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Master Thesis

Drivers of Corporate Turnaround: An Analysis of Italian Companies in the period 2016-2022

Relatore: **Prof. Ing. Enrico Luciano**

Laureando: **Maurizio Aicardi**

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Abstract

This master thesis explores the dynamics of turnaround investing in Italy from 2016 to 2022, a time characterized by significant economic fluctuations and challenges for businesses across various sectors. At the heart of this investigation is an analysis of the drivers behind successful turnaround strategies, providing insights into the mechanisms that enable distressed companies to achieve sustainable recovery and growth. Turnaround investing refers to the process of identifying, investing in, and revitalizing companies that are experiencing financial distress or operational difficulties. This investment strategy is predicated on the belief that, with the right interventions in management, operational efficiencies, financial restructuring, or strategic reorientation, these companies can recover and generate substantial value for their stakeholders.

The target of turnaround investments is distressed companies, by definition, those facing liquidity constraints, declining sales, loss of market share, or challenges that threaten their ongoing viability. The allure of turnaround investing lies in the potential for high returns; however, it also involves substantial risk, given the precarious position of the target companies.

Understanding the drivers behind successful turnarounds is essential for investors, managers, and policymakers aiming to support distressed companies. This thesis categorizes these drivers into four macro areas: operational efficiency improvements, financial restructuring, managerial changes, and assets restructuring. Through empirical analysis, the research identifies patterns and practices that have led to successful turnarounds in the Italian context, offering an overview of the Italian turnaround market in the period from 2016 to 2022.

The primary objective of this thesis is to understand the significance of the drivers and to understand if they have a positive or negative contribution. This will be done by using a regression model structured by setting as a dependent (explicative) variable the Equity. By analyzing the output of such model it'll be possible to determine if the drivers, identified during the literature review, are significant or not.

This thesis is articulated in two macro areas. The first part aims to establish a strong theoretical foundation by analyzing existing literature to provide an overview of theories and past research that have paved the way in this field. The initial part focuses on discussing

financial distress, describing the typical target company for turnaround investing, and delving into the most renowned predictive models of financial distress. This leads to the framing of turnaround investment, the true core of this research, where not only is turnaround investment defined, but also the models and strategies frequently employed for such investments are examined.

The second major area concentrates on empirical analysis, with the goal of identifying the significance of drivers that have facilitated a shift in performance. This empirical analysis will be conducted using financial data collected from the AIDA database, as well as web research that has provided insights into the strategies used for individual turnaround operations (e.g., press releases from the players, official communications from the company undergoing the turnaround process).

The second part will focus on the Italian market, sector that will be mapped during this thesis by analyzing both the current state of the turnaround investing sector in Italy, examining both positive and negative trends, and the key turnaround players operating in Italy. For this last point, significant support has been provided by the research conducted in his Master thesis at Politecnico di Torino in 2023 by Alberto Terracchio ("Distress Investing in Italy: an analysis of the turnaround performance of selected funds - The case of DeA Capital"), who began the mapping of these players and then focused his analysis on the specific case of DeA Capital. Unlike the work done by the colleague, this thesis will analyze all the companies that entered in the portfolio of turnaround players previously mapped.

Based on the results of the analysis, conclusions have been drawn on an aggregate basis but also mentioning, where relevant, some specific cases and examples.

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Introduction

This thesis is organized into six chapters.

Chapter 1, "Literature Review", introduces the concepts of financial distress and turnaround investing, providing theoretical definitions for both. It also presents the primary models used to prevent financial distress and the most commonly employed strategies and models for attempting to revive a distressed company through a turnaround process. Special attention is given to literature analysis on which drivers have historically been most impactful in enabling an effective turnaround, thus laying a solid foundation for subsequent empirical analysis.

Chapter 2, "Turnaround Situation in Italy", examines the landscape of turnaround investing in Italy. It begins with a sector analysis, indicating recent growth, and then maps out the key players in the Italian market. This section identifies 12 major turnaround players and numerous targeted companies from 2016 to 2022.

Chapter 3, "Research Question", establishes the foundation and research questions on which this thesis work is founded.

Chapter 4, "Methodology", explains the methodology used to select the sample of companies analyzed. It details the skimming operation conducted to narrow the focus to only those companies that had a turnaround in the period analyzed. Additionally, this chapter categorizes the drivers used in the next chapter to analyze each company's turnaround process.

Chapter 5, "Analysis and Results", synthesizes the research findings and addresses the research questions posed earlier. Results will be divided into two group: results of the regression model and results of the “number count” analysis.

Chapter 6, “Limitations and future development”, discusses the challenges encountered during this study and its limitations. It also offers critical insights aimed at providing suggestions for further research and studies that could expand on the topics covered.

1. Literature review

1.1 Financial Distress

Financial distress refers to a critical state in which a company experiences severe financial difficulties that endanger its ability to meet its financial obligations and sustain normal business operations. This condition is typically characterized by a shortage of liquidity, declining profitability, high debt levels, and an increased risk of bankruptcy or insolvency.

In this study, when we refer to "risk of bankruptcy," we are discussing the potential of a company to default on its debt obligations, or in simpler terms, the probability of a company becoming financially unstable and not being able to manage its debt. This risk is typically rooted in insufficient cash flows or overwhelming expenses. A company is deemed technically insolvent if it cannot meet its immediate obligations, even if its assets' value is greater than its liabilities. On the other hand, legal insolvency is when a company's assets are of lesser value than its liabilities. Established credit agencies, like Moody's and Standard & Poor's, gauge this bankruptcy risk by providing bond ratings and rating the issuers themselves. In the Italian context, the responsibility of devising an index system to predict or indicate potential business crises has been entrusted to the National Council of Certified Public Accountants and Accounting Experts “Consiglio Nazionale dei Dottori Commercialisti e degli Esperti Contabili” (CNDCEC), with the endorsement of the Ministry of Economic Development.

Understanding financial distress is crucial for stakeholders, including management, investors, creditors, and regulators, as it allows them to identify warning signs and implement effective strategies to address and mitigate the challenges faced by the organization (Dr. SportaPh.D., Simiyu, Ngumi, Ngugi 2017).

Opler and Titiman (1994) conducted an analysis of the likelihood of financial distress for highly leveraged businesses compared to less leveraged businesses during an industry downturn. They looked at three variables, sales growth, returns on equity, and operating income trends, to compare the firm's performance to that of the industry as a whole. According to the study, the three causes of financial slowdown during an industrial downturn are loss from customers, loss from competitors, and loss from managers. Highly leveraged

businesses run a greater risk than their less leveraged counterparts in the event of an industry downturn.

According to Slatter and Lovett (1999), the causes of financial distress can be broadly categorized into two types: internal (endogenous) and external (exogenous) factors. The internal causes encompass:

- Management errors and a lack of oversight.
- Inadequate financial management. Even today, many businesses, especially SMEs, don't have adequate cash-flow predictions, allocation of cost centers, budget formulation, or monitoring of Key Performance Indicators (KPIs).
- Inefficient management of operational funds.
- Elevated operational costs, especially for firms with higher expense frameworks.
- Launching ventures that exceed the company's financial capacity.
- Overproduction when considering the company's capital resources. A lack of financial oversight might lead to an aggressive sales drive not backed by the enterprise's cash flow. An overemphasis on revenue might diminish margins or drain liquidity.
- The detrimental effects of mergers and acquisitions.
- Managerial indecisiveness and cognitive stagnation. A void in managerial leadership coupled with an unstructured organization can blur the distinct roles and duties within the enterprise.

On the other hand, external factors consist of:

- Natural shifts in demand. Over time, the demand for a product can wane, be impacted by economic downturns, or evolve due to innovations.
- Intensified market rivalry.
- Unfavorable fluctuations in the cost of inputs.

(Slatter and Lovett, 1999)

In a similar way Platt and Platt in their research (2006) analyzed the factors that lead to future financial distress and bankruptcy. In their study, they considered 276 financially distressed companies and 1127 non-financially distressed companies across 14 manufacturing industries in the sample for analysis. The study observed that financial distress was affected by the actions of the firm results its inability to discharge its debt obligations. While Merika, Syriopoulos, and Ntzannatou (2007) examined the connection between a firm's

economic performance and leverage, using 103 listed companies from the Athens stock exchange as their sample, the dependent variables used to evaluate firms' performance were sales growth, profitability growth, and stock returns. The study found that highly leveraged companies can maintain their economic performance in the face of a distressed industry scenario thanks to good management practices.

A different result was obtained by the study of Dr. Sporta, Simiyu, and Ngumi (2017). They examined financial data from a sample of 38 commercial banks in Kenya from 2005 to 2015 to estimate the impact of financial leverage on financial performance. The study concluded that leverage is a source of financial stress and impairs the financial performance of Kenya's commercial banks.

In his study Bonfim (2008), based on a dataset of more than 30,000 firms, found that the probability of financial distress is influenced by both firm-specific and macroeconomic variables.

1.2 Financial Distress predictors

Many researchers have long been interested in the prediction of financial distress.

Beaver (1966), in his study "Financial Ratios as Predictors of Failure" addresses the topic of financial distress prediction by investigating the effectiveness of financial ratios as indicators of corporate failure. Beaver's study aims to identify key financial ratios that can serve as early warning signals for impending financial distress and potential bankruptcy.

The research employs a sample of 79 firms that experienced bankruptcy in the period from 1954 to 1964. Beaver selects a set of financial ratios that encompass various aspects of financial performance, including liquidity, leverage, profitability, and activity. These ratios serve as input variables in the analysis. Beaver employs discriminant analysis to construct a predictive model that distinguishes between firms that eventually fail and those that remain financially solvent. The model assigns weights to each financial ratio based on their significance in differentiating between the two groups. The study's findings reveal that a subset of financial ratios can effectively predict financial distress and failure. Specific ratios

like cash flow to total debt, net income to total assets, and total debt demonstrate notable discriminatory power in identifying firms that will experience financial distress.

Altman, E. I. (1968)'s study establishes a comprehensive framework to assess financial health and the likelihood of facing financial distress, by extending the study conducted by Beaver in 1966. In his study Altman, by using Multiple Discriminant Analysis (MDA)[1], developed a financial distress prediction model known as Altman Z-score model.

The Altman Z-score model evaluates a company's financial health and the likelihood of experiencing financial distress by using five financial ratios by adding these ratios and the proper weighting, or "co-efficient," to each ratio. The five financial ratios used are:

- Working capital / total assets = measures the net liquid assets relative to the total capitalization
- EBIT/ total assets = measures the true productivity of a company's assets
- Retained Earnings / Total Assets= measures the cumulative profitability of a company over time.
- Market value of equity/ Book value of total debt = which measures the amount a company's assets can decline in value before the liabilities exceed the assets and the company becomes bankrupt.
- Sales / Total assets

$Z = 0.012X1 + 0.014X2 + 0.033X3 + 0.006X4 + 0.999X5$

In his study, Altman analyzed 66 manufacturing companies, of these companies 33 became bankrupt in the period 1946 – 1966 and the other half were existing companies in 1966.

At the beginning, the Altman-z formula was applicable for manufacturing listed companies and was based on the five financial ratios illustrated before. The model identifies the following range:

- z-score < 1.81 are likely to face high financial distress
- A z- score of 2.99 or higher indicates no danger of bankruptcy

[1] MDA is a statistical method applied in pattern recognition and machine learning to categorize observations into multiple predefined groups, making it especially effective when there are more than two classes, unlike basic discriminant analysis which is limited to two

- The zone between 1.81 and 2.99 is called zone of ignorance or gray area due to the predisposition of errors.

The result of the study was that 94% of the bankrupt firms were correctly classified, while 95% of bankrupt and non-bankrupt were assigned appropriately (Altman, 1968).

In 2000, Altman came up with a revised z-score, named z'-score, for private companies by changing X4 from the market value of equity to the book value of equity. In this revised model, the score indicating high financial distress changed from 1.81 to 1.23 (Altman, 2000). The adjusted formula for the z'-score looks as follows:

$$\mathbf{Z' = 0.717X1 + 0.847X2 + 3.107X3 + 0.420X4 + 0.998X5}$$

Two years later, Altman revised the z-score for non- manufacturers, leaving out the fifth variable, the z''-score. A score below 1.1 indicates a distressed condition (Altman, 2002).

$$\mathbf{Z'' = 6.56X1 + 3.26X2 + 6.72X3 + 1.05X4}$$

Starting from the work done by Beaver in 1966, Deakin in his study analyzed 32 distressed (failed) companies in the timeframe from 1964 to 1970 using the 14 financial ratios identified by Beaver but adding to them a series of multivariate models.

Deakin utilized a methodology similar to Beaver's, examining 32 firms from 1964 to 1972. However, Deakin's study was more specific, focusing solely on firms that faced bankruptcy, insolvency, or liquidation for creditor benefits. Unlike Beaver, he excluded companies defaulting on loans or missing preferred dividend payments. Each failed firm in his study was paired with a non-failed firm from the same industry sector, based on industry classification, financial data year, and asset size. One significant observation of the Deakin study was the rapid expansion of the failed firms in the third and fourth years before their failure. A closer look revealed that this growth was funded predominantly by increased debt and preferred stock, rather than equity or retained earnings. Consequently, these funds were mostly channeled into illiquid assets, such as plant and equipment. These companies struggled to produce the necessary sales and net income to sustain their increased debt, leading to a working capital deficiency (Deakin, 1972).

Ohlson (1980) focused on data from the 1970-1976 period, a timespan almost uncovered by prior studies, analyzing 105 bankrupt and 2058 non-bankrupt firms. Instead of using the Moody Manual, Ohlson used 10k[2] bank statements from that era because of their advantage of having precise timing of release to the public. This made it possible to clarify a company's bankruptcy status before or after the statement was released so that it could be verified whether the company entered bankruptcy before or after the release date. This was an issue that earlier studies hadn't directly addressed.

The key findings of his study highlighted four significant factors affecting a firm's one-year failure probability: company size, financial structure, performance metrics, and liquidity (with some ambiguities on the last factor). Ohlson's model also indicated that prior research may have exaggerated bankruptcy predictive capabilities, especially if models employed post-bankruptcy data for predictions. In contrast to many predecessors like Altman, Ohlson's model used conditional logit analysis over the commonly adopted MDA, sidestepping its associated issues. The primary query his method addressed was the failure probability of a firm within a certain timeframe, devoid of assumptions on bankruptcy prior probabilities or predictor distributions. Ohlson's model incorporated variables like company size, liability to asset ratio, working capital to total assets, and several others, including indicators like changes in net income (Ohlson, 1980).

In 2015, starting from the work of Altman, Jeenham Almamy, John Aston and Leonard N. Ngwa developed the J-model based on UK companies. The model highlited below is characterized by the classic five variables identified by Altman plus one, the cash flow from operations / total liabilities.

$$\mathbf{J = 1.484J1 + 0.043J2 + 0.39J3 + 0.004J4 + -0.424J5 + 0.75J6}$$

J1 = working capital/total assets

J2 = retained earnings/total assets

J3 = earnings before interest and taxes/total assets J4 = market value equity/total liabilities

J5 = sales/total assets

J6 = cash flow from operations/total liabilities

[2] A 10-K is an extensive annual report that publicly-traded companies must submit detailing their financial results, as mandated by the U.S. Securities and Exchange Commission (SEC). This document offers a deeper insight than the annual report to shareholders before the meeting to select company board members.

The newly added variable measures the time it takes for a company to repay its debt by using cash flow from operations.

In their study, Jeehan Almamy, John Aston and Leonard N. Ngwa, by analyzing UK companies before and after the crisis, compared the J-UK model with the Altman z-model obtaining as a result that the J-UK model had a higher precision of predicting bankruptcy both before and after the financial crisis compared to the Altman-z mode (Almamy, Aston, & Ngwa, 2015).

The study by Liang et al. is distinct in its exploration of distress prediction by merging Corporate Governance Indicators (CGIs) and Financial Ratios (FRs), a combination seldom addressed in previous research. The paper's objective is to evaluate the predictive power achieved by integrating seven FR categories with five CGI categories. The dataset, sourced from the Taiwan Economic Journal spanning 1999-2009, defines company bankruptcy according to the Taiwan Stock Exchange's business regulations. Two essential criteria guided the data collection: companies must have three years of comprehensive public data prior to any financial crisis and a sufficient number of industry counterparts of similar size for a meaningful comparison between bankrupt and non-bankrupt entities. This led to a dataset with 239 cases each of bankrupt and non-bankrupt firms. The study incorporated seven FR categories – solvency, profitability, cash flow ratios, capital structure ratios, turnover ratios, growth, and others; and five CGI categories – board structure, ownership structure, cash flow rights, key personnel retention, and others. The findings underscored that blending FRs with CGIs enhanced the model's predictive capacity compared to a solely FR-based model, emphasizing the significance of a company's Corporate and Governance structure. Notably, the most critical elements for robust bankruptcy prediction were solvency and profitability among FRs, and board and ownership structures in the CGI categories.

