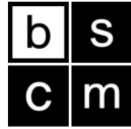


From the Brink: Private Equity in the Distressed Space



Francesco Monteduro

Edoardo Miccio

Prasiddha Rajaure

Ema Melihov

Filippo Reina

Luca Deslondes

Paul Schappert

Pedro Calixto

Table of Contents

1. Introduction to Private Equity	4
1.1 History of PE	4
1.2 Structure of PE.....	5
1.3 General Benefits of PE	6
1.4 Types of PE.....	7
2. Distressed Private Equity	8
2.1 Overview.....	8
2.2 Market Size and Trends	8
2.3 Types of Investments	9
3. Distressed PE Funds	10
3.1 Target IRR	10
3.2 Size, Maturity, and Success of Investments	10
3.3 Value Creation	11
4. Technical Overview of Financial Distress.....	13
4.1 Spotting a Distressed Company.....	13
4.2 Predicting Distress	14
4.3 Causes of Distress.....	15
4.3.1 <i>Endogenous Causes of Distress</i>	15
4.3.2 <i>Exogenous Causes of Distress</i>	16
5. Investment Opportunities	18
5.1 Introduction.....	18
5.2 Economic Performance.....	18
5.3 Relative Quantity of Low-Rated Bonds	19
5.3 Efficient Market Theory (EMT).....	19
5.3.1 <i>Equal Access to Information</i>	19
5.3.2 <i>Rational Behavior</i>	20
5.4 Low Transaction Costs	21
6. Restructuring Options: Analysis of Alternatives	22
6.1 Chapter 7 Bankruptcy	22
6.1.1 <i>Overview and Stages</i>	22
6.1.2 <i>Key Characteristics</i>	23
6.2 Chapter 11 Bankruptcy	23
6.2.1 <i>Overview and Stages</i>	23
6.2.2 <i>Key Characteristics</i>	24
6.3 Out-of-Court Restructurings	25

7. The Role of PE in Relieving Financial Distress.....	27
7.1 Introduction.....	27
7.2 Driving Factors of PE’s Performance Advantage in Restructuring.....	28
7.2.1 Dry Powder and Capital Investments	29
7.2.2 Corporate Governance and Management Team.....	29
7.2.3 Insurance.....	30
7.2.4 Reputation	30
7.2.5 Unique Skills.....	30
7.3. Final Remarks	31
8. Valuation of Distressed Companies.....	32
8.1 Discounted Cash Flow Analysis.....	32
8.2 Comparable Company Analysis	33
8.3 Precedent Transaction Analysis.....	34
8.4 Liquidation Analysis.....	35
9. Investing Strategies.....	37
9.1 Distress for Control.....	37
9.2 Loan to Own	38
9.3 Investing in Special Situations.....	39
10. The Turnaround Process.....	41
10.1 Operational Restructuring.....	41
10.1.1 Leadership Restructuring.....	42
10.2 Financial Restructuring.....	43
10.2.1 Equity Restructuring.....	44
10.2.2 Debt Restructuring	44
10.2.3 Asset Restructuring.....	45
10.2.4 Leverage Reduction.....	45
11. Exit Strategies.....	47
11.1 Sale to Private Acquirors	47
11.1.1 Strategic Sale.....	47
11.1.2 Secondary Sale	47
11.1.3 Management Buyout.....	47
11.1.4 Resale to Promoters	48
11.2 Sale to the Public: Initial Public Offering (IPO)	48
11.3 Liquidation.....	48
11.4 Final Remarks on Exit Strategies	48
12. Conclusion	50

13. Case Study: KKR, Vornado and Bain Capital’s Buyout of Toys “R” Us	51
13.1 Toys “R” Us Overview	51
13.2 Investment Details	52
13.3 Strategic Rationale.....	52
13.4 Comparison of Financials	53
13.5 Conclusion	55

1. Introduction to Private Equity

1.1 History of PE

The early history of Private Equity can be traced back to the beginning of the 20th century when Henry Phipps established the Bessemer Trust. After selling his stake in Carnegie Steel Co., he invested his capital into a fund and started buying emerging businesses together with his children.

Although other funds composed of private investment already existed at that time, they were mainly focused on investing in companies during the early stages of their life cycle, similar to how today's Venture Capital firms invest in start-ups. This means there was one key factor distinguishing those funds from most PEs operating today – leverage.

After the Small Business Act was established in 1958, Venture Capital firms had the opportunity to borrow money from the government, which allowed them to make bigger loans to start-ups, introducing the first real leveraged investments in businesses.

The first leveraged buyouts (LBOs) of today's form took place during the 1960s. However, the new-born trend soon came to a halt due to rising capital gains taxes adding to the effect of tightened regulation, preventing pension funds from participating in “risky” investments such as Private Equity. In the 1980s, restrictions were relaxed again, enabling a first renaissance, and reviving the industry. Some of the most renowned PE firms including Carlyle, Blackstone and Bain Capital were formed during that same period.

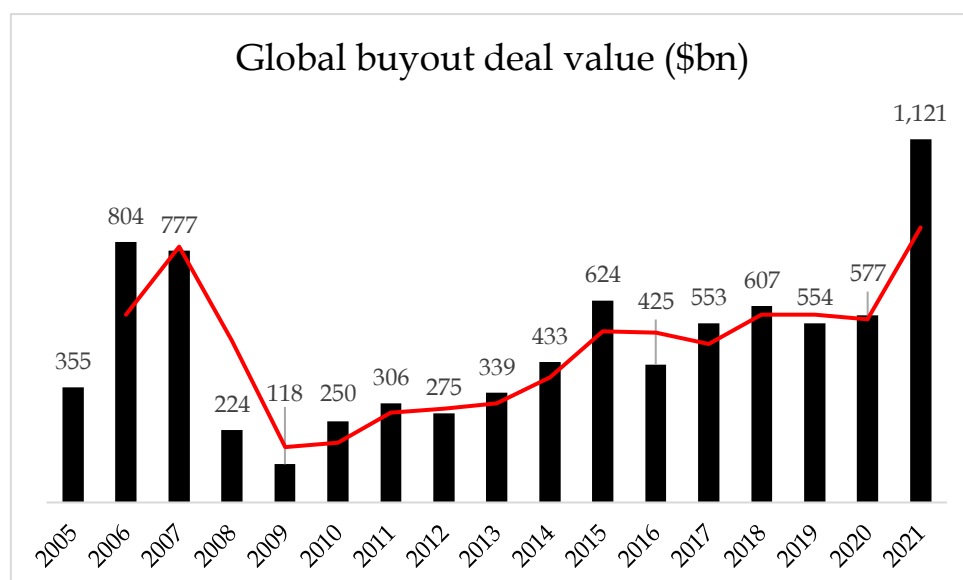
Attracting the attention of the public, the legendary \$25bn buyout of RJR Nabisco in 1988 marked the beginning of an era between heavy criticism and extraordinary profits. The tech boom of the 1990s made it hard for Private Equity to create value through leveraged buyouts, as stock prices were sent to an irrational yet seemingly unstoppable rise. Adapting to this environment, many firms participated in start-up investing, partially abandoning their involvement in LBOs.

Following the introduction of the Sarbanes-Oxley Act in 2002 as a response to the breakdown of the dot-com bubble two years earlier, increasing short-term market pressure on corporations made it attractive to escape the near-sighted interests of investors by going private, further fuelling the PE industry's growth.

After years of growth, the great financial crisis introduced a harsh credit crunch starting in the summer of 2007, with PEs facing significant difficulties funding their leveraged buyouts. In

the decade from 2012 to 2021, PE deal activity grew by more than 300% to \$1,121bn. One main reason of this development were the favourable economic conditions resulting from the recovery following the 2008 financial crisis. Intensifying globalisation among PE firms was another key driver, as especially large funds expanded their operations across the globe and increasingly entered emerging markets. On top of that, sustained low interest rates in the United States and Europe provided cheap borrowing conditions, creating a fertile environment for Private Equity to operate in.

Although the current macroeconomic circumstances have made LBOs expensive, subsequently slowing down results for 2022 and dampening the outlook for the year to come, the industry appears to be set for long-term growth.



Source: “The Private Equity Market in 2021: The Allure of Growth” – Bain Capital

1.2 Structure of PE

Although Private Equity funds often specialize in specific industries and deal sizes, their structure mostly remains the same. General partners (GPs) are responsible for collecting capital and for managing the fund’s activities, which includes selecting the investments. The capital comes from limited partners (LPs), the most common investor groups being pension funds, university endowments and high-net-worth individuals (HNWIs).

Almost all funds are realized within the legal shell of a limited partnership (LP) or limited liability company (LLC) to protect investors from being held liable for amounts exceeding their

investment. The specific conditions of a fund are described in its limited partnership agreement (LPA) including aspects such as investment requirements, duration and fee structure.

The typical duration of a fund ranges from 10 to 12 years. This covers all activities from establishing the partnership, raising capital, and closing the fund to selecting, executing, managing, and finally exiting investments. It is important to note that committed capital remains with investors and is only collected once an investment is executed.

To invest in Private Equity, a minimum capital contribution of around \$200,000 is common. Further restrictions may apply to retail investors. These may include a minimum threshold of personal net worth, or the status of accredited investor as defined by local law. Some funds even require prospective investors to prove their knowledge of sophisticated investment vehicles by filling out a questionnaire or through an interview.

Typically, Private Equity charges a fee mix similar to that of Hedge Funds consisting of a management fee and a performance fee. The management fee, usually fixed at 2% of the capital invested, is paid annually and independent of the fund's performance. On top of that, 20% of the final returns exceeding the initial investment are attributed to the general partners. This fee mix is often referred to as the *2 and 20* fee structure.

1.3 General Benefits of PE

Private Equity offers unique advantages to both investors and portfolio companies. It allows investors to benefit from the growth potential of private companies, which are not traded publicly and therefore not easily accessible through a stock exchange. In the broader picture, Private Equity has a low correlation with other asset classes and therefore provides diversification benefits, relevant especially to institutional investors.

When investing in a portfolio company, the general partners of a PE fund leverage their network as well as their own expertise to maximize value creation. Active participation in the management of the company enables them to make improvements to both strategy and operations. As general partners usually invest a notable amount of their own capital into the fund they are managing, interests are aligned between investors and both the fund's and the company's management.

From a corporate perspective, PE is an additional opportunity to access capital. This is of particular interest to companies that anticipate an unfavourable valuation from the public markets or to companies in distress, as will be discussed in detail in this report. Securing

investment from a PE can also have a positive influence on the reputation of a business and its future valuation in a later trade sale or IPO.

1.4 Types of PE

There are different ways for a PE firm to engage in beneficial specialization to achieve a competitive edge through differentiation from its competitors. While some funds target small-cap investments, others exclusively engage in large-cap deals. Funds can also be distinguished by the stage of the company life cycle they invest in.

The early start-up stages are covered by Venture Capital (VC) firms, which make use of their network and provide sector expertise as well as operational experience to newly founded businesses. After the first rounds of financing, companies usually outgrow the scope of VC and Growth Equity takes over, oftentimes focusing on scaling the established business model through extensive investments in sales and marketing.

Private Equity, on the other hand, concentrates on mature companies with an established position in the market and the ability to generate steady revenues, enabling the use of leveraged buyouts (LBOs). Especially within Private Equity, it makes sense to distinguish between funds focusing on different industries or special situations. Relevant industries include healthcare, technology, industrials, consumer and retail, real estate, and infrastructure.

Examples of special situations are investments in sustainable companies (ESG) or in businesses in distress. The latter can be further divided into turnaround and vulture financing, where the difference lies in the degree of distress observed. While turnaround investing involves the clear objective of bringing a financially struggling company back on track, vulture funds only invest in companies on the verge of bankruptcy or even after insolvency has occurred. For vulture investors, the sale of a company's assets is a relevant alternative to a turn-around scenario.

Following this overview of the origins and key characteristics of Private Equity firms, the next pages introduce the report's main topic of Distressed Private Equity.

2. Distressed Private Equity

2.1 Overview

One of the sub-branches within Private Equity, often referred to as Distressed PE, specializes in investing in the debt or equity of troubled companies, taking control during the bankruptcy or restructuring process, reorganizing the target and selling or listing it for a profit. In practice, these Private Equity firms look for companies that have a poor balance sheet but solid fundamentals.

Many of the major PE players like Blackstone, Bain Capital or Brookfield also operate in this industry, while smaller competitors specialising in the field include Avenue Capital Group, CarVal Investors, MatlinPatterson, Crestview Partners, Tennenbaum Capital Partners, KPS, Third Avenue, and Highbridge (now owned by JPM).

