimation of a company's fair price. The present value of projected cash

flows is computed and discounted at a rate reflective of the associated income risk. The DCF is often regarded as the cornerstone of valuation models. The second approach estimates a firm's value by comparing its financial metrics with a peer group's. This method aims to assess value through comparative analysis called Relative Valuation. The last approach, presented by Damodaran (2002) is the Contingent Claim Valuation. Founded on option-pricing models, this approach posits that the fair value of an asset can exceed the present value of its future cash flows and offers an alternative perspective on valuation.

Conversely, Janiszewski (2011) presented a practical approach to the methods available to experts when valuing firms by dividing them into four categories: a multiples approach, the DCF approach, the book value approach, and the option and mixed methods approach. In particular, the discounted cash flow (DCF) is widely recognized as one of the most potent yet intricate tools in financial analysis. But it is also important to touch upon the other methods: the Multiples approach, based on a comparable companies approach and a comparable transaction approach to value firms; The Book Value approach includes adjusted net book value, liquidation value, and replacement value to extract a company's worth; and the Option methods approach, incorporating innovative approaches that consider options and other unique factors in valuation.

Fernandez (2007) offers another view at the possible breakdown of valuation methods into distinct categories sheding lights on methods to value firms based on their accounting statements and specific items that help reflect their intrinsic value, more commonly known in his work as: the Balance Sheet-based approach, the Income Statement-based approach, Mixed Goodwill, and the Value Creation and Options approach.

The Balance Sheet incorporates concepts such as book value, adjusted book value, liquidation value, and substantial value and evaluate a company's worth based on the assets presented in its balance sheet. While the Income Statement-based approach determines the firm's value by analyzing earnings, sales, and other indicators presented in the income statement. Alternatively, the mixed Goodwill method highlights the importance of intangible assets in defining a firm's value. And lastly, the Value Creation and Options explores innovative methods for evaluating a firm's worth.

Fernandez underscores the preeminent role of the DCF model in contemporary valuation. This model portrays a financial firm as a generator of cash flows, thereby explaining its widespread use in modern valuation practices.

Taking an alternate viewpoint, Frykman et al. (2003) categorize valuation approaches into two primary categories: Fundamental Valuation, which calculates a firm's fair price by leveraging its fundamental financial metrics and economic data delves deep into the core attributes of the business. Relative Valuation, which, in contrast, hinges on a firm's performance relative to its peers within the same industry, seeks value through comparative analysis following the work of Damodaran (2002).

However, Frykman outlines a further differentiation of valuation models within these main approaches, including the Dividend Discount Model (DDM), which calculates a firm's equity value by discounting projected dividend values at the cost of equity to their present value. Calculating Free Cash Flow to the Firm (FCFF) is a critical DCF method that estimates enterprise value by discounting expected cash flows at the Weighted Average Cost of Capital (WACC) to their present value. In addition to the Cash Flow Return on Investment (CFROI), the Boston Consulting Group developed an approach to assess a firm's ability to generate sustainable future cash flows. It is considered the weighted average internal rate of return of the firm's projects.

There are other methods that can be used, such as Returns-Based Valuation, Asset-Based Method, Option-Based Valuation, and Multiples-Based Valuation, each offering a range of tools to determine a firm's value, depending on the specific context and objectives of the work. Among the key scientists who developed framework, models, and valuation approaches commonly used in modern investment management and portfolio theory is American financer and economist Myron J. Gordon (1959) with its Gordon dividend growth model.

In conclusion, valuation in financial analysis is a diverse and dynamic field, offering a spectrum of approaches and models to cater to various contexts and objectives. Analysts and experts must make deliberate choices, considering the specific attributes and characteristics of the assets or firms under evaluation, to ensure accurate and informed decisions.

i. Discounted Cash Flow (DCF)

Damodaran (2012) offers a comprehensive view of the DCF model, underscoring its reliability in estimating the intrinsic value of financial firms. He delves into the intricacies of cash flow projections and the determination of the discount rate, fundamental components of the DCF methodology.

The value of an asset is defined as the present value of future cash flows discounted at a specified rate (Damodaran, 2005; Janiszewski, 2011).

$$Value = \sum_{t=1}^{t=n} \frac{CF_t}{(1+r)^n}$$
(1)

Where:

n is the number of periods, also considered as the life of the asset

 CF_t is the expected future cash flow at time t

r is the discount rate equivalent to the risk associated with the cash flows

As previously described, Damodaran (2002) also includes two more approaches to the intrinsic value estimation of the DCF model, namely the free cash flow to equity and the adjusted present value. In this context, the free cash flow to equity represents the cash accessible to a company's equity shareholders once all outlays, reinvestments and debt obligations have been settled. The value of the firm using this approach is (2) computed as:

$$Value_{equity} = \sum_{t=1}^{t=n} \frac{CF \text{ to } equity_t}{(1+r_e)^n}$$

Where:

n is the number of periods, also considered as the life of the asset

CF to equity t is the expected cash flow to equity in period t

Re is the cost of equity

Luehrman (1997) contributes by addressing the limitations of the DCF approach, understanding potential pitfalls related to free cash flow estimations and discount rate determinations. His work enhances our comprehension of the challenges associated with consistent DCF application across various financial institutions. Furthermore, the DCF method concentrates solely on values related to the free cash flow calculation and omits other accounting measures that do not affect its result. This makes the DCF model resistant to accounting misstatements (Frykman, 2003).

Free Cash Flow to the Firm

Computing Free Cash Flow to the Firm

The free cash flows of a company are obtained by the incremental effect of the cash it generates after paying operating expenses and taxes, including capital expenses and working capital (Damodaran et al., 2002). Interest expenses are excluded from the calculation as there are no tax benefits in including it, as the WACC already considers the debt level after taxes.

The calculation of Free Cash Flow to the Firm is presented as follows:

$$FCFF = EBIT(1 - tax rate) + Depreciation - Capital Expenditures$$
(3)
- $\Delta Working Capital$

WACC

As stated by Rosenbaum et al. (2013), the WACC, also known as the cost of capital, represents the expected rate of return that investors anticipate from an alternative investment with similar risk characteristics. This cost is quantified using the firm's after-tax Weighted Average Cost of Capital (WACC), which is essentially a weighted average of the required rates of return for various sources of capital (Damodaran, 2016).

Moreover, the widespread use of WACC as a discount rate and various financial metrics determines the inherent risk within projected cash flows and highlights its prominent role in financial analysis (Frykman et al., 2003).

The underlying principle of this opportunity cost hinges on the time value of money, representing the return on risk-free investments when financial resources are not allocated to potentially riskier endeavors. It also incorporates a risk premium, reflecting the extent of risk an investor might be inclined to undertake based on their risk profile. Moreover, it accounts for a tax-adjusted discount rate, factoring in the interest tax shields associated with available debt (Luehrman, 1997).

$$WACC = \frac{E}{E+D} * r_e + \frac{D}{E+D} * r_d * (1-T)$$
(4)

Where:

E reflects the Equity portion of capital in the firm's capital structure

D reflects the Debt portion of capital in the firm's capital structure

 r_e is the cost of equity

 r_d is the cost of debt

T is the tax rate

Cost of Equity

Damodaran (2002) articulated that the cost of equity signifies the essential return demanded by shareholders, serving as compensation for their exposure to the risks inherent in a particular company. From the company's perspective, it embodies the cost of attracting additional funding from equity holders, as elucidated by Frykman and colleagues (2003). A more comprehensive breakdown of the two fundamental components that constitute the cost of equity is provided by Frykman and defines that the first component is the risk-free rate, which signifies the return on riskless assets. On the other hand, the second component is an extra return, functioning as a risk premium to offset the heightened risk accompanying investments in a company's equity. An estimation is made to determine the cost of equity by considering the expected return on the market portfolio, meticulously adjusted to align with the firm's risk profile under evaluation. The Capital Asset Pricing Model (CAPM) is the preferred methodology for ascertaining the risk adjustment factor, a principle underlined by Koller and colleagues (2015).

Over time, the CAPM has evolved into the primary model for comprehending risk and return in finance, a transformation suggested by Damodaran (2012). This model has achieved widespread adoption and has become the industry standard, as endorsed by Damodaran (2002) and Eckbo et al. (1992). The equation for the CAPM is as follows:

$$r_e = r_f + \beta_{levered}(r_m - r_f) \tag{5}$$

Where:

 r_e is the cost of equity

 r_f is the risk free rate (usually the safest government issued bond)

 $\beta_{levered}$ is the levered beta of the company

 r_m is market return

The CAPM model, which employs beta to measure how a company's stock price responds to overall market fluctuations, provides a means to reflect and effectively adjust for company-specific risk. In this framework, only beta risk is factored in, while the remaining idiosyncratic risk can be mitigated through diversification across different holdings, as expressed by Koller and colleagues (2015).

However, what sets the CAPM model apart from other financial models is its consideration of the risk-free rate, the market risk premium (i.e., the differential between the expected return on a market portfolio and the risk-free rate), and the assessment of each firm's risk relative to the average firm, as underscored by Koller et al. (2015) and Damodaran (2002).

Risk-free rate

A risk-free asset is defined by two fundamental characteristics, as per Damodaran (2012): it entails no default risk and no reinvestment risk while delivering the anticipated return. Ideal examples of such assets include 10 to 15-year government bonds and treasury bonds in the

company's home nation, as Frykman et al. (2003) suggested. This investment is considered risk-free because there is no variance around the expected return (Damodaran, 2008).

Market risk premium

Rosenbaum (2013) defines the market risk premium as the difference between the expected market return and the risk-free rate, expressed by the equation:

$$Risk \ premium \ (r_p) = \ r_m - r_f \tag{6}$$

. . .

The market risk premium originates from the inclination of risk-averse investors who favor less risky investments over riskier ones and plays a pivotal role in influencing the value of any investment (Damodaran, 2012). It impacts the expected return of portfolios and can lead to changes in asset allocation.

Additionally, it is relevant to consider that the risk premium is influenced by several factors, including risk aversion and consumption preferences, information uncertainty, liquidity, macroeconomic risk, and government policy (Damodaran, 2012).

Beta

Beta, also known as systematic risk, is calculated as the covariance between a specific asset's expected return and the return of the overall market to which it is compared (Rosenbaum et al., 2013). In essence, its resulting value is that assets that exhibit higher risk than the market average will have betas exceeding one, while assets with lower risk will have betas below one. A riskless asset will have in contrast a beta value of zero, as indicated by Damodaran (2002).

Furthermore, it is relevant to create a distinction and comprehend that there are two distinct categories of beta: levered and unlevered. The unlevered beta is employed to assess a company's risk profile without debt, requiring the removal of the debt-related influence, while the levered beta implies the presence of debt in the company capital structure.

In the traditional approach, based on the assumption that debt holds no market risk (thus having a beta of zero), the equity beta can be expressed as a function of the unlevered beta and the debt-equity ratio (Damodaran, 2012):

$$\beta_{levered} = \beta_{unlevered} * \left(1 + \left((1-t) * \frac{D}{E}\right)\right)$$
(7)

It is worth noting that the equation may omit the tax effect in certain variations, resulting in the absence of the (1-t) term.

Cost of Debt

Conversely to what is said above, in this case, we refer to the cost of debt, corresponding to the expense rate incurred when the company issues corporate bonds as well as loans to fund a company's investments.

The cost of debt is the market interest rate the firm has to pay on borrowing (Damodaran, 2002). It will depend upon three components: (a) The general level of interest rates, (b) The

default premium, and (c) The firm's tax rate and is computed as highlighted by Koller et al. (2010) with the following equation:

$$r_d = Weighted average LT Borrowing rate * (1 - T)$$
(8)

Where:

Weighted average LT Borrowing rate is the company's current rate

T is the tax rate

Terminal Value

Another essential input to calculating a firm's value is provided by the Terminal Value, which provides a value for the asset at the end of the forecast period. It is also defined as the expectation of a firm's growth in perpetuity (Damodaran, 2002).

The WACC and the FCF at the time t+1 are still being used for calculating the Terminal Value but with the inclusion of a growth rate in perpetuity. The equation is as follows:

$$TV = \frac{FCF_{t+1}}{WACC - g} \tag{9}$$

Where:

 FCF_{t+1} is the free cash flow computed for the year after the forecasted period (t+1)

WACC is the discount rate or weighted average cost of capital

g is the growth rate in perpetuity

To touch upon the growth rate calculation, two key factors determine a firm's earnings growth rate: its return on equity and the level of reinvestment of earnings into the business. Moreover, when approaching the calculation of g, it is relevant to consider the inflation expectations for the market in which the company operates. Damodaran (2002) points out the importance of accurately assessing these variables for predicting future cash flows.

Another approach developed by Graham et al. (2009) proposes using the compounded annualized growth rate in a firm's revenues, dividends, and earnings to calculate the growth rate. Alternatively, for a more macroeconomic approach, the rate of Gross Domestic Product (GDP) growth of the specific country in which the company operates can also be used.

Essentially, the Terminal Value provides an alternative to a continuous DCF analysis and permits considering the company's perpetuity growth and cash flows and the total value of a firm is therefore computed by adding the obtained Terminal value to the value of the cash flows for the forecasted period and discounted back using the WACC rate, as shown at the beginning of this chapter. (10)

$$Value_{firm} = \sum_{t=1}^{t=n} \frac{FCF}{(1 + WACC)^n} + \frac{TV}{(1 + WACC)^n}$$

Enterprise Value

Calculating its Enterprise Value is the last step to achieve a firm's valuation. Two methods can be used to achieve this:

$$EV = \sum_{t=1}^{t=\infty} \frac{FCFF_t}{(1 + WACC)^n}$$
(11)

Alternatively, if we consider a publicly traded company, the calculation is more straightforward:

 $EV = market \ capitalization + total \ value \ of \ debt - cash \ and \ cash \ equivalents$ (12)

As a result, and by reformulating the above, we end up with an alternative approach to equity value calculation and, ultimately, share price (Frykman, 2003):

$$Equity value = EV - total value of debt + cash and cash equivalents$$
(13)

And consequently, divide the equity value obtained by the number of shares outstanding in order to find the value per share of the company and address its investment and attractiveness potential.

ii. Valuation Multiples

Relative valuation is a widely accepted approach for assessing the value of diverse assets and it is built on the straightforward principle that assets with shared characteristics should have comparable market values. This method leverages price multiples or enterprise value multiples to distinguish between overvalued and undervalued assets in the market, offering a practical means to standardize values across various financial metrics, including earnings, book value, revenues, and industry-specific benchmarks (Damodaran, 2012; Damodaran, 2002).

The idea behind multiples for valuation is that assets, whether real estate developments or stocks, share common attributes and should ideally exhibit similar market prices. In this context, companies operating in the same industry and with similar performance levels should trade at similar multiples (Koller et al., 2015). Among the most intuitive multiples in relative valuation is the Price-to-Earnings (PE) ratio. In stocks, the PE ratio provides a straightforward assessment, comparing a stock's market price with its earnings per share (EPS). It acts as a concise yardstick to determine whether a stock is undervalued or overvalued compared to its peers. When applied to businesses, this approach shifts its focus to assessing the value of their operational assets, often relying on metrics such as Earnings Before Interest and Taxes (EBIT) or Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA) (Damodaran, 2012).

Additionally, book value multiples, exemplified by the Price-to-Book Value (PBV) ratio, are tailored to accommodate accounting adjustments and the original cost of assets, considering the unique attributes of different industries (Damodaran, 2012).

Another facet of relative valuation involves revenue multiples, which helps exploring the intricate relationship between an asset's value and the revenue it generates. A prime example is the Price-to-Sales (PS) ratio, calculated by dividing the market value per share by revenues

per share. These multiples are potent instruments for comparing companies operating under diverse accounting norms (Damodaran, 2012).

Additionally, industry-specific multiples, adapted to the nuances of respective sectors, play a vital role in the valuation arena. These tailor-made multiples consider the distinct attributes of their respective industries. However, it is crucial to note that such multiples may sometimes lead to overvaluation or undervaluation, complicating assessing what constitutes high, low, or average within a specific sector (Damodaran, 2002).

For a successful multiple valuation, guided by Goedhart, Koller, & Wessels (2005), adherence to four fundamental principles is essential:

- 1. Thoughtfully select the appropriate peer group, considering industry peers, those with similar Return on Invested Capital (ROIC), and growth prospects.
- 2. Employ forward-looking multiples.
- 3. Favor enterprise-value multiples for a comprehensive perspective on a company's value.
- 4. Adjust the enterprise-value-to-EBITDA multiple to accommodate non-operating items.

Relative valuation offers a straightforward means of determining asset value, presenting an attractive alternative to the more intricate and time-consuming discounted cash flow analysis. However, its effectiveness hinges on the astute selection and meticulous interpretation of the pertinent multiples (Damodaran, 2006).

c. Private Equity

Private equity represents a dynamic and distinctive asset class that plays a pivotal and transformative role in the global investment landscape. At its core, private equity involves a specialized capital investment, typically steered by proficient and seasoned private equity firms. These firms are renowned for their expertise in acquiring, investing in, and astutely managing equity ownership in privately held companies, often to enhance their value and profitability.

The private equity landscape is remarkably multifaceted, encompassing a wide array of components and intricacies. This section delves into the core elements that define this unique asset class, providing a deeper understanding of its inner workings.

i. Definition

Private equity (PE) is the investments private equity funds make in privately held companies. Investors in this market are investment professionals, high-net-worth individuals, and other institutional investors, such as pension funds and banks.

Multiple forms of investment are considered in the broad term of private equity; however, it is common for private equity to be the principal descriptor for LBO activity (Stowell, 2018). PE funds are differentiated by their approach and their inclination and expertise towards a specific strategic investment, including:

1. Leveraged buyout (LBO)

Refers to the purchase of all or majority of a company or unit by using significant amount of debt and a small portion of equity from a group of investors. Mature companies generating strong operating cash flows are usually the target of LBO transactions.