This might not, however, be appropriate for all international markets. For instance, corporate governance indicators might not be appropriate in markets where the definition of distressed enterprises is ambiguous as well as in markets where the meaning of corporate governance indicators is ambiguous, results from the China markets with FRs and CGIs were no better than that obtained using FRs alone. (Liang, Lu, Tsai, & Shih, 2016).

1.3 Parameters for identifying the crisis and overview of the Italian: “Codice della crisi d’impresa”

One of the limitations of the Altman model is that it is based on historical analysis, i.e. statistical analysis of the balance sheet and individual assets, but this method of approach is not sufficient to anticipate the insolvency or the state of crisis of a company, which will then lead to distress. For these reasons, a careful monitoring and analysis of the company's accounts is necessary, and it is for this purpose that the new "Corporate Crisis Code" (D. lgs. No. 14 12/01/2019) has been introduced in Italy in 2019.

For this reason, the new "Code of the Business Crisis" introduces an internal monitoring and alert system, a useful tool for the detection and prevention of crises. The purpose of this alert system is to detect early signs of a crisis and propose measures to prevent it.

The new Code identifies indicators for the detection of income, capital or financial imbalances. In particular, the new Code considers as meaningful indicators those that "measure the sustainability of the debt burden in relation to the cash flows that the company is able to generate and the adequacy of its own resources in relation to those of third parties", taken from "M&A E Private capital for business relaunch".

The following are the indicators introduced and used by the new Code of Business Crisis that indicate the existence of a state of crisis in the company:

- Negative shareholders equity;
- Deb service coverage ratio DSCR:$DSCR = \frac{forecasted\ net\ cash\ flow\ next\ 6\ months}{financial\ commitments\ next\ 6onths}$

  If the DSCR is not available it is required to respects all the following five indicators:

  1) $\frac{financial\ charges}{Net\ Revenues}$;
  2) $\frac{Shareholders\ Equity}{Debt}$;
  3) $\frac{Net\ cash\ flow}{Assets}$;
  4) $\frac{Current\ Assets}{Current\ Debt}$;
  5) $\frac{tax\ debt+social\ security\ debt}{Assets}$;

In addition to the indicators just mentioned, the new Code also refers to other indicators aimed at measuring the company's ability to meet its payment obligations, thus assessing the existence of repeated and significant delays in payment. In particular, it takes into account

- Debts to suppliers which have been overdue for at least 120 days for an amount exceeding that of debts not due;
- Payables past due for at least 60 days for an amount equal to more than half of the total amount of wages.

1.4 Turnaround definition

Research on financial distress has naturally led to an exploration of turnaround strategies, in fact the study of corporate turnaround has received particular focus during the last few decades.

The recent surge in digital transformation has underscored the necessity for businesses to evolve and restructure to remain competitive. While digitalization offers numerous opportunities for companies to innovate or refine their business models (Bouncken and Barwinski, 2020), it also poses significant challenges for existing firms. The rapid advancements in digital technologies can undermine established revenue-generating methods (Amit and Schoemaker, 1993) and may render some industry practices and the corresponding resources outdated. This digital shift introduces a new level of intricacy, necessitating enhanced strategic insight, planning, and oversight (Volberda et al., 2021). For established players, navigating digitalization often involves a delicate balance between capitalizing on current business ties and exploring novel business avenues (Christensen et al., 2016). It reshapes the business landscape, compelling companies to swiftly adjust to emerging market realities (Teece, 2010).

Further complicating matters, the COVID-19 pandemic, with its widespread contact restrictions, has expedited these industry changes, compelling companies to fast-track their digital transformation initiatives

Turnaround broadly refers to a dynamic process that enables businesses to transition from a state of decline that threatens their survival to an extended period of success. The

turnaround definition implies that a declining firm can be turned around, while a failed firm cannot. Practitioners often consider corporate turnarounds as a firm's attempt to avoid bankruptcy.

Before diving in, it's worth noting that there isn't a universally accepted definition of "turnaround" in the research realm, as highlighted by Barker III et al. in 2022. To establish a foundation for our discussion, we'll first outline a working definition of corporate turnarounds, while also acknowledging contrasting views in the literature.

A central aspect to address is the extent of a company's decline or its situation that poses a significant existential threat. Historically, turnarounds have been described as recoveries from severe performance downturns that, if not rectified, could lead to the firm's demise (Arogyaswamy et al., 1995: 497). This understanding aligns with various studies (such as Robbins and Pearce, 1992; Morrow et al., 2004; Bruton et al., 2003) that pinpoint turnaround scenarios as consecutive years of reduced performance, often gauged using ROI, ROS, or both. Grinyer et al. (1988) shed further light, pointing out that short recessions or simple stagnation should not be confused with situations that should lead to a turnaround. In their view, true turnaround cases involve firms grappling with serious resource shortages, not those firms that simply enter downturn situations perhaps also due to the industry in which they operate. They also add that including companies that do not face threats to survival could lead to distorted interpretations.

There's a divide in turnaround literature about the nature of a decline. Some works, like those of Bibeault, 1982 and Hambrick and Schecter, 1983, view turnarounds as recoveries from any form of decline, whether industry-wide or not. In contrast, other studies (e.g., Robbins and Pearce, 1992; Barker and Mone, 1994) aim to pinpoint the decline's root, discerning between firm-specific and industry-wide causes. They perceive turnarounds as situations marked by both comprehensive and relative downturns. A crucial angle explored by many is the misalignment of firm-specific resources. For instance, Arogyaswamy et al. 1995 see relative decline (a downturn compared to the industry) as a strong indicator of this misalignment. Furthermore, Sheppard and Chowdhury (2005) underlined this misalignment's significance, asserting that failures often arise not solely due to external conditions or internal issues but mainly from an organization's misalignment with external realities.

This section of the paper will continue by discussing some definitions deemed most significant containing the characteristics just described, as well as additional noteworthy insights.

Turnaround can be defined as “a systematic process of reversing a negative trend in an organization, often characterized by financial distress” (Schendel, D., Patton, G. R., & Riggs, J. 1976). Hofer defines the turnaround as a structured plan that involves analyzing, planning and implementing fundamental changes to reverse a declining situation in an industry Hofer, C. W. (1980).

One of the possible causes of a company's decline may be the company's misalignment with current trends and market demand. A focus on this point of view was given by the work of “Barker, V. L., & Duhaime, I. M.” who emphasize the need to align the company with market demands and trends during the turnaround process, including product innovation and customer targeting. Moreover, in their study, they state that a successful turnaround occurs when a company has a performance decrease that poses a threat to its survival for an extended period of time but is able to stop the performance fall, eliminate the threat to the firm's life, and achieve sustained profitability. (Barker, V. L., & Duhaime, I. M. 1997).

A crucial role during the turnaround process is covered by the top management who has to put the effort to respond to the firm’s performance problems (Barker III, V. L., & Mone, M. A. 1998).

A sharp turn (turnaround) is necessary when enterprises that were once prosperous but have had performance decreases that put their survival in jeopardy and are making attempts to recover, either successfully or unsuccessfully (Kow*, G. 2004). This turn can be defined as concluded when the firm has resumed normal operations, and so regained sustained profitability (Lohrke et al. 2004).

Also, Chathoth, Tse, & Olsen have defined turnaround as a process of recovering from a declining situation, more specifically they defined Turnaround as the action taken in order to avoid financial disaster. The latter occurs when a company fails to meet the expectations of its stakeholders, in terms of results, for a given period of time (Chathoth, Tse, & Olsen, 2006).

While Altman, E.I and Hotchinkss emphasizes the fact that turnaround has to focus on financial restructuring and liquidity management to overcome financial distress. (Altman, E. I., & Hotchkiss, E. 2010).

In recent years, more and more "big" companies have entered into a distress situation, and this has increased the importance of turnaround research. According to Kazozcu's research, a turnaround is a phenomenon that occurs when previously successful businesses endure a time of deteriorating performance and are able to overcome from this situation in order to resume performance or even outperform pre-crisis outcomes. (Kazozcu, 2011).

In line with recent trends where an increasing number of major corporations have faced distress, a 2017 Capgemini report revealed that "Since 2000, 52% of companies in the Fortune 500 have either gone bankrupt, been acquired, or ceased to exist." In contrast, by the end of August 2021, the FAANG [3] companies had secured nearly 25% of the S&P 500's total market capitalization. Many industry experts believe that digital disruption is a significant factor behind this shift.

1.5 Turnaround Funds

As we will see later on in the course of this master's thesis a pivotal role in the turnaround process is covered by the Turnaround Funds. Turnaround Funds are a particular type of funds that have the goal of investing in distressed companies to obtain a capital gain at the exit. Looking at this type of investment it is possible to identify two different but equally important aspects:

1. The research of a capital gain for the fund itself;
2. The positive impact on the distressed company and so a social value.

Turnaround funds can be divided into two main macro categories: Equity funds and Debt funds. The formers are a sort of traditional Private Equity fund, focused only on distressed companies. The latter instead provide the liquidity “new money” necessary for the turnaround, in the form of debt instrument, thanks to the partnership with financial partners. The role of the financial partners is crucial also because it is chosen, by the Fund, in order to

[3] "FAANG" stands for the shares of five major U.S. tech corporations: Meta (META), previously Facebook; Amazon (AMZN); Apple (AAPL); Netflix (NFLX); and Alphabet (GOOG), once called Google.

be specialized for the particular situation (expertise in the sector, amount of liquidity injecton required).

1.5.1. Equity Turnaround Funds

Various types of operations fall within the category of operations used by operators defined as Equity Turnaround Funds. In particular, four different types of operations can be identified: minority investments, majority investments, leveraged buyouts, and growth capital.

Unlike classic Private Equity models, Equity Turnaround Funds differ because the initial investment is always characterized by a financial injection into the company, whereas in the case of Private Equity, the initial investment partially covers the payment to the partner with whom one wants to enter into a partnership. This difference implies that everything initially injected by Equity Turnaround Funds is aimed at relaunching the troubled company.

As reported in the book "M&A E Private Capital per il rilancio delle imprese," another aspect of discontinuity between turnaround funds and classic Private Equity is the valuation model of target companies. Since the latter are distressed companies, characterized by negative EBITDA, it will not be possible to evaluate them through common analysis used in the world of Private Equity, such as EBITDA multiples. For this reason, the target companies must be evaluated based on the business plan.

1.5.2. Debt Turnaround Funds

These types of players invest in distressed companies through debt instruments, thus providing the necessary liquidity to execute the industrial revitalization plan and therefore the turnaround. Financial resources are injected into the company through a predictable financing arrangement ("super senior financing," "debtor-in-possession financing"), often following Insolvency Proceedings (e.g., Concordato Preventivo, bankruptcy procedures regulated by Legge Fallimentare art 182 bis, art 67), in order to benefit from the credit protections offered by these procedures.

A crucial aspect to highlight immediately is that, within the framework of investment operations, the majority of shares/equity of the target company are transferred to the fund and its partner to ensure the necessary control to carry out the turnaround. This transfer of

shares/equity usually occurs for free in the case of highly distressed companies (the value of shares is practically zero). However, a mechanism called "waterfall" is established, which stipulates that the previous majority shareholders will still be entitled to any proceeds from the Turnaround Fund's exit at the end of the turnaround.

1.6 Turnaround models

Turnaround is not a monolithic concept but a multifaceted process that can be approached through various models and strategies. The choice of a particular model often depends on the unique circumstances, challenges, and objectives faced by an organization. This chapter seeks to explore the different models of turnaround that have been developed and employed by scholars and practitioners alike. The examination of these diverse models is essential for understanding the nuanced ways in which organizations respond to decline and pave the path to recovery. It contributes not only to academic knowledge but also to practical insights for managers, consultants, policymakers, and other stakeholders engaged in the intricate task of corporate rejuvenation.

Typically, both classic frameworks (such as those by Arogyaswamy et al., 1995; Pearce and Robbins, 1993) and newer models (like those of Trahms et al., 2013; Schweizer and Nienhaus, 2017) outline corporate turnarounds through an interplay of three primary elements: the cause, the response, and the result of the turnaround.

1.6.1. Pearce & Robbins model

This model is based on a multistage method for turnaround, so the process is subdivided into two distinct and sequential phases:

- Retrenchment;
- Recovery.

The first phase “Retrenchment” emphasizes the firm’s assets and cost reduction as a way to mitigate the causes of financial distress. Activities such as downsizing, restructuring and downscoping are typical for the retrenchment phase.

The second phase ("Recovery") occurs only if the first phase was successful. In the "Recovery" phase strategic and operative problems are addressed.

The conceptualization of a multistage approach to turnaround was already developed but this idea had been empirically untested, indeed support by practitioners was already given by the work of Bibeault 1982, Goodan 1982 and Slatter 1984.

In particular the work of Bibeault plays a very important role because not only he divided the Turnaround process into two phases but between the two stages he inserted a decision point.

So, after the "Retrenchment" the firm has to decide between two different possibility:

- Pursue recovery in its retrenchment form, by adopting a downsize (scaled-back) version of if its historic strategy;
- Shift to a return-to-growth stage.

In the figure below (Figure 1) is showed the basic conceptualized multistage turnaround process, according to Pearce and Robbins model.

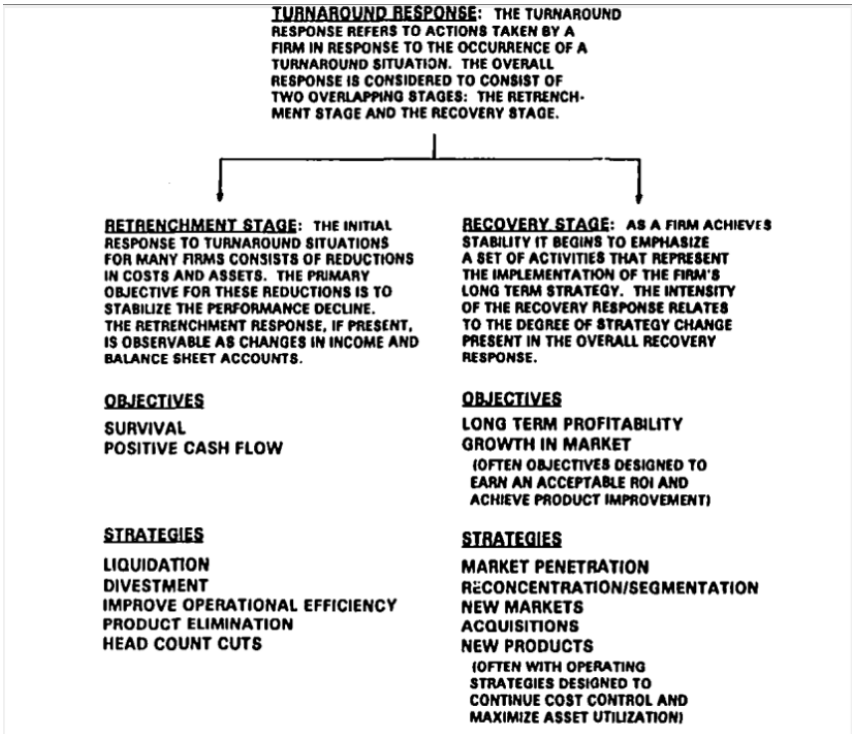

Figure 1: Stages in the Turnaround process

The model described by the work of Pearce & Robbins in 1992 is based on the relationship between 4 components (Figure 2):

- Turnaround situation;
- Retrenchment response;
- Recovery response;
- Level of turnaround success.