2.2 Market Size and Trends

Over the past 10 years, 474 firms worldwide have collectively raised almost \$211bn to make equity and debt investments in distressed companies. On top of that, there is an estimated \$53bn of dry powder reserved for distressed investments. Out of those 474 firms, 57% are located or headquartered in North America, while 28% have their head offices in Europe, with the remainder being based in Asia and across the rest of the world. This underlines the strong concentration of the North American and European Distressed PE markets and implies that there is significant growth potential for the markets in Asia as well as in the developing countries around the world.

In general, the Distressed PE industry strongly reacts to economic sentiment and crises. After the Covid-19 induced recession for example, there was a large increase in the amount of capital flowing into Distressed Private Equity investments. The same dynamics could be observed during the dot-com crash of 2000 and the 2008 financial crisis, with Distressed PE funds outperforming all other PE investment strategies. With the current geopolitical instability, spiralling inflation, looming recession, and massive supply chain issues all leading to an increased risk of defaults and volatility, it is expected that there will be plenty of opportunities for Distressed Private Equity funds in 2023.

2.3 Types of Investments

Distressed PE firms may use a wide variety of investment strategies, but there are three main categories.

The first is “*Distress for Control*”. This strategy involves the purchase of a controlling stake of the company’s equity. To limit the risk that comes with the juniority of equity in the bankruptcy process, it is an attractive alternative for investors to purchase a large amount of debt securities instead, but with the far-sighted goal of converting them into a controlling portion of equity. This process is also known as Distressed Debt investing. Once the fund takes control of the company, it then implements a turnaround strategy.

The second strategy is called “*Loan to Own*”. It involves providing the troubled company with a high interest loan subject to strict terms, and taking control over the company when it becomes unable to repay the loan. Arriving at this point, the PE firm is free to implement its turnaround plan as in the first strategy.

The two approaches explained are the main ways to invest in distressed firms. A third category, “*Special Situations*”, involves a mix of scenarios with certain particularities PEs can invest in, such as spin-offs, restructurings, or merger arbitrage.

This general introduction to Private Equity and the Distressed investment niche provides a solid foundation to explore the more complex concepts covered throughout this report. Before diving deeper into the theory behind Distressed investment opportunities, it is worth highlighting the main drivers that attract investors to devote capital to such a peculiar type of fund.

3. Distressed PE Funds

3.1 Target IRR

Because the performance of Distressed Private Equity funds varies a lot, to provide more meaningful data we chose to summarise data from a time horizon of 10 years covering the decade from 2000 to 2010. The median net IRR ranged between 8.0% and 26.4% in those years, while the overall median net IRR was 14.4%. This performance is very similar to the one of buyout funds. It is worth noticing that during the years of the 2008 financial crisis, Distressed funds have significantly overperformed buyout funds. This period has provided plenty of opportunities for Distressed investors that were able to consistently get an IRR of above 10%.

For what concerns the risk return profile of Distressed funds, it is no surprise to see that among many different types of funds, Distressed Private Equity firms have a high level of risk. Even so, if compared to buyout funds, Distressed Private Equity funds share an almost equal level of risk with a higher median net IRR.

To assess the risk of Distressed funds, the standard deviation of the net IRR between different funds is used.

3.2 Size, Maturity, and Success of Investments

Private Equity firms often invest in distressed or bankrupt firms with the aim of turning them around and generating a return on their investment. The size of the investment made by these firms can vary widely depending on the specific circumstances of each deal. It may range from hundreds of millions to billions of dollars. Notable examples of large deals are reported below.

In 2019, Private Equity firm KKR acquired the Indian Distressed Asset Management company, Altico Capital, for a total investment of \$1.1bn. The investment was made through a combination of equity and debt, with KKR taking a controlling stake in the company. Altico Capital had been struggling with a liquidity crisis, and the investment by KKR was seen as a lifeline for the company.

Similarly, in 2018, Private Equity firm Cerberus Capital Management acquired the distressed German lender, HSH Nordbank, for a total investment of \$3.4bn. The investment was made in partnership with JC Flowers, another Private Equity firm. HSH Nordbank had been struggling with bad loans and had been under pressure from European regulators to clean up its balance

sheet. The investment by Cerberus and JC Flowers was seen as a way to stabilize the bank and turn it around.

As highlighted above, in terms of average investment size, it is difficult to provide a definitive figure as the amount invested can vary widely depending on the specific deal. However, according to a report by Preqin, the average size of a Private Equity Distressed Debt investment in 2019 was \$136mn.

Similarly, success rates and maturity for Private Equity investments in distressed or bankrupt firms can vary widely. Some deals, such as KKR's investment in Altico Capital, have been successful, while others have not. For example, in 2016, Private Equity firm Sun Capital Partners acquired the American apparel retailer, The Limited, for \$26.8mn. However, the retailer continued to struggle, and in early 2017, it filed for bankruptcy and closed all of its stores.

Finally, exiting investments in distressed or bankrupt firms can sometimes be challenging. In many cases, Private Equity firms will look to sell the company to another buyer or take it public through an initial public offering (IPO). However, finding a buyer or convincing the public markets to invest can be difficult, particularly if the company is still struggling. As a result, Private Equity firms may need to hold on to their investments for longer than they initially anticipated.

3.3 Value Creation

The foremost way to attract investors to pool their money into buying a formerly distressed (later restructured) company is by presenting to them the potential improvements in value creation situations. Through these methods, the Private Equity firm could be ascertained with regards to the reduced costs of exit. A few ways a PE can do these are briefly introduced below:

- i. Reduced future signaling costs through new corporate governance. This is an effective approach to reorganize the boards of the companies they have stakes in, optimizing the board and weaning out non-performing members. This methodology adds outside perspective to operational management and allows Private Equity companies to control board expenses. The Private Equity company can act as a supervisory board, governing employees of the portfolio companies and ensuring alignment with the interests of improving the portfolio company. The integration dimension involves the Private

Equity company monitoring remuneration and evaluation of other directors. Through rigorous checks and supervision, Private Equity companies review all aspects of their portfolio companies and ensure their leanness and efficiency.

- ii. Value creation through consolidation. Another commonly visible method is to incorporate consolidation methods that can further yield value creation possibilities. Consolidation of competition involves merging various companies that Private Equity companies are invested in to create a larger, better-rounded entity. This can lead to cost savings through integrating production lines or reducing staffing in departments. Similarly, consolidation of the supply chain involves eliminating third parties from the manufacturing line and incorporating bottom line manufacturers into the parent company. This can lead to cost savings which could potentially create an entity with front to end capability and extend exit possibilities through IPOs. However, this method can also be expensive and may result in the elimination of clients of the products being taken over by a competitor firm.

Following this brief analysis of the main features that drive the attractiveness of Distressed PE funds, the following sections cover technical aspects related to Distressed Private Equity and dive deeper into more specific terms related to the restructuring process.

4. Technical Overview of Financial Distress

4.1 Spotting a Distressed Company

Despite the lack of a universally accepted definition for a distressed company, various indicators are commonly associated with firms experiencing financial distress. This section offers a range of tools for assessing a company's financial health and identifying those that may be deemed distressed.

A common feature most distressed companies share is their deteriorating credit ratings, typically assessed by prominent debt rating agencies such as Moody's, S&P, and Fitch. Although the scales utilized by these firms exhibit slight variation, they share the characteristic that lower grades correspond to a higher probability of default for the evaluated company. Speculative grade bonds, which fall below BB (or Ba in the case of Moody's), are differentiated from investment grade bonds, which surpass BBB (or Baa in the case of Moody's). Due to their access to non-public information, such rating agencies can provide a valuable means of evaluating a company's financial health for potential investors.

However, these indicators are only marginally useful in modern, fast-paced markets. One of the explanations is that they often lag behind the credit development of a company. In addition to this, such agencies only assess the risk of default of a company, while they don't provide any indication of whether the current market value of its securities is fair or not.

One of the most widely accepted definitions of financial distress is attributed to Martin Fridson. Fridson classifies a security as distressed when its credit spread, or risk premium, exceeds 10,000 basis points or 10%. To determine the credit spread of a bond, a basic approach is to calculate the difference between its yield to maturity (YTM) and the yield of a treasury bill of comparable maturity. For example, if a three-year bond has a YTM of 16% and three-year treasury notes have a yield of 5%, the credit spread of this bond would be 11% (11,000 basis points). According to Fridson's definition, this bond would be considered distressed.

This methodology relies on the market's efficiency, which is expected to discount all available information into the price of securities. Although this approach can provide some insight into the market's perception of a company's financial health, it is vital to give some warnings on its historical effectiveness. In fact, the average credit spread varies widely across different periods. For instance, during the 1990s, the average credit spread of speculative-grade bonds was below

500 basis points. However, in some periods, such as the 2000-2003 era, the average credit spread of speculative-grade bonds exceeded 1,000 basis points.

While none of the methods described above is infallible in assessing a company's financial health, specific characteristics are commonly observed in distressed companies. These include stock trading below \$1 and some unsecured debt trading at a discount greater than 40%. These are the characteristics identified by Stephen G. Moyer, a prominent expert in the Distressed Debt field.

Even without providing a formal definition of financial distress, the tools analysed above will be beneficial for understanding what we generally mean when talking about a distressed company. In addition, it may be helpful to provide more quantitative tools that are generally used to predict which companies will face distress in the following years.

4.2 Predicting Distress

Throughout history, various predictive models for corporate insolvency have been developed. Among these models, the Altman *Z-score model* stands out as a prominent example. The model was conceptualized with the aim of scrutinizing different accounting ratios to anticipate the likelihood of prospective bankruptcies.

The formula is as follows:

$$Z = 0.012X_1 + 0.014X_2 + 0.033X_3 + 0.006X_4 + 0.999X_5$$

$$X_1 = \frac{\textit{Working Capital}}{\textit{Total Assets}}$$

$$X_2 = \frac{\textit{Retained Earnings}}{\textit{Total Assets}}$$

$$X_3 = \frac{\textit{EBIT}}{\textit{Total Assets}}$$

$$X_4 = \frac{\textit{Market Value of Equity}}{\textit{Book Value of Total Liabilities}}$$

$$X_5 = \frac{\textit{Sales}}{\textit{Total Assets}}$$

This model employs variables that are inherently linked to credit metrics in a clear and intuitive manner. Specifically, X_1 gauges the relative liquidity of a company, while X_2 measures both the earnings potential and dividend policy of a firm, incentivizing stable performance over time.

It is noteworthy that $X_5 \left(\frac{Sales}{Total\ Assets} \right)$ bears a significantly greater weight than the other variables. Two primary factors account for this peculiarity. Firstly, a company with comparatively higher sales enjoys a competitive edge over the market. Secondly, given that the index was originally fashioned for manufacturing companies, this variable provides an excellent gauge of a company's efficiency and is an outstanding indicator of its financial soundness.

This model can prove immensely beneficial when examining the potential bankruptcy risk of a company. For instance, a manufacturing company with a Z-score below 1.81 indicates significant financial distress and is statistically highly predictive of bankruptcy.

It is essential to stress that while this model can be a valuable tool for analysing a company's financial health, there are many instances that represent exceptions. For example, a company may opt for negative working capital, which would negatively impact the Z-score, despite being in a sound and rational financial position.

4.3 Causes of Distress

After conducting an analysis of the various methods used to evaluate the financial health of a company, a fundamental question arises: what factors contribute to financial distress? In the subsequent section, we will examine the variables that may generate financial distress. To facilitate our discussion, we have divided the causative factors of financial distress into two categories: endogenous and exogenous. Endogenous factors are closely linked to the company and often stem from inadequate management decisions. Conversely, exogenous factors arise from external sources, impacting entire industries or even the broader market.

4.3.1 Endogenous Causes of Distress

When contemplating the reasons behind a company's bankruptcy filing, the initial assumption may be that the company's products and services could not compete effectively in the market. In a rapidly changing business environment, with frequent introductions of new technologies, it can be challenging for many firms to keep up. It is reasonable to infer that once successful, products can become obsolete over time. If a company fails to update its offerings, profits will inevitably decline, leading to a downward spiral of losses. Assessing whether a company's financial distress is due to its obsolete products is critical because most firms in this situation are likely to file for bankruptcy and be liquidated. If the revenue-generating potential of a company's assets is close to none, a turnaround is nearly impossible.