1. Growth capital

It is characterized by minority equity investments in mature companies that need additional capital without control change within the company to undergo expansion or restructuring of their operations, finance acquisition, or enter a new market.

2. Venture capital (VC)

VC refers to equity investments allocated to early-stage and less mature non-public companies. Often, this capital is provided to fund a business's launch, development, or expansion.

3. Mezzanine capital

A Mezzanine is a form of financing where an investment in subordinated debt or preferred stock of a company is made without taking voting control. Such a solution is often bundled with warrants and conversion rights to common stocks.

ii. Characteristics and Participants

Investment firms engaging in LBOs are called private equity firms or financial sponsors. This results from their role and active engagement in the transaction, which spans from providing equity capital to assistance across all aspects of the transaction. In a private equity transaction, several defining characteristics come into play:

A private equity fund acquires a company or business unit, with its funding sourced from debt and equity. These funds are secured from various institutional investors such as pension funds, insurance companies, endowments, funds of funds, high-net-worth individuals, sovereign wealth funds, hedge funds, or banks (Kaplan & Strömberg, 2009).

Equity investment in these transactions typically constitutes approximately 30% to 40% of the total purchase price. The remaining cost of the acquisition is covered through debt financing. This relatively high leverage employed can enhance the potential return on equity for the private equity buyer, albeit with an increased risk of amplified losses if the asset's value declines. The debt used in private equity transactions takes various forms, including senior debt, usually provided by banks and secured by the target company's assets, and subordinated debt, often unsecured and raised in the high-yield capital markets.

In the event of a publicly traded company being the target, the buyout leads to the company "going private." The newly privatized company is expected to eventually be reintroduced to the public domain, typically within seven years. This re-entry can occur through an initial public offering (IPO) or a private sale to another company or private equity firm.

Private equity firms often set a targeted internal rate of return (IRR) exceeding 20% during their investment's holding period (Stowell, 2018). However, the actual IRR achieved depends on multiple factors, including the level of leverage used, the ability of the target company's cash flow to service debt, dividend payouts, and the selected exit strategy. Considering the elevated risk due to the substantial use of leverage in the transaction is essential when assessing the expected IRR. These transactions involve capital commitments from various parties. The "general partners" of the private equity fund commit capital alongside the "limited partners," as shown in the Fund Structure section. The collective capital from these sources constitutes the equity funding for the transaction.

These characteristics collectively define private equity transactions and highlight the intricate relationship between equity and debt financing, the transition of public companies to private status, and the pursuit of attractive returns while effectively managing associated risks.

In this context, four primary participants collectively drive the private equity transaction, effectively managing target selection, financing, operations, and ultimately, the strategy for realizing value. The following vital roles are essential to the execution of a private equity transaction (Stowell, 2018):

1. Private Equity Firm (or Financial Sponsor, Buyout Firm, LBO Firm)

This firm performs key functions throughout the process. They: Choose the target for a leveraged buyout, often with an investment bank's help; Negotiate the acquisition price and secure financing, including senior and subordinated debt, often with assistance from an investment bank; Complete the acquisition; Manage the acquired company, often with existing or new leadership, as owners and controlling board members; Supervise senior management closely; Make significant strategic and financial decisions, and; Decide when and how to sell the company, often with the expertise of an investment bank

2. Investment Banks

Investment banks are crucial in private equity transactions. They: Introduce potential acquisition targets to private equity firms; aid in acquisition price negotiations; Frequently provide loans, alone or as participants in syndicated bank loan facilities, and underwrite high-yield bond offerings; Occasionally assist in recapitalizations by underwriting debt or extending loans to facilitate substantial dividend distributions to

the private equity owner and; Facilitate the company's eventual sale through mergers and acquisitions or initial public offerings.

Private equity funds are a significant revenue source for investment banks.

3. Investors

Institutional and high-net-worth investors become limited partners in a private equity fund, committing their capital for extended periods, typically 10 to 12 years. However, they receive distributions when investments are converted into cash through exit strategies, like an IPO or company sale. Limited partners provide capital gradually, based on investment opportunities identified by the general partner, which may take several years to draw down fully.

4. Management

The management of acquired companies co-invests with the private equity fund, taking an equity stake in the acquired company, which aligns their interests with the fund's success. They often receive stock options, providing a direct incentive to create substantial value. This results in wealth creation if they manage the company effectively until a successful exit, typically within 3 to 7 years. If issues arise during the holding period or exits are delayed, management may forgo exit-related compensation and potentially face employment challenges.

iii. Fund Structure

Private equity firms typically adopt a structure organized as management or limited liability partnerships, functioning as holding entities for multiple private equity funds and, sometimes, other alternative asset funds managed by general partners. A group of 20 to 40 general partners can be found in the largest private equity firms. These general partners make personal investments in the fund and concurrently raise capital from institutional investors and high-net-worth individuals who become limited partners within the fund.

General partners in private equity firms receive funding from several avenues. They derive an annual management fee from limited partners, which typically amounts to approximately 2% of the total assets under the fund's management. Additionally, they distribute profits generated by the fund, known as "carry" or "carried interest." The carry traditionally constitutes around 20% of the profits, a powerful incentive for private equity firms to create value for the fund actively. The remaining profits are distributed to limited partners, which benefit from avoiding double taxation thanks to the company structure (Døskeland & Strömberg, 2018).

Furthermore, the fund invests in, often referred to as "portfolio companies," may also remit transaction fees to the fund for various services provided, including transaction and consulting services. These fees are usually calculated as a percentage of the transaction's value, and sometimes, they include "monitoring fees." Some, but not all, funds offset these fees against management fees payable by limited partners. Partnership agreements between general and limited partners are established at the commencement of each fund, clearly outlining the expected compensation and fee structures for the general partners. The management fee resembles fees paid to mutual funds and hedge funds, typically surpassing mutual fund fees and aligning with hedge fund fee levels.

On the other hand, the carry does not have a direct counterpart in most mutual funds and is analogous to the performance fees received by hedge funds. However, it is essential to note that hedge fund managers typically receive performance fees annually based on the assets under management's value. In contrast, general partners of private equity funds only receive carry when their investments are successfully monetized. This monetization often occurs after a holding period of 3 to 7 years.

For private equity firms to remain successful, they must consistently raise new funds every 3 to 5 years. Each new fund is expected to be fully deployed within a 5-year and structured to achieve an exit strategy within 3 to 7 years from the initial investment.

Figure 2.1 illustrates the PE model as discussed previously and outlined by Gilligan and Wright (2014).



iv. Fund Lifecycle

The typical lifespan of a private equity fund extends over approximately ten years, although it may vary from one fund to another. In the case of a ten-year fund, the investment period typically spans around six years. During this investment period, the private equity (PE) fund periodically calls upon the capital committed by limited partners (LPs), and LPs must meet these capital calls as they arise. Once the PE fund successfully exits an investment, commonly through a trade sale or an initial public offering (IPO), the resulting proceeds are distributed to LPs following a predefined structure.

When the PE fund has yet to divest all its assets by the end of its intended lifetime, extending the fund's duration for two or three years is usually possible, subject to approval from the LPs. Notably, private equity firms often manage a sequence of funds simultaneously and typically initiate the fundraising process for a subsequent fund when the preceding one is nearing complete deployment. This approach allows them to maintain a continuous flow of fee income.

According to data from Bain & Company (2023), private equity firms, on average, were concurrently launching a fund each 3.2 years. This is a result of an acceleration in investment, which led over the past decade to GPs coming back sooner to LPs and asking for more. Similarly, LPs diversify their investments across various funds from different vintage years.

This strategy ensures that they experience a more balanced pattern of cash outflows and inflows, enabling them to adhere to their target private equity allocation (Døskeland & Strömberg, 2018).

Figure 2.2 outlines an example of the fund lifecycle for a ten-year fund as touched upon by Døskeland and Strömberg (2018):



Excluding the eventuality of an extension period as an actual phase, the fund lifecycle can be divided into four overlapping phases as follows: (1) Marketing/Fundraising phase, (2) Investing phase, (3) Holding phase, (4) Exit.

1. Marketing/Fundraising phase

The private equity investment cycle commences with the fundraising phase, a pivotal starting point, as it provides the essential capital for the subsequent stages. Without adequate funds, a private equity fund lacks the means to embark on investment activities.

2. Investing phase

Following the fundraising phase, private equity funds transition into the investment phase, a period that can extend for up to six years. During this phase, these funds target companies, encompassing publicly listed and privately held entities. In the case of publicly listed companies, private equity funds typically pursue the delisting of these firms.

The success of this investment phase heavily relies on favorable market conditions that facilitate the acquisition of debt to finance company buyouts. Consequently, private equity funds are susceptible to short-term and intermediate-term interest rates, especially concerning low-grade bonds.

3. Holding phase

The intermediary period between investment and divestment is called the holding phase. In this stage, private equity funds restructure and strategically reorientate their target companies. The primary objective of the private equity fund during the holding phase is to enhance shareholder value. The fund substantially influences the company's management and strategy as it is the predominant or largest shareholder, aiming to maximize the target company's worth.

4. Exit

Around the third year of their investment horizon, typically lasting several years, private equity funds initiate the divestment phase, which continues until the fund's planned lifetime. Exit strategies can take various forms, including an Initial Public Offering (IPO), trade sale, secondary buyout, or write-off. Some private equity funds may execute the paradoxical move of bringing a previously delisted company back to the stock market.

An IPO is a relatively less common exit route, primarily chosen by experienced private equity funds when market conditions are favorable. This expensive exit option is often reserved for specific timeframes when strong market sentiments align with robust stock market performance, offering the potential for significantly increased value. In contrast, a trade sale, or exiting through a strategic buyer, is the most preferred exit route. It consistently delivers superior value compared to internally reported valuations. When an IPO or trade sale is not viable, private equity funds may turn to a secondary buyout, which involves selling the company to another private equity fund.

While this option generates less value than an IPO or trade sale, it has gained popularity over the years due to limited trade sales and IPO opportunities coupled with increased private equity investments.

d. Value Generators for Private Equity firms

i. Operational Enhancement

Operational engineering is defined as the industry and operating expertise that private equity investors employ to enhance their investments. It encompasses increased sales, improved operational efficiency, reduced capital intensity, and higher valuations at exit (Døskeland & Strömberg, 2018). To cater to the growing importance of operational engineering, private equity firms have increasingly turned to hiring managers with extensive industry experience, including former CEOs of prominent public companies (Kaplan & Strömberg, 2009).

In the world of private equity, the strategies for value creation have evolved significantly, and in the 1980s, financial and governance engineering reigned supreme as the primary drivers of value in leveraged buyouts (LBOs). However, over the years, the focus has shifted towards operational engineering, marking the critical distinction between highly successful and less successful private equity firms. This shift does not negate the importance of financial and governance engineering but instead reflects the changing dynamics within the private equity industry.

Recent surveys, such as the one conducted by Gompers et al. (2016) among 79 major private equity investors managing over \$750 billion in assets, reveal the factors that have taken precedence in value creation. These include sales growth, improved incentive structures, multiple expansions, enhanced corporate governance, follow-on acquisitions, acquisition at favorable prices, and cost reduction strategies. It is important to emphasize that these strategies represent a combination of financial, governance, and operational engineering.

Operational engineering is integral to the private equity process, commencing right from the deal selection phase. The study by Gompers et al. (2016) underscores that GP (General Partner) contributions in this early phase are significant, focusing on factors like the business model, the competence of the management team, and the ability to add value to the portfolio company.

The influence of GPs in this phase is pivotal in determining the success of diverse strategies. For instance, strategies focused on growth through acquisitions benefit from GPs with financial backgrounds, while GPs with consulting or industry expertise are better suited for organic growth strategies.

Critical Components of Operational Engineering

With a focus on operational engineering, the key elements that drive value creation in private equity include growth through increased sales, optimizing operational efficiency, managing working capital, divestments and sale-leaseback contracts, and improvements in cost structure (Kaplan & Stomberg, 2009; Hannus, 2015).

- Growth and Increase in Sales

Various studies conducted since the 1980s have consistently revealed significant improvements in productivity operations and sales growth in private equity-owned portfolio companies. This connection between operational engineering and increased sales is pivotal as higher sales directly influence a company's valuation, often based on free cash flows.

- Operational Efficiency

Efficiency improvements in private equity-owned companies extend beyond just sales numbers. They are also about optimizing resource utilization and achieving higher profitability through operational efficiency. This is often measured using accounting variables, such as cash flows per sales, assets, or employees.

- Divestments and Sale-Leaseback Contracts
 Strategies like divestitures (selling underperforming assets) and sale-leaseback contracts are often employed to streamline the asset base of portfolio companies.
 These measures improve operational efficiency by releasing cash for debt repayments or new investments.
- Working Capital Management

Effective working capital management, which includes optimizing accounts receivables, inventory, and accounts payables, significantly enhances asset utilization in private equity-owned companies. It aims to release cash by reducing capital requirements during growth, thereby increasing cash flows.

Improvements in Cost Structure

Cost structure improvements are crucial to efficiency and profitability, allowing PE firms to streamline operations and generate productivity gains. That is true despite the faced criticism by cost-cutting measures.

Employment, R&D, and Capital Expenditures

Contrary to the perception of short-termism, private equity-owned companies manage to make modest reductions in employment, R&D spending, and capital expenditures without compromising long-term business sustainability. Employment reductions are often accompanied by a subsequent increase in different roles, encouraging employee empowerment. The efficiency of R&D functions often improves, leading to patents with higher

economic value. Private equity firms seek a balance between cost management and long-term business vitality, and the impact on employment and innovation is nuanced.

In conclusion, operational engineering is at the forefront of value creation in today's private equity landscape, transforming how firms approach investments, employment, and operational efficiency. Its increasing importance reflects the unique skills required and the challenges it poses to competitors, setting private equity firms apart in the ever-evolving world of investment and value creation.

ii. Financial Engineering

Financial engineering is a fundamental aspect of the private equity (PE) landscape, embodying the strategic utilization of financial tools and capital structure adjustments to enhance the performance and value of portfolio companies. As a dynamic and multifaceted discipline, financial engineering plays a pivotal role in PE transactions, particularly in the context of leveraged buyouts (LBOs). The objective of financial engineering within this realm is to optimize the allocation of capital, leverage, and incentives, ultimately driving value creation and fostering alignment between the interests of PE firms, management teams, and investors.

This section delves into the intricacies of financial engineering within private equity, examining how the manipulation of capital structure, leverage, and financial incentives contributes to value creation, corporate governance enhancement, and risk mitigation. By exploring the nuances and strategies associated with financial engineering, we gain valuable insights into the mechanisms that make PE investments a compelling and dynamic component of the global financial landscape.

Capital Structure and the Impact of Leverage

Financial engineering involves strategically manipulating portfolio companies' capital structures to drive value creation. Using debt to acquire portfolio companies significantly amplifies their leverage in leveraged buyouts. The rationale behind this increase in leverage within portfolio companies is multifaceted and offers several benefits contributing to value creation.

Firstly, elevated leverage allows private equity (PE) firms to acquire larger companies with relatively modest equity investments, thereby enhancing returns upon exit. This value creation is achieved through what is known as the "free cash flow effect." Debt infusion mitigates free cash flow issues, compelling companies to allocate their cash flows primarily toward servicing debt and interest payments. The strategic focus on bolstering a portfolio company's cash flow generation reinforces the firm's emphasis on the ability to create value. In simple terms, the enterprise's value can be considered the sum of its debt and equity. When the company's debt load decreases, the value of its equity correspondingly increases. That means that even if the company's overall value remains constant throughout the holding period, PE investors will observe an increase in their equity share, which translates into improved returns upon the company's eventual sale.

Secondly, leverage indirectly plays a pivotal role in mitigating agency costs, aligning the interests of managers, and enhancing equity ownership among key executives. By investing their resources to acquire a portion of the company's equity, managers are incentivized to meet debt repayment obligations. The stakes are heightened as failure to do so could lead to

creditors, as a last resort, initiating bankruptcy proceedings. This would significantly impact the personal finances of the managers, given that a substantial portion of their wealth is tied to the company's equity. Repaying debt also indirectly amplifies the value of the managers' equity stake, as lower debt translates to higher equity value. This combination of high leverage and high-powered incentives further fosters operational efficiency and a reduction in managers' private benefits, focusing on growing equity rather than merely growing the company itself.

Moreover, high leverage benefits from making cash a scarce resource, driving a more rigorous screening process for potential investments, and prioritizing the most viable projects. Debt's tax-deductible nature further adds to its appeal. Nevertheless, it is crucial to note that the amount of tax savings may already be factored into the transaction price. Various countries have "thin capitalization" rules that limit the tax deductibility of interest. While high leverage offers many advantages, it also increases the risk of financial distress, as leveraged buyouts (LBOs) experience distress more often than public companies. Despite this, financial distress does not necessarily lead to bankruptcy. High leverage means that the going concern value of an LBO is considerably higher than its liquidation value when facing financial distress, which incentivizes creditors to reorganize their claims and avoid costly bankruptcy. It is a pivotal point illustrated by the restructuring of Thule in 2007, a PE buyout that encountered financial challenges but successfully rebounded.

In conclusion, high leverage carries significant advantages that outweigh the disadvantages of LBOs. The advantages include driving value creation, aligning managerial incentives, reducing agency costs, and enhancing equity ownership among executives, all of which contribute to the overall success of these transactions.

iii. Governance Engineering

The governance engineering of private equity (PE) firms stands as a vital and distinctive aspect of their operations, wielding a profound influence over the companies they invest in. PE firms do not merely inject capital into their portfolio companies; they often enact substantial changes in corporate governance structures and practices. This process, often called governance engineering, is a crucial driver behind the success of private equity investments.

PE firms leverage governance engineering as a strategic tool to enhance their portfolio companies' performance, efficiency, and value.