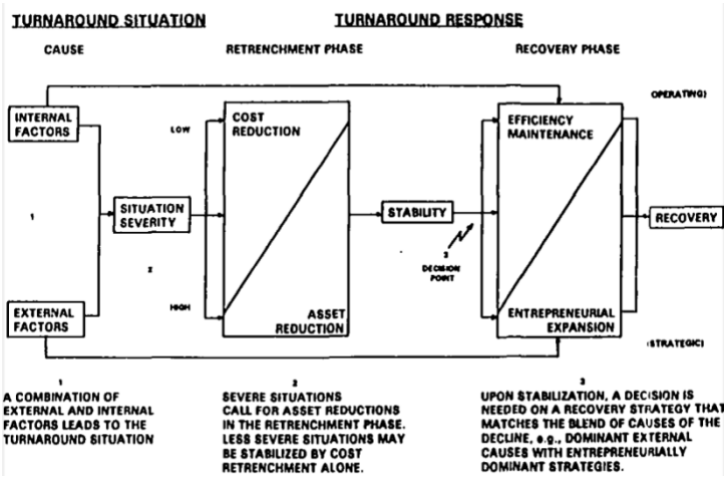

Figure 2: Pearce & Robbins Turnaround process

One of the results of the study was that the presence of a retrenchment phase in the turnaround process was fundamental, however, for many firms analyzed in the study the only cost retrenchment was not sufficient to achieve the turnaround (these firms were in a more severe situation). Speaking about severity, another important finding of this study was the impact of the turnaround severity: the need to retrench increased as the distress situation was worse.

Although consciously chosen in testing, one of the limitations of Pearce & Robbins' model is its global applicability, as it was tested only on a sample of companies in the textile industry (Castrogiovanni & Bruton, 2000).

1.6.2 Model of Jerry Paul Sheppard and Shamsud D. Chowdhury

The multistage model, briefly described in the figure below (Figure 3), is based on four sequential stages.

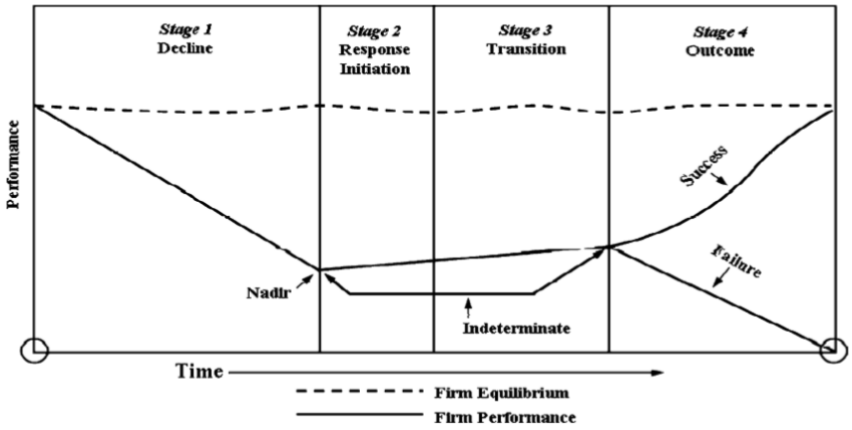

Figure 3: Failure/Turnaround process

The first stage is characterized by a decline that begins from business or industry equilibrium and falls until it reaches a nadir as a result of prior organizational strategy misalignments and environmental obstacles. The second stage of the process begins when the nadir forces management to take corrective action (in failing businesses, these steps may happen when there aren't enough resources to implement the required improvements). The third stage, sometimes known as the transitional phase, is by far the most challenging one. During this phase, there is a complex interaction between human, technological, cultural, and strategic factors. To connect all of the firm's dispersed activities, this interplay requires investment in both people and systems. The steps taken by failing businesses might not be enough to save them. The fourth stage displays the results of the interactions that occurred in the third stage and can be rated as either successful or unsuccessful.

In addition to these previously mentioned steps, it is important to specify that this model is also based on three basic requirements:

- Incident: An incident is a recurrent activity that can be objectively observed in one or more stages of the model.

- Event: An event is a mental abstraction that explains the temporal patterns of key happenings.
- Concept: A concept is a variable that, by being progressively present through all stages of the event under examination, epitomizes the phenomenon.

Unlike most models which is theoretical, this model was tested by Chowdhury on the famous Chrysler case; the results obtained largely supported the model. The operational, strategic, and organizational decisions that affect turnaround efficacy are considered by Chowdhury's model, which also considers the dynamic interplay between internal dynamics of distress, outside industry developments, and these factors. It has limits, though, in that it is more ideal for case studies than for quantitative analyses with high sample sizes, which makes it difficult to use empirically.

1.6.3 Schoenberg, Collier, & Bowman Revision

While not an actual model, we've chosen to incorporate the review work by Schoenberg et al. in this section to highlight key elements pertaining to turnaround dynamics. Specifically, this review delves into the six predominant turnaround strategies, which are as follows:

- Cost efficiencies;
- Asset retrenchment;
- Focus on the firm core activities;
- Building for the future;
- Reinvigoration of firm leadership;
- Corporate culture change.

The first four are related to the main objective of the turnaround (content-oriented strategies) the last two instead accompanying the required change process for the implementation.

Cost efficiencies:

The pursuit of cost efficiencies is the turnaround approach that businesses use the most frequently. Often, the first stage in any recovery strategy is to implement cost-effective solutions in order to stabilize the cash flow.

Lowering R&D, collecting and lowering accounts receivable, reducing inventory, stretching accounts payable, reducing marketing activities, and ceasing pay increases are some of the most frequently mentioned cost savings in the literature. The pursuit of cost savings entails some dangers, just like any approach. Simply reducing costs has the potential to lower employee morale and commitment, which will increase worker turnover. R&D is frequently one of the first departments to be reduced, thus this alone is unlikely to make a significant difference in the turnaround process and may even hurt the company going forward.

Asset retrenchment

Asset retrenchment is frequently pursued concurrently with or soon after a cost-cutting initiative. Areas of the company that are underperforming are evaluated as part of an asset retrenchment strategy to see if any efficiencies can be made or if it would be appropriate to entirely divest the asset rather than allowing it to operate at a lower level than the rest of the company. In case of asset divest there is the possibility that asset sales could jeopardise next strategic options.

Focusing on core activities

Focus enables the business to create a distinct competitive strategy for its selected core operations. This strategy comprises identifying the markets, goods, and clients with the highest profit-making potential and refocusing the company's operations there.
Along with this, it might be required for the company to restructure or redesign itself in order to better align with its fundamental purpose. This would require the rationalisation, sale, or closure of any operations, goods, or assets that do not fit with the identified purpose.

Building for the future

Building for the future is coordinated with the turnaround process' recovery phase. During this stage, businesses tended to reconfigure their assets in an entrepreneurially motivated manner, utilising their resources to expand their product offerings or expand into new geographical areas. The development of the future plan has been criticised for "re-complicating the business" by reintroducing some of the complexity that was reduced during cost- and resource-cutting measures.

The ability of the company to replenish and refresh itself is what is meant by this stage, which is said to be the hardest to reach because it is challenging to keep the company nimble enough to evolve without becoming "stuck" in its current situation or returning to its "usual" mode of operation.

Reinvigoration of firm leadership

A substantial connection exists between CEO turnover and companies facing crises, with 75% of newly appointed CEOs in turnaround situations coming from outside the organization (Kesner and Dalton, 1994). Two primary rationales for CEO turnover are prevalent in the literature:

Firstly, the CEO often bears the brunt of the blame from the media and shareholders when a company is underperforming. Changing the current CEO acts as a symbol of transformation to both external and internal stakeholders (Daily and Dalton, 1995). Frequently, a shift in leadership is propelled by the Chairmen of the Board in response to investor pressure (Sudarsanam and Lai, 2001). This shift bears symbolic significance; it denotes a break from the unacceptable status quo and signifies the initiation of recovery processes.

Secondly, a CEO who seems oblivious to the problems (Bibeault, 1982; Gopinath, 1991; Kesner and Dalton, 1994) or who attempts to rectify them with outdated remedies (Arogyaswamy et al., 1995; Barker and Patterson, 1996) is usually replaced. Managers often resort to tried-and-true solutions to address decline, ignoring evidence suggesting the need for new approaches. Additionally, the stress of a company's decline can lead to misinterpretation of any evidence they encounter (Arogyaswamy et al., 1995).

In such scenarios, having a new CEO can infuse fresh perspectives, diverse experiences, and innovative strategies for organizational revival (Barker and Duhaime, 1997).

Alongside the CEO changes, altering some or the entire top management team (TMT) is typically recommended (Kesner and Dalton, 1994; Lohrke et al., 2004). Hofer opines that changing the TMT is one of the crucial initial steps for a successful turnaround, as it allows the introduction of novel strategies and the replacement of possibly mismatched skills of former managers (Hofer, 1980). However, a word of caution: some studies warn that changes in CEO and TMT can lead to substantial internal upheaval (Castrogiovanni et al., 1992; Kesner and Dalton, 1994).

Culture change

Alongside alterations in leadership, the literature underscores the significant impact of cultural transformations in aiding the revival and readjustment of enterprises in turmoil. Initiating a cultural shift may be requisite to question and reassess antiquated beliefs and presumptions, which may not align with the altered circumstances the company is confronted with; only in doing so can archaic operational procedures be relinquished, paving the way for the adoption of novel behavioral patterns among employees.

The research conducted by Stopford and Baden-Fuller (1990) on the revitalization of waning UK manufacturers revealed that innovative solutions, which were otherwise unattainable, were conceived when the CEO and the TMT questioned outdated beliefs, thereby signalling to the workforce that such behavior was permissible. This act of signalling is integral to the strategy of cultural transformation during a turnaround as it denotes a shift from antiquated conduct to a rejuvenated operational approach. Disseminating contemporary market insights, which mirror the renewed market conditions, was a methodology employed to dispute longstanding convictions. Additionally, some studies, including those by Armenakis et al. (1995), have discovered that employing symbols can expedite alterations in the perceptions and actions of the workforce, a crucial element for the expedited progression and realization of outcomes during a turnaround.

These scholars pointed out the elimination of privileges and the incorporation of medical metaphors to illustrate the critical state of affairs as the most potent and beneficial symbols. In essence, the literature accentuates that when executing turnaround tactics,

managers must comprehend that alterations are not confined to systems or structures but extend to the attitudes and actions of individuals. Recognizing and valuing this aspect is pivotal for triumph.

Schoenberg's review, derived from the study of the main research articles, confirms the validity of the two-stage Retrenchment + Recovery model. For this reason, in this work, we will continue with its in-depth analysis, in the following paragraphs the Retrenchment and Recovery phases will therefore be explored in depth

1.7 Turnaround phase: Retrenchment

This phase first involves a comprehensive restructuring and refocusing of organizational resources and operations, with the aim of stabilizing the distressed entity, along with strict cost management measures. It consists of all those strategies designed to buffer the distressed situation in the short term and create prerequisites for recovery in the long term.

The most common strategies used during retrenchment can be divided into the following three categories (Sudarsanam & Lai, 2001):

- Managerial restructuring;
- Operational restructuring;
- Financial restructuring.

Managerial restructuring during this phase primarily focuses on optimizing the decision-making processes, reshuffling managerial roles, and possibly changing leadership to inject fresh perspectives and skills into the organization. It is aimed at fostering a more conducive environment for implementing urgent and, often, painful retrenchment strategies like cost-cutting, asset liquidation, and operational streamlining.

As stated before, the TMT change is often considered as a pre-requisite for a succesfull turnaround process. When drastic changes are required, it is difficult for the incumbent TMT to change their habits and institute radical reforms, they continue to pursue old ways of doing things considering it the best practice (cognitive bias).

Appointing new leadership, possibly with experience in turnaround situations, can bring in new insights, direction, and momentum to the troubled organization (Lohrke, Bedeian, & Palmer, 2004).

Another key aspect related to the need to change the manager is to give a signal to lenders (banks and general creditors). Effective stakeholder management strategies, including transparent communication with creditors, and investors, are crucial to regain trust and mitigate the impact of retrenchment actions (Pearce & Robbins, 2008).

A change in the TMT is evidence for the creditors that the company in distress is pursuing some strategy with the aim to improve the company's performance.

Operational restructuring refers to the reconfiguration of the day-to-day functions and processes within a company to enhance efficiency, reduce costs, and maximize output. The aim of the operational restructuring is to standardize operations and increase productivity. There are several ways through which it is possible to pursue operational restructuring:

- Operating asset reduction: the basic concept is to focus on core assets, in order to both improve liquidity (by selling non-core activities) and focus on the main business lines of the company. This will reduce complexity and so will simply the business however, it is important to ensure that the assets being sold don't handicap the company's long-term growth and recovery prospects. Moreover, the asset reduction and the consequent sales of assets can be used to pay down debt and reduce interest expenses.
- Cost reduction: the main goal of cost reduction is to quickly improve the cash flow situation of the company. In this category, we can also consider the possibility of outsourcing and offshore some activity in order to reduce costs.
- Revenue generation: demand stimulation through increased investment in marketing and price reduction

Financial restructuring in this paper refers to the reworking of a company's capital structure, it aims to improve the financial health of an organization by altering the mix and structures of its capital, thereby reducing financial risk.

Companies may look to reduce overall debt, either by negotiations with creditors or by converting debt to equity, according to Gilson (1990), debt restructuring is a phase in which a pre-existing debt is substituted with a new one characterized by a reduction of interest (or capital), the extension of the deadline or swap debt-equity.

Another possible strategy for improving the financial position of the company is by focalizing the equity side. This strategy involves the reduction of dividends and the issuance of shares.

1.8 Turnaround phase: Recovery

According to the Pearce & Robbins model, which is used as a guideline for this work, the phase following the retrenchment phase is the recovery phase. While the retrenchment phase focus on the short-term action with the aim of restoring the situation of financial difficulties, the recovery phase focus on long term action that can return
the enterprise to a sustainable level of profitability. In their paper Pearce and Robbins expand the concept of "recovery" by developing a classification of strategies that can be implemented in this stage (Pearce & Robbins, 2008). Getting more specific, they divided the possible strategies into two families, the first one consists in bringing back the company to its condition prior to the period of financial distress the second option instead accept the downsize and redesign products and market segments and try to compete in a more focused way. In this way, the company uses its strengths to defend itself against the crisis situation and try to survive.

The first alternative is riskier and more difficult to implement mainly for two reasons:

- the competitive environment may have changed from the past, this implies that strategies that worked in the past will not necessarily work again;
- the use of the same strategies used in the past could lead back to the distressed situation in which society found itself.

The second alternative focuses on narrowing the company's scope, concentrating on a smaller portion of the business in order to improve performance.

Another possible strategy that can be adopted is to seek for a strategic transformation, this is done to reposition the company competitively. In their work, Pearce and Robbins focus their attention on two options for fostering company growth: growth through acquisition and growth through alliance and joint venture.

- Growth through acquisition: While this option is undeniably the fastest, it's also the priciest. However, when there's a need for swift strategic transformation, such an

approach can be enticing. There are various forms of acquisitions based on the nature of the targeted company. Specifically, we can identify horizontal acquisitions, involving similar businesses in the same industry; vertical acquisitions, targeting companies either upstream or downstream in one's value chain; and conglomerate acquisitions, where the goal is diversification and the companies involved operate in distinct sectors;

- Growth through alliance and joint venture: These various forms of business collaborations can vary based on several factors, including legal structure, duration, risk, responsibilities, costs, management, visibility, scale, complexity, and potential. For instance, a joint venture is a means by which a company can partner with one or more other businesses, pooling their skills and resources. This partnership involves a mutual investment, after which revenues, expenses, and control of the newly formed entity are shared. On the other hand, strategic alliances differ from joint ventures as the participating companies do not take an equity position in a new entity. Often, these alliances are for a specified period, during which partners contribute resources to a cooperative project, all the while retaining their independence. The aim of such collaborations is knowledge exchange and building internal expertise that remains useful beyond the contractual agreement. It's crucial to understand that these partnerships are intricate and might fall short of being effective due to opportunistic behaviors among participants.

1.9 Turnaround strategies

1.9.1 Operational Turnaround Strategies

Operational restructuring can be described as optimizing organizational efficiency during periods of decline, with the goal of reducing costs and boosting revenue. However, this is not a straightforward task. Many companies that engage in operational restructuring don't achieve profitability, suggesting a common bias in their approach (Acharya et al., 2007; Hotchkiss, 1995; Routledge & Gadenne, 2000, among others). Operational restructuring

involves changing the existing processes of a company and adjusting its products or services in line with sales activities.