Another factor that can rapidly erode a successful company's profitability is having an unrealistic business plan. Although the term "unrealistic" is quite vague, specific examples can shed some light on its meaning. For instance, a common cause of financial distress is an unsuccessful LBO, in which the acquiror overestimates the future profits of the target company or underestimates the expenses. In such a scenario, it is not feasible to deleverage the business by using the target company's assets, whether by selling them or relying on their profits, leading to financial distress.

These two causes can be linked to a common factor: poor management. Poor management fails to respond adequately to a changing business environment and identify potential threats. The definition of "poor management" is broad and can be used to explain most situations of distress. Nonetheless, a detailed breakdown of the factors leading to distress can significantly alter an investor's perspective. Replacing a bad management team is relatively easy, whereas restructuring a company with obsolete assets and products is almost impossible.

The last endogenous cause of distress that we will analyse is near-term liquidity issues. While there is a vast range of events that can create liquidity issues in a company, we will try to provide a general idea of the common characteristics that they have.

If a company relies heavily on bank debt, covenant breaches are some of the biggest threats to the stability of the company. After such events, banks will be able to charge additional fees to the company. This is only one of the possible outcomes of a covenant breach. For instance, banks may try to replace the management of a company or try to secure their debt (if it was originally unsecured).

Among the other shocks that can affect the liquidity of a company, we must highlight a crisis of confidence events. When such a situation occurs, it is extremely hard to predict how the market will react, as well as to forecast the faith of the company.

4.3.2 Exogenous Causes of Distress

The most intuitive and obvious cause of financial distress is perhaps an economic downturn. While during periods of recession almost all companies suffer from losses and see their profits decimated, the more fragile companies will not be able to survive. This is the optimal condition for distress: during periods of economic downturns, most firms begin shrinking and their liquidity reserves get exhausted.

While the case of a general recession is, perhaps, a little bit extreme, other changes internal to a specific industry can negatively affect a company. Radical changes in market conditions, such as a spike in the price of some raw materials, can rapidly affect the profitability of a business. Disruptive technologies can make the entire product line of a company obsolete.

Among the other endogenous causes of distress, it's interesting to highlight government policies and geopolitical events. These factors can influence whole industries or countries, and it is often impossible for companies to take precautions against the decisions of governments. Historically, several businesses have been driven out by political events.

There is one final factor that we want to analyse, that is black swan events. What we mean by this term are extremely rare and disruptive events, able to wipe out entire companies. Take as an example a natural disaster. This event can be almost impossible to forecast for a company, which means that it is extremely hard to be prepared for it. The impact that black swan events can have on a company can vary a lot. It could result in a fraction of profits being burnt, or completely destroying the money-making assets of a company, nullifying its revenue-generating potential.

After understanding the technical aspects that classify a company as distressed, we will further highlight how such a troubled scenario is turned into a profitable investment opportunity by Private Equity firms.

5. Investment Opportunities

5.1 Introduction

While most investors are generally repugnant to bankruptcies, actual or potential corporate insolvency can present a lucrative money-making opportunity for Distressed investors. In fact, during the period 2000-2003 solely, these insolvencies and bankruptcies were valued above an unprecedented amount of \$400bn.

Moody's Investors Service illuminates a bigger picture including payment defaults, forced exchanges, and other similar events alongside bankruptcies. This broadened definition, relative to just simple bankruptcies, is more representative of all the opportunities that were presented to Distressed investors. Some of the opportunities that investors looking for the perfect moment to invest within the Distressed industry seek are explained on the following pages along with the economic rationale behind them.

5.2 Economic Performance

Sustained period of overall economic weakness is the foremost logical factor associated with financial distress. It's a cinch that when an economy is weak and the demand and supply of goods is soft, many businesses will have difficulty raising their unit growth and prices, thus leading to a reduced cash flow. However, this does not imply that the businesses do not have potential to grow in the future and represent therefore a profitable investment opportunity.

As can be seen in the graph, unsurprisingly enough, there is an inverse correlation between default rates and industrial production.

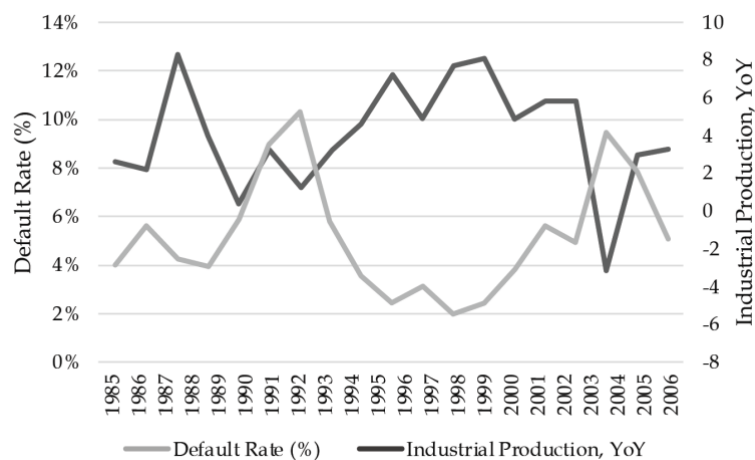


Fig.: Default Rates Versus Industrial Production 1985 –2003

Source: Moody's Investors Service, Federal Reserve

5.3 Relative Quantity of Low-Rated Bonds

First, throughout this section, let us be reminded that low-rated bonds are those with investment grades of B or less. We observe that there appears a strong correlation between low-rated bonds and future defaults. The intuition, however, is comparably simple: because low-rated bonds have a higher probability of default, the higher up is their amount outstanding, and, thus, greater the amount of defaulted debt that should be expected. Per se, part of the reason for the relatively high default rate for C-rated bonds is that as credit starts rolling downhill, rating agencies inherently start to adjust the ratings. Therefore, akin to the statistical concept of adverse selection, as the risk of default rises, the rating agency systematically downgrades the issues to even lower rating categories (eg. Caa or lower). All in all, it may be possible to forecast periods when default activities are relatively high and Distressed investment opportunities are comparatively strong.

5.3 Efficient Market Theory (EMT)

The EMT essentially portrays that trading prices reflect all available information, and no investor can consistently outperform the market. While new information indeed impacts prices, price changes are instantaneous and prolonged efficiency cannot exist. Preconditions of the EMT show that it has dubious applicability to the Distressed market. However, if the Distressed market is “inefficient,” superior investors might and should be able to enjoy superior returns. This is based on three key assumptions explained below:

5.3.1 Equal Access to Information

All investors have equal access to information. Under the circumstances that most investors tend to view investment through the prism of equities, it is reasonable to assume that all available information is easily accessible and, therefore, internalized in market prices. This information environment rarely exists in a Distressed Debt market. Moreover, hundreds of high-yield bond issuers have no in-depth analyst coverage and most Distressed Debt deals trade in privately negotiated over the counter transactions in which prices are not made public. Furthermore, in these high-yield markets, many issuers have no public equity and are often exempt from the reporting requirements of the Exchange Act. Even large capitalization companies, when filing for bankruptcies, discontinue SEC recording and have lengthy delays. Therefore, what information, if any, that the issuer discloses would be available to the holders? Within Distressed Debt situations, there are generally two different levels of information access: restricted non-public information including detailed operating data and management

projections (available only to banks and bondholders) and publicly available information. And while most investors who sign confidentiality agreements take their obligations seriously, it would be rather naive to believe that no other party ever gets a hint or a wink here or there. Therefore, we can fairly conclude that the assumption that all investors have equal and easy access to information within a Distressed market is simply not true. In most situations, only a limited number of investors have access to such information and these are often the ones who leverage such knowledge into profitable returns.

5.3.2 Rational Behavior

The second assumption of the EMT is that investors act rationally. However, classic concepts of rationality express difficulty in explaining the tendency of markets to engage in periods of speculative excess or ostensibly irrational acts. This is valid for distressed securities too. However, the main reason we question rationality within the Distressed market is because the transactions are mostly under forced or coerced selling (outside “free will” purchase and sales decisions solely based on investment merits). Sources of coerced selling include:

- i. Sales by banks to manage various portfolio quality statistics. This is often done to maintain the non-performing (default assets or total earning assets) asset ratio below a target level. Another reason includes the senior banking executives’ risk-averse trait with respect to bank regulators questioning their adequacy of loss reserve levels. Thus, these executives seek to manage the amount of their loan portfolio carrying low SNC ratings. Thus, performed loan sales are not motivated by the “rational” view of the value of the loan.
- ii. Desire to generate earnings. Under the situation that a bank holds a non-performing loan that has been written down to zero. This generally happens to loans with low SNC ratings of “loss” or under secured loans of bankrupt entities. However, later if the same loan that the bank is holding can be sold in the market for 20 (although management believes that the same loan would reach a value of 40 in the future) then selling the loan now at less than the objectively “fair” or “rational” price can occur because of considerations other than portfolio return maximization.
- iii. Liquidity management requirements of high-yield mutual funds. In a typical high-yield mutual fund, investors are allowed to claim interests regularly at the NAV of the fund. Thus, when investors decide to withdraw their funds, the fund manager requires cash on hand to respect such redemption. This sometimes might require selling securities. For poorly managed funds, the outflow is not uniform, hence requiring the managers to liquidate holdings at the weakest period of the market.

These investment “irrationalities” could act as the utmost opportunities to Distressed Debt investors and significantly undermine the applicability of the EMT to the Distressed sector.

5.4 Low Transaction Costs

The EMT assumes minimal, or no, transaction costs. However, given that our discussions until now have entirely focused upon Distressed markets, we analyse the two sources of transaction costs faced by Distressed investor. One is the settlement fee representing the direct transaction costs, including commission to the broker. The other is called the “unwind” fee representing the bid-ask spread in the market (the difference between the bid price and the ask price for a given security). Intuitively, for an investment to be profitable, the minimum market movement required is an amount higher than the cumulative of two transaction fees (buy and sell) and the unwind fee. For a distressed bond, while the transaction fees solely could be considered reasonable, the unwind costs are overwhelming, primarily because of the less-liquid bonds with significantly high bid-ask spread. Nevertheless, except in the most liquid situations, distressed securities generally have significantly higher transaction costs than most other traded securities. The existence of transaction costs in the real world may prevent the EMT from functioning as expected, as the quick buying and selling of securities required for incorporating all available information into prices may not happen. As a result, market prices may not always reflect all available information.

In conclusion, we can, with certainty, assert that within a Distressed context, many investors are often forced to sell in a poor market condition, not all market information is accessible with a cinch, and, finally, distressed securities may have significantly high transaction costs making it nearly impossible for the market to operate under a fair “efficient” price. If properly studied, each of these factors could be wisely used by a talented Distressed investor to earn superior returns. Such investors might have an information advantage, detect coerced sales and accumulate securities at below “fair” values, and structuring the high transaction costs as barriers and reduced competition/participants within the market in the long run.

Seeing how distressed companies can be viable investments for Private Equity companies, it is now important to explore and compare receiving investment from a PE with alternatives available to firms facing financial issues, such as filing for bankruptcy. This will help to understand how the involvement of a PE firm in the restructuring process can be of fundamental value for the struggling company.

6. Restructuring Options: Analysis of Alternatives

6.1 Chapter 7 Bankruptcy

6.1.1 Overview and Stages

Chapter 7 of the U.S. bankruptcy code concentrates on the process of liquidating assets for the purpose of repaying debts. This form of bankruptcy is generally used by companies that are unable to fulfil their obligations to their creditors and have no possibility of achieving profitability under a Chapter 11 reorganization, which will be analysed later in this section. The process followed by companies that file for bankruptcy under Chapter 7 involves several stages and requirements to be fulfilled by the filing firm.

The first stage, namely the practical beginning of the Chapter 7 bankruptcy process, is centred around the petition that the company is required to file to the court. The document must include information about the firm's finances, such as assets, liabilities, income or expenses, as well as details about the company's creditors. At this point, companies are sometimes required to undergo a period of six months of credit counselling, but this step is subject to a number of exceptions, so it is not always present. It is important to note that at this stage the court appoints an unbiased trustee tasked with overseeing the whole bankruptcy process.

The second stage of the bankruptcy process is represented by an "Automatic Stay" that prohibits creditors from pursuing action to collect their debts. More specifically, creditors do not have the ability to take any legal action against the debtor and cannot make collection calls.

The actual liquidation of assets can be labelled as the third stage of the process. Firstly, the trustee reviews the firm's assets and determines which can be liquidated and whether any are exempt from the process. The selected assets, which can include equipment, inventory or real estate are then sold, and the proceeds from the sale will later be distributed to creditors. Some assets can be categorized as "exempt" from being liquidated, an example of such asset being personal property.