Managerial Incentives

As highlighted, PE ownership profoundly influences corporate governance within portfolio companies. New owners implement a set of strong incentives for the management, often involving a reduction in the size of the board of directors (BoDs) and the introduction of novel governance procedures to enhance company oversight (Døskeland & Strömberg, 2018). These transformative changes aim to align the interests of owners and managers while improving overall governance.

Under PE ownership, post-buyout, the equity ownership of the management substantially increases. However, this equity is not handed out freely; instead, managers are required to invest their funds to acquire their equity share (Kaplan, 1989). This practice serves dual purposes. Firstly, it gives managers strong incentives to maximize the company's value, as they stand to gain significantly if the company's worth increases. Secondly, since managers

have invested their capital, they face considerable downside risks. In the event of financial turmoil or business failure, they could lose their entire investment, a risk amplified by the illiquidity of the equity, which can typically only be realized at the exit stage (Jensen et al., 2006).

In essence, high managerial equity ownership aligns with Lazear's (2004) concept that owners expect managers to have "skin in the game," thereby reinforcing the alignment of interests between owners and managers. This alignment also underscores the managers' genuine belief in the company's business acumen and commitment to implementing the company's strategies in a value-creating manner. However, the increased equity share could make managers more risk-averse, rejecting highly profitable yet risky projects in favor of less profitable, lower-risk endeavors. This behavior, over time, may adversely affect the company's financial performance and the value maximization principle (Holthausen & Larcker, 1996). Therefore, careful consideration must be given to the level of managerial ownership to prevent over-concentration of risk.

Furthermore, high-powered incentives in the PE context encompass more than just increased equity ownership among executives. Baker and Wruck (1989) observed that salaries for top executives tend to rise shortly after a buyout. However, in alignment with the PE ownership model, where there is a "carrot," there is also a "stick." Increased salaries may coincide with introducing new performance evaluation systems and longer working hours. To mitigate accounting manipulation, the newly implemented evaluation systems are typically tied to cashflow-based metrics, such as EBITDA (earnings before interest, taxes, depreciation, and amortization) (Cronqvist & Fahlenbrach, 2013). Moreover, PE firms often expand bonus plans to encompass more managers, with bonuses under these new plans generally being more significant than those in public companies (Baker & Wruck, 1989).

In summary, the incentivization of management under PE ownership is comprehensive and performance-sensitive. It underscores the importance of management's substantial financial stake in the company's success.

Board Composition and Practices under PE Ownership

After a leveraged buyout (LBO), the ownership structure of the portfolio company undergoes a significant transformation, becoming highly concentrated. The reduced number of shareholders eliminates the free-rider problem and makes supervising and monitoring management more cost-effective (Renneboog & Vansteenkiste, 2017). PE investors actively participate in the board of directors, enabling more efficient oversight of management's adherence to the company's strategy. However, managerial equity ownership partially offsets the need for this monitoring (Nikoskelainen & Wright, 2007).

Acharya et al. (2009) have identified four primary distinctions between boards in PE-owned companies and public companies' boards. Firstly, the board's composition changes, significantly reducing the number of members. PE boards typically consist of five to seven members, including three from the PE firm, one to two managers from the buyout company, and one to two external individuals (Gompers et al., 2016). The presence of external individuals who are neither employed by the buyout company nor affiliated with the PE firm characterizes these PE boards. These changes in board composition have been substantiated by several scholars (e.g., Gertner & Kaplan, 1996; Peck, 2004; Cornelli & Karakas, 2012). The reduction in board size may be attributed to the shorter time horizon (typically 3-5 years) and highly concentrated and homogenous ownership within PE-owned companies. As such, PE boards can focus on a few well-defined priorities, requiring fewer board members.

public companies have diverse shareholder groups with varying interests and time horizons, leading to more extensive and less effective boards.

That is further supported by Yermack's (1996) findings that larger boards in public companies correlate with poorer performance, indicating that public companies with larger boards generate lower shareholder returns. Secondly, PE boards place a strong emphasis on value creation. All involved parties, including management, owners, and board members, share a common objective—maximizing the company's value at exit. This alignment is reinforced by the increased equity ownership of board members (Gertner & Kaplan, 1996). Board members with equity stakes have added motivation to monitor managers and ensure the company remains on course to achieve its objectives.

Thirdly, PE boards establish strategic objectives and key performance indicators (KPIs). These KPIs are closely tied to cash-flow-based metrics and receive intensive scrutiny, aligning with progress (as also confirmed by Heel and Kehoe, 2005). PE boards set high expectations for top executives, leading to significant CEO turnover, with one-third replaced within the first 100 days post-buyout and two-thirds replaced within four years (Acharya & Kehoe, 2008). Jensen (2007) articulates that, in PE firms, CEOs have a direct superior, contrasting with most public corporations where directors typically see themselves as employees of the CEO. This shift in the corporate governance paradigm underscores the transformative impact of PE ownership.

PE ownership also leads to increased turnover of other top executives (Gompers et al., 2016) and directors (Cornelli & Karakas, 2008). Finally, the engagement and commitment of PE board members are notably high. Non-executive directors, including PE investors and external members, dedicate significantly more time than their counterparts in public companies and engage in more frequent informal interactions with the management. This heightened level of involvement keeps PE board members well-informed about the company's activities and enables them to provide extensive support and advice to the management. Consequently, the decision-making process is expedited and not confined to formal boardroom meetings. PE boards catalyse change, shaping the company's strategy and contributing to value creation (Acharya et al., 2009).

iv. Exit Strategy Optimization

In private equity (PE), selecting the right exit strategy is pivotal. It significantly shapes how returns from an investment unfold, determining their form, timing, and extent. In this domain, most exits occur through one of four main routes: a strategic sale, a secondary buyout, an initial public offering (IPO), or a dividend recapitalization. Market situations and the target's performance affect the choice of exit route as the investors are often willing to reinvest the proceeds into a new project and pay the profits to the LPs (Yousfi, 2011). The chosen exit strategy will depict the form, timing, and extent of the returns from the investment, which usually occurs within three to five years from the acquisition (Rosenbaum & Pearl, 2009).

One of the most prevalent exit routes for PE funds, especially in leveraged buyouts (LBOs), is the strategic sale. It garners attention from buyers beyond the PE landscape, lured by the prospects of synergy, potential patents, and growth prospects. These strategic buyers bring a long-term perspective, anticipating increased market share and a competitive edge post-acquisition. As a result, strategic buyers are often the stronger bidders, capable of offering premium sale prices (Rosenbaum & Pearl, 2009).

IPOs represent the aspirational exit strategy, particularly for highly successful LBOs. They elevate the company's profile, increasing company valuation and greater autonomy for the target's management. Remarkably, investors in such scenarios usually retain a significant

ownership stake. This paves the way for future equity offerings or potential company sales. The IPO sets the stage for a more liquid market, potentially fuelling post-IPO success and yielding substantial returns for the PE firm (Rosenbaum & Pearl, 2009). However, it is imperative to note that IPOs may give rise to agency problems, as the target's management holds informational advantages over new shareholders, potentially fostering opportunistic behavior (Yousfi, 2011).

Other exit solutions available to PE firms include:

- A dividend recapitalization strategy involves the PE firm issuing fresh debt on behalf of the target company, which, in turn, disburses dividends to its shareholders. This approach offers concrete means to realize returns, often before a complete exit from the investment. In specific scenarios, the dividends may be substantial enough to recoup the initial investment or even exceed it fully. A pivotal advantage of this practice is that it generates returns while preserving the existing ownership structure (Rosenbaum & Pearl, 2009).
- Secondary buyouts unfold when the target company is transferred to another PE investor. This scenario materializes when the existing investor believes that the intervention of a more prominent investor can enhance the target's value. It may also arise when the minimum investment period has concluded, yielding satisfactory returns, or when the current investor cannot or will only provide further funding at the end of the fund period. However, this approach may be a drawback for the seller, resulting in a lower exit price and reduced returns (Wang, 2012).

In conclusion, each exit route presents its unique benefits and complexities, aligning with investors' diverse objectives and requirements in the ever-evolving landscape of private equity investments.

v. Performance Measurements

Return measurement of private equity investments is calculated differently from the typical approach for liquid assets since, as previously outlined, cash flows are irregular, and capital calls to LPs occur at any time with different sizes. As a result of this difference, benchmarking PE returns with other asset class returns is also considered complicated.

The most used performance measures in PE include the internal rate of return (IRR), the multiple of the total value to paid-in capital (TVPI), and, although less popular among practitioners, the public market equivalent (PME).

The Internal rate of return is an annualized measure used to compare returns across different time intervals. It reflects the discount rate at which an investment's net present value equals 0.

$$\sum_{t} \frac{FCF_t}{(1+IRR)^t} = 0 \tag{13}$$

The numerator of total net cash flows implies that the PE fund is fully realized. If this is not the case, the residual value of the portfolio investments must be added to the numerator.

An essential factor to consider is that early successful investments with high returns and a long holding period by the PE firm can distort the IRR. That is another reason not to compare the IRR of PE funds with that of public markets.

On the other hand, the total value to paid-in capital (TVPI) is perceived as more straightforward as it effectively measures how much investors are receiving, dividing the sum of all capital distributions by the sum of the capital calls.

$$TVPI = \frac{\sum capital \ distributions_t}{\sum capital \ calls_t}$$
(14)

This metric is also called the multiple on invested capital (MOIC), and its popularity derives from its simplistic nature. As for the IRR, unrealized funds add the estimated value of unrealized investments to distributions.

Another commonly used performance measurement is the public market equivalent (PME), the ideal approach for comparing returns between PE and public markets.

In this sense, several alternative PME methods have been developed:

1. Long and Nickels were the first to develop a PME approach called LN-PME. It involved the creation of a notional investment in the S&P 500, utilizing the cash flows generated by the private equity fund. It can be summarized as follows:

Regarding capital calls made by the private equity fund, an equivalent amount was hypothetically allocated to purchase the S&P 500 Index. Conversely, when the private equity fund received distributions, it was assumed that a matching amount of the S&P 500 Index was sold. As the price of the index fluctuated, the value of this theoretical investment also changed. When evaluating the fund, they could compare its value to the index investment's notional value (Long & Nickels, 1996).

- The PME+ method adjusts cash flows constantly to prevent negative net present value situations. While it helps avoid discrepancies, it does shift cash flows, making direct comparisons between the PME vehicle and the private equity fund less precise (Rouvinez, 2003).
- 3. Another innovative approach to address the issue of negative NAV associated with the LN-PME was developed in 2013 by the investment firm Cambridge Associates. Like the LN-PME and PME+ methodologies, the mPME involves the creation of a hypothetical public investment that mirrors the performance of a chosen public benchmark.
- 4. Kaplan-Schoar PME (KS-PME): KS-PME, developed in 2005 by Kaplan and Schoar, provides the most straightforward market-adjusted cash multiple, making it easier to determine whether the private market fund has outperformed or underperformed the chosen public market index.

$$PME = \frac{\frac{\sum capital \ distributions_t}{(1+r_t)}}{\frac{\sum capital \ calls_t}{(1+r_t)}}$$
(14)
This method offers flexibility in selecting different indices and combining cash flows from an entire portfolio. For this reason, the KS-PME provides a valid economic performance measure to limited partners (Sorensen & Jagannathan, 2014).

vi. Risk Management

Private equity investments present unique risks that set them apart from other asset classes, with the most notable ones being (Buchner, 2014; BVCA, 2015):

- Operational Risk:

Operational risk encompasses the potential for financial losses from inadequate processes and systems underpinning an organization. This concern applies universally to private equity (PE) investors, irrespective of the asset classes these funds invest in.

- Funding Risk:

Funding risk revolves around the chance that investors may fail to fulfill their capital commitments, constituting an "investor default risk." PE funds typically refrain from immediately tapping into all the committed investor capital; instead, they call upon it once they have identified suitable investments. Funding risk is closely intertwined with liquidity risk since investors facing a funding shortage may need to liquidate illiquid assets to meet their obligations.

- Liquidity Risk:

Liquidity risk denotes the inability of an investor to redeem their investment at any time. PE investors are "locked in" for extended periods, spanning five to ten years or more, with no avenue to redeem their committed capital during this duration. Furthermore, there needs to be an active market for underlying investments to estimate when these investments can be liquidated and at what valuation (Franzoni et al., 2012).

- Market Risk:

PE investments are exposed to various forms of market risk, including broad equity market fluctuations, geographic and sectoral exposure, foreign exchange rate variations, commodity price volatility, and interest rate fluctuations. In contrast to public markets, where prices constantly fluctuate and are marked-to-market, PE investments undergo infrequent valuations, typically on a quarterly basis, often involving subjectivity. Nevertheless, the market prices of publicly listed equities at the time of a portfolio company's sale ultimately impact the realized value. Despite these risks, private equity funds often emphasize efficiency programs and overall cost reduction, making portfolio companies less susceptible to economic downturns than industry-related counterparts. Market risk is quantified through the utilization of the Value-at-Risk (VaR) approach, which has become the prevailing standard employed by financial analysts to measure this type of risk (Jorion, 2001).

- Capital Risk:

Capital risk pertains to the capital exposed to potential loss, encompassing the net asset value of the unrealized portfolio and future undrawn commitments. In theory, all portfolio companies could experience a decline in their current value, reaching a zero valuation in the worst-case scenario. Capital risk is closely linked to market risk, with market risk addressing uncertainty in unrealized gains or losses. In contrast, capital risk concerns the prospect of realizing a loss on the original capital at the fund's end. Capital risk manifests in two primary ways: firstly, through the failure of underlying

companies within the PE portfolio, and secondly, through suppressed equity prices that can render exits less attractive. The condition, method, and timing of exits play pivotal roles in impacting value creation for investors.

- Interest Rate Risk:

The leverage in acquiring companies influences private equity performance. Companies must repay principal debt and interest within 5-6 years. Fluctuations in interest rates can affect a portfolio company's available free cash flow. A substantial increase in interest rates may jeopardize the company's ability to meet its financial obligations. Various forms of debt financing in the private equity industry carry differing risks, although this research will not delve into exotic debt types.

- Manager Risk:

For institutional investors, their private equity portfolio's performance is paramount. The selection of the right private equity fund managers is critical. Managers vary in experience, networks, strategies, sector and regional focus, deal size, reputation, integrity, historical track record, and consistency of returns. Based on these criteria, a comprehensive due diligence phase is essential before investing in private equity funds. Manager risk can be mitigated through investment in several managers following diligent due diligence.

3. Market Overview

a. Private Markets Landscape

i. Private Markets Overview

In contrast to the robust growth of the previous decade, 2022 emerged as a year of restraint for the private markets. The soaring heights of 2021, driven by pent-up demand from the early pandemic stages, were curtailed by various external macroeconomic factors. The traditional era of the "Great Moderation," characterized by low inflation, low interest rates, and globalization, has given way to a new period marked by high inflation, rising interest rates, and economies are driven by supply dynamics (Private Markets Outlook – BlackRock, 2023).

Persistent high inflation prevailed for a significant part of the year, leading central banks across the globe to implement interest rate hikes at an unprecedented pace. Concurrently, quantitative tightening and disruptions in asset valuations raised apprehensions of an economic deceleration. Moreover, the ongoing conflict in Ukraine exacerbated risks to the global economy, manifesting in increased commodity prices and supply chain disruptions. Consequently, public markets experienced substantial sell-offs, with private markets initially showing resilience but eventually succumbing to the broader trend.

These disruptions had multifaceted and substantial impacts on private markets, influencing fundraising, performance, and the growth of assets under management (AUM). Fundraising within private markets saw an 11 percent decline, amounting to \$1.2 trillion, with the "denominator effect" playing a role in limiting some limited partners' capacity to allocate capital. The decrease was particularly pronounced in Europe and Asia, while North America witnessed a modest uptick in fundraising. Investors gravitated toward larger funds, reinvesting with existing managers while reducing commitments to smaller and emerging ones (McKinsey Global Private Markets Review, 2023).

Performance across all private markets' asset categories declined compared to 2021, although they continued outperforming their public market counterparts. Private equity (PE) recorded negative returns for the first time since 2008. Conversely, natural resources strategies maintained relatively robust performance, buoyed by elevated commodity prices.

Despite these challenges, the private markets industry managed to sustain its growth, culminating in assets under management (AUM) reaching \$11.7 trillion as of June 30, 2022. Furthermore, this evolving economic landscape presents an opportunity for long-term investments in megatrends, including the shift toward a net-zero economy, the expansion of global technology adoption, advancements in healthcare, and demographic changes (McKinsey Global Private Markets Review, 2023).

In this context, companies increasingly seek capital through private markets, creating prospects for acquiring high-quality assets at favorable valuations. On the other hand, investors seek downside protection in private market deals, often through lower valuations and alternative deal structures that offer risk mitigation (Bain & Company, 2023).

According to research by BlackRock, private assets present the potential for a more favorable risk-reward trade-off. With the typical investment period for a new fund vintage spanning from one to three years, the attraction of lower entry valuations becomes particularly appealing in the current landscape. The focused nature of private market portfolios, characterized by a relatively limited number of investments, contributes to a broader dispersion in potential

returns and underscores the significance of judicious manager selection (Private Markets Outlook – BlackRock, 2023).

ii. Key Investment Sectors

Within private equity, a compelling opportunity presents itself in the form of investments offering steady cash flows at appealing valuation multiples. Resilient sectors like healthcare and technology designed to combat inflation offer distinct avenues to navigate various market cycles.

In the infrastructure sector, the pressing energy crisis and shift toward a low-carbon economy underscores the need for investments in cost-effective, sustainable, and environmentally friendly technologies. The structural elements of these investments will play a crucial role in managing risks associated with technological innovation, unforeseen tax implications, price fluctuations, and regional policies.

In the real estate domain, the demands arising from evolving demographics, deglobalization, and the pursuit of energy-efficient buildings remain relevant despite a slowdown in investment activity. We anticipate further revaluation of assets in 2023 but firmly believe that investors who can discern the most promising regional and thematic niches will uncover compelling opportunities.