A notable strategy for operational restructuring is workforce reduction to improve revenue per employee and cut costs, as discussed by Taplin and Winterton (1995). Various studies, such as those by Folger & Skarlicki (1998), Budros (1999), and Norman et al. (2013), confirm that layoffs are a primary method for cost reduction, leading to immediate financial relief. However, layoffs may also undermine the full potential of human capital, leading to demotivation, reduced creativity, and commitment in the workforce (John et al., 1992; Freeman & Cameron, 1993; Chowdhury & Lang, 1996), and negatively impact the company's reputation. The loss of intellectual capital due to layoffs can adversely affect market returns (Amabile & Conti, 1999; Brockner et al., 2004; Nixon et al., 2004; Hannan et al., 2006; Flanagan & O'Shaughnessy, 2005; Love & Kraatz, 2009; Lin et al., 2008; Guthrie & Datta, 2008), although some studies like Cascio (2002), Nixon et al. (2004), and Morrow Jr. et al. (2004) emphasize the importance of layoffs for cost-cutting.

Operational Turnaround strategies aim to reduce costs and increase revenues, potentially by downsizing operating assets to cut direct and overhead costs. Improving a firm's efficiency can involve focusing on resources (input) and revenues (output). Revenue enhancement often includes concentrating on current products, adjusting pricing, and intensifying marketing efforts. For firms operating under capacity, asset reduction is a common practice to improve asset use and productivity. These strategies are essential for bolstering short-term cash flow and profits (Sudarsanam & Lai, 2001).

The impact of operational restructuring can be assessed by examining changes in operational costs, gross margins (indicating efficiency changes post-restructuring), and the optimization of working capital components. As Barker and Duhaime (1997) found, optimizing accounts receivables and inventories positively correlates with improvements in the Altman Z"-score, a sentiment echoed by O'Neill (1986). Robbins and Pearce (1992) also highlight the critical role of working capital optimization in successful turnarounds. Changes in tangible non-current assets are seen as strong indicators of the likelihood of successful reorganization (Moulton & Thomas, 1993). Sudarsanam and Lai (2001), along with Koh et al. (2015) and Atanassov and Kim (2009), argue that asset reduction is key to successful restructuring, with asset sales often being more closely linked to recovery success than debt reduction strategies.

Summarizing, according to the previously mentioned sturdies, a positive impact (increase in the z- Altman score) for operational restructuring can be mapped through the following elements:

- reduction in operational expenses;
- increase in gross margin;
- reduction in the operational part of working capital;
- reduction in tangible non-current assets.

In the analysis conducted in chapter 5, it will be analyzed the impact of the previously mentioned strategy in determining the increasing of firm profitability, measured by both the increasing of EBITDA and Gross Margin.

1.9.2 Managerial turnaround strategies

Whitaker (1999) suggests that mismanagement is often a more prevalent cause of a firm's struggles. According to Stopford and Baden-Fuller (1990), a company's strategic innovation is closely linked to the CEO's beliefs, indicating that new management is crucial for a successful turnaround. Replacing the CEO can significantly lower agency costs. Aligning shareholder interests may also involve reducing the CEO's salary and implementing equity-based compensation (Gilson & Vetsuypens, 1993).

Conversely, various studies indicate that turnaround success doesn't necessarily hinge on changing management (e.g., Clapham et al., 2005; Mackey, 2008). Research on managerial turnaround suggests that the departure of the current CEO doesn't automatically ensure success. Other factors, like the manager's educational background, brief tenure, and previous experience with defaults in other organizations, are also critical (e.g., Boeker, 1997; Ling et al., 2007).

While there is limited systematic and significant evidence on managerial turnaround (Beute N.W., 2018), this study aims to highlight what are the benefit and why this strategy is often adopted during turnarounds.

1.9.3 Asset turnaround strategies

In the realm of corporate restructuring, asset restructuring stands out as a critical strategy, especially in the context of firms grappling with financial distress. This strategy entails a strategic overhaul of a company's asset portfolio, aligning with both operational imperatives and strategic goals. Central to asset restructuring is its role in diminishing information asymmetry between agents and principals, a concept anchored in agency theory and empirically supported by studies like those of Gibbs (1993), Bergh et al. (2008), and Li (2013). Such restructuring often involves the reallocation of assets to the capital markets, a move aimed at refocusing the company's strategic direction and enhancing its performance. However, as Brauer (2006) points out, the extent of restructuring needs careful calibration to prevent potential declines in performance.

The efficacy of asset restructuring is further illuminated through its impact on market perceptions. Studies by Markides (1992) and Denis & Kruse (2000) associate this strategy with positive market reactions, interpreting it as an effective response to financial adversity. Conversely, there are inherent risks in asset restructuring, as highlighted by Winn (1997) and Li (2013), who note potential pitfalls such as the loss of vital assets and shifts in power dynamics that can adversely affect market perspectives.

The strategic significance of asset restructuring is further accentuated by its dual focus: the reduction of financial non-current assets and intangible non-current assets. These approaches are essential for the survival and turnaround of distressed firms, as evidenced by research from O'Neill (1986), Gibbs (1993), and Hofer (1980). These studies demonstrate how reductions in these asset types can lead to improvements in financial stability, as measured by metrics like Altman's Z"-score. Moreover, the literature underscores the need for strategic divestments in line with a company's core competencies, as argued by Markides (1995) and supported by Denis & Kruse (2000) and Hakkala (2006). Such strategic focus is crucial for reducing leverage and honing in on core competencies, leading to specialization and, ultimately, improved firm performance.

This thesis delves into these restructuring strategies within the context of Italian companies undergoing turnaround processes. By examining their application and outcomes, the study aims to shed light on the effectiveness of asset restructuring strategies in real-world scenarios. It will particularly focus on how Italian firms navigate the challenging process of

reducing financial and intangible non-current assets, and how these decisions impact their turnaround success. The goal is to provide a comprehensive understanding of asset restructuring's role in corporate revival, contributing valuable insights to both academic research and practical applications in business management.

1.9.4 Financial turnaround strategies

In this study, we scrutinize the efficacy of financial restructuring as a pivotal reorganization strategy within the context of the Italian market. Financial restructuring, primarily focusing on the reformation of a firm's capital structure, serves as a strategic tool to alleviate the burdensome impact of interest and debt payments. As delineated by John (1993), this form of restructuring can be broadly segmented into two categories: debt restructuring and liquidity improvement. The intricacies of these variables are further expounded by Opler (1993) and Eichner (2010), who break them down into component parts.

Liquidity improvement encompasses the optimization of working capital, adjustments in dividend policies, and the issuance of equity. On the other hand, debt restructuring involves strategic measures like debt provisions, debt reduction, and structural changes in debt composition.

The complexity of working capital optimization, as highlighted by Eichner (2010), especially in its intersection with operational restructuring, necessitates an in-depth examination of its elements—inventory management, stretching payables, and optimizing receivables. Notably, while inventory management and receivables optimization lean more towards operational activities, stretching of the payables represents a financial driver and thus forms a part of financial restructuring strategies.

Bowman et al. (1999) and Yawson (2005) have contributed significant insights into the effectiveness of financial restructuring. They argue that despite its immediate impact, as compared to other strategies like asset restructuring, financial restructuring demands a nuanced understanding, particularly due to its varying effects on firm performance. Under the broad umbrella of financial restructuring, we can identify two distinct categories: equity-based strategies and debt-based strategies. The former, as noted by DeAngelo and DeAngelo (1990) and John et al. (1992), often involves large firms in financial distress undertaking

measures like significant dividend cuts and equity issuances. Debt-based strategies, on the other hand, are characterized by both preventive and reactive measures.

Gilson's studies (1989, 1990) define debt restructuring as the process of replacing existing debt with new contracts, which may involve changes in interest and principal payments, extension of debt maturity, or swapping debt for equity. The concept of over-leverage, a significant contributor to financial distress as per Molina (2005), plays a critical role in this context. Wruck (1990) suggests that while a reduction in leverage can aid in avoiding financial distress, it may not directly contribute to an increase in firm value. However, this perspective is complemented by studies such as those by Opler & Titman (1994) and Zingales (1998), which link leverage reduction to performance improvement.

Empirical findings by Giroud et al. (2012) reinforce the notion that debt reduction leads to significant performance improvements, with debt ratios emerging as key determinants of operating performance. This is further supported by studies like those of Routledge & Gadenne (2000) and George & Hwang (2010), which find that highly leveraged firms often achieve successful turnarounds. The renegotiation of credit lines, as emphasized by Campello et al. (2011), emerges as a crucial factor for turnaround success, albeit influenced by macroeconomic conditions.

In the context of debt composition, studies by Asquith et al. (1994) and James (1996) highlight its importance in the successful realization of turnaround strategies. Brown et al. (1993) relate changes in debt composition to shifts in power dynamics between equity and debt holders, impacting strategic decisions during periods of financial distress. Additionally, Bernardo & Talley (1996) discuss the strategies employed by shareholders and management to counteract the increasing power of debt holders, particularly through investments of low value aimed at facilitating favorable debt renegotiations.

In summary, this research aims to analyze, within the Italian market context, the adoption and impact of two specific strategies: the reduction of leverage and the enhancement of the financial component of working capital. The study will rely on the theoretical frameworks provided by scholars such as Wruck (1990), Campello et al. (2011), and Schweizer and Nienhaus (2017), to examine how these strategies influence a firm's financial health.

2. Turnaround situation in Italy

This thesis is dedicated to examining the landscape of corporate turnaround in Italy during the period from 2018 to 2023, with an emphasis on identifying the key drivers instrumental in executing successful turnaround strategies. In this context, this section introduces the principal players in Italy's turnaround arena, with a special focus on the composition and characteristics of their portfolios.

A study by BackToProfit, sponsored by AIFI (Italian Association of Private Equity, Venture Capital, and Private Debt), reveals that up to 1,700 firms in Italy fit the criteria for turnaround interventions, underscoring a robust market. These firms, primarily from the industrial sector, generate revenues ranging from 10 to 300 million euros. They display specific financial indicators: a net financial position to EBITDA ratio of between 4 and 12 times, a positive EBITDA, and a net financial position to equity ratio between 2 and 5.5 times. Collectively, these entities employ around 170,000 individuals, with an aggregate revenue of 55 billion euros.

Italian companies face not only global economic challenges but also distinct, sometimes inherent, vulnerabilities. Consequently, Italy saw a significant number of company closures: CRIBIS data indicates 732,067 firms shut down between 2021 and February 2023. Nevertheless, despite the sizable number of distressed companies, Italy's private equity dedicated to turnaround operations has lagged in its growth and remains relatively small in transaction volume and capital commitment. AIFI's study suggests that even in 2022, the turnaround space was still a smaller segment, with nine investments made, up slightly from eight in 2021. However, the capital invested nearly doubled from 127 to 249 million euros. A chart (Figure 4) illustrates the stark contrast in 2022 between the volume and capital of buy-out deals compared to turnaround deals.

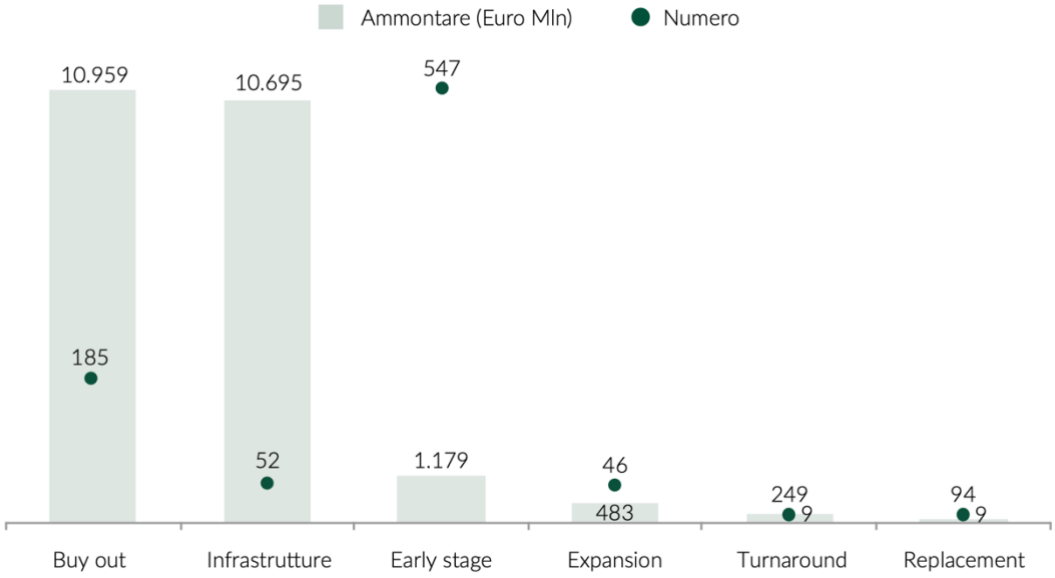

Figure 4: Distribution of investments by type relative to 2022, source AIFI

Yet, a silver lining appears in another chart (Figure 5), showing that while deal numbers have stabilized, the capital committed in this niche rose significantly in 2022.

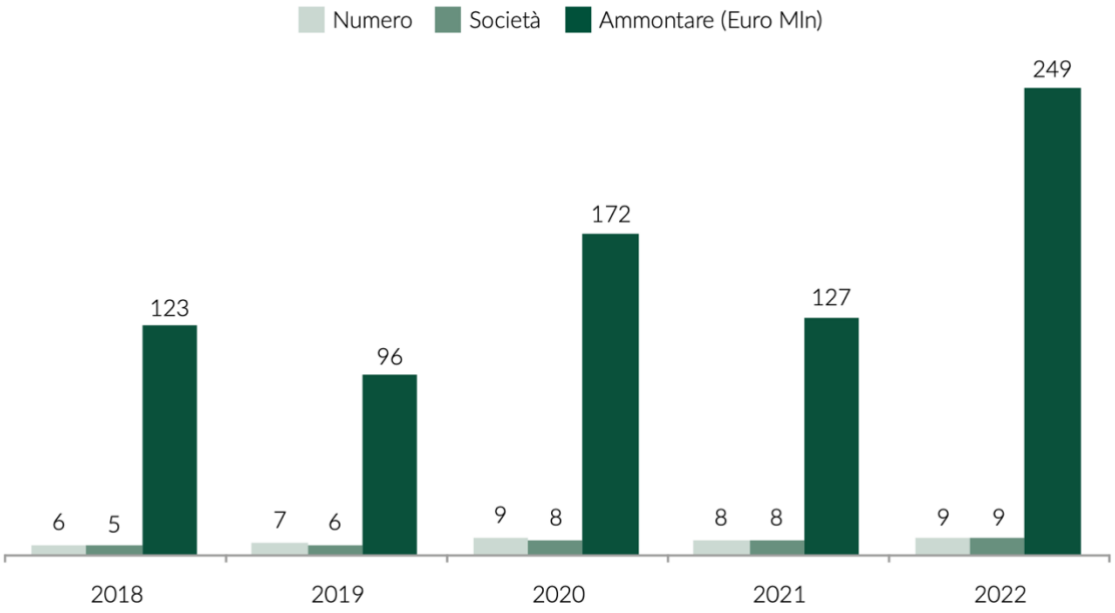

Figure 5: historic trend turnaround investing in Italy, source AIFI

With this backdrop of Italy's turnaround investing landscape, the subsequent section will introduce prominent actors in this niche operating within the country.

2.1 Dea Capital

DeA Capital Alternative Funds SGR, fully owned by DeA Capital S.p.A. of the De Agostini Group, stands as the foremost independent Alternative Asset Management platform in Italy. With a diverse portfolio encompassing private equity, credit, real estate, and multi-asset/multi-manager investment solutions, it manages aggregated assets under management (AUM) totaling EUR 27.1 billion. As the go-to partner in Italy for both direct and indirect investments in private equity, turnaround strategies, and non-performing loans (NPL), the company boasts both domestic and international exposure. Established in 2006, DeA Capital initially focused on Fund targeting global markets, but has since expanded its scope to include direct private equity funds, and investment programs aimed at turnaround and NPL. DeA Alternative Funds currently serves as the asset manager for Italy's largest NPL fund, the Italian Recovery Fund, which has a gross book value exceeding EUR 30 billion and an AUM of about EUR 2.4 billion. It is also a key collaborator with major Italian banking institutions, specializing in the restructuring of NPL/UTP credits for small and medium-sized enterprises facing financial complexities yet possessing strong industrial fundamentals, as seen in the Corporate Credit Recovery Fund.
The portfolio of Dea Capital is based on two different funds:

Idea Corporate Credit Recovery I (IDeA CCR I)

The IDeA CCR I fund, managed by DeA Capital Alternative Funds SGR, is a closed-end fund under Italian law reserved for qualified investors, which began its operations on June 23, 2016. The fund, with a total endowment of 221.8 million Euros as of March 31, 2018, aims to contribute to the revival of medium-sized Italian companies in financial distress but with solid industrial fundamentals (so-called "Target Companies"), distributing benefits among creditors and new investors

The fund is divided into two compartments:

- **Credit Compartment**, which has acquired credits/instruments from eight banks participating in financing operations for Target Companies, with a total value of approximately 179 million Euros, in exchange for shares in the same Credit Compartment;
- **New Finance Compartment**, which has gathered commitments for new financial resources amounting to approximately 42.8 million Euros, potentially allocable to Target Companies or companies with similar characteristics.