The fourth stage of the Chapter 7 bankruptcy process involves distributing the proceeds from liquidation to creditors. This is done according to seniority, meaning that secured creditors are the first ones entitled to recover their collateral or its cash value in place of the loan repayment. They are followed by unsecured creditors, who may obtain only a pro rata distribution of the debtor's assets and an amount proportional to the size of their debt.

As a final step, the remaining debt of the company is discharged, meaning that the firm is no longer responsible for repaying the debt and the creditors cannot take any further action to collect it.

6.1.2 Key Characteristics

Filing for bankruptcy under the Chapter 7 procedure has some notable benefits, some of them being: i) most unsecured debt is eliminated, thus providing an opportunity for a fresh financial start, ii) protection of exempt assets, iii) putting a stop to collection calls. Another advantage of filing for Chapter 7 is the relatively short nature of the whole process, which is generally situated around a few months.

It is also important to note that not all struggling companies are eligible for a Chapter 7 restructuring. Some tests are performed to determine whether the firm's income is low enough, only after which the company can file the petition. As a last remark, it is relevant to mention that a Chapter 7 restructuring may have a considerable impact on the long run, as it would severely hamper the company's reputation and credit scores, leading to a possible inability to obtain credit in the future.

6.2 Chapter 11 Bankruptcy

6.2.1 Overview and Stages

Chapter 11, named after a section in the U.S. bankruptcy code, is a form of bankruptcy popularly known as "reorganization bankruptcy" as it involves the restructuring of a company's assets, debts and other affairs. The process is usually used by companies, even some of the largest ones (e.g. United Airlines or General Motors) whose business model is viable enough and can be saved despite the presence of financial difficulties. As in the case of Chapter 7 bankruptcy, the process involves multiple stages, however, Chapter 11 often takes a longer time to be approved, implemented and deemed successful.

Similar to Chapter 7, the first stage of the Chapter 11 bankruptcy process is filing a petition to the court. The court must be provided with the distressed company's financial statements and information. An automatic stay comes into effect also in the case of a Chapter 11 filing, restricting the company's creditors from taking any collection action.

The second stage and perhaps the most notable one relates to drawing up a reorganization plan. The distressed company, together with its creditors, assembles a plan that would allow it to reorganize its debts, as well as its operations. More specifically, such a plan may consist of

renegotiating debts and other various contracts or downsizing the firm's operations. The developed plan is subject to the approval of the court, and this is usually granted if the proposed actions are fair and feasible. It is important to note that under Chapter 11 reorganization, the business is generally restricted from taking certain decisions without the approval of the court, such as expanding the business or selling certain assets.

The third stage involves the actual implementation of the previously approved reorganization plan. For this step of the process, a trustee is appointed by the court to oversee the implementation and to guarantee that the company complies with all terms established by the court.

The final step in a Chapter 11 restructuring is the actual emergence from bankruptcy that the company should experience. After the implementation of the reorganization plan is complete, the company should be ready to continue its operations as a financially viable entity.

6.2.2 Key Characteristics

One very important benefit of filing for a Chapter 11 bankruptcy is the fact that during the restructuring, the business is still allowed to operate. This is a major advantage as it prevents the firm from losing customers or relationships with suppliers, while still generating revenue. Similar to Chapter 7, a Chapter 11 restructuring shields the business from any collection action coming from its creditors. As a last benefit, it is relevant to highlight that a Chapter 11 reorganization is generally beneficial from a long-term perspective, as it allows the business to become more efficient, renegotiate better terms for contracts or debts, and generally have a new way of organizing its operations.

Another perspective can be given by the potential challenges and costs of Chapter 11 reorganization. One of the most important challenges to note is the complexity, length and cost of taking such action. Companies filing for Chapter 11 usually need legal and financial expertise to navigate the procedure and all major action related to the restructuring needs to be approved by the court, which can extend the process and increase costs. The last and perhaps most relevant risk of filing for Chapter 11 is the possibility that shareholders and creditors face major losses. This might result from a re-evaluation of the company's assets, and as such can expose the firm's stakeholders to notable risks.

6.3 Out-of-Court Restructurings

On the other side of the alternatives available for distressed companies, there are the out-of-court restructurings. These, present a compelling alternative for corporations facing financial distress when compared to filing for bankruptcy, or simply closing doors. While there are inherent risks and challenges, out-of-court restructurings offer several advantages, such as lower costs, faster resolution times, and the potential for greater proceeds for both the debtor and creditors. Furthermore, the process is less disruptive to ongoing operations and confidential material is not required to be filed publicly.

One of the primary advantages of this type of restructurings is their lower cost weighted against bankruptcy proceedings. Out-of-court restructurings require fewer professional fees, and the process can be completed faster than Chapter 11 filings. The faster resolution time allows companies to get back to normal business operations sooner, and creditors can receive their payments more quickly in time.

Out-of-court restructurings also have the potential for greater proceeds for both the debtor and creditors. The parties involved can negotiate a settlement that is agreeable to everyone, resulting in a more amicable solution. On the other hand, bankruptcy proceedings can be adversarial, with the court ultimately making the final decision, being it usually not as optimal for stakeholders.

Moreover, these processes are privately handled, meaning that it is not mandatory to file confidential information publicly, which can be beneficial for companies that wish to avoid revealing their financial struggles to the public. Additionally, the process is less disruptive to ongoing operations, as corporations can continue to operate normally during the whole restructuring process.

Despite these advantages, out-of-court restructurings come with inherent challenges and risks. One of the primary challenges is that companies lack court protection and are not shielded from collection efforts by creditors. The latter can continue to pursue the firm for payment, which can create additional stress and uncertainty.

Another challenge is connected to asset sales. These require unanimous approval from the creditors' side (who remain with the legal claims on the assets and certain liabilities), creating a barrier for companies to liquidate their assets and raise capital. Therefore, the higher the

number of creditors, the lower the probability of reaching a compromise, making asset liquidation very challenging for companies with complex capital structures.

One other significant risk attached to out-of-court restructuring, is the limited access to financing. As lenders tend to avoid distressed borrowers without court protections, it can be difficult for companies to raise capital and continue to operate. Private Equity firms play an important role when it comes to mitigate these risks, as they usually provide financing, expertise, and guidance to distressed companies.

Overall, out-of-court restructurings offer different types of advantages when compared to other resolution methods, including more attractive cost levels, a higher speed of the process, and greater potential for proceeds. Nevertheless, the decision to pursue an out-of-court restructuring should be based on the unique circumstances of the companies and respective creditors.

After analysing the restructuring options available to firms, it is important to consider why a firm might prefer to go through such a challenging situation with the support of a Private Equity firm.

7. The Role of PE in Relieving Financial Distress

7.1 Introduction

It is widely known that having a PE firm in the ownership structure of a firm can provide numerous benefits in recovering from financial distress. This statement is supported by various studies and articles, which have found that firms backed by Private Equity funds tend to outperform their publicly owned counterparts during periods of distress.

In this section of the report, we will examine the findings and data from two sources:

1. An article written by Hyder Kazimi and Tao Tan and published by McKinsey titled "How private-equity owners lean into turnarounds", which analyses a sample of 659 PE-backed and publicly-owned firms from 2006 to 2015.
2. A paper authored by Edith S. Hotchkiss (Boston College), David C. Smith (University of Virginia), and Per Strömberg (Stockholm School of Economics, Swedish House of Finance, CEPR and ECGI) titled "Private Equity and the Resolution of Financial Distress" (October 2020), which examines a set of 2,151 firms that borrowed from the leveraged loan market between 1997 through 2010.

The aforementioned phenomenon results in several ways in which the restructuring of PE-backed firms outperforms their counterparts. In this section, we will highlight the most important aspects and present some of the common findings that can explain this outcome.

Firstly, we analyse the most notable differences in the restructuring process:

- i. Restructuring Types. According to the research results, distressed firms that are supported by Private Equity tend to restructure their operations more frequently through agreements that are resolved outside of bankruptcy court or via pre-packaged bankruptcy agreements that are negotiated before filing, while the majority of non-PE-backed firms opt for a traditional Chapter 11 bankruptcy filing.
- ii. Time Span. PE-backed firms are able to resolve their financial distress faster than non-PE-backed firms, ultimately saving them both time and money in the long run.

To some extent, this can be attributed to the fact that, as aforementioned, PE-backed firms more often choose to restructure outside of court or through pre-packaged bankruptcy agreements instead of going through a free-fall Chapter 11 bankruptcy.

In any case, the publication by Hotchkiss, Smith and Strömberg has observed that firms backed by Private Equity are able to navigate through Chapter 11 bankruptcy filings approximately more rapidly compared to their non-PE-backed counterparts. This is especially true for companies owned by PE sponsors with expertise in Distressed Debt investing.

Considering that both direct and indirect costs are known to increase in correlation with the duration of a firm's financial distress, particularly in the context of bankruptcy court proceedings, these findings suggest that financial distress tends to have a lower cost impact on firms that are supported by Private Equity firms, in comparison to similar firms without a PE sponsor in their ownership structure.

- iii. Restructuring Outcome. The results of the analysis indicate that the outcome of the distress resolution process varies significantly between firms that are supported by Private Equity and those that are not.

It was found that PE-backed firms are inclined to successfully exit the restructuring process as a “viable independent entity”, and less likely to undergo liquidation when compared to non-PE-backed firms.

Furthermore, a significant proportion of PE sponsors retain controlling ownership in the distressed company following the restructuring process, whereas equity holders in non-PE-backed firms are typically stripped of control.

7.2 Driving Factors of PE’s Performance Advantage in Restructuring

Our analysis has revealed various factors that contribute to the superior performance of restructuring efforts in companies backed by Private Equity when compared to their non-PE-backed counterparts. The findings suggest that PE firms are better equipped to manage financial distress, which can be attributed to a range of determinants that distinguish PE sponsors and the companies within their portfolio.

In the following section, we will highlight the most significant factors identified through our analysis.

7.2.1 Dry Powder and Capital Investments

An explanation for the observed trend of PE-backed firms resolving financial distress more efficiently lies in the ability of PE owners to provide prompt capital injections to distressed companies that expedite the turnaround process.

In cases where a Private Equity owner still has unused commitments or "dry powder" in their funds at the time a portfolio company faces financial distress, this reserved capital can be utilized to provide aid to the struggling firm by providing fresh funding, which can help facilitate negotiations with creditors. In contrast, a non-PE backed firm in an analogous situation would need to seek external capital from third-party investors, who may entail adverse selection costs (as highlighted by the paper cited at the beginning of the section).

This suggests that the advantage enjoyed by PE-backed firms in navigating restructurings swiftly can be attributed, at least in part, to the readiness of PE owners to step in and provide distressed firms with the liquidity required to sustain operations.

Additionally, such financing serves as a signal of the owners' commitment to the success of the restructuring negotiations having more "skin in the game", which may encourage other parties to commit to a speedy and successful resolution of the financial distress.

7.2.2 Corporate Governance and Management Team

A second important factor that may explain the higher efficiency of PE-backed firms in undergoing a restructuring process is the fact that these firms tend to have stronger corporate governance structures and more effective management teams, both of which are critical factors in successfully navigating challenging financial circumstances.

PE ownership provides some natural advantages, particularly in terms of the active role played by PE boards in setting the ground rules and holding management teams accountable for leading the firm through a turnaround.

One important distinguishing feature of successful PE-backed companies is that their boards are quick and efficient to alter and adapt the rules of engagement, clearly set and communicate specific performance targets, establish a precise program for action, and evaluate the ability of the CEO and management team to execute the plans. In this way, these companies manage to transition to a crisis mode in a timely manner, thus expediting the turnaround process.

This may be true to different extent for various PE-backed companies, but it is possible to infer that overall, the influence of PE sponsors on the management of the firm and its corporate

governance is a useful asset that may make an important difference in deciding the outcome of the restructuring process.

7.2.3 Insurance

In addition to the above-mentioned factors, it is worth noting that a Private Equity fund can offer the “insurance” of locked-in capital to several portfolio companies. This allows the PE fund to boost the debt capacity of its portfolio companies.

The existence of locked-in capital reserves can help to reduce the perceived risk of the portfolio companies, allowing them to access debt financing on more favourable terms. This, in turn, can further enhance the debt capacity of the portfolio companies and make them more attractive to lenders.

This outcome is akin to the borrowing benefits enjoyed by diversified conglomerates, where the divisional diversification reduces the likelihood of financial distress and consequently enhances debt capacity.