With rising interest rates, private credit spreads can deliver enhanced returns. However, there are uncertainties regarding corporations' capacity to absorb the increased costs. We emphasize the critical importance of rigorous underwriting standards and well-structured investment arrangements, including provisions that govern asset revenue/spread adjustments, the hierarchy of investment risk, and mechanisms for early intervention and restructuring. These measures are paramount for effective risk management (Private Markets Outlook – BlackRock, 2023).

The support extended by private equity sponsors and the adaptability offered by private debt providers is essential for optimizing the companies' capital structures and achieving the ideal balance between equity and debt. When this equilibrium is not achieved, opportunities in particular situations and distressed investments may arise again.

Private markets' deals accounted for 1,256 deals (PitchBook Data, Inc., 2023) broken down across the following sectors (Private Markets Outlook, JP Mogan, 2023):



iii. Porter's Five Forces

Porter's Five Forces is a strategic framework that analyzes the competitive dynamics of an industry. When applied to the private equity sector, it offers insights into the factors influencing its attractiveness:

- 1. **Bargaining Power of Suppliers (Low):** Private equity firms have significant capital, giving them negotiating power when dealing with potential portfolio companies. However, they rely on deal flow from business owners looking to sell, which can limit their power.
- 2. **Bargaining Power of Customers (High):** The limited partners (investors) in private equity funds exert substantial influence as they provide the capital for investments. They can negotiate terms and fees with fund managers, and in contrast, fund managers of KKR need to provide high returns to retain them.

However, the bargaining power could be higher within the infrastructure business as infrastructure projects to businesses and governments are usually awarded through bidding processes, creating a low power of negotiations.

- 3. **Threat of New Entrants (Low):** The private equity industry has high barriers to entry due to regulatory requirements, established networks, and the need for substantial capital. It is challenging for new entrants to compete with well-established firms.
- 4. **Threat of Substitutes (Moderate):** While alternative investment options exist, private equity offers unique opportunities for active management and operational improvement in portfolio companies. This mitigates the threat of direct substitutes, building strong client relationships and diversification of its portfolio.
- 5. **Rivalry among Existing Competitors (High):** Competition among private equity firms is intense. Firms compete for attractive investment opportunities, and differentiation often comes from expertise, network, and value-added services they can provide to portfolio companies.

b. Market Assessment

i. Market Size and Growth Trends

Bain and Company's Global Private Equity Report for 2023 paints a robust picture of the market, with buyout value soaring to a remarkable \$654 billion. Exit value reached a substantial \$565 billion, and fundraising activities amounted to \$347 billion. These metrics underscore the scale and activity within the private equity market. The report highlights an overall decline in new deals and exits, attributed mainly to persistent uncertainty stemming from precarious macroeconomic conditions. Private equity players must navigate this complex landscape.

In 2022, the world experienced the highest inflation rates in the last 40 years. Private equity fund managers find themselves in uncharted territory, grappling with the impact of inflation. Notably, this challenge extends beyond the private equity space to public markets. Macro headwinds have created a slowdown in exits, impacting specific investment portfolios. For example, a fund invested in companies reliant on human capital faced margin compression due to rising labor costs. The fund managers find themselves in a position where they need to make up ground, which involves increasing prices, enhancing revenue, or gaining market

share to align EBITDA with the projected initial figures in their deal model. However, this process takes time. (Bain and Company, 2023).

The long-term outlook for fundraising is positive. However, in 2023, fundraising faces challenges. A cash squeeze and macroeconomic forces are causing fundraising to tilt predominantly toward experienced managers and established funds (Bain & Company, 2023).

Global assets under management (AUM) are on a growth trajectory, with a compound annual growth rate of 15% (Bain & Company, 2023).



Global AUM by asset type (\$T)

Notes: Buyout category includes buyout, balanced, coinvestment, and coinvestment multimanager funds; other category includes fund-of-funds, mezzanine, natural resources, hybrid, private investment in public equity, and real assets Source: Prepin

Moreover, despite declining growth valuations, buyout multiples, particularly in the US, have held relatively steady and this resilience in multiples is noteworthy given the current macroenvironment conditions.

ii. Competitive Landscape

KKR & Co. operates in a highly competitive private equity landscape with substantial seasoned industry players and a constant quest for attractive investment opportunities. As one of the prominent global investment firms, KKR competes with a diverse array of private equity giants, including The Blackstone Group, The Carlyle Group, Apollo Global Management, Ares Capital, and Bain Capital, among others.

Moreover, as a global firm, KKR competes on a worldwide stage. Thus, its ability to navigate various geographies, regulatory environments, and market conditions is essential. Local knowledge and relationships can be a competitive advantage, commitment to innovation, experienced teams, and the ability to navigate market dynamics.

The firm's reputation for identifying emerging trends and executing value-driven strategies ensures its competitive standing in private equity. As a result, KKR presents significant room to grow further.

At the Investor Day in April 2021, KKR presented a breakdown of the market share it has by asset class, which was as follows:

	Market Size, \$bn	KKR AUM, \$bn	KKR Market Share
Traditional Private Equity	4'740	88	4.2%
Growth Equity	691	8	1.2%
Real Estate	1'090	27	2.5%
Infrastructure	655	17	2.7%
Alternative Credit	1'128	61	5.4%
Leveraged Credit	2'415	103	4.3%
Hedge Funds	3'870	25	0.6%

The private equity landscape has undergone significant transformation in recent years, marked by the maturation of the market and a notable surge in competition. Several factors contribute to the maturation of the PE market and the consequent increase in competition. Among the most straightforward reasons is that as the PE market has grown in popularity, it has also attracted more participants. However, one can find the perception of substantial returns as an explanation for the more significant number of investors, leading to the establishment of new PE funds. This surge in market entrants has amplified the competition among general partners for lucrative buyout opportunities.

Furthermore, as the private equity market matures, the knowledge concerning operational enhancements for portfolio companies has become more widespread among various PE funds and other key players in the buyout market. This widespread sharing of knowledge, in combination with the greater adoption of valuation techniques and financial engineering, has made it increasingly challenging for general partners to pinpoint attractive buyout targets. Unfortunately, the supply of such targets has not kept pace with the growing influx of capital and the surging popularity of the asset class. This scenario has created a highly competitive landscape in the private equity market.

c. Market Opportunities and Risks

i. Economic Cycles Performance – PE vs Public Equity comparison

Over the past 25 years, the number of US public companies has declined by about a third. This reduction poses diversification challenges. A few tech giants hold a disproportionate share of market indexes, making diversification daunting. Private equity continues to outpace public markets regarding absolute and relative returns.



Private equity and public index returns during tumultuous markets

Source: Private equity: Burgiss, and MSCI World total return index for public equities. Private Equity data sourced from Burgiss covers vintages 1999-2019 as of 31 December 2021. Private equity strategies include: Buyout, VC (Late), VC (Generalist), and Expansion Capital. All collar figures are USD. Index performance returns do not reflect any management fees, transaction costs or expenses. Indexes are unmanaged and one cannot invest directly in an index. Time periods defined as follows A) Apr-00 to Sep-02 B) Oct-07 to Mar-09 C). Jul-11 to Sep-11 D) Dec-19 to Mar-20. The figures shown relate to past performance. Past performance is not a reliable indicator of current or future results. The number of IPOs related to companies with market capitalizations of at least \$50 million saw a significant drop in 2022 from 513 to 1,269 in 2021, according to a Dealogic report. This trend signals a potential shift from public markets to private markets.

ii. Monetary Policy changes

In response to the escalating inflation, central banks in Western economies have initiated monetary tightening measures. This policy involves raising interest rates and deposit requirements, effectively limiting access to credit. Such actions are typically deployed when central banks aim to restrain excessive economic expansion, categorizing it as a contractionary monetary policy. The consequence of this policy in the financial landscape is an escalation in the cost of debt.

Nevertheless, while the heightened cost of debt may momentarily impede deal activity, there is an increasing need for strategic capital to facilitate General Partners in executing transactions. This scenario presents opportunities for forward-thinking managers with available capital and seasoned teams to engage in proactive and opportunistic direct co-investment strategies.

iv. Opportunities

While the technology sector experiences a shift after a decade-long bull run, up-and-coming startups face a potentially longer path to IPO. Conversely, sectors like energy transition and renewables are attracting substantial interest from investors, offering new avenues for investment (JP Morgan Private Markets Outlook, 2023). Moreover, as presented by BlackRock in its 2023 Private Markets Outlook, volatility in the market creates opportunities, with a focus on recession-resilient industries and companies. These include business-critical enterprise software, essential healthcare equipment and services, and consumer staples. Strong tailwinds are evident in space spending, defense companies with Department of Defense contracts, and cybersecurity.

Entry and exit prices in 2023 will be closely tied to the persistence of cash flows. Companies with resilient, recurring cash flows are expected to be among the most attractive investment targets.

v. ESG Factors

The pressure on private equity firms to align with environmental, social, and governance (ESG) principles increased in 2022. Regulators, consumers, B2B customers, and investors are pushing for changes, emphasizing the critical role of ESG factors in portfolios. Simultaneously, the pursuit of advancing innovative alternative energy sources and other eco-friendly solutions is evolving into a long-term opportunity to invest capital effectively. Businesses providing the technology, products, and services crucial for transitioning from carbon-based energy are scattered throughout the global economy. They will require substantial fresh capital as the world endeavors to combat the most severe consequences of climate change. The energy transition is opening investment opportunities. However, making sense of the evolving landscape is challenging for any fund. Ultimately, targeting the right company within these themes comes down to due solid diligence informed by deep expertise in these subsectors.

Disruptive potential is an especially tricky and sometimes risky call. In some cases, although the discovered technology may prove effective in delivering vital data to a particular industry, a more substantial concern pertains to whether the intended users genuinely need it. Customer inquiries might exhibit appreciation for the technology while concurrently signaling a hesitancy to depart from their established practices. In such a scenario, even though the technology firm anticipates revenue growth, projections indicate that the anticipated rapid expansion may need to align with the investment deal's timeframe, ultimately resulting in the fund's decision to forgo the opportunity.

ESG guidelines have now become firmly established. The survey conducted by Pwc for its "Private Equity Trend Report 2023" suggests that in unanimous agreement, all survey participants confirm the presence of a responsible investment policy and the requisite tools for its implementation. Notably, 64% had already adopted ESG-specific Key Performance Indicators (KPIs) for all their portfolio companies, encompassing metrics like carbon footprint, water consumption, and diversity and inclusion, representing a substantial surge from 2021 when it attested at 17%. Concurrently, a growing conviction is that a focus on environmental, social, and governance (ESG) considerations contributes positively to a company's financial performance. A substantial 71% now concur with the notion that the return on investment (ROI) from ESG efforts surpasses associated costs, in stark contrast to the 36% who held this view in the previous year (Pwc, Private Equity Trend report, 2023).

e. Market Outlook

According to a report by Mordor Intelligence, the global private equity market is expected to grow at a compound annual growth rate (CAGR) of greater than 10% during the forecast period. This remarkable growth is underpinned by substantial capital reserves in the market and an increasing imperative to diversify these resources.

Moreover, the notably low correlation of private equity with other investment classes renders it an attractive choice for ultra-high-net-worth individuals (UHNWIs) and high-net-worth individuals (HNWIs). The growing startup culture is expected to drive a surge in private equity deals. Additionally, the relatively light regulatory burden on private equity investments, compared to other forms of investing, provides investors with enhanced control and autonomy over their funds, fostering further growth in private equity deals.

4. Kohlberg Kravis Roberts & Co – KKR & Co

a. Company Overview

KKR & Co. Inc., also known as Kohlberg Kravis Roberts & Co., is a prominent global investment firm with a diverse portfolio of alternative asset classes. Founded in 1976 by Jerome Kohlberg Jr., Henry Kravis, and George R. Roberts, the company has evolved into a major player in the investment industry. KKR's mission is to generate attractive investment returns through a patient and disciplined approach while supporting the growth of its portfolio companies.

As of December 31, 2022, KKR managed approximately \$504 billion in assets under management (AUM) and \$412 billion in fee-paying assets under management (FPAUM).

With offices in major financial hubs worldwide, including New York, London, Hong Kong, Tokyo, and more, KKR maintains a global presence, allowing it to capitalize on a broad range of investment opportunities.

KKR continues to be a prominent force in the world of alternative investments, combining a rich history with a forward-looking approach to provide value to its investors and partners.

b. History

The history of Kohlberg Kravis Roberts & Co. (KKR) is one of audacity and innovation in the private equity landscape. Starting in the 1960s and 1970s, Jerome Kohlberg, Henry Kravis, and George Roberts led a trailblazing journey at Bear Stearns, pioneering "bootstrap" investments in family-owned businesses.

Several family businesses at the time were enterprises facing succession challenges and they couldn't go public. In this sense a pivotal moment, now remembered as a groundbreaking deal in the world of leveraged buyouts, occurred in 1964 when Lewis Cullman masterminded the acquisition and subsequent divestiture of the Orkin Exterminating Company.

The subsequent years saw various acquisitions and leveraged buyouts, with some notable successes and one bankruptcy. Tensions with Bear Stearns led to the formation of KKR in 1976. Notably, within Bear Stearns, Cy Lewis, a high-ranking executive, consistently rebuffed proposals to establish a dedicated investment fund.

The first buyout made by Kohlberg Kravis Roberts & Co. was made in 1976 in the company A.J. Industries thanks to the capital procured from a group of investors, featuring the Hillman Company and First Chicago Bank. The nascent KKR successfully gathered interest and by 1978, it was able to receive over \$30 million in commitments from investors.

In 1981, KKR broadened its investor base with the inclusion of the Oregon State Treasury's public pension fund during the acquisition of retailer Fred Meyer, Inc. This partnership endures to this day and led to another pivotal chapter of the company with the audacious \$380 million leveraged buyout of Houdaille Industries in 1979, marking the largest buyout in history at the time. When in 1987, at 61 years old, Jerome Kohlberg stepped down from his role, it marked a significant change in strategy for the company. Henry Kravis took over as the senior partner and under his and George Roberts' leadership, the company took part in the historic purchase of RJR Nabisco in 1988 through a leveraged buyout. This was the biggest buyout ever at the time, costing a staggering \$25 billion.

The details and dramatic events of this huge deal were carefully documented in a book called "Barbarians at the Gate: The Fall of RJR Nabisco." This story was even turned into a TV movie making the deal famous in the world of finance. The RJR Nabisco deal held the record for the largest leveraged buyout for 17 years as in July 2006, the U.S. hospital operator, Hospital Corporation of America, was bought for an even more massive \$33 billion. KKR was involved in this deal, showing how the private equity landscape was changing through an incremental reliance to co-investment deals.

However, also the 1990s marked a shift in KKR's investment approach, from large leveraged buyouts to industry consolidations and diversification across various sectors. During this time, the firm faced challenges, such as the troubled investment in First Data Corporation, but continued to actively manage its portfolio. Another innovative approach was made in this time, when in 1990 RJR was taken public in exchange offer that allowed the company to swap debt for new public stock, providing an unconventional means of taking RJR public while simultaneously reducing its debt. The process of fully realizing their RJR Nabisco investment extended well into the 2000s with contrasting results.

In the mid-1990s, KKR ventured into "leveraged buildups," diversifying its investments. The firm made significant acquisitions, such as NXP Semiconductors, Bank of New England, and American Re Corporation. However, as the 21st century began, the landscape of large leveraged buyout firms was undergoing significant changes as several once-prominent firms faced substantial losses due to the bursting of the telecom bubble. While KKR's track record had its ups and downs, the firm navigated through challenges and managed to offset losses from investments like Regal Entertainment Group with successes in other ventures, such as Willis Group, Wise Foods, Wincor Nixdorf, and MTU Aero Engines.

On this premise, KKR was among the few firms capable of completing large leveraged buyout transactions also in the years immediately following the collapse of the Internet bubble. These transactions included successful buyouts of companies like Shoppers Drug Mart and Bell Canada Yellow Pages. Notably, in 2004, KKR was part of a consortium that acquired Toys "R" Us for \$6.6 billion, an acquisition notable for its size, the competitive market conditions, and impact on the public recognition of the company. This move attracted significant interest in the company as well as the private equity industry from prominent institutional investors. The result was evident in 2006, when KKR raised a new \$17.6 billion fund, known as the KKR 2006 Fund, which enabled the firm to execute some of the largest buyouts in its history.

Notable investments around this time included the \$21.3 billion acquisition of HCA in 2006, indicating the growth in scale of deals that private equity firms, including KKR, were pursuing during this period. HCA was taken private in a consortium with Bain Capital, Merrill Lynch Global Private Equity, and HCA's co-founder, Thomas F. Frist, Jr. This transaction.

In 2007, KKR underwent a significant transformation by going public itself. The firm listed its shares on the Euronext Amsterdam exchange, marking a historic move for a private equity firm. This initial public offering (IPO) allowed KKR to access public capital markets and provided liquidity to its founders and early investors.

KKR's IPO was followed by similar moves from other major private equity firms, including The Blackstone Group and Apollo Global Management. These IPOs signaled a shift in the private equity industry, with firms increasingly seeking public listings to diversify their capital base and enhance their brand visibility.

Despite this enthusiasm, the global financial crisis of 2008 posed challenges to the entire financial industry and many companies in KKR's portfolio faced challenges as credit markets

tightened, and economic uncertainty prevailed. To confront this, the firm diversified its investments in various sectors and expanded globally.

One notable example was the troubled investment in First Data Corporation acquired in a leveraged buyout just before the crisis in 2007. The company, a leading payment processing firm, struggled under its debt burden and faced declining revenues during the economic downturn leading KKR and First Data to undertake a series of initiatives, including debt restructurings, cost-cutting measures, and a focus on growing the company's core business to address these challenges. These efforts were aimed at stabilizing the company and improving its financial performance.