DeA Capital has a total commitment in the fund of 15.2 million Euros.

Idea Corporate Credit Recovery II (IDeA CCR II)

Idea Corporate Credit Recovery II (IDeA CCR II) is the second multi-compartment DIP Financing fund in Italy, following in the footsteps of CCR I. It commenced operations on December 28, 2017, with the aim of supporting the recovery of medium-sized Italian enterprises facing financial strain but possessing strong industrial fundamentals.

The fund consists of two compartments:

- **Credit Compartment**: Several leading Italian banking institutions (Unicredit, Intesa Sanpaolo, Banco Bpm, Bnl, Ubi Banca, Mps, Banca Ifis, and Credito Valtellinese) have joined this compartment. They transferred their credits, worth approximately EUR 231.5 million, to the fund. These credits are related to nine industrial companies (Canepa, Snaidero, Calvi, Pieralisi, Grotto-Chiuppano, Biokimica, Trend Group, Consorzio Latterie Virgilio, and Zucchi), in exchange for shares in the fund.
- **New Finance Compartment**: This compartment has gathered commitments for new financial resources up to approximately EUR 69.7 million, potentially earmarked for Target Companies or firms with similar characteristics.

Upon its inception, the Fund successfully raised EUR 301.2 million, including EUR 15.15 million from DeA Capital. On December 21, 2018, IDeA CCR II completed the first closing of its Shipping Compartment, acquiring credits from three partner banks related to eight Target companies in the ship management sector, valued at approximately EUR 170.3 million. This transaction, in exchange for shares in the Shipping Compartment, increased the total fund allocation from EUR 326.5 million to EUR 496.8 million, with EUR 15.15 million contributed by DeA Capital. Table 1 summarizes the portfolio and the concluded tuanround operations conducted by DeA Capital

Portfolio of DeA Capital

Table 1: DeA Capital turnaround overview

Company	Sector	Investement Year	Actual statuts	Funds
Cartiere Paolo Pigna S.p.A.	Back to school segment, paper products	2016	Exit in 2019	IDeA CCR I
Targetti S.p.A.	Market for interior and exterior architectural lighting"	2016	Exit in 2017	IDeA CCR I
Sinterama S.p.A.	Production and marketing of colored polyesters and yarns	2016	Exit in 2019	IDeA CCR I
Util Industries S.p.A.	Automotive brakes manufacturer	2016	Exit in 2019	IDeA CCR I
Snaidero Rino S.p.A	Production of modular kitchen	2017	Still in portfolio	IDeA CCR II
Calvi Holding S.p.A	Metallurgy and mechanics sector	2017	Still in portfolio	IDeA CCR II
Pieralisi Maip S.p.A.	Production of machinery for agriculture and forestry	2017	Still in portfolio	IDeA CCR II
Costa Endutainment S.p.A.	Management of facilities dedicated to educational entertainment activities	2022	Still in portfolio	IDeA CCR II

2.2 Oxy Capital

Oxy Capital, founded in 2015, is an asset management company specializing in the restructuring of industrial enterprises.

Oxy Capital Italia S.r.l. was created to foster growth and improvement in the Italian business and lending environments, emphasizing the enhancement of their industrial heritage and skills. This goal is achieved through collaborative partnerships with entrepreneurs and creditors, employing innovative strategies that align the interests of all stakeholders. Oxy assumes a controlling role in its investment ventures and extends support in financial and human resources. This method focuses on the unique strengths of financially struggling companies, whose products, brand reputation, cost strategies, and corporate values are key to stakeholders including customers, suppliers, and investors. Oxy primarily targets companies with revenues between 50 to 500 million EUR and a Net Debt that is 5 to 20 times their EBITDA.

Table 2 summarizes the portfolio and the concluded turnround operations conducted by Oxy Capital.

Portfolio of Oxy Capital S.r.l.

Table 2: Oxy capital turnaround overview

Company	**Sector**	**Investement Year**	**Actual statuts**
Ferroli S.p.A.	Heating and air conditioning systems	2016	Still in portfolio
Olio Dante S.p.A	Olive and vegetable oil	2016	Shares are in reality owned by River Due. River Due" is attributable to the stakeholders of Oxy Capital.
Stefanel S.p.A.	Department stores	2017	Exit in 2019

Gpack S.p.A.	Cardboard boxes for luxury, pharmaceutical, parfumes/cosmetics, and food & beverage markets	2021	Still in portfolio
Manuli Stretch S.p.A.	High-performance stretch films and packaging	2018	Still in portfolio

2.3 Pillarstone

Pillarstone S.p.A. is an investment entity in the non-performing loan (NPL) sector, established in 2015. This initiative was the result of a partnership involving its present management team, KKR & Co. Inc. a prominent global investment firm, and the banks Unicredit and Intesa Sanpaolo. Pillarstone is adept at managing corporate financial distress, offering a mix of financial, operational, and industrial assistance to turn around negative trends and set the stage for sustainable, long-term development. In 2015, Pillarstone Italy began by acquiring a portfolio of credits from Intesa San Paolo and Unicredit, which was valued at around 1 billion EUR of Assets under Management and included five firms: Manucor, Burgo, Lediberg, Alfa Park, and Cuki. This portfolio was further expanded to incorporate credits from Sirti and Premuda, with additional involvement from Carige, Mps, and Bper.

Besides its investment portfolio, Pillarstone also acts as an investment advisor for funds under the management of IQ-EQ Fund Management (Ireland) Limited, as per certain contractual arrangements. These include the Fi.Nav Fund (from 2019) and the RSCT Fund (from 2020). The RSCT Fund, an entity sanctioned by the Central Bank of Ireland, is adept at managing collective savings and has the authority to set up and oversee mutual investment funds.

The Fi.Nav Fund is an Italian closed-end alternative investment fund with multiple compartments, focusing on acquiring credits and assets in the maritime transportation

industry. Pillarstone initially secured EUR 300 million in distressed shipping credits from Intesa Sanpaolo and Unicredit, related to maritime groups such as Motia, Perseveranza di Navigazione, Elbana di Navigazione, Morfini, and Finaval. Following this, Fi.Nav executed a second round of closings with additional credits from these banks, elevating the total to EUR 500 million. This move signifies Pillarstone's deepening involvement in the shipping industry, a journey that started with buying all shares in Premuda and acquiring ships from the insolvency of Rizzo-Bottiglieri-De Carlini Armatori.

The RSCT Fund (Responsible & Sustainable Corporate Turnaround Fund) is another initiative targeting the restructuring and revitalization of Italian firms by managing and valorizing UTP corporate credits. A group of banks allocated a credit portfolio from 14 businesses across various industries such as retail, consumer and industrial goods, manufacturing, IT services & infrastructure, logistics, and leisure to the fund. Notable credits include those towards Pittarosso, a retailer of bags and shoes, and Italtel, a renowned telecommunications firm. More recently, in 2022, the fund took a 70% stake in Scarpe & Scarpe, a footwear retailer, by converting its UTP portfolio debt into equity.

Table 3 summarizes the portfolio and the concluded turnaround operations conducted by Pillarstone.

Portfolio Pillarstone

Table 3: Pllarstone turanround overview

Company	**Sector**	**Investement Year**	**Actual statuts**
Cuki Cofresco s.r.l.	Food preservation products	2015	Exit in 2018
Lediberg S.p.A.	Production of planners and notebook	2015	Exit in 2018. Fusion with Johnson for the creation of Boost
Magicland S.p.A.	Owner of the namesake fun park	2015	Still in portfolio
Manucor S.p.A.	Production of polypropylene films for flexible packaging and labels	2015	Exit in 2019
Burgo Group S.p.A.	Production of graphic papers and specialty papers	2015	Exit in 2020
Premuda S.p.A.	Shipping company	2016	Still in portfolio
Sirti S.p.A.	Cybersecurity and digital services	2016	Still in portfolio
Foi & Vitali Elettrodotti s.r.l.	Operation and maintenance of high-medium-low voltage power lines	2016	Exit in 2022
Rizzo – Bottiglieri – De Carlini Armatori S.p.A.	Maritime transportation	2017	Bankrupt in early 2018
Welcomm Engineering S.p.A.	Cybersecurity	2019	Exit in 2019

2.4 QuattroR SGR S.p.A.

The fund, initially propelled by Cassa depositi e prestiti (Cdp) along with Inail, Inarcassa, and Cassa Forense, aimed to establish a public or semi-public restructuring fund. Incorporated in 2016, it manages a fund of over €700m, right now QuattroR is 60% owned by the vehicle QR Partners srl.

In April 2017, it announced its first closing at €711 million, targeting €1.5 billion, moreover recently, Cdp Equity, a subsidiary of Cdp, exited the venture.

QuattroR's objective is to revitalize and propel growth in Italian companies that have robust market and industrial bases but require financial support for their expansion plans. The firm specializes in providing both capital and strategic management resources to businesses experiencing financial or economic challenges, with a view to fortifying and rejuvenating them. This includes supporting their growth, domestically and internationally, potentially through strategic acquisitions.

Table 4 summarizes the portfolio and the concluded turnround operations conducted by QuattroR.

Portfolio QuattroR SGR:

Table 4: QuattroR turnaround overview

Company	Sector	Investement Year	Actual statuts
Fagioli S.p.A.	High-tech engineering services, transportation and special lifting	2017	Still in portfolio with a 71% share
Gruppo Cerdisa Ricchetti S.p.A.	Manufacturer of ceramic floor and wall tiles	2018	Still in portfolio
Burgo Group S.p.A.	Production and distribution of pulp, cardboard and paperboard for packaging	2020	Still in portfolio
Trussardi S.p.A.	Luxury and fashion	2019	Still in portfolio
Casalasco S.p.A.	Agricultural company	2021	Still in portfolio
MTD s.r.l. (Medical Technology Devices)	Design and manufacture of medical devices	2022	Still in portfolio

2.4 Ibla Capital S.r.l.

Founded in 2015, Ibla Capital is a standalone investment firm focused on Private Equity ventures in small-medium Italian entrprises Italian companies. Its mission is to generate enduring value in its investments through a hands-on and entrepreneurial method. This approach enables Ibla Capital to actively contribute to the management of its portfolio companies, guiding them to achieve their utmost potential. Additionally, Ibla Capital is adept at navigating pivotal business events, including succession planning, corporate turnarounds, and carve-outs.

The firm's investment strategy revolves around acquiring majority interests in manufacturing and service sector companies across diverse markets. It particularly concentrates on industries like mechanics, components, packaging, food, chemicals, pharmaceuticals, medical devices, and cosmetics. The enterprises Ibla Capital targets usually

boast annual revenues between 10 and 50 million EUR. With an investment timeframe of 3-7 years, Ibla Capital is backed by prominent European and American entities, including pension funds, insurance companies, universities, and foundations, either directly or via leading European asset managers. To align its interests with those of its investors, Ibla Capital's management team also personally invests in the funds.

Table 5 summarizes the portfolio and the concluded turnaround operations conducted by Ibla Capital.

Portfolio of Ibla Capital:

Table 5: Ibla Capital turnaorund overivew - Ibla Industries and Ibla Industries II.

Company	**Sector**	**Investement Year**	**Actual statuts**	**Funds**
Natural Way Laboratories s.r.l.	Dietary supplements	2016	Exit in 2021	Ibla Industries
Presotto s.r.l.	Production and marketing of high-quality furniture	2018	Bankrupt in November 2021	Ibla Industries
Assio s.r.l.	Production of furniture	2019	Exit in 2021	Ibla Industries
MAN Oil & Marine s.r.l.	Oil gas & marine hoses	2020	Still in portfolio	Ibla Industries II
Seko Industries s.r.l.	Production of machinery for livestock feeding and ecology	2022	Still in portfolio	Ibla Industries II
Heila Cranes S.p.A.	Marine and specialized cranes	2022	Still in portfolio	Ibla Industries II

Se.Fa. s.r.l.	Production of rubber items for the heat pump industry	2022	Still in portfolio	Ibla Industries II

2.5 Wrm group

Established in 2009, Wrm Group operates as an autonomous investment consortium with a focus on Private Equity, Real Estate, and Special Situations. The Group's objective is to uncover, oversee, and amplify the value of illiquid assets, turnarounds, and distressed scenarios. This is achieved by employing strategies that exploit market asymmetries or the temporary mispricing of assets and involve investments across the target companies' full capital structure.

- **Special Situations**: In this area, value is generated through the negotiation and structuring of complex transactions, particularly for companies in the midst of temporary operational or capital structure crises.
- **Private Equity**: The activities of Wrm Group span leveraged buyouts, growth capital, distressed capital, and mezzanine capital investments. It concentrates on private or publicly traded companies with restricted liquidity or public float, which often share characteristics with private companies. The approach here involves active involvement in company governance and the implementation of business plans. This includes supporting the development of human capital, creating synergies with other companies in the portfolio and with industry stakeholders, and driving international growth.
- **Real Estate**: In this segment, Wrm Group procures and oversees a broad range of upscale residential and commercial real estate across Europe and the United States. The process of value creation encompasses the refurbishment, renovation, conversion, or restoration of existing properties to substantially increase income potential and apply cost-saving measures.

Table 6 summarizes the portfolio and the concluded turnaround operations conducted by Wrm Group.

Portfolio of Wrm Group

Table 6: Wrm turnaround overview

Company	Sector	Investement Year	Actual statuts
Gruppo Kipre S.p.A.	High quality ham market	2020	Exit in 2021
Retelit S.p.A.	Telecommunication	2018	Exit in 2020
Banca Carige S.p.A.	Banking	2018	Exit in 2022
TAS Group S.p.A.	Payment systems, e-money, financial markets and extended enterprise	2016	2020
Auchan Retail Italia S.p.A.	Large-scale retail trade	2019	Still in portfolio

Moreover, in July 2019, Wrm Group purchased the "Progetto Luce," a portfolio of non-performing loans secured by 74 solar plants with a combined capacity of over 85 megawatts, valued at 180 million euros, from Intesa Sanpaolo Group. This was a pioneering transaction in the Italian renewable energy credit market

2.6 Clessidra Capital Credit SGR S.p.A.

Clessidra Capital Credit SGR, operating under the umbrella of Clessidra Holding S.p.A., leads the Clessidra Financial Group. This independent entity is dedicated to alternative investments, asset management, and factoring, providing a broad range of products and services designed for both institutional investors and medium-sized Italian businesses. Its goal is to generate consistent and long-term value for all its stakeholders.

As an autonomous asset management company, the SGR specializes in the private credit market, with a particular emphasis on funds dedicated to corporate credit and turnaround strategies, catering to both distressed and solvent scenarios. The firm establishes itself as a key financial ally for small and medium-sized Italian companies that possess strong industrial bases and are pursuing aggressive growth, reinforcement, and turnaround objectives.

The portfolio of Clessidra Capital Credit is based on two distinct funds:

1. **Clessidra Restructuring Fund**

Initiated in September 2019, the Clessidra Restructuring Fund is a specialized closed-end alternative investment fund. It emphasizes providing industrial expertise, technical skills (especially in strategies for managing business crises), and proficiency in credit and alternative investments. The fund's primary goal is to play an active role in the rejuvenation and value creation for companies facing financial distress, offering support to both entrepreneurs and their management teams. This Fund is uniquely structured with a single compartment, yet it offers various classes of shares:

- Credit Shares: These are acquired by eleven financial institutions, which in return assign their credits from Italian businesses that are currently facing short-term financial challenges but possess robust industrial bases.
- New Finance Shares: Acquired by premier institutional investors, these shares are funded through cash infusions specifically allocated for the restructuring and revitalization of these businesses.