7.2.4 Reputation

In addition, it is worth noting that PE sponsors are frequent participants in the buyout market, which means that repeated instances of costly financial distress could potentially damage their reputation with lenders and other stakeholders. Indeed, if a bank or other financial institutions experience significant losses due to a default by a PE-backed firm, they may be less inclined to extend favourable lending terms for future buyouts to the PE firm behind this default. Consequently, the PE fund has a greater motivation than other owners to minimize the cost of defaults for lenders when they do occur.

This is a direct consequence of the fact that in the PE sector the reputation of a firm and long-lasting relationships are fairly important in conducting its operations.

7.2.5 Unique Skills

PE sponsors may possess unique competencies that allow them to manage companies more effectively during times of financial distress. Experienced PE sponsors are likely to have encountered financial distress in their portfolio companies before, and thus possess a thorough understanding of the restructuring process. This is even more true for PE firms that are specialized in Distressed investing and therefore in turnaround processes.

By drawing on their experience in Distressed investing, Private Equity sponsors can bring a unique set of skills, expertise and knowledge to bear on the management of financial distress

in their portfolio companies. This may prove to be advantageous in helping to mitigate the impact of the distress, increase the chances of a successful turnaround, and ultimately enhance the performance of the buyout fund.

This expertise acquired from past experiences may turn out to be of extreme value in times of economic turmoil and financial distress.

7.3. Final Remarks

Based on the results presented in the paper and the article cited as main sources at the outset of this section, we have identified the key factors that distinguish a restructuring of a PE-backed company from a non-PE owned counterpart and the primary reasons for such differences. To obtain more comprehensive data and evidence on this subject, we recommend a more thorough examination of the paper, which utilizes several regression analyses to support the conclusion highlighted in this section.

To summarise the findings presented above, defaulted PE-backed firms can resolve financial distress more expeditiously, both in- and out-of-court, and are more inclined to restructure their operations through cost-effective out-of-court proceedings than their non-PE counterparts. Simultaneously, PE-backed firms are less prone to face liquidation and more likely to continue operations as a viable independent entity, often with the original PE owners retaining control. These findings indicate that PE-backed firms tend to experience lower costs of financial distress relative to other distressed firms. We have also displayed some of the most well-known explanations of the benefits of PE firms' influence in distressed companies, such as the possibility to promptly inject capital in the firm, the more active role of the owners in the management of the company, the superior corporate governance structure and more efficient management team, as well as their unique set of skills and expertise.

After examining the advantages that a PE fund can bring to a distressed company, the next chapter investigates how the acquiring fund determines the company's value, a fundamental step in the investment decision process.

8. Valuation of Distressed Companies

Valuation plays a crucial role in the investment decision of PE firms, and the traditional methods must be revised when dealing with companies in financial distress.

A valuation of a company can be performed in absolute terms or in relative terms. Absolute valuation, also referred to as intrinsic valuation, includes the Discounted Cash Flow model, widely used by analysts, and the Liquidation Analysis, which acquires a great relevance in the valuation of distressed companies, since it considers the worst-case scenario of a Chapter 7 bankruptcy and estimates the value of a company's assets to be deployed for creditors' repayment. As regards relative valuation, the most used methods are the Comparable Company Analysis and the Precedent Transactions Analysis.

Let us now go through the main valuation techniques and see how firms apply them in this specific context.

8.1 Discounted Cash Flow Analysis

The discounted cash flow valuation is based on the simple assumption that a company can be valued as the present value of its future cash flows from ordinary activities. It then relies on estimates of a company's future operations and income, which can be delicate to make, especially in the long term. Therefore, analysts usually estimate a company's cash flows in a time range of 5 or 10 years, and then estimate the so-called Terminal Value, which approximates the selling price of the company at the end of the time span considered, assuming that it will continue to operate in the foreseeable future (Going Concern assumption).

The Discounted Cash Flow valuation can be then summed up in 6 steps:

1. Projecting Free Cash Flows for the next 5/10 years.
2. Computing the discount rate, using the WACC in the case of FCF to Firm and the cost of equity in the case of FCF to equity.
3. Discounting Free Cash Flows using the obtained discount rate.
4. Estimating the company's terminal value. This step can be approached by using Terminal Value EBITDA multiples obtained through comparison with similar publicly traded companies, or by using the Gordon Growth model, which relies on a challenging estimate of the firm's growth rate after the final year.
5. Discounting the obtained Terminal Value.
6. Summing up the present values of both FCFs and Terminal Value

Now that the steps of DCF valuation are clear, the critical issues that analysts face when evaluating a distressed company can be considered.

The extent to which a company's distress must be accounted for when estimating its value through a DCF is still under debate. Theories explain how, in case of bankruptcy, the liquidated value of assets should reflect the cash flows that they would have generated in the future and so yield the same valuation as the one obtained through DCF; also, some believe that in the case of companies in distress, their unstable condition is already reflected in lower cash flows estimates and adjusted discount rates. While the former theory doesn't hold in real life, due to the need of a bankrupt company to liquidate its assets in a very short term, the latter could be more accurate yet very hard to apply in practice.

This is why analysts adopt different techniques to adapt the DCF in the case of companies in crisis. These include the use of probability distribution to adjust the models to the risk of bankruptcy, conducting simulations and sensitivity analyses to portray all possible scenarios.

A typical strategy is to conduct a DCF analysis under the going concern assumption, and then compute both the probability of distress and an estimate of the Distress sale value (often through a liquidation analysis, which discussed later), to estimate the value of the firm through the following formula:

$$\text{Firm's value} = (1 - p) \times \text{DCF valuation} + p \times \text{Distress sale value},$$

where p represents again the probability of bankruptcy.

8.2 Comparable Company Analysis

Due to the high weight that estimates bear in the DCF analysis, it is mainly used for mature companies with stable and predictable cash flows, and it is usually not considered to be suitable for the valuation of a distressed company.

Relative valuation, namely the comparison with similar publicly traded companies (Public Comps) can be a valid alternative, and it can be very reliable and effective when there are several publicly traded comparable companies available. Analysts focus on public companies due to the disclosure requirements they are subject to, which makes their data easier to be found with respect to private companies.

The comparison method can be structured in the following steps:

1. Selecting comparable companies, through the parameters of geography, industry, and financials.
2. Choosing profitability multiples to use as a comparison (the choice varies across industries, the most used are EV/EBITDA, EV/EBIT and P/E, while the most accurate but complex to compute are the Free Cash Flow multiples)
3. Computing chosen multiples.
4. Obtaining company's implied valuation by applying the median multiple to the company's financial figures.

In relative valuation of distressed firms, analysts use almost exclusively Revenue and EBITDA multiples, since P/E and P/B ratios are often impossible to compute.

The main issue when using comparable analysis is that it is very rare to find companies in the same industry, with similar financials, that are in a condition of distress.

To override the issue, analysts perform the valuation selecting comparable firms that are not necessarily facing a crisis, and then adjust the valuation using the probability distribution approach. In fact, the median multiple initially obtained will then reflect the condition of relatively healthier companies and needs to be adjusted downwards.

Again, the most effective strategy is to estimate a probability of distress (p) and distress sale value, to compute the value of the company as:

$$\text{Firm's value} = (1 - p) \times \text{Public Comps value} + p \times \text{Distress sale value}$$

8.3 Precedent Transaction Analysis

Another widely used relative valuation method is using a precedent transaction involving a comparable firm, found using the same three parameters used in the Public Comps analysis, with the addition of a fourth: timing. In fact, market conditions (interest rates, inflation, etc.) vary continuously and have a high impact both over company valuations and transaction premiums.

The study of the transaction premium is crucial when adopting the precedent transaction method, since it reflects the value of a company that goes beyond its recurring cash flows or the net value of its assets. It is highly variable, depending, to give a few examples, on the type of acquiror, the possible synergies or industry consolidation opportunities.

It directly follows that this is the method that overall yields the higher valuation of a company. Its use is highly dependent on the industry and on the M&A activity in the analysed period. In moments of high deal flow it is clearly more likely to find a suitable transaction to run the valuation. The same consideration applies for its application to distressed companies' valuation, which therefore is not frequent and relies on market conditions and specific suitable scenarios.

8.4 Liquidation Analysis

It is now necessary to make a distinction concerning the valuation of distressed firms.

The valuation methods analysed up to now are all applied in situations of so-called financial distress, which is identified by the incapability of the firm to meet its current obligations, perhaps due to asset illiquidity, although having a valuation under the going concern assumption that is estimated to exceed its assets' net worth. However, when the total market value of a company's assets is worth more than the present value of its future operations, the company is said to be in economic distress; A frequent solution in this situation is the declaration of bankruptcy and the sale of the firm's assets at their current market value; it is in this scenario that the liquidation analysis becomes of high relevance.

Liquidation analysis is another intrinsic valuation method, applied almost exclusively to distressed firms. It consists in estimating the sale proceeds of a company's assets, considering the Chapter 7 bankruptcy scenario in which assets are sold and liquidated separately to pay the creditors back.

It is usually performed following three steps:

1. Listing a firm's assets and extracting their book value from the balance sheet.
2. Estimating the market value of the assets, expressed as a percentage of their book value, the recovery rate.
3. Distributing the total liquidation value, following the priority order among the creditors, to verify the capability of the firm to cover its debt and to assess the difference between the total amount due to debt holders and the cash available after liquidation (eventually available to repay equity investors).

As a final note, it is clearly the method that returns the lower valuation of a company, since it only takes a company's balance sheet into account, setting aside all the aforementioned factors that drive upwards a firm's valuation in the real world. It can be used by potential buyers of a

distressed company to estimate the worst-case scenario of a firm's bankruptcy and in the need of liquidating its assets.

After covering all the background knowledge concerning Private Equity and Distress in detail, the following part of the report turns towards the actual strategies implemented when executing a distressed investment, as well as the turnaround and exit process.

9. Investing Strategies

9.1 Distress for Control

Most, if not all, Private Equity investments in distressed firms aim to take control over the target, to obtain full power and autonomy in the implementation of turnaround strategies.

Control can be obtained directly through the purchase of a majority stake of the target's equity. To achieve full control, it is necessary to aggregate at least 50% of the total voting rights. Such an equity investment in a distressed company usually comes with a significant discount depending on the level of distress of a company. On the downside, this strategy is inevitably threatened by the high risk of bankruptcy, a scenario that would likely result in a large loss for the fund due to the low seniority of equity with respect to debt securities when it comes to the distribution of liquidation proceeds.

To avoid such risk, a widely used practice to obtain control over a distressed company involves the purchase of a large amount of its debt securities, also known as Distressed Debt investing, with the far-sighted goal of converting them into a controlling portion of equity.

PE funds choose wisely the type of debt security to invest in, seeking the product that is more likely to be considered relevant in the reorganization process (either an out-of-court restructuring or a Chapter 11 Bankruptcy) and to be converted into equity, while also having a seniority high enough to receive liquidation proceeds in the worst-case scenario of a Chapter 7 Bankruptcy. It must also be underlined that Distressed Debt securities trade at a high and therefore attractive discount, where the price of debt is obviously relevant in the turnaround investment decision.

Through its influence in the restructuring process, the PE fund targets the conversion of its portion of debt into equity by leading the turnaround. It collaborates with the current management or, if necessary, appoints a new team, sets new goals and strategies, and aims to drive the firm towards a revaluation.

Due to the usually high capital requirement in combination with the critical and unstable situation of the target, Distressed Debt investing carries a variety of risks. It is a strategy that can yield exceptionally high returns, but that opportunity comes at the cost of high risks.

Along with the default risk, linked to the firm's ability to meet its obligations, it is worth also mentioning the liquidity risk that comes with investing in the Distressed space. In fact, the more critical the situation of distress of the company, the harder it is to find an acquiror and to exit

the investment. On top of this, operational risk, linked to the several issues a fund might face during the turnaround process, adds another potential burden, resulting in a high probability of failure.

This is why a precise and thorough due diligence of potential targets assumes a crucial role in the investment decision and can prevent PE funds from facing large losses later on. Due diligence must cover the company's financials, its operations, and legal contracts, along with a deep analysis of the industry as well as market conditions and outlook. For this reason, it is often carried out by different (usually external) bodies, each focusing on their area of expertise. In general, the ideal candidate displays weak financials but an interesting, yet improvable, business model.

9.2 Loan to Own

The *Loan to Own* strategy involves providing financing to a troubled company in exchange for an ownership stake or the future possibility of a full takeover and is typically employed in situations where the company is in serious financial distress or on the brink of bankruptcy.