Furthermore, as the private equity industry evolved, during the 2010s the firm made investments across a wide range of sectors, including healthcare, technology, infrastructure, energy and real estate. Notably, structural changes within the company included KKR's investments in the energy sector, which reflected the firm's interest in the exploration and production of oil and gas assets.

The establishment of KKR Real Estate Partners in 2011, a platform focused on real estate investments, and the expansion of its presence in the infrastructure sector, with investments in companies involved in areas such as transportation and utilities underscoring its interest in assets with long-term revenue potential.

In the 2020s, KKR continued its journey with investments in technology, healthcare, and sustainability. Notably, the acquisition in 2020 of a majority stake in Global Atlantic Financial Group, a leading retirement and life insurance company, reflects the company's interest in the insurance sector as well as its core financial services sector.

KKR's global impact has been further demonstrated by its engagement in joint ventures and strategic alliances with companies and organizations in various regions, showcasing its commitment to global expansion and diversification.

Throughout its history, KKR's journey has been marked by adaptability, innovation, and a commitment to value creation. The firm's ability to navigate changing market conditions, execute complex transactions, and diversify its investment portfolio has solidified its position as a leader in the private equity and investment industry.

c. Road to Initial Public Offering

In 2007, KKR filed a formal submission, more precisely the Form S-1, with the Securities and Exchange Commission, seeking to secure \$1.25 billion in capital by securitizing an ownership stake in its management company and sell it in the public markets. As reported at the time by The New York Times, this significant development took place within a short span, less than two weeks after Blackstone Group, a competitor in the private equity sector, conducted its initial public offering.

In 2006, KKR had previously listed its European affiliate KKR Private Equity Investors ("KPE") vehicle, but this filing marked a pivotal moment. For the first time, KKR was poised to provide investors with the opportunity to gain a stake in the management company itself. However, as the global financial landscape experienced the onset of the credit crunch and a decline in the IPO market, the prospects of achieving a favourable valuation for KKR's offering grew dim. Consequently, the planned flotation faced multiple delays and was ultimately abandoned by the end of August.

Fast forward to July 2008, KKR announced a renewed plan to take its shares to the public. This revised approach involved a reverse takeover of its publicly traded affiliate, KPE, in exchange for a 21% ownership interest in the firm. This means that KPE shares will be exchanged for new shares of the NYSE-listed KKR. Those shares will effectively become the only publicly traded shares available and will represent 21% of the total value of the company. In addition, KPE shareholders were given a "contingent value right" that awarded them extra shares in the new KKR should the value of the newly exchanged stock not reach a certain level over the next three years.

These features were designed to keep KPE holders happy, since they still had to approve the transaction. Conversely, KKR's top managers opted for a lock-up in the company for six to eight years, meaning they could not sell stocks until that period ended.

However, the turbulence of the financial markets led to a delay in executing this transaction, with KKR formally pushing it to 2009 in November 2008. This postponement was driven by the significant decline in KPE's share value during the latter part of 2008 due to the financial crisis. KKR stated its intention to complete the transaction in 2009.

In October 2009, KKR initiated the listing of shares in KKR & Co. on the Euronext exchange, effectively replacing KPE. The company also projected a listing on the New York Stock Exchange in 2010. This public offering represented a 30% ownership interest in Kohlberg Kravis Roberts. Furthermore, in October 2010, KKR acquired approximately nine members of Goldman Sachs Group's proprietary trading team. This acquisition followed consideration of offers from prominent investment firms such as Perella Weinberg and Blackrock. With Goldman Sachs discontinuing its proprietary trading operations, KKR, led by Bob Howard and his team, aimed to diversify beyond leveraged buyouts into areas like hedge funds.

d. Operating Model

i. Segments

KKR differentiates its operations into two main segments, namely the asset management business and the insurance business.

In this section, I intend to provide an illustration of the specific business lines of each segment as well as their investment process and fund characteristics.

Asset Management

The asset management business has been at the core of KKR's operations since its inception. Its business lines have been transformed over the years and are today presented in the following form:

- 1. Private Equity
- 2. Real Assets
- 3. Credit and Liquid Solutions
- 4. Capital Markets
- 5. Principal Activities

As mentioned, changes in the sub-segments included the Private Equity and Real Assets divisions that were initially reported together due to their scope and similar traits under the Private Markets business line. But also, the Credit and Liquid Strategies were categorized as one Public Markets business line.

1. Private Equity

Through the Private Equity line, KKR manages and sponsors private equity funds investing in long-term appreciation, either through controlling ownership of a company or through strategic minority positions. The company also sponsors investment funds that invest in core equity, growth equity, and impact investments.

KKR is able to leverage its reputation as a world-leader in private equity, thanks to over 30 private equity funds raised across its history, as well as its global network that leads to sourcing advantage and industry knowledge.

The Private Equity business line is further divided into four strategies:

- Traditional Private Equity

Seeking to engage in the classical form of private equity, namely management buyouts, build-ups and other investments made to acquire control or significant influence over a company.

- Core Private Equity

This sub-line differs from the previous by targeting investments with longer holding period and more stable companies that present lower than anticipated risk profile. In addition, the leverage level for the firms in this segment is on average lower than in Traditional Private Equity, explained by the different traits and risk-reward profile. This business line accounts for over 30% of the investments on the company's balance sheet with a predominant share invested in North America (68%).

- Growth Equity

First adopted in 2016, this strategy focuses on emerging, high-growth companies and invest across a variety of sectors and sub-sectors including technology, media and telecommunications (TMT) and healthcare.

- Global Impact

An ever-increasing importance and recognition has been given to impact investments, which translate into identifying and investing on opportunities where there's an alignment between financial performance and social impact.

The global impact funds offered by KKR starting from 2019 invest in small and mediumsized companies that contribute towards achieving one or more of the UN Sustainable Development Goals, with the aim to generate private equity like risk-adjusted returns.

Investment Process

KKR's investment approach when it comes to Private Equity is disciplined and focuses on achieving multiples of invested capital as well as attractive risk-adjusted Internal Rate of Returns by selecting quality investments that have the potential to be made at attractive prices. A rigorous due diligence process governs the investment decision and the implementation of strategic and operational changes ultimately driving growth and creating value for the acquired business. Monitoring and exit strategies are also key to the success of the investment.

The company thanks to its sizeable capital base, global presence, and relationship with executives from major companies can benefit with an access to significant opportunities for private equity investments.

The investment process starts with an investment proposal considered worth to be formally presented to the appropriate investment committee. Once accepted, the due diligence process starts with the aim of identifying attractive opportunities based on facts, figures and

circumstances surrounding the investment, but also preparing a framework that may be used to drive operational improvement and value creation. In addition to the more common approach to the due diligence process, KKR prides itself of the time spent meeting and evaluating the management and personnel of the company, as well as visiting plants and facilities. Once the investment is made, the portfolio management committees have the task of ensuring that strategic and operational objectives are achieved. In its Capstone KKR emphasizes the importance of top-line growth, geographical expansion, cost optimization and investment for the long-term.

Finally is the exit strategy to realize investments. KKR focuses on optimization of returns and minimization of impact from the exit by putting once again emphasis on its disciplined approach and longstanding relationships with corporate buyers and investment bankers.

Fund Characteristics

KKR's private equity funds have finite lives and investment periods where each fund is organized as a partnership agreement (one or more agreements), where each partner is controlled by a general partner.

The investment period depending on the rapidity of capital deployment generally lasts up to 6 years, while the term of the funds last between 10 and 12 years and may last up to 15 years from the date of the fund's first or last investment.

Given the length of the investment periods and limited redemption or withdrawal conditions, the assets under management provide KKR with a sound and long-term stable capital base.

Carried interest equals 20% of the net profits realized by the limited partners. A performance hurdle is present and requires a return from the general partners of at least 7%, compounded annually, to the limited partners before receiving the 20% share of net profits. The timing of receipt and conditions for receipt of the carried interest is dictated by the terms of the partnership agreements governing the fund.

Gross management fees range between 1% and 2% of committed capital during the fund's investment period and decrease to the range 0.75% to 1.25% of invested capital after the expiration of the investment period.

2. Real Assets

The Real Assets business line is characterized by the management and sponsoring of real assets funds and accounts that allocate capital to infrastructure, real estate, or energy.

The infrastructure team and strategy were established in 2008 with investments in core infrastructure and infrastructure-related opportunities and focus on predominantly contracted or regulated cash-flow securities, properties, and other assets. Investments were initially made in assets and businesses located in the OECD member countries and were later expanded in 2020 to include opportunities in the Asia-Pacific region.

In the real estate realm, KKR seeks to provide solutions across the capital structure including property-level equity, debt, and special situations transactions. Real estate equity deals span across both residential and commercial assets. In addition, KKR is active in real estate credit through a specialized platform deploying a variety of solutions and strategies.

Similarly, the energy platform focuses on operated oil and gas assets and complemented by non-operated assets, mineral, royalty interests, and infrastructures needed to move crude oil, natural gas, and other energy products. The first dedicated energy fund was launched in 2010,

while in December 2021 the publicly listed Crescent Energy Company was formed to become the company's main platform for pursuing the exploration and production stages (upstream) of oil and natural gas opportunities.

Investment Process

The Real Assets' vehicles apply a very similar investment process to the one described for the Private Equity business line.

Fund Characteristics

Investment periods for the traditional infrastructure and real estate funds is up to 6 years and the fund term is generally of up to 13 years. Management fees can vary between 0.75% to 1.5% on the committed capital, invested capital or net asset value (NAV) during the investment period and on invested capital or NAV for investments thereafter. Also, these funds as experienced with private equity have, in large part, a hurdle rate of 8% to 10% that if reached can lead general partners to a share of 10% to 20% of the net profits realized by limited partners.

3. Credit and Liquid Strategies

Through this line KKR combines the credit and hedge fund platforms, where the Credit platform pursues a variety of investments in leveraged credit and alternative credit while the Hedge Fund platform essentially consists in strategic partnerships with third-party hedge funds in which the company is a minority owner.

- Credit Strategies – Leveraged Credit

KKR manages both single-assets and multi-assets class pools of capital and primarily invests in leveraged loans, high yield bonds, structured credit, stressed securities and illiquid credits.

Credit Strategy – Alternative Credit

This strategy consists of (1) private credit strategies and (2) investments overseen by a strategic investment group ("SIG").

- (1) Private credit strategies focalize on privately or directly sourced and negotiated transactions including direct lending in the senior part of a company's capital structure, junior mezzanine debt typically consisting of subordinated debt, and asset-based finance on portfolios of financial loans and loans backed by hard assets.
- (2) Strategic Investment Group provides strategic solutions to high-quality, mid-to-large cap companies and assets where there's a belief that market volatility or investment themes have created opportunistic investments across the capital structure and through market cycles. The solutions used in this strategy include stressed and distressed investments as well as exit financing and other even-driven investments
- Hedge Fund

As previously mentioned, through the participation of minority ownership in third-party hedge funds, KKR acts as strategic partner to the following companies:

- (1) Marshall Wace LLP, a global alternative investment manager specializing in long/short equity solutions. KKR owns 39.6% of the company as of 31 December 2022.
- (2) PAAMCO Prisma Holdings, LLC, an investment manager engaged in liquid alternative investment solutions. KKR holds 39.9% of the company ownership as of 31 December 2022.

(3) BlackGold Capital Management L.P., a credit-oriented investment manager with involvement in energy and hard asset investments. KKR has a 24.9% participation in the company as of 31 December 2022.

Investment Process

Investment portfolios are constructed seeking to generate attractive risk-adjusted returns by picking investments that are believed to be at attractive prices. In this process KKR employs both "top-down" and "bottom-up" approaches. Additionally, investment opportunities are sourced through a variety of channels, including internal deal generation strategies and the firm's global network of contacts. For the credit vehicles a relative value framework is typically applied when evaluating the investment suitability. Once again, monitoring is an essential part of this process.

Fund Structures and Credit Vehicles

Investment funds, separately managed accounts, and structured credit vehicles namely Collateralized Debt Obligations (CLO's) are among the pursued investment solutions provided in the leveraged credit and alternative credit strategies. Incentive fees, carried interest, and management fees may be applied by KKR depending on the selected vehicle.

4. Capital Markets

KKR's capital markets business provides third parties and KKR's own portfolio companies with differentiated access to capital through its dedicated distribution platform. Among the services provided the capital markets line arranges debt and equity financing, helps in the process of placing and underwriting securities offerings. Additionally, it services customers that are active in the capital markets industry and have businesses resulting in the customer receiving fees, including underwriting, placement, transaction fees.

The capital markets segment, which is integrated with KKR's asset management business lines, has a global footprint with presence and licenses across various countries.

5. Principal Activities

The principal activities business line is responsible for managing the firm's own assets on its balance sheet and deploying capital to support and grow the Credit and Liquid Strategies, Private Equity, and Real Assets businesses.

KKR makes sizeable capital commitments in the investment opportunities it provides. This is because the company strongly believes that making general partner commitment is beneficial when raising new funds from limited partners by signaling their conviction in the specific fund strategy. The principal activities provide the required capital to fund various commitments made by the capital markets business line as well as dedicating a substantial portion to support the core private equity strategies. Principal activities can additionally make co-investments alongside private equity, real assets and credit and liquid strategies funds as well as independently following an opportunistic approach.

Insurance

KKR's insurance business is operated by Global Atlantic, a recently acquired leading retirement and life insurance company providing a broad range of solutions and products to both institutional and individual markets. KKR acquired the company on February 1, 2021.

However, according to reports as of December 31, 2022, it won a majority stake equals to 63.3% of Global Atlantic.

The company operates in two complementary markets:

- Individual Markets

With a network of distribution partners, among which are included banks, broker dealers and independent marketing organizations, Global Atlantic targets individuals who are planning for, or are already in, retirement. The company sees the distribution channels as a key to providing attractive returns and maintaining a competitive advantage.

The product solutions offered to individuals are fixed-rate and fixed-indexed annuities as well as targeted life products. Such activities are exclusively for individuals in the USA.

- Institutional Markets

Global Atlantic leverages its expertise to provide institutional clients with customized reinsurance solutions that help the business meet their risk management, strategic, and capital goals. The solutions in place for institutional customers span from block reinsurance to pension risk transfer (PRT) transactions, but also flow reinsurance agreements and funding agreements. Such solutions are offered to both domestic and international retirement insurance and life insurance companies.

ii. Revenue Streams

KKR's sources of revenue can be diverse and vary across business segments.

The asset management arm earns fees, including management fees and performance fees, as well as carried interest for the investment management activities and other services. In addition, the company is able to generate income by receiving transaction fees from the transactions executed in the capital markets.

Another source of income derives from the culture within the firm to allocate capital alongside that of its fund investors and other assets in its balance sheet. In this practice, also thanks to its expertise and investment philosophy of putting own capital behind their ideas, KKR generates additional investment income.

On the other hand, the insurance business' primary source of income is earned with a spread on assets under management, calculated by the difference between the company investment income and the cost of benefits for the policyholder. KKR, through its participation in Global Atlantic, also earns fees paid by policyholders which are reported as carried interest in the asset management segment. The reason being that policyholders pay fees on certain types of contracts and fees paid by third-party investors.

A clear picture of KKR's revenues deriving from its contractual agreements is presented below:

Type of Revenue	Services Rendered	Obligation Performed Over Time or at Specific Time	Fixed or Variable Consideration	Payment Terms (Usual scenario)
Management Fees	Investment management services	Over time as services are rendered	Variable	Quarterly or Annually
Transaction Fees	Advisory services, debt and equity arranging and underwriting	Specific point in time	Fixed	Paid shortly after transaction
Monitoring Fees	Monitoring services	Over time as services are rendered	Variable	Quarterly
Recurring Fees	Monitoring services	Over time as services are rendered	Variable	Quarterly
Termination Fees	Monitoring services	Point in time when termination is completed	Fixed	Paid shortly after termination
Incentive Fees	Investment management services resulting in achievement of hurdle rate	Over time as services are rendered	Variable	At the end of performance measurement period
Expense Reimbursements	Investment management and monitoring services	Point in time when expenses are incurred	Fixed	Paid shortly after expense is incurred
Oil and Gas Revenues	Delivery of oil liquids and gas	Point in time when delivery has occured and title transferred	Fixed	Paid shortly after delivery
Consulting Fees	Consulting services and other	Over time as services are rendered	Fixed	Quarterly

A detailed explanation of each is illustrated hereafter and is intended to comprehend the recurrence and stability of KKR's revenues overtime thanks to the combination of variable and fixed considerations.

Management Fee: KKR's primary source of income arises from providing investment management services to clients. These fees are typically calculated as a percentage of the total funds invested. Clients pay these fees on a quarterly basis, separate from any other transaction-related costs. This model ensures that KKR generates steady revenue for its management services.

Fee Credits: In certain instances, KKR shares specific fees with particular funds, often linked to specific services provided. These shared fees can be utilized to offset other charges, ensuring equitable treatment and transparency in financial transactions.

Transaction Fees: KKR charges transaction fees when it aids companies in various financial and investment dealings. The fees for these services are negotiated at the outset of each transaction, establishing clear expectations for all parties involved.

Monitoring Fees: For maintaining a watchful eye over the companies, it invests in, KKR charges monitoring fees. On some occasions, especially when there are significant changes in ownership, additional fees may be incurred. These monitoring fees help guarantee the effective management and stability of the invested companies.

Incentive Fees: KKR may levy extra fees, known as incentive fees, based on the performance of investments. These fees are typically deferred and paid at a later stage once they become clearly calculable. Think of it as a performance-based bonus for achieving favourable investment outcomes.

Oil and Gas Revenue: KKR transferred its interests in oil and gas to a different fund. Consequently, revenue generated from oil and gas activities is no longer included in their regular income calculations.