Managing assets exceeding 350 million EUR, the fund achieved an impressive combined turnover of more than 1.2 billion EUR in 2019.

Table 7 summarizes the portfolio and the concluded turnaround operations conducted by Clessidra Restructuring Fund.

Table 7: Clessidra Restructuring Fund overview

Company	**Sector**	**Investement Year**	**Actual statuts**	**Type**
ITALTEL S.p.A.	ICT	2022	Still in portfolio.	Minority stake
Sisma S.p.A.	Personal, Home and Food Care	2020	Still in portfolio	50%
Acque Minerali d'Italia S.p.A.	Mineral water and soft drink	2022	Still in portfolio	Minority stake
OMA S.p.A.	Automotive	2023	Still in portfolio	Minority stake

2. Clessidra Private Debt Fund

Managed by Clessidra Capital Credit, the Clessidra Private Debt fund successfully concluded its first round of financing in March 2022, securing over 130 million EUR. This fund primarily aims to support the growth initiatives of Italian entrepreneurs and managers in the lower-middle market, focusing on the industrial expansion of financially stable companies. With its array of flexible and customized financial solutions, the fund is committed to fostering the sustainable evolution of business practices. It stands out for its industrial acumen, strategic growth expertise, and experience in both credit and alternative investment fields, coupled with the capability to craft financing solutions with adaptable repayment and interest terms. The fund maintains a blend of products that empower the current management and owners to retain control over their operations while incorporating ESG (Environmental, Social, and Governance) principles.

Table 8 summarizes the portfolio and the concluded turnaround operations conducted by Clessidra Private Debt Fund.

Table 7: Clessidra Private debt Fund overview

Company	Sector	Investement Year	Actual statuts	Type
Bracchi S.r.l	Logistic	2023	Still in portfolio	Financing and acquisition on minority stake
Righi Elettroservizi S.p.A	Industrial automation	2023	Still in portfolio	Financing and acquisition on minority stake
Groupack s.r.l.	Meccatronic	2023	Still in portfolio	Financing
Gruppo Florence S.p.A.	Fashion/Luxury	2023	Still in portfolio	Financing
Trime s.r.l.	Lightining	2022	Still in portfolio	Financing
M.G.M S.p.A.	Footwear	2022	Still in portfolio	Financing and acquisition on minority stake
Candy Factory S.p.A.	Food and Beverage	2022	Still in portfolio	Financing and acquisition on minority stake

Continuing to talk about Clessidra it is also important to mention the company Clessidra Private Equity SGR. In particular, the investment strategy of Clessidra Private Equity SGR is to create a diversified portfolio of participations in leading Italian companies in its sector. The investments made by Clessidra are supported by an active and direct involvement by the team of Clessidra itself. However, this type of activity, although linked to the world of private equity, is not strictly related to the world of turnaround for this reason will not be considered in this thesis work.

2.7 Itaca Equity Holding S.p.A.

Launched towards the end of 2020, Itaca Equity is a venture initiated by TIP (Tamburi Investment Partners S.p.A.) along with three partners: Sergio Iasi, Angelo Catapano, and Massimo Lucchini. Designed as a robustly capitalized firm, Itaca Equity is adept at deploying substantial financial resources to tackle complex challenges, with the goal of driving strategic realignment and rejuvenation efforts. The firm primarily operates in "special situations," serving as an advisor, restructuring manager, and equity contributor, but refrains from buying non-performing loans or engaging in transactions related to NPL or UTP.

From a structural standpoint, the company is 60% owned by the trio of partners and 40% by TIP. This company is responsible for delivering investment consulting and advisory services. Concurrently, Itaca Equity Holding S.p.A. operates as the financial arm, using distinct corporate entities, and includes participation from Family Offices, TIP, and Itaca Equity S.r.l.

Itaca Equity Holding, having successfully reached its 600 million EUR fundraising goal, focuses on businesses with a minimum turnover of 100 million EUR, ideally surpassing 200 million EUR. These companies are identified for their significant industrial promise and a need for new equity investments, generally in the ballpark of 30 to 100 million EUR or more. The ideal target companies are characterized by a robust and viable business model, a need for financial leverage readjustment, and a current, yet surmountable, liquidity crunch. Itaca Equity Holding does not limit itself to specific sectors but gives precedence to ventures that lead to mergers or acquisitions, especially in sectors or production clusters where Italy has a competitive edge. The goal is to achieve strategic revival and repositioning of these companies within a span of 2-3 years.

By March 2022, Itaca Equity invested in Landi Renzo, a company specializing in CNG, LNG, LPG and hydrogen fueling components and systems, by subscribing to a capital increase of up to 39.4 million euros. In return, they acquired a minority stake in the holding entities (Girefin and Gireimm) that owns 59,2% of Landi Renzo. This move is part of a broader 60 million euro capital increase by Landi Renzo, with the new controlling group committing up to 50 million.

2.8 Illimity SGR

Launched in 2020, the Illimity Credit & Corporate Turnaround (ICCT) fund, with an initial fundraising target of 350 million EUR and a maximum cap of 600 million EUR, stands as the first of two funds. This fund is focused on investing in UTP credits of SMEs that show promise for operational recovery and growth, spanning a variety of diverse industries. In April 2021, ICCT achieved its initial closing at 200 million EUR, bolstered by credit contributions from seven banking institutions and groups (Banca Popolare di Sondrio, Banca Sella, Banco Desio, Bnl Gruppo Bnp Paribas, BPER Gruppo, Gruppo Bancario Cooperativo Iccrea, Gruppo La Cassa di Ravenna) involving 33 different companies. The fund's initial cash endowment, which included contributions from professional investors and Illimity Bank, was 25 million EUR. By the end of December 2021, the fund's total collection had risen to 280 million EUR, with further closings adding approximately 80 million EUR. This increase was due to both additional contributions from the fund's existing shareholders and the participation of two new banking groups.

As it stands, the fund has now acquired more than 350 million EUR in UTP credits from 11 banking groups, while also securing 30 million EUR from professional investors.

In the table below are summarized the investment related to the ICCT portfolio.

Table 9 summarizes the portfolio and the concluded turnaround operations conducted by Illimity SGR.

Table 9: Illimity SGR turnaround overview

Company	**Sector**	**Investement Year**	**Actual statuts**
Duplomatic Automation S.p.A.	Manufacture of machine tools.	2021	Still in portfolio
Gruppo Schneider S.p.A.	Sourcing and supply of high-quality wool, cashmere,	2022	Still in portfolio
Gruppo Nespoli S.p.A	Production of professional tools for building sector	2022	Still in portfolio
Varvel S.p.A	Power transmission systems for industrial applications	2023	Still in portfolio
Noberasco S.p.A.	Dry Fruit, alimentary	2024	Still in portfolio

The investments of the ICCT fund are diversified by sector, although having a predominance by the industrial sector (about 20%) and are focused in the areas of northeastern Italy, especially Lombardy and Emilia Romagna.

For completeness, it is important to mention also the second fund of Illimity SGR: Illimity Real Estate Credit (Irec). This second fund, launched in 2022, is specifically tailored for investments in distressed credits, primarily UTP, secured by real estate assets, including both mortgage credits and leasing contracts. Initially, the portfolio comprised credits with a total gross amount of over 170 million EUR, almost fully secured, directed towards 77 companies predominantly active in the diversified real estate sector (industrial, commercial, residential, energy, etc.). These credits were transferred by banking groups already participating in Illimity SGR's first fund, as well as by Illimity Bank itself. Following a new closing at the end of January 2023, the fund received additional credits worth approximately 95 million EUR in nominal value, elevating the total funds raised to about 270 million EUR.

2.9 Phi Industrial

Founded in 2006, with its headquarters in Madrid, PHI Industrial Acquisitions is a private equity company specializing in industrial sector investments. The company adopts an entrepreneurial approach, focusing on the acquisition and development of industrial and service-oriented businesses. PHI Industrial is committed to a proactive and dynamic strategy to create long-term strategic value, with the goal of enhancing the brands and operations of the companies within its portfolio. PHI Industrial targets companies undergoing:

- Technological transitions that require significant investment to maintain market competitiveness.
- Organizational structural shifts.
- Leadership succession situations, necessitating the appointment of new management.
- Financial challenges that call for financial restructuring to restore profitability.
- Corporate spin-offs, including company divestitures and carve-outs.

The prospective companies for investment generally have a revenue range between 20 and 250 million EUR. Although PHI Industrial is open to a variety of sectors, it deliberately avoids the financial and real estate sectors. The firm predominantly focuses on European enterprises and invests primarily by acquiring majority shares.

Table 10 summarizes the portfolio and the concluded turnaround operations conducted by Phi Industrial.

Portfoglio of Phi Industrial

Table 10: Phi Industrail turnaround overview

Company	**Sector**	**Investement Year**	**Actual statuts**
Boglioli S.p.A.	Clothing	2017	Still in Portfolio
Brevi Milano S.p.A.	Baby items	2018	Declared bankruptcy in December 2021
Mascioni S.p.A.	Textile	2015	Still in Portfolio

2.10 Azimut Capital Management SGR S.p.A.

Azimut Holding S.p.A. stands as Italy's premier independent asset management firm, with expertise in Asset Management, Wealth Management, Investment Banking, and Fintech. This group, which is listed on the Milan Stock Exchange, leads the market in Italy and extends its operations across 18 countries worldwide, particularly focusing on emerging markets. Azimut Holding caters to the needs of both individual and corporate clients, aiming to generate investor value and support growth through various equity and debt instruments.

The holding includes several subsidiaries engaged in selling, managing, and distributing financial and insurance products. Azimut Capital Management SGR, operating within Italy, is responsible for selling and managing Italian mutual and alternative investment funds, in addition to the discretionary management of individual investment portfolios. This entity also distributes products from both Azimut Group and other parties throughout Italy via a financial advisory network. Meanwhile, Azimut Libera Impresa concentrates on alternative investments. On the international front, Azimut Investments SA, established in Luxembourg in 1999, manages the AZ Fund 1 and AZ Multi Asset multi-strategy funds. Additionally, Azimut Life DAC in Ireland specializes in life insurance offerings. Regarding their assets under management, 55.9% are based in Italy, while 27.3% are from investments in the American market.

Azimut has launched and/or manages a variety of public and private funds. The public funds provide investment solutions in publicly traded markets, while the private ones focus on investments in regulated but unlisted markets. Among these funds, designed to assist companies facing financial distress, is the AZIMUT ELTIF - Private Debt Capital Solutions. This particular fund, among all offered by Azimut, is most closely aligned with the topics discussed in this thesis.

Azimut Investments S.A. functions as the managing entity for AZIMUT ELTIF, an alternative investment fund inaugurated in February 2020. As per ELTIF [4](European Long Term Investment Funds) Regulations, it is recognized as a European long-term investment fund. The

[4] ELTIF is a new type of collective investment framework allowing investors to put money into companies and projects that need long-term capital. It is aimed at investment fund managers who want to offer long-term investment opportunities to institutional and private investors across Europe, e.g. in infrastructure projects. Source : https://ec.europa.eu/commission/presscorner/detail/en/MEMO_15_4423

Fund is structured to include multiple compartments, each representing a unique segment of the Fund's assets and liabilities, with varying investment characteristics and policies.

Within this structure, "AZIMUT ELTIF - Private Debt Capital Solutions Fund" is a specific compartment focused on Rescue Finance strategies. Its objective is to assist well-established SMEs that are operationally sound yet encountering temporary challenges. These businesses are in need of short- to medium-term financial backing and assistance in their recuperation efforts. The compartment targets companies with a turnover ranging from 30 to 200 million EUR, particularly favoring industries such as food, retail, transport, media, ICT, telecommunications, distribution, healthcare, plastics and rubber, manufacturing, construction, and real estate. This compartment primarily invests in firms that are based, legally registered, or conduct a substantial part of their operations within the European Economic Area, representing 30% of the gathered capital, while primarily concentrating on Italy, which accounts for 70% of the capital. Portfolio management responsibilities for this compartment have been entrusted to Muzinich & Co. SGR S.p.A., an Italian firm serving as the Investment Manager of the Compartment under an investment management contract.

Table 11 summarizes the portfolio and the concluded turnaround operations conducted by Azimut.

Portfolio and Investment made by AZIMUT ELTIF - Private Debt Capital Solutions Fund

Table 11: Azimut turanround overview (Azimut ELTIF)

Company	Sector	Investement Year	Actual statuts
Dopla s.r.l.	Production of tableware, plastic cups and disposable food containers	2023	Still in Portfolio
Canepa S.p.A.	Fabric production and sales	2021	Still in Portfolio
AVR S.p.A	Management and maintenance of roads and greenery.	2023	Injection of finance resources (private Dept operation). No shares were bought
Costa Edutainment S.p.A.	Management of public and private facilities dedicated to educational entertainment activities	2022	Emission of convertible bond (private debt operation). No shares were bought
Synergas s.r.l.	Maritime transportation	2022	Injection of finance resources (private Dept operation). No shares were bought

2.11 J.P. Morgan Global Alternatives

J.P. Morgan Asset Management, the asset management arm of J.P. Morgan Chase & Co, stands as a global leader in financial services. The company boasts a significant global presence with over 240,000 employees, specializing in areas such as investment banking, financial services for consumers and small businesses, commercial banking, financial transaction processing, and wealth management.

A key segment of JP Morgan Asset Management, JP Morgan Global Alternatives, focuses on a diverse range of alternative investment strategies. This division is renowned for its offerings in real estate, private equity, private credit, hedge funds, tangible assets, and liquid alternative investments. With operations spanning the Americas, Europe, and Asia Pacific, the division leverages J.P. Morgan's specialized expertise, vast resources, and robust infrastructure to fulfill the individual goals of each client.

One notable initiative by J.P. Morgan is the Lynstone Special Situations Fund II, established to support companies facing temporary financial difficulties. This fund, which invests in stressed, distressed, and event-driven scenarios across private and public markets in Europe and North America, focuses on capital structures of assets that may be undervalued due to market illiquidity or disturbances. An event or catalyst in these situations can drive a substantial positive total return. Surpassing its initial 2 billion USD target and reaching 2.4 billion USD, Lynstone Fund II is an integral part of J.P. Morgan Asset Management’s Global Special Situations (GSS) team, managing a portfolio of 3.5 billion USD. The GSS team operates under JP Morgan Global Alternatives, a 218 billion USD platform that encompasses a wide range of sectors including real estate, infrastructure, transportation, hedge funds, private equity, private credit, and liquid alternatives.

Table 12 summarizes the portfolio and the concluded turnaround operations conducted by Lynstone Special Situations Fund II (JP morgan).

Portfolio and Investment made by Lynstone Special Situations Fund II

Table 12: Lynstone Special Situations Fund II turnaround overview

Company	Sector	Investement Year	Actual statuts
Pernigotti S.p.A.	Choccolate and sweetie production	2022	Still in Portfolio
Walcor S.p.A.	Choccolate and sweetie production	2022	Still in Portfolio

2.12 Equor Capital Partner

The SGR (Società di Gestione del Risparmio) is 50% owned by Rigamonti, with Fregnan and Diana each holding a 25% stake. This private equity fund concentrates on equity injections into underperforming companies, aiming to make their business models sustainable through financial restructuring and turnaround operations. It targets Italian companies with a turnover exceeding 50 million euros, or those belonging to groups with a turnover greater than 50 million euros. Currently, the fund is in the fundraising phase for EQUOR I.

Although EQUOR I is not yet operating directly in the sector, it was deemed relevant to mention it so as to highlight that this sector (turnaround) is a sizzling and active one in Italy.

3. Research questions

In Italy's rapidly changing business landscape from 2016 to 2023, many companies have found the need to implement effective turnaround strategies. The period analysed is characterized by economic fluctuations and significant market changes, including the impact of the COVID-19 pandemic, which tested the resilience and adaptability of companies.

This thesis aims to analyze in detail a sample of companies that underwent a turnaround in the period between 2016 and 2022, focusing in particular on the impact that certain factors had in determining the changes in the equity of the companies analysed.

The objective of the following research is to identify the existence of variables (drivers) that are statistically significant in determining the change in equity of a company that has undergone a turnaround process. On the other hand, the second objective will be to determine the existence (or not) of patterns related to the turnaround strategies adopted by different turnaround actors.