In practice, it involves providing the troubled company with a high interest loan subject to strict terms, for example requiring collateral, a guaranteed return on investment, or even a minority ownership stake. If the company is unable to repay the loan, the fund can then take full ownership of the company or its assets, after which it can enact a restructuring plan. The main difference regarding the previously seen *Distress for Control* strategy is how the fund gains control over the company: instead of directly establishing control by buying the company's Distressed Debt securities, control is taken conditionally through the terms of the loan agreement.

Loan to Own strategies can be risky, as the distressed company may continue to struggle even after the loan is provided. There is no guarantee that the PE firm will be able to recover their investment through ownership or asset sales, which is why funds carefully examine the creditworthiness of a business before providing it with a loan. In addition, the strategy often implies significant legal costs, as the navigation of bankruptcy proceedings or potential ownership and asset disputes requires the involvement of specialized lawyers.

Regardless, there are great advantages offered by the *Loan to Own* strategy, with two major positive outcomes allowing for success. Either the company repays the high interest loan, or the fund gains a controlling interest in a potentially profitable company at a significant

discount. In the second case, the PE fund then can restructure the company, like a more classic Distressed PE investment, aiming to increase its long-term value and create a profit.

9.3 Investing in Special Situations

Special Situations is a term referring to a range of distinctive circumstances that companies might face, among which there are spin-offs, divestitures, recapitalizations, and restructurings, to name some of the most important ones. Private Equity firms investing in *Special Situations* look to create value by correcting any inefficiencies or making a profit off mispricing stemming from the previously mentioned events, which usually requires the combination of multiple strategies such as asset sales, debt and equity investments or operational improvements.

It is important to note that while *Special Situations* investments generally come with the potential of unlocking considerable value for Private Equity companies, they also carry significant legal and regulatory risks. They can be more costly and time-consuming compared to other ordinary Distressed scenarios, which is mainly due to the complexity of the circumstances surrounding the target company. An example of such a case is a company facing distress after a spin-off. Some of the most prevalent claims arising after a spin-off are breaches of fiduciary duty and fraudulent transfer. Other common claims include the unlawful distribution of dividends, violation of securities laws, preferential payments, recharacterization, equitable subordination, and substantive consolidation, among others. These claims are less common for distressed companies that do not face special situations, which makes investing in distressed companies under the *Special Situations* umbrella less attractive from a legal standpoint.

Despite being a characteristic of all PE investment decisions, the identification of misvalued securities can be seen as a particularity of *Special Situations* investing. Mispricing of securities can arise due to a variety of causes, including market inefficiencies, accounting errors and fraud, with special situations additionally reinforcing those effects. Mispricing of securities can arise due to a variety of causes, including market inefficiencies, accounting errors or fraud, with special situations additionally reinforcing those effects. The difficulty of the situation can also increase when a special situation investment involves securities that are not publicly traded, a case in which identifying whether a security is misvalued becomes more difficult. Unlawful behaviour, such as insider trading, can also arise during spin-offs, restructurings or other special events due to changes in ownership and control, and it is prevented when the

Private Equity company uses only non-private information for making investment decisions or securities trades.

In some instances, special situations may cause a necessity for litigation, a lengthy process which oftentimes comes with extensive costs. Private Equity companies need to always be prepared to conduct rigorous due diligence prior to investing in a distressed firm that faces any of the abovementioned unique circumstances to prevent facing substantial legal costs in the case of litigation. The due diligence process is especially paramount in special Distressed investments, due to potential bankruptcy proceedings that the target firms undergo, or any lawsuits resulting from restructurings, recapitalizations or spin-offs.

Overall, investing in “Special Situations” distressed companies can be a great opportunity for Private Equity firms, as there is a notable potential for higher returns. It requires an additional degree of caution, however, as there are numerous regulatory or legal issues that may appear along the way. Proper due diligence and appropriate legal counsel are crucial to mitigating the risks associated with *Special Situations*, such as lawsuits for fraudulent transfer, insider trading or a forced litigation.

After the acquisition of a distressed firm, it is essential for a PE firm to identify and resolve the company’s core issues. The following section therefore analyses different turnaround strategies that can be implemented by PE firms.

10. The Turnaround Process

We have divided the approaches used to turnaround a company in two main sections, operational and financial restructuring. The first category is particularly suitable for companies that are struggling due to operational inefficiencies that involve the products and services that they sell. Financial restructuring, on the other side, mainly concerns the capital structure of the company and doesn't concern the day-to-day operations of the business. It is important to notice that in the majority of cases, it will be necessary to combine these two approaches to turnaround a particularly troubled company.

10.1 Operational Restructuring

During the operating turnaround stage, PE funds fundamentally deal with the stabilization of operations and the restoration of profitability by pursuing strict cost and operating-asset reductions. Operational restructuring comprises cost reductions, revenue generation, supply chain restructuring, and operating asset reduction strategy to improve efficiency and margin by reducing direct/overhead costs. Further detailed discussion on the subject will follow in the subsequent section.

Operational RX is generally the first strategy applied by PE after acquiring a distressed firm. While planning a restructuring process, cost reduction is an important consideration. This could include reduced overhead expenses, cutting back on staff, renegotiating contracts with suppliers, and minimizing inefficiencies during production (if any). One common form of cost reduction in operational restructuring is labour layoffs. This involves reducing the number of employees in the company to lower labour costs. Such layoffs could be initiated for various reasons, such as downsizing, reorganization, or financial necessity.

Another form of cost reduction could also be price reduction. This involves reducing the prices of the company's products or services to remain competitive and increase demand, thus spreading fixed costs over a larger base, reducing the cost per unit of production. Additionally, increased sales volume can help to improve supplier bargaining power, leading to lower input costs. Improvement in terms of supplier bargaining power could also support supply chain optimization through specific means such as the renegotiation of contracts with suppliers, consolidating suppliers, or sourcing materials from lower-cost suppliers. Price reduction, therefore, may be accompanied by changes in the company's production processes or supply chain to lower costs and maintain profitability.

Process optimization is another way to achieve cost reduction in operational restructuring. This involves the Private Equity fund examining the company's internal processes to identify areas where costs can be reduced or eliminated. Process optimization may involve streamlining operations, eliminating redundant processes, and automating certain tasks.

Furthermore, revenue growth strategies may also be pursued focusing on existing product-lines, initiating price cuts, or raising prices where products are insensitive to prices. Strategies such as condensing focus on a specific product-line or focusing on its expansion raise the company's market expenditure to stimulate demand. It is wise to notice how a firm performing well below its capacity would be better off with asset reduction to bolster utilization and productivity of assets. This also augments the firm's cash flow, which is vital to firms in financial distress.

Moving on, it is important to note the distinction between strategic asset reduction and operational asset reduction. While strategic asset reduction involves divesting non-core assets to refocus the company's resources on its core competencies, operational asset reduction focuses on improving the efficiency and effectiveness of the company's existing assets and operations. Basically, operational asset reduction primarily focuses on reductions that involve sales, closures, and integrations of surplus fixed assets such as plant, equipment, and offices to enhance the efficiency of the firm's current operations through improved asset utilization at the operating level. Strategic asset reduction will be explored in more detail in a later section.

All in all, operational restructuring is focused on generating short-term cash flow and profit improvements by optimizing the use of resources and reducing costs. This approach is often reactive and aimed at addressing immediate challenges faced by the firm. However, it is important to note that this type of restructuring differs from longer-term restructuring efforts aimed at improving the firm's competitive positioning and overall performance. In a survey of firms that experienced a sharp and sustained improvement in performance after a period of decline relative to their competitors, it was observed that these firms did not solely rely on operational cost reduction strategies. Instead, they pursued other strategic changes too. These will be explored in the upcoming paragraphs.

10.1.1 Leadership Restructuring

As part of the turnaround process, management replacements are sometimes necessary. When a profound change in the way that the company operates is needed, it is hard for the management to completely change their habits and the way they used to operate the company.

Incumbent leaders are often focusing the entirety of their attention on improving a narrow range of activities, without looking for other potentially more viable solutions. Additionally, banks and creditors want to be sure that the management team will be able to handle the turnaround and will demand changes in the leadership positions. They will often demand the intervention of professionals with experience in distressed companies (that often take the position of CRO or Chief Restructuring Officer) to protect their interests. Distressed Private Equity firms often have dedicated turnaround teams that will coordinate the operations and dictate the strategies to follow. Due to their vast experience in these situations, they are precious resources for the company and will play a key role in the turnaround process.

It is important to notice, however, that even if completely replacing the management team appears to be an appealing solution to the owners of the distressed company, it is not always feasible. For instance, finding a new CEO that meets all the prerequisites and technical skills specific to the company and who is willing to work in a distressed environment can be a tedious process. Since timeliness is essential for the turnaround of a distressed company, the leadership restructuring often begins with paying a big retention bonus to the firm's current managers. Even though this may sound counterproductive, one of its advantages is that the management will be sufficiently incentivized to pursue the challenging restructuring plan developed by the turnaround team.

Furthermore, financial distress often leads to the demoralization of the company's employees. From one side, the brightest people will be probably looking for another job since they sense the possibility of a bankruptcy. On the other side, the remaining employees' lack of commitment and effort will contribute to the decline of the quality of the services offered by the company. For this reason, retaining the best employees and restoring faith in the company is essential. This is achieved through the payment of big bonuses and incentives (for example the promise of future promotions). In this way, the employees will give their best to contributing to the turnaround of the company.

10.2 Financial Restructuring

Cash generation strategies such as equity divestment (sale or disposal of a company's ownership interest or shares in another company, business unit, or asset) and equity issues (raising capital by issuing new shares of ownership in a company) are commonly used strategies by a Private Equity to control financial distress of the firm it acquires, settle its borrowings, alleviate its interest costs, and improve its cash flows. Within this section of our

report, significant consideration will be given to financial restructuring as a key element of the corporate restructuring framework.

Involving the reworking of a company's capital structure to relieve the interest and debt repayment burden, financial restructuring is further separated into multiple strategies, primarily debt-based, equity-based, and asset-based ones. These are briefly explained in the sections that follow:

10.2.1 Equity Restructuring

Equity-based strategies mainly concern dividend cuts or omissions and equity issues in the form of rights issues, public offers, or institutional placings. Unsurprisingly, when working with firms in financial distress, PE funds tend to omit, or at least reduce, dividends due to liquidity constraints, restrictions imposed by debt covenants, or other strategic considerations that might include improving the company's bargaining position within trade unions. Studies have shown that distressed firms are more likely to raise equity funds through share issues compared to non-distressed firms. This is primarily due to pressure from creditors who are concerned about the security of their loans that further prevents PE from any more lending that is not secure. Consequently, it is not uncommon for distressed firms to omit dividend payouts following announcements of poor earnings or previous cuts in payouts. This underscores the importance of equity funding in helping these firms regain their financial footing and meet the demands of their creditors. The conclusive implication is that managers tend to defer an omission until low prospects make it imperative.

10.2.2 Debt Restructuring

Debt-based strategies refer to the extensive restructuring of firm debt. This is done either to avoid financial distress or to resolve an existing one. In simple words, debt restructuring could be defined as the process of replacing existing debt by a new contract, with one or more of the following traits: (1) reduced interest or principal, (2) extended maturity, (3) debt-equity swap. Under debt-equity swap, the creditor agrees to cancel a portion, or all, of a company's outstanding debt in exchange for equity in the business. Restructuring can also be performed through what is termed as *taking a "haircut"*. The meaning is that a portion of the outstanding interest payments will be written off or a portion of the balance will not be repaid. Another way for debt restructuring could be callable bonds. Callable bonds are commonly issued by companies as a safeguard against inability to meet their interest payments. In the case of decreasing interest rates, the bond issuer may decide to redeem the bond early. This allows the

company to restructure their debt by substituting the existing bond with a new one that features lower interest rates.

An increasingly popular option for companies anticipating financial distress is the issuance of payment-in-kind (PIK) debt that gives the issuer the right to meet interest payments by issuing additional debt. The main advantage of using PIK debt is that it can significantly reduce financial distress costs. In fact, in case of liquidity issues, the company will be able to avoid the cost of negotiating some kind of debt-to-equity swap with the debtholders, thus making a turnaround of the company easier.

10.2.3 Asset Restructuring

When a firm is in financial distress and its financial health is weak, an asset sale is often essential to be able to perform a turnaround strategy. The concept of this operation is quite straightforward. If the firm manages to sell its assets at a decent price, this operation will generate enough proceedings to pay off a sufficient portion of the debt of the company. The types of assets that the company should sell vary across different industries. However, the obvious key to succeed in this operation is to sell those assets that are underperforming. These types of operations have a clear benefit for the company, as they will gain time and more breathing space. In fact, creditors will generally be appeased from an asset sale. From one side, the holders of secured debt will get repaid, at least partially. Owners of unsecured debt, on the other side, will be happy because the amount of secured debt above them is reduced, and they will have higher chances of recovering some portion of their investment.