Consulting Fees: KKR provides advisory services to companies and receives compensation for this guidance. Fees for these services are individually negotiated with each company, ensuring that the terms of the arrangement are transparent and equitable. This arrangement allows KKR to provide valuable insights and receive compensation for their expertise.

e. Organizational Structure



The above organizational structure chart outlines the ownership structure put in place following the listing of KKR &Co. shares. The intention is now to exemplify this chart using common terms and a descendent trajectory following the figure above.

- Public shareholders own a 21% interest in the KKR Group Co. Inc., being KKR & Co. Inc. the parent company of KKR Group Co. Inc.
- KKR Management LLP, is owned by senior KKR employees, which exclusively hold the Series I preferred stock of KKR & Co. Inc. This Series I preferred stock will be redeemed and cancelled, transferring all common voting powers to KKR & Co. Inc.'s common stock on a one vote per share basis. Based on the Reorganization Agreement available in the company Form 10-K addressed to the Securities and Exchange Commission ("SEC"), this transition will occur on or before December 31, 2026.
- KKR Group Co. Inc. owns KKR Group Holdings Corp., which acts as the general partner of KKR Group Partnership L.P. ("KKR Group Partnership").
- KKR & Co. Inc. indirectly controls KKR Group Partnership and indirectly holds partner interests in the four units of KKR Group Partnership ("KKR Group Partnership Units"), representing economic interests in KKR's business. As of December 31, 2022, KKR & Co. Inc. indirectly held approximately 99.7% of the KKR Group Partnership Units.

f. Governance

Board of Directors

KKR's Board of Directors consists of fourteen directors, ten of whom are independent directors as stated under the New York Stock Exchange (NYSE) rules relating to corporate governance matters.

Henry R. Kravis	Co-Executive Chairman and Director	Member since July 2010	
George R. Roberts	Co-Executive Chairman and Director	Member since July 2010	
Joseph Y. Bae	Co-Chief Executive Officer and Director	Member since July 2017	
Scott C. Nuttall	Co-Chief Executive Officer and Director	Member since July 2017	
Adriane M. Brown	Independent Director	Member since June 2021	
Matthew R. Cohler	Independent Director	Member since December 2021	
Mary N. Dillon	Independent Director	Member since September 2018	
Arturo Gutiérrez Hernández	Independent Director	Member since March 2021	
Dane E. Holmes	Independent Director	Member since March 2021	
Xavier B. Niel	Independent Director	Member since March 2018	
Patricia F. Russo	Independent Director	Member since April 2011	
Robert W. Scully	Independent Director	Member since July 2010	
Evan T. Spiegel	Independent Director	Member since October 2021	
Kimberly A. Ross	Independent Director	Member since September 2023	

It is worth mentioning that the following Independent Directors do not appear anymore on the corporate governance section of the company website as of October 5,2023: Mr. Raymond J. McGuire, Mr. Joseph A. Grundfest, and Mr. John B. Hess.

Despite this, given the lack of information and absence of a press release from KKR & Co. on the situation, it has been considered relevant to raise this issue and the Committee composition that follows is based on information provided in the 10-K report at the end of year 2022.

Board Committees

KKR has four standing committees within its Board of Directors: (1) an Audit Committee; (2) a Conflicts Committee; (3) a Nominating and Corporate Governance Committee; and (4) an Executive Committee.

Since KKR is a "controlled company", its Board of Directors is not required based on NYSE rules to establish a Compensation Committee or a Nominating and Corporate Governance Committee. Despite this, a Nominating and Corporate Governance Committee has been established, albeit with exemptions concerning its composition and mandate. Below a brief description of each.

Audit Committee

The Audit Committee, led by Mr. Grundfest (Chair), Mr. Holmes, and Mr. McGuire, plays a crucial role in helping the Board of Directors ensure various aspects of our financial management. This includes overseeing the quality and accuracy of our financial statements, compliance with legal and regulatory requirements, the performance of our independent registered public accounting firm, and the internal audit function. The committee members meet the independence and financial literacy criteria mandated by the Exchange Act and NYSE rules for serving on an Audit Committee. Each member is also recognized as an "audit committee financial expert" as required by law.

Conflicts Committee

The Conflicts Committee, composed of Mr. Scully (Chair) and Mr. Gutierrez, along with Mrs. Dillon and Mrs. Russo, has a critical responsibility. It evaluates specific matters that the Board believes may involve conflicts of interest and enforces its rights under various agreements, such as the tax receivable agreement and limited partnership agreement. These actions may pertain to former partners of KKR Holdings or the current or former partner of KKR Associates Holdings and the exchange agreement. Furthermore, the Conflicts Committee can take actions authorized by these agreements or in response to amendments, supplements, modifications, or waivers that could affect its authority or rights. The committee also approves any amendments to the covered agreements deemed to create or result in a conflict of interest, as determined by our Board of Directors. The Conflicts Committee assesses the fairness and reasonableness of conflict resolutions and may review and approve related person transactions (except those covered by our related person policy). It also has the authority to establish guidelines or rules for specific transaction categories.

Nominating and Corporate Governance Committee

The Nominating and Corporate Governance Committee, led by Mr. Kravis, Mr. Roberts, and Mr. Scully, focuses on identifying and recommending candidates for Board of Directors appointments. Additionally, it provides guidance to the Board on general operations and corporate governance matters. Mr. Scully meets the independence standards set by NYSE rules, which are necessary for service on the Nominating and Corporate Governance Committee.

Executive Committee

The Executive Committee, consisting of Messrs. Kravis and Roberts, serves as a substitute for the full Board of Directors during periods when the latter is not in session or for matters delegated to the committee's oversight, including the firm's Equity Plans. The Executive Committee is authorized to act on behalf of the full Board in overseeing the company's business and affairs, with certain exceptions. These exceptions include actions specifically

delegated to other board committees, as well as decisions related to dividends on our common stock, mergers or consolidations, asset sales, leases or exchanges, liquidation or dissolution, and others.

Management and Hierarchy

As of June 30, 2023, KKR has a team of over 2,500 employees, consultants, and advisors, including more than 720 investment professionals working across 20 industries in offices around the world.

The organization structure is hierarchical structure, meaning that it features a vertical chain of command. Hierarchy within the KKR's business lines follows a standardized approach in which roles are defined as indicated in the pyramid below.



Generally, analysts and associates are entry-level positions that involve a lot of data analysis and research, while Vice Presidents (VPs) are more experienced and have more responsibility, such as managing teams and client relationships. Principals are senior members who have a lot of experience in their field and are responsible for leading projects.

Thereafter, Directors and MDs are responsible for the overall strategy of the firm and managing multiple teams. Members (Partners) are the most senior members of the firm and have ownership or receive carried interest in the company and its performance.

Management Team

Henry R. Kravis	Co-Executive Chairman	
George R. Roberts	Co-Executive Chairman	
Joseph Y. Bae	Co-Chief Executive Officer and Director	Promoted in 2021
Scott C. Nuttall	Co-Chief Executive Officer and Director	Promoted in 2021
Robert H. Lewin	Chief Financial Officer	Promoted in 2019
Ryan D. Stork	Chief Operating Officer	Joined in 2022
Kathryn K. Sudol	General Counsel and Chief Legal Officer	Joined in 2022

Recent changes include the appointment of Mrs. Kathryn K. Sudol as General Counsel in 2022 and later became Chief Legal Officer in March 2023. Mrs. Sudol succeeded Mr. Sorkin, who has become an Advisory Partner of the company, in both roles. Biographies are presented in Annex 1.

g. Shareholder Structure

The table below presents the largest shareholders of the floating share of KKR & Co., their respective stake and latest change in holding position if applicable.

Holder Name	Position (shares)	% Out	Latest Change	File Date
Roberts George R.	88'692'855	10.34%	2'630'000	24/02/2023
Kravis Henry R.	83'370'688	9.72%	n.a.	24/02/2023
Capital Group Inc.	50'821'062	5.93%	-1'672'263	30/06/2023
Vanguard Group Inc.	39'466'139	4.60%	40'918	30/06/2023
BlackRock Inc.	36'727'225	4.28%	1'881'997	30/06/2023
Harris Associates LP	29'160'310	3.40%	2'503'509	30/06/2023
Principal Financial Group Inc.	24'221'521	2.82%	-709'426	30/06/2023
T Rowe Price Group Inc.	23'764'464	2.77%	-3'846'588	23/10/2023
ValueAct Capital Management	20'535'233	2.39%	n.a.	30/06/2023
Nuttall Scott C.	20'144'424	2.35%	n.a.	24/02/2023
Bae Joseph Y.	18'331'070	2.14%	n.a.	24/02/2023
Akre Capital Management LLC	15'233'868	1.78%	57'500	30/06/2023
Invesco Ltd	13'080'592	1.53%	1'583'926	30/06/2023
Manulife Financial Corp.	12'822'525	1.49%	-1'044'940	30/06/2023

From the table is possible to spot both Mr. Roberts and Mr. Kravis as well as the Co-CEOs of the firm. Additionally, well-known investment managers and other financial institutions represent the remaining largest portion of the shareholding.

h. Financial Analysis with Ratios

Financial ratios are numbers obtained from financial statements, and they help us understand how a company is doing financially. These numbers are used to check things like how easily the company can pay its bills, how much debt it has, how efficiently it operates, how much profit it's making, and how it's valued in the market. These ratios are usually put into these categories and for KKR the following have been selected:

- Liquidity ratios

Liquidity ratios indicate KKR's ability to generate cash to pay off its short-term obligations when occur.

Liquidity ratios	
Current ratio	1.02
Quick ratio	0.79

The current ratio is calculated by dividing a company's current assets by its current liabilities and its value of 1.02 suggests that the company has just enough current assets to cover its short-term obligations.

The quick ratio is computed slightly differently as it excludes inventory from current assets since the conversion of inventory into cash is a longer process. The result of 0.79 indicates that KKR has \$0.79 for each dollar in the current liabilities.

- Solvency ratios

Solvency ratios are indented to compare the company's debt portion to its assets, equity, earnings, and others. Solvency ratios are also often referred to as financial leverage ratios.

Leverage ratios	
Debt to equity ratio	2.57
Interest coverage ratio	0.46

The debt to equity ratio as the name indicates is calculated by dividing a company's total debt by its shareholders' equity. In this case, it is relatively straightforward to indicate how KKR is a relatively highly leveraged business as for every dollar it holds of shareholders' equity, the company has \$2.57 in total debt.

Conversely, the low Interest Coverage Ratio of 0.46 indicates that the company may struggle to meet its interest payments with its current level of earnings as in 2022 it struggled with increased costs and lower revenues resulting in impacted earnings.

- Profitability ratios

Profitability ratios measure the capacity of a company to generate profits from its operations. To obtain a cleared picture without year over year distortion of results, the 5-years average has been computed and KKR profitability corresponds to the following:

Profitability ratios (5-yrs Average)
Profit margin	25.46%
Gross margin	84.31%
ROA	4.40%
ROE	16.02%
ROI	6.76%

The profit margin of 25.46% indicates that the company was able to convert a significant portion of its revenue into profit. This consideration is reinforced by looking at how efficiently the company manages its production costs through the gross margin. With a result of 84.31% for the gross margin we can reiterate the good profitability of KKR.

The Return on Assets (ROA) of 4.4% means that, on average over the past 5 years, the company generated a 4.4% return on its total assets. Moreover, over the course of the same period, the company earned a 16.02% return on investments made when compared to the shareholders' equity.

Lastly, the ROI evaluates the overall return on all investments made and in this metric KKR achieved a return of 6.76%.

- Market value ratios

Lastly, market prospect ratios are also included in this report for the purpose of evaluating KKR to its peers in the relative valuation section. The two metrics analysed are EV/EBITDA and Price-to-Earnings ratio (PE ratio).

EV/EBITDA assesses the overall value of a company in relation to its earnings before accounting for interest, taxes, and various non-cash expenses as depreciation and amortization. It is a valuation measure commonly used in finance to determine a company's relative attractiveness as an investment or acquisition target.

PE ratio is calculated by dividing the current market price of a particular company's stock by its earnings or earnings per share (EPS) for simplicity. The PE ratio provides insight into how much investors are willing to pay for each dollar of a company's earnings.

i. Dividends and Analyst Coverage

Dividends

KKR maintains a quarterly cash dividend policy and plans to continue doing so in the future. However, it's important to note that the board of directors holds sole discretion over the declaration and payment of dividends, and this policy may be subject to change at any time. Several factors influence this decision, including the availability of cash, current and anticipated financial requirements (such as investment commitments, debt servicing, and future debt repayments), prevailing economic and business conditions, strategic plans, prospects, and financial performance.

KKR's dividend distribution process involves several stages:

- 1. KKR Group Partnership distributes funds to holders of KKR Group Partnership Units, which include wholly owned corporate subsidiaries and KKR Holdings. This distribution is based on their respective ownership percentages within KKR Group Partnership.
- 2. Subsequently, the wholly owned corporate subsidiaries, after accounting for applicable taxes, transfer the received distributions from KKR Group Partnership to the Group.
- 3. Finally, the Board of Directors (BoD) decides on dividends based on the distributions received from the wholly owned corporate subsidiaries, and these dividends are then disbursed to Common Stock and Series C Mandatory Convertible Preferred Stockholders.

When comparing the company to its main competitors, it pays a much lower dividend yield. But conversely to them, rather than paying out a larger percentage of its distributable cash flows, it reinvests back the money into the business and back into their own funds, which helps drive compound earnings, cash flow and book value.

The following table outlines the dividend history of KKR:



Dividend History

Analyst Coverage

The following list presents a list of the companies, and respective analysts, covering the KKR & Co. stock as well as the Target Price and Recommendation assigned.

The calculated Median Target Price is \$73.50 per share, while the Average attested at \$72.84 based on the data available on Bloomberg as of October 23, 2023.

Company	Analyst	Recommendation	Targe	t Price	Last Update
Autonomous Research USA	Patrick Davitt	Outperform	\$	71.00	18/10/2023
Morgan Stanley	Micheal J. Cyprys	Hold	\$	65.00	18/10/2023
Evercore ISI	Glenn P. Schorr	Outperform	\$	68.00	16/10/2023
Deutsche Bank	Brian Bedell	Buy	\$	72.00	11/10/2023
Wells Fargo	Finian O'Shea	Overweight	\$	73.00	11/10/2023
Jefferies	Daniel T. Fannon	Buy	\$	70.00	10/10/2023
Keefe Bruyette & Woods	Micheal Brown	Outperform	\$	75.00	10/10/2023
JMP Securities	Brian F. McKenna	Market Outperform	\$	80.00	10/10/2023
Barclays	Benjamin Budish	Overweight	\$	82.00	10/10/2023
BMO Capital Markets	Rufus Hone	Outperform	\$	74.00	09/10/2023
Oppenheimer	Christopher M. Kotowski	Outperform	\$	87.00	09/10/2023
Wolfe Research	Steven Chubak	Outperform	\$	75.00	04/10/2023
Citi	Chris Allen	Buy	\$	75.00	03/10/2023
Goldman Sachs	Alexander Blostein	Buy	\$	74.00	02/10/2023
Piper Sandler & Co.	Sumeet Mody	Suspended Coverage			02/10/2023
JP Morgan	Christopher Brown	Overweight			29/09/2023
BNP Paribas Exane	Arnaud Giblat	Outperform	\$	80.00	27/09/2023
Morningstar	Greggory Warren	Hold	\$	59.00	22/08/2023
Argus Research Company	Stephen Biggar	Buy	\$	72.00	08/08/2023
Baptista Research	Ishan Majumdar	Hold	\$	59.20	12/04/2023

I. Stock Performance

KKR & Co Inc. is traded on the New York Stock Exchange (NYSE) under the symbol KKR. Since its initial public offering (IPO), the stock has shown significant growth, with a remarkable 438% increase in performance. It's essential to note that over the years, there have been instances of share repurchases and dilution.

Year to date (YTD), KKR's stock has yielded a return of 18.2%, and over the past 52 weeks, it has returned 16%. When considering the compound annual return since the IPO in 2010, we arrive at an average of 13.5%. However, it's important to recognize that this measure doesn't necessarily reflect positive performance every year.

It is also worth highlighting that the stock's value reached an all-time high of \$83.4 in November 2021, just before the world was impacted by the outbreak of Covid-19, which subsequently caused economic and financial turmoil across various industries and businesses. This, in turn, led to a significant drop in share prices, hitting its lowest point on March 23rd, 2020, at \$18.50 per share. More recently, in September 2022, the stock's market value dipped to \$43 per share due to heightened macroeconomic uncertainties and subsequent monetary tightening measures to combat rising inflation levels. Although it has made a recovery, it is still below its full potential, signifying room for future growth.

Between 2015 and the Investor Day held in April 2021, the company executed a share buyback program, repurchasing 75 million shares at an average price of \$20.36. Considering the current stock price of \$54.88, this strategic move by the board of directors has proven to be a phenomenal decision in hindsight.



5. Valuation

a. Preliminary Assumptions

Before delving into the valuation process, it is imperative to conduct a comprehensive analysis of various components within both the Income Statement and Balance Sheet. This analysis is essential for accurately forecasting free cash flows over the upcoming four years. Within this context, the primary focus will be on the critical assumptions underpinning the calculation of the elements comprising the FCF for the next four years:

Revenues

KKR's revenues are assumed to expand at different levels for the two main service categories. For the Asset Management segment, a compound annual growth rate (CAGR) of 6% is being considered over the four-year forecast but taking as a base case an average of the FY2021 and FY2022 data. Conversely, the Insurance business will grow by 5% each year, given the current protection-related trends.

	2023E	2024E	2025E	2026E
Asset Management	5'007	5'464	5'964	6'509
Insurance	5'670	5'954	6'251	6'564
Total Revenues	10'677	11'418	12'215	13'073

Revenues will then be projected as follows (in millions, \$):

- EBITDA and EBITDA margin

The items in this section are expected to maintain a consistent percentage relative to sales throughout the forecasted period. The EBITDA is on a steady recovery from 2022, returning to levels seen in the 2021 trajectory and expected to continue the upward trend observed in previous years.