Therefore, the following research questions will guide the following dissertation work:

1. **Are there any statistically reliable drivers that can explain a change in the value of equity in companies that have entered a turnaround process? If so, what are they and what is their impact?**
    - **1.1. If there were any drivers that were considered significant in explaining changes in equity, what was their average change relative to the sample of companies analyzed?**
2. **Are there specific strategic patterns (modus operandi) associated with certain turnaround players? Are there turnaround players who have focused their activities on only one of the three macro areas identified above (operational turnaround, asset turnaround and financial turnaround)?**

4. Methodology

4.1 Data collection

The sample used in this study, as well as the data tested in this study, are constructed through the financial database Aida, a database provided by Bureau Van Dijk that allows the search, study and export of economic-financial, master and business data of all companies operating in Italy. The following paragraphs explain the process by which the dataset was created.

Starting from the portfolio of the turnaround player operating in Italy presented in paragraph 2.8 of this thesis, the first raw dataset is extracted, consisting of 63 companies (Table 13), of which only 42 (Table 14) are analysed, because companies that enter the portfolio of the turnaround player after 2021 are not considered, due to the fact that the turnaround process is still at the beginning and an analysis based only on the 2022 results would be too approximate. Furthermore, of the 42 companies that made up our initial dataset, only 35 were analysed and included in the model because the other 7 didn't have official financial reporting in the Aida dataset and therefore could not be included.

From the starting raw data table (Table 13), that counts 64 companies, 21 were not considered because they are too new to asses. These 21 companies are identified in Table 13 by the attribute "Enough Time" equal to "No" and listed in Table 14 . These companies entered the portfolio of a turnaround player after 2021 and so it was not possible to compare the status before the turnaround and after, since for this thesis we only used balance data updated till year 2022 (Table 14).

Starting from the narrowed database of 43 companies the following one have been removed, mainly due to the fact that was not possible to find the financiale reporting for these companies. Here is the list of the companies not considered in this research due to the fact that it was not possible to analyze the financial statement:

- Stefanel S.p.A
- Auchan Retail Italia S.p.A.
- Rizzo e bottiglieri Armatori S.p.A
- Presotto Industrie Mobili S.p.A

- Banca Carige S.p.A

Moreover, also Casalasco has not been considered in the analysis. This is due to the fact that Casalasco turns out to be a real outliers. Casalasco has seen an increase of 2300% in the gross margin over the period analysed. A closer analysis of the situation of Casalasco reveals an inconsistency in the comparative analysis between 2022 and 2021, due to the fact that 2022 is the first year of operation of Casalasco Società Agricola S.p.A. During 2021, Casalasco has not been able to develop its operating income, and for this reason the delta between 2021 and 2022 is exaggerated, especially in percentage terms.

For all these limitations the dataset turns out to be reduced to only 35 companies, as illustrated in Table 15.

Table 13: Raw Dataset

Company Name	**Holding**	**Years**	**Enough time**
Cartiere Paolo Pigna S.p.A.	DeA Capital	2016-2019	Yes
Targetti S.p.A.	DeA Capital	2016 - 2017	Yes
Sinterama S.p.A.	DeA Capital		Yes
Util Industries S.p.A.	DeA Capital	2016-2019	Yes
Snaidero Rino S.p.A	DeA Capital	2017- Still in portfolio	Yes
Calvi Holding S.p.A	DeA Capital	2017- Still in portfolio	Yes
Pieralisi Maip S.p.A.	DeA Capital	2017- Still in portfolio	Yes
Ferroli S.p.A.	Oxy Capital	2016- Still in portfolio	Yes
Olio Dante S.p.A.	Oxy Capital	2016- Still in portfolio	Yes
Stefanel S.p.A.	Oxy Capital	2017 -2019	No balance data on Aida after 2017
Gpack S.p.A.	Oxy Capital	2021 – Still in portfolio	Yes
Manuli Stretch S.p.A.	Oxy Capital	2018 – Still in portfolio	Yes
Burgo Group S.p.A.	Pillarstone	2015 - 2020	Yes

Magicland S.p.A.	Pillarstone	2015 – Still in portfolio	Yes
Manucor S.p.A.	Pillarstone	2015-2019	Yes
Premuda S.p.A.	Pillarstone	2017-Still in portfolio	Yes
Sirti S.p.A.	Pillarstone	2016- Still in portfolio	Yes
Rizzo e bottiglieri Armatori S.p.A.	Pillarstone	2017 – Bankrupt in 2018	No balance data available on Aida
Welcomm Engineering S.p.A.	Pillarstone	2019	Exit in 2019
Fagioli S.p.A.	QuattroR	2017 – Still in portfolio	Yes
Gruppo Cerdisa Ricchetti S.p.A.	QuattroR	2018 – Still in portfolio	Yes
Burgo Group S.p.A.	QuattroR	2020 – Still in portfolio	Yes
Trussardi S.p.A.	QuattroR	2019 – Still in portfolio	Yes
Casalasco S.p.A.	QuattroR	2021 – Still in portfolio	No
MTD s.r.l.(Medical Technology Devices)	QuattroR	2022 – Still in portfolio	No
Natural Way Laboratories s.r.l.	Ibla Industries	2016 -2021	Yes
Presotto Industrie Mobili s.r.l.	Ibla Industries	2018 – Bankrupt 2021	No balance data available on Aida
Assio s.r.l.	Ibla Industries	2019 - 2021	Yes
MAN Oil & Marine s.r.l.	Ibla Industries II	2020 – Still in portfolio	Yes
Seko Industries s.r.l.	Ibla Industries II	2022 – Still In portfolio	No

Heila Cranes S.p.A.	Ibla Industries II	2022 – Still in porfolio	No
Se.Fa. s.r.l.	Ibla Industries II	2022 – Still in portfolio	No
Gruppo Kipre S.p.A.	Wrm Group	2020 – 2021	Yes
Retelit S.p.A.	Wrm Group	2018 – 2020	Yes
Banca Carige S.p.A.	Wrm Group	2018 - 2022	No balance data available on Aida
TAS Group S.p.A.	Wrm Group	2016 - 2020	Yes
Auchan Retail Italia S.p.A.	Wrm Group	2019 – Still in portfolio	No balance data available on Aida
Boglioli S.p.A.	Phi Industrial	2017 – Still in portfolio	Yes
Brevi Milano S.p.A.	Phi Industrial	2018 – 2021	Yes
Mascioni S.p.A.	Phi Industrial	2015 – still in portfolio	Yes
Dopla S.r.l	Azimut	2023	No
Canepa S.p.A.	Azimut	2021	Yes
AVR S.p.A	Azimut	2023	No
Costa Edutainment S.p.A.	Azimut	2022	No
Synergas s.r.l.	Azimut	2022	No
Pernigotti S.p.A.	JP Morgan	2022	No
Walcor S.p.A.	JP Morgan	2022	No
ABM Italia S.p.A.	Clessidra	2015 - 2017	Yes
Roberto Cavalli S.p.A.	Clessidra	2015 - 2019	Yes
Scrigno S.p.A.	Clessidra	2018 - 2021	Yes
L&S Lighting Intelligence S.p.A.	Clessidra	2019 – Still in portfolio	Yes

Everton S.p.A.	Clessidra	2023	No
Impresoft Group S.p.A.	Clessidra	2022	No
Viabizzuno S.p.A	Clessidra	2022	No
Landi Renzo S.p.A.	Itaca Equity Holding	2022	No
Bracchi s.r.l	Clessidra	2023	No
Righi Elettroservizi S.p.A.	Clessidra	2023	No
Groupack Holding S.p.A.	Clessidra	2023	No
Gruppo Florence S.p.A.	Clessidra	2023	No
Trime s.r.l.	Clessidra	2022	No
M.G.M S.p.A.	Clessidra	2022	No
Candy Factory S.p.A.	Clessidra	2022	No

Table 14: List of companies that entered in the portfolio of turnaround player after 2021 (too new to asses)

Company Name	**Holding**	**Investment year**
Everton S.p.A.	Clessidra	2023
Impresoft Group	Clessidra	2022
Viabizzuno S.p.A.	Clessidra	2022
Landi Renzo	Itaca Equity Holding	2022
Bracchi S.r.l	Clessidra	2023
Righi Elettroservizi S.p.A	Clessidra	2023
Groupack Holding S.p.A.	Clessidra	2023

Gruppo Florence S.p.A.	Clessidra	2023
Trime s.r.l.	Clessidra	2022
M.G.M S.p.A.	Clessidra	2022
Candy Factory S.p.A.	Clessidra	2022
MTD s.r.l	QuattroR	2022
Seko Industries s.r.l.	Ibla Industries II	2022
Heila Cranes S.p.A.	Ibla Industries II	2022
Se.Fa. s.r.l.	Ibla Industries II	2022
AVR S.p.A	Azimut	2023
Costa Edutainment S.p.A.	Azimut	2022
Synergas s.r.l.	Azimut	2022
Pernigotti S.p.A.	JP Morgan	2022
Walcor S.p.A.	JP Morgan	2022
Dopla S.r.l	Azimut	2023

Table 15: Final dataset with only the companies considered in the analysis

Company Name	**Holding**	**Years**
Cartiere Paolo Pigna S.p.A.	DeA Capital	2016 - 2019
Targetti S.p.A.	DeA Capital	2016 - 2017
Sinterama S.p.A.	DeA Capital	2016 - 2019
Util Industries S.p.A.	DeA Capital	2016 - 2019
Snaidero Rino S.p.A	DeA Capital	2016 – still in portfolio
Calvi Holding S.p.A	DeA Capital	2017 – still in portfolio
Pieralisi Maip S.p.A.	DeA Capital	2017 – still in portfolio
Ferroli S.p.A.	Oxy Capital	2016 - Still in portfolio
Olio Dante S.p.A.	Oxy Capital	2016 - Still in portfolio

Gpack S.p.A.	Oxy Capital	2021 – Still in portfolio
Manuli Stretch S.p.A.	Oxy Capital	2018 – Still in portfolio
Burgo Group S.p.A.	Pillarstone	2015 - 2020
Magicland S.p.A.	Pillarstone	2015 – Still in portfolio
Manucor S.p.A.	Pillarstone	2015-2019
Premuda S.p.A.	Pillarstone	2017-Still in portfolio
Sirti S.p.A.	Pillarstone	2016- Still in portfolio
Welcomm Engineering S.p.A.	Pillarstone	2019
Fagioli S.p.A.	QuattroR	2017 – Still in portfolio
Gruppo Cerdisa ricchetti S.p.A.	QuattroR	2018 – Still in portfolio
Burgo Group S.p.A.	QuattroR	2020 – Still in portfolio
Trussardi S.p.A.	QuattroR	2019 – Still in portfolio
Casalasco S.p.A.	QuattroR	2021 – Still in portfolio
Natural Way Laboratories s.r.l.	Ibla Industries	2016 -2021
Assio s.r.l.	Ibla Industries	2019 - 2021
MAN Oil & Marine s.r.l.	Ibla Industries II	2020 – Still in portfolio
Gruppo Kipre S.p.A.	Wrm Group	2020 – 2021
Retelit S.p.A.	Wrm Group	2018 – 2020
TAS Group S.p.A.	Wrm Group	2016 - 2020
Boglioli S.p.A.	Phi Industrial	2017 – Still in portfolio
Brevi Milano S.p.A.	Phi Industrial	2018 – 2021
Mascioni S.p.A.	Phi Industrial	2015 – still in portfolio
Canepa S.p.A.	Muzinich and Dea Capital	2017 – Still in portfolio
ABM Italia S.p.A.	Clessidra	2015 - 2017

Roberto Cavalli S.p.A.	Clessidra	2015 - 2019
Scrigno S.p.A.	Clessidra	2018 - 2021
L&S Lighting Intelligence S.p.A.	Clessidra	2019 – Still in portfolio

4.2 Turnaround drivers

Before presenting the model used to answer the first research question, it is essential to present the variables that will be used in the model itself. In this section, the latter will be listed, highlighting both the reasons that led to their selection as explanatory drivers of the turnaround process and the expected evolution (assumptions) that they will have in the model. These assumptions are based on the author's personal view of this work and are derived from the analysis and study of the literature presented in the first part of this work.

The variables that will be presented in this section are those that will construct the model of linear regression that will allow us to answer the first of the research questions. These variables will also be broken down to define the "bucket" of the turnaround stategy to which they refer.

4.2.1 Equity

The change in equity is used in the research model as the dependent variable of the linear regression model.

But how can we define equity? Equity value is the total value of a company attributable to shareholders.

This variable has been chosen as the most explanatory variable to explain the benefits of a turnaround carried out by an actor.

This choice stems from the fact that one of the typical solutions of a turnaround player at the end of the process of recovery and reorganization of a company is to sell the same company and to profit from this operation.

In the private equity world, one of the methods used to value a company is the multiplier mom (money on money), which is a critical measure of return in the private equity (PE) industry. As you can see from the formula, unlike the IRR, the mom does not depend on the time elapsed, but only on the value.

$$MoM = \frac{Return\ at\ Exit\ (Equity)}{Capital\ invested\ at\ the\ acquisition}$$

In this thesis, it was decided to explain the delta between "capital invested at acquisition" and "return at exit" as the change in equity during the turnaround period. So the higher is the delta of Equity, the higher it'll be the MoM.

In addition, the value of the company, "enterprise value", is inextricably linked to the value of equity. Enterprise value is the total value of the company's assets (excluding cash).

$$Enterprise\ Value = Equity\ Value + Net\ Debt$$

Since this thesis is based on turnaround transactions, which turn out to be a category of private equity transactions, it has been decided to use the sole value of equity as an explanatory variable and the variations in net debt as an independent variable, as we will see later. In practice, in this model, the value of "enterprise value" has been decomposed to analyse in more detail the two components that make it up, thus giving importance to the capital structure of the same company.

When analyzing the evolution of the equity value during the turnaround period, the presence of any dividends is also taken into account, so that the equity value considered is that of Equity Adj (Equity Adj = Equity + Dividend). However, as we will see later in the analysis section, dividends will often be absent due to the difficult economic situation of companies.

4.2.1 EBITDA

EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortisation) measures the operating profitability of a company. EBITDA is used to track and compare the underlying profitability of companies, regardless of their depreciation assumptions or financing choices.

EBITDA has become increasingly important over the years, particularly in the PE world, not only because it is a proxy for analysing a company's operating profitability, but also because it is probably the most widely used valuation model. EBITDA multiples are one of the most commonly used business valuation indicators, often used by investors or potential buyers to assess a company's financial performance.

Annual tables showing EV/EBIDTA values are produced by major academics (e.g. Damadaoran) and rating agencies, broken down by sector. This means that the value of EBITDA is equal to the enterprise value at less than a parameter (multiple) and therefore, increasing the value of EBITDA, assuming that the coefficient EV/EBITDA remains constant in the short term, will lead to a direct increase in the enterprise value, thus allowing the turnaround player to create value thanks to its operation.

EBITDA will be used in this work as a driver to determine the presence or not of an Operational Restructuring, the latter, as stated in paragraph 1.7.1 of this thesis work, also has a positive impact on the value of the Z-Altman Score.

Assumption: EBITDA and Equity changes will be positively correlated

4.2.2 Operating Cycle

This driver makes it possible to analyse the operational efficiency of a company in the management of its working capital, i.e. the company's liquidity management. First of all, it is necessary to explain how this indicator is calculated:

Operating Cycle = DOI + DSO – DPO

- Days of inventory: $DOI = \frac{Inventory}{Raw\ materials} \cdot 365$

  This variable measures how many days does it take my stock to get sold, on average

- Days sales outstanding: $DSO = \frac{Receivables}{Net\ sales} \cdot 365$

  This variable measures how many days does it take to my clients to pay me, on average
- Days payables outstanding: $DPO = \frac{Payables}{COGS} \cdot 365$

  This variable measures how many days does it take me to pay my suppliers, on average

If this value (DOI + DSO – DPO) is less than zero, it implies that the company generates cash, which is typical of retail companies such as supermarkets. Conversely, if this value is greater than zero, it implies that the company absorbs cash, which in more severe cases can lead to a cash outflow (an example being B2B companies). An improvement (so a reduction) in this parameter indicates that the company has become more adept at managing liquidity. By reducing the operating cycle, the need for the company to absorb cash decreases, thereby reducing its need to "burn" liquidity to finance its operations. An improvement in this variable implies the presence of an operational turnaround.