This situation, however, might be different for some distressed companies owned by Private Equity firms. Financial owners will usually take aggressive actions to boost the firm's cash flow by increasing its revenue. The strategy pursued by Private Equity firms is to use their expertise to improve the company's profitability. Thus, the first resolution pursued by financial owners usually involves the attempt to fully utilize the current assets of the company, without taking the risk of selling any precious money-making tools ahead of time. If the sale of some non-performing assets is inevitable, it is done without haste, making sure to capture all of their value.

10.2.4 Leverage Reduction

A common tool companies have for alleviating financial distress is reducing leverage by purchasing their debt at a discount. In case of bonds, the firm can rely on open market

repurchases in order to acquire its own debt or can directly negotiate with some of its bondholders. In case the company doesn't have enough cash to repurchase its debt, it may instead rely on exchange offers. What this essentially means is that the company will offer its creditors an attractive amount of equity in exchange for some amount of their bonds.

After successfully implementing one or more of the turnaround strategies outlined before, the Distressed PE fund will want to exit the investment. The following section sheds light on different ways to achieve this goal.

11. Exit Strategies

There are multiple ways in which a Private Equity fund can exit an investment. Usually between 5 and 8 years after buying a stake in a business, a PE firm will want to monetize their investment and cash out the returns.

11.1 Sale to Private Acquirors

The first and most common option for this undertaking is a sale to one or more private buyers. Within this category, we can further distinguish between different types of private acquirors.

11.1.1 Strategic Sale

In the case of a *strategic sale*, the company is sold to a third party which is a competitor, supplier, customer or other party that has a direct strategic interest acquiring it. Buyers with a strategic incentive often pay what is called a synergy premium on top of the fair market value of the business. This is because, unlike most financial buyers, they can exploit synergistic benefits resulting from the acquisition, such as economies of scale or an overall reduction in overhead costs.

11.1.2 Secondary Sale

Another common way to exit is the *secondary sale* to a financial acquiror, another Private Equity fund in most cases. Depending on the composition of their portfolio, this group can also utilize synergies, although those will not be as substantial as for strategic buyers in most cases. A financial acquiror usually brings lots of transaction expertise and can therefore simplify the exit process for the PE fund selling.

11.1.3 Management Buyout

For a Private Equity firm, a sale to the management team of a distressed company, often called *management buyout*, can be an attractive way to exit their investment, especially if the company's distress is not fully healed yet. Although the situation might still look disadvantageous from the outside and could therefore harm the valuation in the case of a secondary sale, management might be willing to pay a higher price if they believe in the future of the business. Such a procedure also makes sense from the perspective of the company because the management team has a vested interest in the continuation of the exit strategy.

11.1.4 Resale to Promoters

A further option would be the resale to the promoters, meaning the original founders or owners of the company. This method is quite rare, as the promoters need to have the necessary monetary resources to make a repurchase feasible. Oftentimes one of the previously mentioned strategies provides the PE with better opportunities to realize their returns.

11.2 Sale to the Public: Initial Public Offering (IPO)

Moving on to the public side, a PE can also exit a portfolio company by selling it to the public through an *initial public offering* (IPO). Going public can be an attractive alternative to a private sale especially in times of favourable market sentiment. If timed right, an IPO can capitalize on the strong current performance of a company. It should be taken into account that an initial public offering on a stock exchange comes with extensive filing requirements as well as sizeable efforts in terms of marketing and advertising including the organization of an investment prospectus and so-called roadshows.

11.3 Liquidation

In the event that the turnaround strategy cannot be carried out with success, the last option often is to liquidate the company, selling its tangible assets such as factories, machinery, and inventories as well as its intangible assets including patents and copyrights. Normally, a business should be worth more than the sum of its parts or assets. If a company slides into distress, this might not be true any longer. It is important to note that some vulture investors intentionally buy targets in advanced distress already planning on a liquidation exit. They then account for this from the outset by setting a lower purchase price. In most cases, however, giving up the company and selling its remains is the last resort to avoid losing the amount initially invested.

11.4 Final Remarks on Exit Strategies

The exit phase in Distressed Private Equity deals can have significant implications for the involved investors, remaining stakeholders, and sometimes the broader financial markets. These are related to the challenging financial and operational conditions of the targets, supported by the level of Distressed Debt that requires the acquirors to do serious changes to its structures, and produce a high operational yield to repay it; thus, the exit strategy has a strong connection with the investment holding period, reflecting the latter.

A successful exit can result in momentous returns for Private Equity firms and may also generate a positive boost by attracting more investors and deal flow following the successful announcement. However, it also signals the end of the firm's involvement with the company, closing the potential for further returns and growth of the investment.

On the other hand, unsuccessful exits generate significant losses for the investors and other parties involved. These may also bring a negative image to the Private Equity firm by displaying its inability to successfully turnaround the distressed company and could therefore harm reputation and future deal flow.

One remarkable successful exit was the turnaround of Hertz Global Holdings by Certares Management and Knighthood Capital Management as a result of the impact of the Covid-19 pandemic in the travel and leisure sector. In May 2021, the two Private Equity firms entered an auction to take the company out of Chapter 11 administration, having invested a combined amount of \$2bn in the car rental company. By November of the same year, the owners re-listed Hertz on the Nasdaq exchange and sold almost \$500mn, having maintained a share of 39% holding in the company, worth \$4.5bn. This translates into an investment that has risen approximately 2.5 times in a 6-month period, which reflects an astounding performance and timing.

12. Conclusion

Throughout this report, it has been explored what makes investments in distressed companies attractive. After identifying the main reasons causing financial distress in a company, different paths were discussed that can be taken to address these issues. Finally, it was explained in detail in which ways a PE firm can save a company from failure, securing its viability and making a profit.

Since the report mostly focused on the positive aspects of distressed investments, it should be made a final remark on the risk inherent in Distressed Private Equity.

As mentioned in the report, this type of investment exposes PE firms to large losses in case of an unsuccessful turnaround strategy implementation. It is further worth highlighting that the risk also lies on the side of the struggling company, which could be negatively affected by decisions taken by the PE sponsor.

To illustrate the major consequences that a poorly managed investment can have, the report concludes with a case study about *Toys “R” Us*, one of the most notable examples for failure in the distressed investment space. Analysing this case adds a practical perspective to all the contents covered so far and draws attention to the risks that come with investing in distressed companies.

13. Case Study: KKR, Vornado and Bain Capital's Buyout of Toys "R" Us

13.1 Toys "R" Us Overview

Throughout the 1980s and 1990s, Toys "R" Us has been one of the world's leading specialty toy retailers. During these years the toy industry consisted of a small number of firms and presented a variety of lucrative investment opportunities. However, by 2005, the sector experienced a record amount of capital committed, driving up its competitiveness. In the following pages, we will explore the reasons that led Toys "R" Us from being the industry leader to bankruptcy.

Toys "R" Us was a worldwide specialty retailer of toys and baby products. The business started in 1948 in Washington, with the name of Children's Bargain Town. After changing its name to Toys "R" Us in 1957, it started expanding in the US. In 1983 the expansion of the Company followed with the opening of other stores named Kids "R" Us, while in 1996 the first Babies "R" Us stores opened, expanding the presence of the Company in the baby market.

By 2005, the Company operated almost 1,500 stores worldwide, evenly split between the US and the rest of the world.

Toys "R" Us differentiated itself from the competitors by offering a premium experience tailored to its customers, focusing on product presentation and in-store experience. The products sold varied from toys and videogames to sporting goods. In addition to this, the Babies "R" Us stores focused on a wide variety of baby products, ranging from toys to nursing tools. By 2005, there were 217 specialty baby retail locations, all in the US.

The challenges for Toys "R" Us started in 2003. In that same year, In 2003, what merely appeared to be the most disappointing holiday sales in the company's history ended up as its path of downfall and consistent downgrade in terms of credit ratings. Discounts and wholesale stores with greater financial resources drove down the profitability of the industry, and sales dropped due to changes in consumer habits: videogames started taking over traditional toys, making toy retailers' sale and margins shrink.

By 2005 specialized stores (such as Toys "R" Us) accounted for only 20% of toy sales, while discounts and wholesales accounted for over 50%. The rest of the demand was met by online stores. This led the Company to have an extensive level of financial distress.

After closing 146 of the business' standalone Kids "R" Us clothing stores and imaginariums, redefining its business models, and experiencing a failed advisory from Credit Suisse, the

company finally solicited its bid at \$26.75 per share to three prominent PEs - KKR, Vornado Realty Trust, and Bain Capital—in a Leveraged Buyout (LBO).

13.2 Investment Details

The Toys “R” Us LBO was a highly leveraged transaction with the total value of the transaction being \$6.6bn, where each PE party put an equal equity share combined at \$1.3bn and the rest \$5.3bn being structured as secured, senior unsecured, and subordinated debts. The firm’s capital structure, which displayed a low 30% in debt before the buyout, was completely reversed to a 78% of debt and 22% of equity. Given the highly cash-strapped and debt obligated nature of Toys “R” Us, the use of Payment-In-Kind (PIK) bonds is still regarded as the most controversial part of this LBO deal that further skyrocketed the debt burden of the company. Aside from these, the buyout also made use of Asset-Backed Securities (ABS). The highly leveraged debt financing allowed KKR and its co-investors to maximize their return on investment while minimizing their upfront cash outlay. This allowed the PEs to generate significant returns on their investment in the short term, but also contributed to the eventual bankruptcy of Toys "R" Us after their exit.

13.3 Strategic Rationale

Now, moving on to the strategic rationale that the Private Equities employed on this deal. As briefly mentioned earlier, the foremost strategy for the investing parties to succeed in this deal was leverage. Besides this, the other rationale that the PEs depended on for the turnaround were operational restructuring actions such as cost cutting, expansion, merchandising, e-commerce, and other operational improvements. Under the debt financing aspect, the senior secured debt was backed by the lowest interest, the senior unsecured debt had a higher priority of payment, and the PIK bonds allowed the borrowers to make payments in the form of additional debt rather than cash. All of these combined magnified the leverage and the rate of return for the Private Equity firms involved in the buyout.

Another innovative financing strategy was the creation of a holding company structure that actually required the parties to set up a new entity—Toys Acquisition Corporation (TAC)—that was used to acquire Toys “R” Us. TAC issued its own debt, which was used to finance the acquisition of Toys "R" Us, and this debt was then backed by the assets and cash flow of the acquired company. This allowed the Private Equity firms to isolate the debt associated with the acquisition from the rest of their operations, which helped to reduce overall risk. Additionally,

the company's real estate holding was packaged into an ABS offering—allowing borrowers to tap into a diversified pool of assets—which was then sold to investors to raise additional funds.

Financial engineering techniques such as interest rate swaps were used to manage and mitigate the interest related risks associated with the company's debt. Similarly, currency swaps were also used in the LBO to manage the currency risk associated with the company's international operations. Generic cost-cutting measures such as reducing the number of employees, streamlining the supply chain were also seen. The new owners also saw potential for growth by expanding the company's presence in the United States and overseas. To that end, they opened new stores and acquired other toy retailers. Launching a new website and investing in technology to improve online shopping experience were other efforts made aiming at the same. Introduction of new private-label products and lower prices to try to remain competitive with other retailers added to the competitive advantage.

13.4 Comparison of Financials

It is now necessary to look closer to a set of relevant numbers to analyse the impact of the PE investment in Toys R Us on the company's profitability and financial health.

In the graph below (Exhibit 1), it is plotted the evolution over the time span 2000-2016 of the operating margin of the firm, useful to understand the ability of the new management in restructuring the target's operations and reducing its recurring costs.

From the graph it is observable a dual trend during the investment horizon of the consortium. Between 2006, the year in which the buyout occurred, and 2010, there was an overall positive increase in the operating margin. The trend however inverted in 2011, with decreasing margins until 2013, when the PE firms exited the investment. To provide a more accurate picture of the effect of the buyout, it is worthy to look also at the years that followed, which portray a dramatic fall in margins due to the impact of the high leverage overtaken by the firm when the buyout occurred weighting on the firm's balance sheet.