EBITDA is then forecasted as follows (in millions, \$):

	2023E	2024E	2025E	2026E
EBITDA Margin (%)	44.4%	45.7%	47.0%	48.3%
EBITDA	4'744	5'218	5'740	6'314

- Depreciation and Amortization

Therefore, depreciation and amortization are assumed to increase but remain very relative in size over the years. The EBIT is also computed and presented as follows (in millions, \$):

	2023E	2024E	2025E	2026E
EBITDA	4'744	5'218	5'740	6'314
D&A	34	35	36	37
EBIT	4'709	5'183	5'704	6'277

- Taxes

KKR strategically transitioned from a partnership to a corporation following U.S. tax reform, significantly reducing the tax implications. As a result, under the C-Corp structure, KKR is

subject to corporate taxes on all its revenue. Nevertheless, the tax impact has notably eased by reducing the headline U.S. corporate tax rate from 35 percent to 21 percent.

- Working Capital

Given the absence of a clear distinction between current assets and current liabilities, and in specific accounts receivables and payables, the approach is based on historical values. Additionally, an increment in current liabilities is expected in the long term, given the business's reliance on debt in its capital structure. The changes in working capital are presented below (in millions, \$):

	2023E	2024E	2025E	2026E
ΔWC	-68	-12	300	550
ΔWC / Revenues	-1%	0%	2%	4%

- Capex

In the context of capital expenditure, it is expected that KKR will maintain its activity, which is significantly reliant on Capex. We adopted a method based on historical data to forecast Capex, where we calculated the average Capex to Revenues ratio from previous years. This approach resulted in an average balance of 4%. The subsequent table outlines the underlying assumptions for Capex projections (in millions, \$):

	2023E	2024E	2025E	2026E	
Сарех	396	403	504.9	493	
Capex / Revenues	4%	4%	4%	4%	

b. Discounted Cash Flow Model

i. WACC

To derive the weighted average cost of capital, we need first to compute the cost of debt and the cost of equity and understand and assess the company's capital structure.

Starting with the cost of debt, we delve into the calculation and get an after-tax cost of debt equal to 5.24%, as follows:

Cost of debt	
Risk-free rate	4.84%
Default Spread	1.80%
Tax rate	21%
Pre-tax cost of debt	6.64%
After-tax cost of debt	5.24%

Secondly, it is essential to assess the market risk to obtain the cost of equity. The data provided by Damodaran on the NYU Stern website clarifies this topic and presents US-listed and non-listed companies with a country risk premium of 0.

The data gathered and computed led to a cost of equity equal to 12.29%, significantly impacted by the relatively high beta and, as for the above, the risk-free rate of 4.84% given the monetary tightening by the FED.

Cost of equity	
Risk-free rate	4.84%
Beta	1.49
Market risk premium	5.00%
Country risk premium	0.00%
Cost of equity	12.29%

The capital structure of KKR, on the other hand, presents a strong influence on the debt portion, which, given the ability of the firm in this context and the usage of such techniques to improve shareholders' returns, does not surprise me particularly.

Capital Structure (in USD millions)						
Debt	42'727	69.4%				
Equity	18'808	30.6%				

At this point, the parameters needed to compute the WACC have been obtained, and the result leads to a 7.40% discount rate for the firm's free cash flows.

WACC	7.40%
------	-------

ii. Free Cash Flow to the Firm (FCFF) and Terminal Value

FCFF Calculation	2023E	2024E	2025E	2026E
EBIT	4'709	5'183	5'704	6'277
Tax rate	21%	21%	21%	21%
After-tax operating income	3'720	4'094	4'506	4'959
Depreciation and Amortization	34	35	36	37
Gain/Losses on Investments	3'028	3'391	3'798	4'254
Δ Working Capital	-68	-12	300	550
Capex	-396	-403	-505	-493
Free Cash Flows	3'427	3'739	3'737	3'952

At this point, the FCF obtained is discounted at the WACC rate of 7.40%. In addition, we calculate the terminal value by taking the following steps to obtain perpetuity growth rate:

First, we take the GDP forecasted growth rate from the US, which according to Statista stands at 4.1%. The reason is that the company carries out most of its investments in the country and has its headquarters and legal address.

In the second step, we calculated the average inflation rate across geographies where KKR is interested. We can compute a weighted average inflation rate based on the Assets under Management (AuM) weight across those countries.

Inflation rates across geographies		KKR AuM weight
USA	3.70%	
Canada	3.80%	
Americas	3.75%	53%
	4 200/	
Eurozone inflation	4.30%	
Switzerland	1.70%	
UK	6.70%	
Europe	4.23%	12%
Japan inflation rate	3.0%	
China inflation rate	0.0%	
Australia	5.4%	
India	5.2%	
Asia-Pacific	3.4%	23%
Qatar inflation rate	1.80%	
UAE inflation rate	2.28%	
Saudi Arabia	1.70%	
Middle-East	1.93%	12%
Weighted Average Inflation rate	3.51%	100%

At this point, we subtract the inflation rate obtained from the GDP growth forecast in the previous step. Moreover, an adjustment is applied to the average computed inflation rate. It reflects the commitment of central banks across Western countries, where inflation levels are impacting their economies, to bring down those levels to close to 2.0% over the following years.

This leads to a perpetuity growth rate of 1.5%, which is still considered conservative but appropriate given the current economic landscape.

Perpetuity Growth	
GDP growth US (forecast)	4.1%
Weighted Average Inflation rate	3.5%
Inflation adjustments Long-Term	0.9%
Perpetuity Growth rate	1.5%

After that, we can compute the firm's Total value by summing up all the discounted cash flow plus the terminal value. Then, by dividing the amount by the number of shares, we obtain the target share price of KKR & Co Inc., which corresponds to \$83.80 based on the DCF method.

	2	2023E	2024E	2025E	2026E	TV
Discounted Cash Flows		3'191	3'241	3'017	2'971	50'390
Total Value		62'810				
Shares Outstanding		750				
Target price (per share)	\$	83.80				

iii. Target Price and Sensitivity Analysis

Considering the multiple approaches leading to the perpetuity growth rate and EBIT values, it is essential to present a sensitivity analysis to address and evaluate the potential effects of changes in assumptions.

The following table shows that changes in perpetuity growth rate and WACC could lead to significant changes in the targeted share price. However, all obtained share prices still present a considerable upside to the company's current share price.

	Perpetuity Growth rate							
		1.00%	1.25%	1.50%	1.75%	2.00%		
W	6.60%	87.4	90.7	94.3	98.3	102.7		
Α	7.00%	82.6	85.5	88.6	92.1	95.9		
С	7.40%	78.5	81.1	83.8	86.8	90.0		
С	7.80%	74.9	77.1	79.5	82.1	84.9		
	8.20%	71.6	73.6	75.7	78.0	80.5		

c. Relative Valuation

i. Peers and Multiple Selection

Relative Valuation is a crucial tool for comparing and complementing the previous valuation conducted via the FCFF model. The primary goal is to determine the valuation of KKR's shares by aligning them with comparable companies operating in the same industry. We have classified these similar companies into two groups to ensure a comprehensive and insightful analysis.

The first group encompasses direct peers, who exhibit remarkably similar characteristics in size, market presence, and overall traits. This grouping allows for a rigorous and close comparison, offering a more accurate assessment of KKR within its immediate competitive landscape. While the second group comprises additional peers that, while relevant for comparison, may not share identical traits but are still valuable reference points for benchmarking. This broader set of peers offers a more comprehensive view of KKR's standing within the industry.

To execute this comparative analysis effectively, we have chosen two critical multiples for evaluation: the Price-to-Earnings ratio (P/E ratio) and Enterprise Value to Earnings Before Interest, Taxes, Depreciation, and Amortization (EV/EBITDA). By examining KKR's performance with these multiples among direct and additional peers, we aim to derive a well-informed and comprehensive valuation of KKR's shares in the market thanks to data provided by Bloomberg.

Company Name	Ticker	EV/EBITDA		P	/E Ratio	
		TTM	FY1	2023	FY1	FY2
Direct peers						
Ares Capital Corporation	ARES US Equity	23.8	38.1	47.5	27.4	20.0
Blackstone Inc.	BX US Equity	-	20.9	38.7	23.5	17.1
The Carlyle Group Inc.	CG US Equity	9.4	9.7	18.3	9.2	7.1
TPG Capital, L.P.	TPG US Equity	-	20.5	74.9	21.7	13.2
Average		16.6	22.3	44.9	20.5	14.4
Median		16.6	20.7	43.1	22.6	15.2
Other peers		47.4	22.5		10.2	16.2
Blue Owl Capital	OWL US Equity	47.4	23.5 -		19.3	16.2
T. Rowe Price	TROW US Equity	8.3	9.0	14.8	13.4	13.4
GCM Grosvenor	GCMG US Equity	-	10.4	63.4	14.8	10.7
Franklin Resources Inc.	BEN US Equity	13.0	11.2	11.0	9.5	9.4
Voya Finanical	VOYA US Equity			8.1	8.4	7.3
Average		22.9	13.5	24.3	13.1	11.4
Median		13.0	10.8	12.9	13.4	10.7
All peers						
Average		20.4	17.9	34.6	16.4	12.7
Median		13.0	15.9	28.5	14.8	13.2
KKR & Co Inc.	KKR US Equity	34.0	51.6	41.7	16.3	12.0

iii. Valuation

We followed a meticulous process to derive the Relative value, as described earlier, by computing the averages and medians for the two peer groups.

For this valuation, we decided to utilize the median value to evaluate KKR since it offers a robust and balanced perspective, particularly in situations where outliers or extreme values might skew the results. By applying the median multiple from each peer group, we aimed to ensure a more representative and dependable valuation for KKR.

This approach not only considers the collective characteristics of the chosen peer groups but also strongly emphasizes achieving a more conservative and prudent valuation in line with best practices in finance. This methodology ensures that the KKR's value assessment is reliable and unbiased, thus contributing to well-informed investment decisions.

	EV/EBITDA				<u>P/E Ratio</u>			
	TTM		FY1		FY1		FY2	
Relative Value to Direct Peers	\$	101.1	\$	126.1	\$	119.6	\$	93.1
Relative Value to All Peers	\$	79.2	\$	96.5	\$	78.3	\$	81.1
<u>EV/EBITDA</u>								
----------------------	-----------------------							
Average Direct peers	\$ 113.6 per share							
Average All peers	\$ 87.9 per share							
<u>P/E Ratio</u>								
Average Direct peers	\$ 106.3 per share							
Average All peers	\$ 79.7 per share							
All Multiples								
Average Direct peers	\$ 109.9 per share							
Average All peers	\$ 83.8 per share							

As shown in the table above, the resulting share prices indicate a robust undervaluation, especially in the context of its direct peers. This suggests that KKR's shares are trading at a notably lower price relative to companies with the most similar characteristics, presenting an attractive investment opportunity.

Furthermore, when we compare KKR's share price with the entire peer selection (which includes both direct and other peers), the share price is closely aligned with the valuation obtained through the DCF approach.

As a result, by taking an average of all the multiples, we arrive at a value per share of \$109.9. In contrast, considering the valuation incorporating all the peers, we obtain a per-share value of \$83.8, indicating that while KKR's shares may seem undervalued when assessed alongside its direct peers, the inclusion of a broader peer set brings the valuation closer in line with the DCF-derived valuation.

6. Investment Thesis

The long-term, robust trend of investor capital flowing into alternative asset managers remains a compelling opportunity, and KKR stands out as a favored choice. KKR's exceptional capital allocation capabilities, a growth-oriented mindset, and substantial capital in the alternative market position it uniquely in the market.

Moreover, despite being an above-average business, KKR's valuation trades at a discount compared to its closest market peers is likely to contract significantly. Furthermore, the Discounted Cash Flow (DCF) approach suggests that the market's expectations for future cash flow growth, as reflected in the stock's current pricing, may need to be considered.

Total returns will closely mirror the company and the market growth trajectory over the next five years. Having said that, I expect the stock to increase in value within this timeframe, coupled with a continued dividend policy.

Additionally, it is worth highlighting that KKR holds a natural advantage in the face of inflation, which enhances its appeal as a robust choice for investors seeking to safeguard and grow their investments in an evolving economic landscape.

7. Conclusion

The objective of this project was to establish the fair value of KKR's shares with the dual purpose of providing investment recommendations and gaining insights into the dynamics of a global alternative investment firm. This comprehensive approach involved applying the FCFF model and the Relative Valuation method as our chosen valuation methodologies.

However, it's essential to acknowledge that including additional models could enhance our confidence in the analysis results and facilitate a more comprehensive comparison of the obtained values.

The Discounted Cash Flow (DCF) approach led to a share valuation of \$83.80. At the same time, the Relative Valuation resulted in a value of \$109.95 per share when considering direct peers and \$83.77 per share when considering all peers selected.

For the reasons presented above and in the investment thesis section, the recommendation for an investment in the KKR & Co Inc. stock is a buy, given the upside of 34% from the current market price. The table below illustrates the result of this valuation work.

Current share price	\$ 55.23	Upside
Target share price (DCF Valuation)	\$ 83.80	34%
Target share price (Relative Valuation - Direct peers)	\$ 109.95	50%
Target share price (Relative Valuation - All peers)	\$ 83.77	34%

8. References

Bibliographic references:

Acharya, V.V., Kehoe, C. & Reyner, M. (2009) Private Equity vs. PLC Boards in the U.K.: A Comparison of Practices and Effectiveness. ECGI - Finance Working Paper No. 233. Available at SSRN: https://ssrn.com/abstract=1324019.

Bain & Company (2023) Global Private Equity Report 2023.

- Bain & Company (2023) Global Private Equity Report 2023, https://www.bain.com/insights/private-equity-outlook-global-private-equity-report-2023/
- Baker, G.P. & Wruck, K.H. (1989) Organizational Changes And Value Creation In Leveraged Buyouts: The Case Of The O.M. Scott & Sons Company. Journal of Financial Economics. 25. (2) pp. 163-190.
- BlackRock (2023) BlackRock Alternatives 2023 Private Equity Markets Outlook, https://www.blackrock.com/uk/professionals/solutions/investment-actions/2023-privatemarkets-outlook
- Brealey, R. A., Allen, F., & Myers, S. C. (2011). Principles of corporate finance: Concise edition. Boston, MA: McGraw Hill.
- Buchner, Axel (September 18, 2014), Risk Management for Private Equity Funds. Available at SSRN: https://ssrn.com/abstract=2549664, pp. 1-4.
- BVCA Research Paper (2015), Diller C., Jäckel C., and Montana Capital Partners, Risk in Private Equity, pp. 3-12.
- Cornelli, F. & Karakaş, O. (2008) Private Equity and Corporate Governance: Do LBOs Have More Effective Boards? AFA 2009 San Francisco Meetings Paper. Available at SSRN: https://ssrn.com/abstract=1102467
- Cornelli, F. & Karakaş, O. (2012) Corporate Governance of LBOs: The Role of Boards. Available at SSRN: https://ssrn.com/abstract=1875649
- Cronqvist, H. & Fahlenbrach, R. (2013) CEO contract design: How do strong principals do it? Journal of Financial Economics. (108) pp. 659-674.
- Damodaran, A. (2002). Investment Valuation: Tools and Techniques for Determining the Value of any Asset, 2nd ed. New York: John Wiley & Sons Inc.
- Damodaran, A. (2005). The Value of Synergy. New York University Stern School of Business, Vol. 1, 1-47.
- Damodaran, A. (2006). Valuation Approaches and Metrics: A Survey of the Theory and Evidence. New York University Stern School of Business, Vol. 1, 1-77.
- Damodaran, A. (2012). Investment Philosophies: Successful Strategies and the Investors Who Made Them Work, 2nd ed. New Jersey: John Wiley & Sons Inc.
- Damodaran, A. (2016). The Cost of Capital: The Swiss Army Knife of Finance. Working Paper, New York University Stern.
- Damodaran, Aswath, What is the Risk-free Rate? A Search for the Basic Building Block (December 14, 2008). Available at SSRN: https://ssrn.com/abstract=1317436
- Døskeland, T., & Strömberg, P. (2018). Evaluating investments in unlisted equity for the Norwegian Private Equity Goes Public 107 Government Pension Fund Global (GPFG) report to Norwegian Ministry of Finance. Norwegian School of Economics and Stockholm School of Economics, NBIM.
- Eckbo, B. E., & Masulis, R. (1992). Adverse Selection and the Rights Offer Paradox. Journal of Financial Economics, Vol. 32, no. 3, 293-332.
- Fernández, P. (2007). Company valuation methods. The most common errors in valuations (WP No. 449 IESE Business School). IESE Business School.