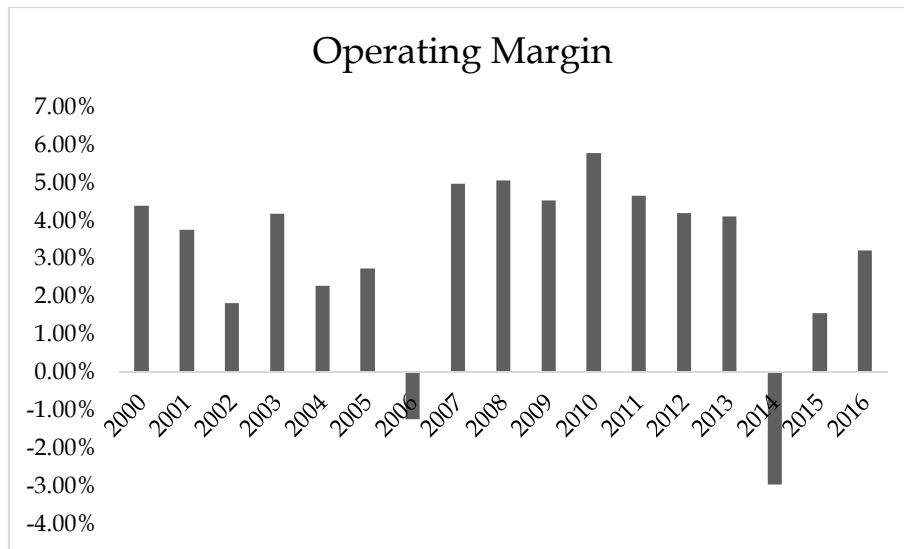


Exhibit 1

Source: “The anatomy of buyout failure: the case of Toys “R” Us”, Pimchanock Maneepan

When it comes to leveraged buyouts, it is fundamental to take under close control the firm’s ability to repay its obligations through the cash flows it generates. In Exhibit 2 it is shown the time evolution of the interest coverage ratio, computed as the ratio between the company’s EBIT and Interest Expenses. It is clearly visible how the ratio was below 1.5, which is considered the minimum sustainable level for a firm, almost through the whole 2006-2013 time span, reaching even negative values after the exit of the investment. The data shows again that the benefits of the buyout were offset by the weight of debt, which brought Toys R Us back to a troubled situation after the consortium’s exit.

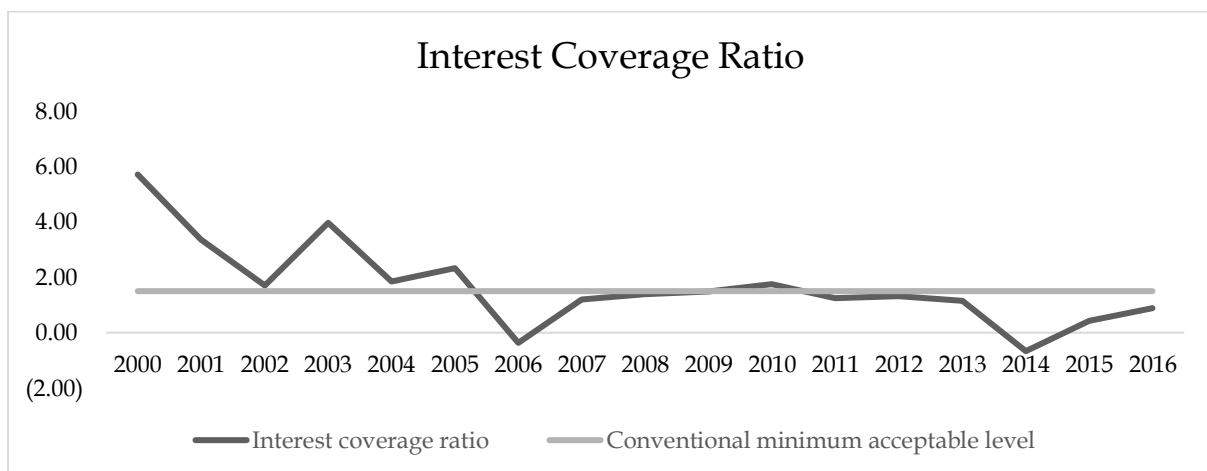


Exhibit 2

Source: “The anatomy of buyout failure: the case of Toys “R” Us”, Pimchanock Maneepan

KKR and Bain Capital sold their remaining stake in Toys "R" Us in 2013 through their offerings to the public and in 2017 through a bankruptcy auction, as the company had filed for Chapter 11 bankruptcy protection earlier that year. The bankruptcy auction resulted in the liquidation of the company's assets and the closure of all its stores. Vornado, on the other hand, had sold its stake in Toys "R" Us in 2010 to pay off debt it had incurred from its investment in the company. However, until the funds were part of the deal, they managed to squeeze out certain returns from their initial buyout, even with a company as troubled as Toys "R" Us which, nevertheless, later ended up bankrupt.

13.5 Conclusion

The Toys "R" Us deal ended with the company's Chapter 11 filing for bankruptcy, and subsequent liquidation in 2018. KKR, Bain Capital and Vornado were not able to exit the investment in a traditional way since Toys "R" Us' assets were sold off to pay back its creditors. It is not clear exactly how much the owners received from the liquidation, but it is likely that an amount of money was received from this assets' sale, even though slightly discounted, following liquidation sales' patterns.

When the three Private Equity firms originally invested in Toys "R" Us, it may have made sense based on information available by the time. In 2005, the retail industry was growing, the company had a well-established brand with a loyal customer base, and the investors may have looked for an opportunity to improve operations and ultimately exit with an attractive return. However, with the rise of e-commerce, and increased competition mainly from Amazon and Walmart, it was difficult for Toys "R" Us to maintain its market share and the company was not able to clear most of debt from the Leveraged Buyout operation. The owners may have not anticipated these factors, and the investment did not generate the expected returns.

It is difficult to conclude if it would have been better for Toys "R" Us not to file for bankruptcy. Getting into this operation allowed the company to stay afloat and restructure its debt, despite the fact that the company was not able to turnaround itself. However, with high levels of pressure from suppliers, which started to refuse to ship products without cash being paid on delivery or in advance, there was no alternative other than doing it.

In conclusion, the Toys "R" Us bankruptcy had a difficult and unfortunate outcome for all parties involved. While these three firms, which are key and renowned players in the Private Equity industry, may have made the investment with good ambitions, the challenges facing the company and its respective financial situation ultimately led to its downfall. Although these

firms' losses were most likely absorbed by their well-established portfolios, this deal remains in history as a cautionary episode about the risks associated with leveraged buyouts and Distressed Private Equity investments.

Bibliography

Baker, H.K. and Filbeck, G. (2019). "Debt Markets and Investments." New York: Oxford University Press.

Banking Prep. (2021). "Distressed Private Equity: Where Private Equity & Hedge Fund Converge" [Report]. <https://bankingprep.com/distressed-private-equity/>.

Bilzin Sumberg (2014). "Attacks on Loan to Own Strategies Continue. [Online] The National Law Review." Available at: <https://www.natlawreview.com/article/attacks-loan-to-own-strategies-continue>.

Bocconi Students PE Club. (2019). "Distressed Private Equity: It's Cheaper If It's On Fire." Retrieved from <http://sellsidehandbook.com/2019/03/16/distressed-private-equity-its-cheaper-if-its-on-fire/>.

Capolaghi, L., & Remy, V. (2023). "Distressed debt and special sits funds are back: why is Luxembourg well-positioned to structure such platforms?" [Article]. EY. https://www.ey.com/en_lu/private-equity/distressed-debt-and-special-sits-funds-are-back---why-is-luxembourg-well-positioned-to-structure-such-platforms.

Cernov, I. and Schillinger, M. (2009). "Leveraged Buyout of Toys "R" Us." University of St. Gallen Case Study, No. CC-0152.

Cote, C. (2021). "What is Distressed Debt Investing?" [Online] HBS Online. Available at: <https://online.hbs.edu/blog/post/distressed-debt-investing>.

Crystal, M.Q. and Mokal, R., (2006). "The Valuation of Distressed Companies - a Conceptual Framework." 3-4 South Square Barristers and Centre of Commercial Law, School of Law, University of Aberdeen. Available at SSRN: <https://ssrn.com/abstract=879904>

Das, S. (n.d.). "Altman Z-Score+ Analysis of J. C. Penney Company, Inc. (Ticker: JCP)." [Online] Altman Z-Score+. Available at: http://www.altmanzscoreplus.com/articles/AltmanZScorePlus_JCP_J_C_Penney_Company_Inc.html.

DeChesare, B. (2021). "Distressed Private Equity: The Best Place to Invest When the World is Collapsing?" [Report]. Mergers and Inquisitions. <https://mergersandinquisitions.com/distressed-private-equity/>.

Esty, B.C. and Scharfstein, J.A. (2001). "The Toys "R" Us LBO." Harvard Business School Case Study, No. 9-201-129.

FT. (2021, August 25). "Distressed debt funds sparkle in Covid recovery" [News article]. Financial Times. <https://www.ft.com/content/74c50d58-d46e-4c1f-b806-3725ec7581fb>.

Hess, E.D. and Sturdivant, D.L. (2006). "The Toys "R" Us LBO." Darden School of Business Case Study.

Hirsch, L. (2018, March 13). "Toys R Us prepares plan to liquidate its business. CNBC." <https://www.cnbc.com/2018/03/13/toys-r-us-is-preparing-to-file-its-liquidation-plan-with-the-court.html>.

Hotchkiss, E. S., Smith, D. C., & Strömberg, P. (2021). "Private equity and the resolution of financial distress". *The Review of Corporate Finance Studies*, 10(4), 694-747.

Investopedia. (2022, May 19). "What Is the Structure of a Private Equity Fund?" [Article]. <https://www.investopedia.com/articles/investing/093015/understanding-private-equity-funds-structure.asp>.

Jelfs, N. (2011, January 12). "Distressed Private Equity Firms" [News article]. Preqin. <https://www.preqin.com/insights/research/blogs/distressed-private-equity-firms>.

Kazimi, H., & Tan, T. (2016). "How private-equity owners lean into turnarounds." Retrieved from <https://www.mckinsey.com/capabilities/strategy-and-corporate-finance/our-insights/how-private-equity-owners-lean-into-turnarounds>.

Knowledge at Wharton Staff (2006). "Bad News Is Good News: 'Distressed for Control' Investing." [Online] Knowledge@Wharton. Available at: <https://knowledge.wharton.upenn.edu/article/bad-news-is-good-news-distressed-for-control-investing/>.

Krasoff, J. and O'Neill, J. (2006). "The Role of Distressed Investing and Hedge Funds in Turnarounds and Buyouts and How This Affects Middle-Market Companies." *The Journal of Private Equity*, 9(2), 17-22.

Moyer, S.G. (2018). "Distressed Debt Analysis: Strategies for Speculative Investors." 4th ed. Boca Raton, FL: CRC Press.

MacArthur, H., Burack, R., De Vusser, C., & Yang, K. (2022). "The Private Equity Market in 2021: The Allure of Growth." Retrieved from <https://www.bain.com/insights/private-equity-market-in-2021-global-private-equity-report-2022/>.

Morgan, J., & Nasir, M. A. (2020). "Financialised private equity finance and the debt gamble: The case of Toys R Us." *Review of International Political Economy*, 27(5), 1192-1212.

Pinkas, O. N. (2015). "Distressed Debt: Loan To Own Investment Strategies After "Fisker."" [Online] Mondaq. Available at: <https://www.mondaq.com/unitedstates/insolvencybankruptcy/387122/distressed-debt-loan-to-own-investment-strategies-after-fisker>.

PitchBook. (2023). "US PE Breakdown" [Annual report]. <https://pitchbook.com/news/reports/2022-annual-us-pe-breakdown>.

Rozman, T. and Stanic, M. (2017). "Distressed Assets as Investment Opportunities for Private Equity." Faculty of Economics, University of Ljubljana, February 2017.

Vardi, N. (2017, September 19). "The big investment firms that lost \$1.3 billion on the Toys "R" Us bankruptcy. Forbes." <https://www.forbes.com/sites/nathanvardi/2017/09/19/the-big-investment-firms-that-lost-1-3-billion-on-the-toys-r-us-bankruptcy/?sh=a48bcc1308fb>.

Wall Street Prep (n.d.). "Distressed Buyout Guide: Guide to Understanding the Distressed Buyout Strategy." [Online] Available at: <https://www.wallstreetprep.com/knowledge/distressed-buyouts-primer-private-equity-strategies/>.

Xie, D. B. (2015). "Private Equity Selection: An Empirical Analysis on Selecting Distressed Companies" (Doctoral dissertation, University of St. Gallen). Dissertation no. 4433.