- Franzoni, F., Nowak E., and Phalippou L. (2012), Private Equity Performance and Liquidity Risk, Journal of Finance 67, 2341–2373.
- Frykman, D., & Tolleryd, J. (2003). Corporate valuation: An easy guide to measuring value. Harlow: Financial Times Prentice Hall.
- Gertner, R. & Kaplan, S.N. (1996) The value maximizing board. Working Paper. Finance & Booth School of Business. University of Chicago: p.25.
- Gilligan, J., & Wright, M. (2014). Private equity demystified: An explanatory guide (3rd ed.). ICAEW Corporate Finance Faculty.
- Gompers, P., Kaplan, S., & Mukharlyamov, V. (2016). What do private equity firms say they do? Journal of Financial Economics, 121(3), 449–476.
- Gordon, M. J. The Review of Economics and Statistics, Vol. 41, No. 2, Part 1 (May, 1959), pp. 99-105.
- Gordon, Myron J. (1962). The Savings, Investment, and Valuation of a Corporation. Review of Economics and Statistics, 37-51. http://dx.doi.org/10.2307/1926621
- Gordon, Myron J., and Eli Shapiro, (1956), Capital Equipment Analysis: The Required Rate of Profit, Management Science 3, 102-110.
- Graham, B. & Dodd, D. (2009). Security Analysis, 6th ed. Colorado: The McGraw-Hill Companies Inc.
- Graham, B. (1939). [Review of The Theory of Investment Value, by J. B. Williams]. Journal of Political Economy, 47(2), 276–278. http://www.jstor.org/stable/1826645
- Graham, J.R. and Tucker, A.L. (2006) Tax Shelters and Corporate Debt Policy. Journal of Financial Economics, 3, 563-594.
- Hannus, S., (2015) Value Creation in Private Equity: A case study of Outperforming Buyouts in the Nordic Countries. Tampere University of Technology, (1328) pp. 1-180.
- Havnaer, K. (2013). Advisor Perspectives: DCF vs. Multiples. Working Paper, Jensen Investment Management, 1-4.
- Heel, J. & C. F. Kehoe (2005) Why Some Private Equity Firms Do Better Than Others. The McKinsey Quarterly. (1) pp. 24-26
- Holthausen, R.W. & Larcker, D.F. (1996) The Financial Performance of Reverse Leveraged Buyouts. Journal of Financial Economics. 42. (3) pp. 293-332.
- Janiszewski, S. (2011). How to perform discount cash flow valuation? Vol. 3, No.1, 81-96.
- Jensen, M.C. (2007) The Economic Case for Private Equity (and Some Concerns). Keynote presented at Harvard Business School Centennial Conference on Private Equity, New York City. http://ssrn.com/abstract=963530
- Jensen, M.C., Kaplan, S.N., Ferenbach, C., & Feldberg, M. (2006): Morgan Stanley Roundtable on Private Equity and Its Import for Public Companies. Journal of Applied Corporate Finance. 18. (3) pp. 8-38.
- JP Morgan & Co. (2023) Private Markets Outlook, https://www.jpmorgan.com/insights/banking/private-capital-markets/private-marketsoutlook
- Kaplan, S. (1989) The Effects of Management Buyouts on Operating Performance and Value. Journal of Financial Economics. (24) pp. 217-254.
- Kaplan, S.N. & Schoar, A. (2005) Private Equity Performance: Returns, Persistence, and Capital Flows. Journal of Finance. 60. (4) pp. 1791-1823.
- Kaplan, S.N. & Strömberg, P. (2009) Leveraged Buyouts and Private Equity. Journal of Economic Perspectives. (23), 1, pp. 121-146.
- Koller, T., Goedhart, M., & Wessels, D. (2010). Valuation measuring and managing the value of companies (5th ed.). Hoboken, N.J: Wiley.
- Koller, T., Goedhart, M., & Wessels, D. (2015). Valuation measuring and managing the value of companies (6th ed.). Hoboken, N.J: Wiley.

- Koller, Tim and Goedhart, Marc and Wessels, David, The Right Role for Multiples in Valuation. McKinsey on Finance, No. 15, pp. 7-11, Spring 2005, Available at SSRN: https://ssrn.com/abstract=805166
- Lazear, E.P. (2004) Output-Based Pay: Incentives, retention, or sorting? Accounting for Worker Well-Being (Research in Labor Economics). (23) pp. 1–25.
- Long, Austin M. & Nickels Craig J. (February 13, 1996) A Private Investment Benchmark, AIMR Conference on Venture Capital Investing, University of Texas. pp. 8-11.
- Luehrman, T. (1997). Using APV: A Better Tool for Valuing Operations. Harvard Business Review, 1-8.
- Modigliani, F., & Miller, M. H. (1958). The cost of capital, corporation finance and the theory of investment. The American Economic Review, 261-296.
- Mordor Intelligence (2022) Private Equity Market Overview, https://www.mordorintelligence.com/industry-reports/global-private-equity-market
- Myers, S. (1974). Interactions of Corporate Financing and Investment Decisions Implications for Capital Budgeting. Journal of Finance, 1-25.
- Nejadmalayeri A, and Singh M., Corporate Taxes, Strategic Default, and the Cost of Debt (November 7, 2012). Journal of Banking and Finance, Vol. 36, 2012, Available at SSRN: https://ssrn.com/abstract=2172502

Nikoskelainen, E. & M. Wright (2007) The Impact of Corporate Governance Mechanisms On Value Increase In Leveraged Buyouts. Journal of Corporate Finance. 13. (4) pp. 511-537.

Peck, S.W. (2004) The Carrot versus the Stick: The Role of Incentive Compensation and Debt Obligations in the Success of LBOs. American Business Review. 22. (2) pp. 1-12.

Renneboog, L. & Vansteenkiste, C. (2017) Leveraged Buyouts: Motives and Sources of Value. Annals of Corporate Governance. 2. (4) pp. 291-389.

- Rosenbaum, J. & Pearl, J. (2009) Investment Banking, Valuation, Leveraged Buyouts, and Mergers & Acquisitions. Hoboken, N.J. John Wiley & Sons, Inc.
- Rosenbaum, J., & Pearl, J. (2013). Investment banking (2nd ed.). Hoboken, NJ: Wiley.
- Rouvinez, C., (2003), Private equity benchmarking with PME+. Venture Capital Journal 43, 8, 25-39.
- Sorensen, Morten and Jagannathan, Ravi, The Public Market Equivalent and Private Equity Performance (2013). Columbia Business School Research Paper No. 13-34, Available at SSRN: <u>https://ssrn.com/abstract=2259261</u>
- Stowell, David P. (2018), Chapter 16 Overview of Private Equity, Investment Banks, Hedge Funds, and Private Equity (Third Edition), Academic Press, Pages 341-361, ISBN 9780128047231, https://doi.org/10.1016/B978-0-12-804723-1.00005-0.
- Wang, Yingdi, (June 10, 2012) Secondary Buyouts: Why Buy and at What Price?. Available at SSRN: https://ssrn.com/abstract=1948618
- Yermack, D. (1996) Higher Market Valuation of Companies With a Small Board of Directors. Journal of Financial Economics. 40. (2) pp. 185-211.
- Yousfi, O. (2011) Exit Routes in LBO: Does Leverage Solve Risk-Taking Problem? IUP Journal of Behavioral Finance, 8 (3), pp. 61–78.

Reports

KKR & Co Inc., 10-K Report 2018. Annual Report 2018.

- KKR & Co Inc., 10-K Report 2019. Annual Report 2019.
- KKR & Co Inc., 10-K Report 2020. Annual Report 2020.
- KKR & Co Inc., 10-K Report 2021. Annual Report 2021.

KKR & Co Inc., 10-K Report 2022. Annual Report 2022.

KKR & Co Inc., Investor Day Presentation – April 2021

Internet Sources:

KKR: <u>https://www.kkr.com/</u> Bloomberg: <u>https://www.bloomberg.com</u> Damodaran: <u>https://pages.stern.nyu.edu/~adamodar/</u> Investing.com: <u>https://pages.stern.nyu.edu/~adamodar/</u> Investing.com: <u>https://pages.stern.nyu.edu/~adamodar/</u> Yahoo Finance: <u>https://www.investing.com/</u> Yahoo Finance: <u>https://tradingeconomics.com/</u> Statista: <u>https://www.statista.com/</u>

9. Appendices

Annex A – Management Team' Biographies Henry Kravis

Co-Founder and Co-Executive Chairman

Henry Kravis (New York) co-founded KKR in 1976 and serves as its Co-Executive Chairman. Prior to his current position, he was Co-Chief Executive Officer until 2021. He is actively involved in managing the Firm and serves on each of the regional Private Equity Investment Committees. Mr. Kravis currently serves on the boards of Axel Springer and ICONIQ Capital, LLC. He also serves as a director, chairman emeritus, or trustee of several other cultural, professional, and educational institutions, including The Business Council (former chairman), Claremont McKenna College, Columbia Business School (former co-chairman), Mount Sinai Hospital, the Partnership for New York City (former chairman), the Partnership Fund for New York City (founder), Rockefeller University (former vice chairman), Sponsors for Educational Opportunity (chairman), and the Tsinghua School of Economics and Management in China. He earned a B.A. from Claremont McKenna College in 1967 and an M.B.A. from the Columbia Business School in 1969. Mr. Kravis has more than four decades of experience financing, analyzing, and investing in public and private companies, as well as serving on the boards of a number of KKR portfolio companies.

George Roberts

Co-Founder and Co-Executive Chairman

George R. Roberts (Menlo Park) co-founded KKR in 1976 and serves as its Co-Executive Chairman. Prior to his current position, he was Co-Chief Executive Officer until 2021. He is actively involved in managing the Firm and serves on regional Private Equity Investment and Portfolio Management Committees. Mr. Roberts has served as a director or trustee of several cultural and educational institutions, including Claremont McKenna College. He is also founder and Chairman of the board of directors of REDF, a San Francisco nonprofit organization. He earned a B.A. from Claremont McKenna College in 1966 and a J.D. from the University of California (Hastings) Law School in 1969. Mr. Roberts has more than four decades of experience financing, analyzing, and investing in public and private companies, as well as serving on the boards of a number of KKR portfolio companies.

Joseph Bae

Co-Chief Executive Officer

Joseph Bae (New York) joined KKR in 1996 and is its Co-Chief Executive Officer. Prior to his current position, he served as Co-President and Co-Chief Operating Officer from 2017 to 2021, and he has been a member of the board of directors of KKR & Co. Inc., since July 2017. Mr. Bae has held numerous leadership roles at KKR. He was the architect of KKR's expansion in Asia, building one of the largest and most successful platforms in the market. In addition to his role developing KKR's Asia-Pacific platform, he has presided over business building in the firm's private markets businesses, which included leading or serving on all of the investment committees and implementing the firm's modern thematic investment approach. Mr. Bae serves on the firm's Inclusion and Diversity Council. He is active in a number of non-profit

educational and cultural institutions, including co-founding and serving on the board of The Asian American Foundation, serving as a member of Harvard University's Global Advisory Council and serving as a member of the Board and Executive Committee of the Lincoln Center.

Scott Nuttall

Co-Chief Executive Officer

Scott Nuttall (New York) joined KKR in 1996 and is its Co-Chief Executive Officer. Prior to his current position, he served as Co-President and Co-Chief Operating Officer from 2017 to 2021, and he has been a member of the board of directors since July 2017. Mr. Nuttall has had numerous leadership roles at KKR. He was the architect of the firm's major strategic development initiatives, including leading KKR's public listing, developing the firm's balance sheet strategy, overseeing the development of KKR's public markets businesses in the credit and hedge fund space as well as the creation of the firm's capital markets, capital raising and insurance businesses. Mr. Nuttall serves on KKR's Balance Sheet Committee and the firm's Global Inclusion and Diversity Council. He has served on the boards of various non-profit institutions with a particular focus on education, most recently as Co-Chairman of Teach for America - New York.

Robert Lewin

Partner, Chief Financial Officer

Robert Lewin (New York) joined KKR in 2004 and is the Chief Financial Officer. Since joining KKR, Mr. Lewin has held a number of positions, including as an investor in private equity, coleading the firm's credit and capital markets businesses, serving as Treasurer and Head of Corporate Development and most recently as Head of Human Capital & Strategic Talent. From 2006 through 2010, Mr. Lewin resided in Hong Kong, helping to launch KKR's Asia business. Mr. Lewin has a Bachelor of Science from the University of Pennsylvania. He currently serves on the board of Answer the Call, a non-profit organization.

Ryan Stork

Chief Operating Officer

Ryan Stork (New York) joined KKR in 2022 as Chief Operating Officer. He is responsible for ensuring the firm's global operations, technology, human capital and enterprise risk resources are coordinated to meet our investment and client needs. Prior to joining KKR, Mr. Stork held multiple leadership roles at BlackRock for more than twenty years, including Deputy Chief Operating Officer, chairman of Asia Pacific, global head of Aladdin – BlackRock's investment & risk management technology platform, head of the institutional client business in Continental Europe, and co-head of the financial institutions group. Over his career he has worked and lived in New York, London, and Hong Kong. He was also a member of BlackRock's global executive committee and a board member of BlackRock's foundation. Prior to joining BlackRock, Mr. Stork worked at PennCorp Financial Group – a life insurance holding company, Conning Asset Management, and The Travelers Insurance Companies. He holds a Chartered Financial Analyst designation and received an undergraduate degree in Finance from the University of Massachusetts at Amherst.

Katie Sudol

Partner, Chief Legal Officer and General Counsel

Kathryn King Sudol (New York) joined KKR in 2022 and is our Chief Legal Officer and General Counsel. Prior to her current position, she served as KKR's General Counsel from 2022 through March 2023 and Secretary from 2022 through June 2023. Prior to joining KKR, Ms. Sudol was a partner of Simpson Thacher & Bartlett LLP for 24 years, where she held numerous leadership roles, including as global co-head of mergers & acquisitions, a long-time member of the firm's executive committee and head of the firm's M&A practice in Asia from 2010 through 2018. Ms. Sudol currently serves as a member of the Board of Trustees of New York University School of Law. She earned a B.S., with honors, from Northwestern University and a J.D. from New York University School of Law.

Annex B – Dividend History and Yield

Dividend Date	D	ividend	Yield on cost
08/09/2010	\$	0.0800	0.78%
26/11/2010	\$	0.1500	1.18%
21/03/2011	\$	0.2900	1.64%
27/05/2011	\$	0.2100	1.23%
30/08/2011	\$	0.1100	1.00%
29/11/2011	\$	0.1000	0.79%
06/03/2012	\$	0.3200	2.15%
21/05/2012	\$	0.1500	1.11%
21/08/2012	\$	0.1300	0.94%
20/11/2012	\$	0.2400	1.56%
05/03/2013	\$	0.7000	3.93%
21/05/2013	\$	0.2700	1.32%
20/08/2013	\$	0.4200	2.02%
19/11/2013	\$	0.2300	1.05%
04/03/2014	\$	0.4800	1.99%
23/05/2014	\$	0.4300	1.95%
19/08/2014	\$	0.6700	2.92%
18/11/2014	\$	0.4500	2.10%
06/03/2015	\$	0.3500	1.46%
18/05/2015	\$	0.4600	2.04%
18/08/2015	\$	0.4200	1.75%
24/11/2015	\$	0.3500	1.90%
08/03/2016	\$	0.1600	1.25%
19/05/2016	\$	0.1600	1.19%
19/08/2016	\$	0.1600	1.12%
22/11/2016	\$	0.1600	1.14%

07/03/2017	\$ 0.1600	0.89%
27/04/2017	\$ 0.1700	0.93%
27/07/2017	\$ 0.1700	0.88%
26/10/2017	\$ 0.1700	0.85%
08/02/2018	\$ 0.1700	0.76%
03/05/2018	\$ 0.1700	0.77%
26/07/2018	\$ 0.1700	0.63%
25/10/2018	\$ 0.1250	0.52%
01/02/2019	\$ 0.1250	0.54%
30/04/2019	\$ 0.1250	0.52%
25/07/2019	\$ 0.1250	0.50%
29/10/2019	\$ 0.1250	0.43%
31/01/2020	\$ 0.1250	0.38%
06/05/2020	\$ 0.1350	0.55%
04/08/2020	\$ 0.1350	0.37%
30/10/2020	\$ 0.1350	0.36%
08/02/2021	\$ 0.1350	0.29%
04/05/2021	\$ 0.1450	0.26%
03/08/2021	\$ 0.1450	0.22%
02/11/2021	\$ 0.1450	0.18%
08/02/2022	\$ 0.1450	0.25%
03/05/2022	\$ 0.1550	0.30%
02/08/2022	\$ 0.1550	0.27%
01/11/2022	\$ 0.1550	0.27%
07/02/2023	\$ 0.1550	0.27%
08/05/2023	\$ 0.1650	0.33%
07/08/2023	\$ 0.1650	0.28%

Annex C – Trading Volumes since IPO





Annex D – Breakdown of Revenues from Total Fees



Asset Management - Geographical Revenue Breakdown of Total Fees



Annex F – Selected peers overview

Company Overview	Description	Founding year	Market Cap
Ares Capital Corporation	Ares Capital is a business development company that provides financing solutions to middle-market companies and offers a range of services, including debt and equity investments, to support the growth and stability of their portfolio companies.	1997	\$10.6bn

Blackstone Inc.	Blackstone is a global private equity and alternative asset management firm active in managing various investment funds and assets across real estate, private equity, credit, and hedge funds. The company is well known in the industry for its extensive reach and multitude of investment strategies.	1985	\$110.2bn
The Carlyle Group Inc.	The Carlyle Group is another prominent global private equity and alternative asset management firm investing in a wide range of industries and asset classes, including aerospace, healthcare, and real estate, among others.	1987	\$9.93bn
TPG Capital, L.P.	Leading private equity investment firm with a focus on various industries, including technology, healthcare, and consumer goods and known for its strategic investments in both public and private companies.	1992	\$9.0bn
Blue Owl Capital	Blue Owl Capital is an alternative asset management firm that offers investment solutions across private equity, credit, and real assets. Blue Owl Capital since its founding in 2021 aims to provide a diversified approach to alternative investments.	2021	\$17.2bn
T. Rowe Price	T. Rowe Price is an asset management company that serve individual and institutional investors with a focus on long-term investment strategies by offering a wide range of investment services, including mutual funds and retirement planning.	1937	\$19.8bn
GCM Grosvenor	GCM Grosvenor is an independent alternative asset management firm that specializes in hedge funds, private equity, and real assets and offers its investment solutions to institutional and high-net-worth investors.	1971	\$1.4bn
Franklin Resources Inc.	Franklin Resources, often known as Franklin Templeton, is a global investment management company. They provide a diverse array of investment products across several subsidiaries.	1947	\$11.2bn
Voya Financial	Voya Financial is a financial services company focused on helping individuals and institutions plan for their financial future, including with retirement, insurance, and wealth management products.	1991	\$6.7bn