Moreover it is recognized by several studies the positive impact of working capital optimization on turnaround process: as Barker and Duhaime (1997) found, optimizing accounts receivables and inventories (two of the three variables of Operating Cycle) positively correlates with improvements in the Altman Z"-score, a sentiment echoed by O'Neill (1986). Robbins and Pearce (1992) also highlight the critical role of working capital optimization in successful turnarounds.

Assumption: Operating Cycle and Equity will be negatively correlated

4.2.3 Gross Margin

Gross margin, the difference between a company's sales and its cost of goods sold (COGS), expressed as a percentage of sales. In essence, it shows the profitability of a company's core operations before taking into account operating expenses. A higher gross margin indicates that a company is effectively managing its production or service delivery costs, thereby generating more profit from each unit sold.

A significant increase in gross margin indicates that a company is effectively addressing operational inefficiencies and optimising the use of its resources. This improvement could result from various initiatives, such as renegotiating supplier contracts to

reduce input costs, improving production processes to reduce waste, or implementing pricing strategies that capture more value from customers. A robust gross margin is not only a sign of operational strength, but also a competitive advantage in the marketplace. Companies with superior gross margins can withstand pricing pressures, outmanoeuvre competitors and drive sustainable shareholder value. Consequently, a significant improvement in gross margin signals to investors and stakeholders that the company is executing a sound turnaround strategy and positioning itself for long-term success. Moreover, as stated in paragraph 1.7.1 Gross margin has been considered by several study as a key index of the presence of operational turnaround.

Assumption: Gross Margin and Equity changes will be positively correlated

4.2.4 Non-current assets

By analysing these three variables (intangible fixed assets, tangible fixed assets, financial fixed assets), the aim is to monitor the implementation of an asset reduction policy, which indicates whether the company in question has chosen to reduce its assets with the ultimate aim of focusing on its core business and neglecting unprofitable secondary activities. The presence of decreasing trends in these variables suggests the adoption of asset reduction strategies typical of the early stages of a turnaround, according to the Pearce and Robbins model. The strategic importance of asset restructuring is further underlined by its dual focus: the reduction of financial fixed assets and intangible fixed assets. These approaches are essential for the survival and turnaround of distressed firms, as evidenced by research by O'Neill (1986), Gibbs (1993) and Hofer (1980).

As noted in several studies, changes in fixed assets are considered to be strong indicators of the likelihood of a successful turnaround (Moulton & Thomas, 1993). Sudarsanam and Lai (2001), along with Koh et al. (2015) and Atanassov and Kim (2009), argue that asset reduction is key to successful restructuring.

However, as shown by Pearce and Robbins' dual model, the increase in the asset side of the balance sheet can also be associated with the shift from pure downsizing to the recovery phase of the turnaround, which is characterised by: investment to enter a new market segment, mergers and acquisitions..

Assumption: Non-current assets and Equity changes will be negatively correlated

4.2.5 Cost of Personnel

In line with the literature, strategies to reduce personnel costs are closely linked to the firm's downsizing phase. This phase is accompanied by a narrowing of the company's field of activity and a focus on core activities. This type of strategy is considered by many researchers to be an almost obligatory step in determining the presence or absence of an operational turnaround of a company. As reported by several study, a notable strategy for operational restructuring is the reduction of the workforce in order to improve employee earnings and reduce costs, as discussed by Taplin and Winterton (1995). Various studies, such as those by Folger & Skarlicki (1998), Budros (1999) and Norman et al. (2013), confirm that layoffs are a primary method of cost reduction, leading to immediate financial relief.

However, it is good to pay attention to this approach, as it could lead to results opposite to those expected. In fact, as confirmed by the work of (John et al., 1992; Freeman & Cameron, 1993; Chowdhury & Lang, 1996), an excessive use of redundancies can lead to demotivation and a reduction in commitment to the company, thus creating a bad reputation for it.

Since, as mentioned above, redundancies are often accompanied by a reduction in the company's turnover and a reduction in the diversity of its product range, the impact of staff costs on turnover is considered. The aim of this parameter is to monitor the company's ability to generate revenue in relation to staff costs.

Assumption: Cost of Personnel and Equity changes will be negatively correlated

4.2.6 Debt/Equity

The debt-to-equity ratio is a basic measure of a company's leverage, quantifying the ratio of debt financing to equity financing. It is calculated by dividing total liabilities (including both short-term and long-term debt) by shareholders' equity. A high D/E ratio indicates a higher degree of financial leverage, suggesting that a company is relying more heavily on debt to finance its operations and growth initiatives.

During periods of financial distress or underperformance, companies often struggle with burdensome debt burdens that restrict liquidity, increase interest expense and increase financial risk. By reducing the D/E ratio, companies can improve their financial stability and resilience to external shocks. A lower D/E ratio implies a healthier balance between debt and equity financing, which reduces the risk of default and improves the company's ability to meet its debt obligations even in difficult economic conditions. According to the literature, two distinct categories can be identified: equity-based strategies and debt-based strategies. The former, as noted by DeAngelo and DeAngelo (1990) and John et al. (1992), often involves large firms in financial distress taking measures such as significant dividend cuts and equity issues. Debt-based strategies, on the other hand, are characterized by both preventive and reactive measures.

Wruck (1990) suggests that while a reduction in leverage may help to avoid financial distress, it may not directly contribute to an increase in firm value. However, this perspective is complemented by studies such as Opler & Titman (1994) and Zingales (1998), which link leverage reduction to improved performance.

Assumption: D/E and Equity changes will be negatively correlated

4.2.7 Net Debt and Net Debt/EBITDA

As described in the introduction to this chapter, point 4.2.1, in order to determine the increase in the value of the company, it is necessary to monitor not only the increase in equity, but also the evolution of net debt, in order to see whether there is an increase in the value of the company or whether it is due to an increase in debt.

Consequently, in this argument based on a branch of private equity, the main focus has been on equity, which has been chosen as the explanatory variable of the model, but it is also important to analyse the ratio of net debt to equity.

Net debt differs from traditional debt in that traditional debt has been taken out of available liquidity. A reduction in net debt can therefore be linked to two variables: increased liquidity and debt reduction. This driver falls into the category of drivers used in financial restructuring strategies as mentioned by John (1993), this form of restructuring can be divided into two categories: debt restructuring and liquidity improvement.

The net debt to EBITDA ratio assesses the financial situation and measures the leverage of a company by comparing its net debt to EBITDA. A reduction in the ratio of net debt to EBITDA indicates a company's increasing ability to repay debt and thus greater stability.

Assumption: Both Net Debt and Net Debt/ EBITDA will be positively correlated to Equity changes

4.3 Regression Model

A multiple linear regression model has been used to analyze the impact of each of the aforementioned drivers on the chosen explanatory variable (equity).

Multiple regression is a statistical technique that can be used to analyze the relationship between a single dependent variable and several independent variables. The purpose of multiple regression analysis is to use the independent variables, whose values are known, to predict the value of each dependent value. Each predicted value is weighted, with the weights indicating its relative contribution to the overall prediction. The classic model of multiple regression analysis is the following:

$$\boldsymbol{Y = a + b_1 X_1 + b_2 X_2 + \cdots + b_n X_n}$$

Where Y is the so-called dependent variable (equity in the model used in this thesis) and $X_1$to X_n are the independent variables used to explain the dependent variable. The dependent variables in the following model are

- X_1 = EBITDA
- X_2 = Gross Margin
- X_3 = Cost Of Personnel
- X_4 = Non current Assets
- X_5 = Debt-to-Equity ratio
- X_6 = Net Debt-to-EBITDA ratio
- X_7 = Net Debt
- X_8 = Operating Cycle

The coefficient *a* of the regression model is called the intercept, it is a constant value and it determines the intercept with the y-axis. In the model used in this thesis to determine the relationship between the drivers and the dependent variable equity, it was assumed that the value of *a* was equal to 0. The value of the drivers, as well as the value of the dependent variable, was calculated as the delta between the year before the start of the turnaround process and the last year of the turnaround (or 2022 if the turnaround was still ongoing).
The confidence interval used in the model is 95% (α = 5%).

4.4 Number Count

The second type of analysis carried out, wants to analyze the individual behavior of the single driver analyzed for the sample of 36 companies that entered the portfolio of turnaround players in the period under analysis. The analysis is conducted on individual drivers to identify for each driver:

- The delta mean value between years before the start of the turnaround and the last available year;
- The aggregate of this delta in order to determine what was the impact in aggregate of turnaround transactions in the Italian market (how much Equity was "created", how much value was created);
- What was the percentage improvement rate (by improvement is meant in accordance with assumptions) on the individual driver?

Moreover, always in this part has been conducted an analysis aggregating the results for turnaround players to verify the presence of particular strategic trends adopted by some players, this latter analysis aims to understand if turnaround players can be divided into different groups according to differently strategic behavior adopted.

5. Analysis and results

5.1 Regression Output

In this chapter, the data resulting from the analysis based on the drivers highlighted in Section 4 and the sample of companies analysed outlined in Chapter 3 of this thesis are collected. Through an examination of the obtained results, this section aims to identify trends and insights that will help address the research questions guiding this study.

The model used to guide this work is, as mentioned before, a multiple regression model based on 8 drivers (independent variables) across 35 different Italian companies in the Italian market in the period in scope. The drivers are the ones illustrated and described in chapter 4 and the company analyzed are the ones listed in Table 15. It is important to remember that the dataset is reduced to a lower number of companies because from the initial database, it has been removed the companies that began the turnaround after 2021 and companies for which it was not possible to find the financial data on AIDA.

In the table below are listed all the companies that have been considered in this analysis, listed in alphabetic order. For each of the companies listed in the table, the delta of the driver has been provided. The delta is computed as a difference between the last year of the turnaround (if the turnaround has not yet ended, balance data of 2022 have been used) and the year before the turnaround begins. This choice has been made to highlight the change caused by the turnaround strategies.

The raw data used are highlighted in the figure below (Figure 6):

PLAYER	SOCIETY	PERIOD	EBITDA	GROSS MARGIN	COST OF PERSONNEL	NON CURRENT ASSETS	D/E	NET DEBT/EBITDA	NET DEBT	CYCLE	EQUITY
Clessidra	ABM italia S.p.A.	2014 - 2017	51.075	2%	0%	-4.879.070	1	-178	11.527	3	-62.836
Clessidra	Argea s.r.l.	2020 - Still in portfolio	8.446.546	0%	0%	2.603.471	0	-2	-34.220.430	-41	4.649.326
Ibla Capital	Assio s.r.l.	20218 - 2021	-58.390	5%	6%	314.382	1	6	485.825	0	-67.804
Phi Industrial	Boglioli S.p.A.	2016 - Still in portfolio	9.299.122	-4%	2%	-2.071.059	-1	-55	-8.864.492	19	-798.395
Phi Industrial	Brevi S.p.A.	2017 - 2021	-3.021.896	-25%	7%	-206.836	-0,11	77	616.898	-133	-7.544.438
Pillarstone & QuattroR	Burgo Group S.p.A.	2014 - 2020 Pillarstone from 2020 QuattroR	-16.581.000	6%	5%	-150.857.000	-10	-5	-669.931.000	-9	206.197.000
Dea Capital	Calvi Holding S.p.A.	2016 - Still in portfolio	-10.082.496	-5%	-4%	-75.913.679	-40	-7	-184.108.727	18	55.206.319
Muzinich and Dea Capital	Canepa S.p.A.	2017 - 2019 Dea Capital from 2021 Muzinich	-2.602.435	-17%	28%	-21.365.571	2	24	-35.942.969	78	-20.848.651
QuattroR SGR	Cerdisa Ricchetti S.p.A.	2017 - Still in portfolio	10.840.000	-3%	-4%	-45.822.000	0	212	-77.893.000	-106	-32.957.000
QuattroR SGR	Fagioli S.p.A.	2016 - Still in portfolio	-7.006.000	-4%	-1%	-22.272.000	-4	2	940.000	617	15.340.000
Oxy Capital	Ferroli S.p.A.	2015 - Still in portfolio	77.117.548	-4%	-9%	-27.475.241	9	99	-161.387.487	-95	191.759.379
Oxy Capital	GPACK S.p.A.	2020 - Still in portfolio	5.769.781	-5%	-7%	-7.874.660	20	88	-32.348.951	10	19.677.869
WRM goup	Gruppo Kipre S.p.A.	2019 - 2021	-4.826.360	-21%	0%	-20.174.394	-693	1	239.686	1794	-619.794
Clessidra	L&S Italia S.p.A.	2018 - Still in portfolio	5.286.841	4%	8%	64.282.863	-0,3	3	38.228.592	-30	46.164.338
Oxy Capital	M Stretch S.p.A.	2017 - Still in portfolio	-1.565.000	-3%	-2%	-7.885.000	-7	-2	-24.289.000	-7	24.423.000
Pillarstone	Magicland S.p.A.	2014 - Still in portfolio	-1.216.804	15%	10%	-31.913.500	-19	116	-61.384.051	-1	12.826.882
Ibla Capital	Man Oil & Marine s.r.l.	2019 - Still in portfolio	869.169	1%	14%	1.514.069	1,3	3	6.049.103	-42	772.454
Pillarstone	Manucor S.p.A.	2014 - 2019	-242.382	1%	1%	-17.601.820	-5	-6	-20.901.108	-19	1.438.386
Phi Industrial	Mascioni S.p.A.	2014 - Still in portfolio	-98.000	-8%	1%	-5.029.000	5	6	-9.663.000	-86	-10.834.000
Ibla Capital	Natural Way Laboratories s.r.l.	2015 - 2021	1.016.573	140%	-47%	800.647	0	4	1.761.737	-231	918.482
Oxy Capital	Olio Dante S.p.A.	2016 - Still in portfolio	505.870	3%	2%	9.080.441	-9	12	54.401.980	-17	-56.923.312
Dea Capital	Paolo Pigna S.p.A.	2015 - 2019	20.788.873	-8%	-3%	-8.655.283	2	2	-70.261.126	71	34.357.520
Dea Capital	Peralisi Maip S.p.A.	2016 - Still in portfolio	3.308.561	-12%	6%	-7.099.833	-0,02	-32	-19.237.326	-301	-6.920.010
Pillarstone	Premuda S.p.A.	2016 - Still in portfolio	94.690.000	34%	-5%	-108.928.370	5	26,25	-260.940.194	55	178.827.355
WRM goup	Retelit S.p.A.	2017 - 2002	18.081.570	-8%	1%	170.265.081	2	9	436.684.799	0	20.296.639
Clessidra	Roberto Cavalli S.p.A.	2014 - 2019	-34.071.968	-20%	5%	71.610.626	-1	-14	-51.217.331	-101	42.542.075
Clessidra	Scrigno S.p.A.	2017 - 2021	6.291.249	3%	5%	124.905.284	0,6	4	69.878.110	-72	58.857.545
Dea Capital	Sinterama S.p.A.	2015 - 2019	-4.272.478	-1%	0%	-17.889.280	-2	10	-20.156.180	-72	4.493.928
Pillarstone	Sirti S.p.A.	2015 - Still in portfolio	10.953.000	-9%	-7%	3.627.000	-4	5	-8.222.000	202	31.259.000
Dea Capital	Snaidero Rino S.p.A.	2015 - Still in portfolio	14.884.000	4%	-5%	24.995.425	-20	-38	-1.517.000	-33	-19.160.000
Dea Capital	Targetti sankey s.r.l.	2015 - 2017	-4.236.000	-5%	5%	-1.374.000	6	-5	1.613.000	25	-1.133.000
WRM goup	TAS S.p.A.	2015 - 2020	15.422	16%	3%	32.496	-94	-19	L	-650	37.448
QuattroR SGR	Trussardi Milano S.p.A.	2018 - Still in portfolio	-9.344.866	-49%	20%	-11.614.508	-3	-0,4	22.362.183	216	-42.516.580
Dea Capital	Util Industries S.p.A.	2015 - 2019	-10.814.605	-2%	8%	-3.974.309	-186	12	-25.027.314	7	7.375.463
Pillarstone	Welcomm Engineering S.p.A.	2018 - Still in portfolio	268.569	0%	3%	-344.849	0	-0,46	-1.526.509	-34	1.394.998

Figure 6: Raw data

By running the regression model, through the help of the data analysis tool of Excel and by setting the following constraints:

- **a = 0**: Constant of the regression model have been set as equal to zero;
- **Confidence Level = 95%**

the following results have been obtained, as illustrated in Figure 7

Regression Statistics	
Multiple R	0,90218626
R Square	0,81394004
Adjusted R Square	0,72866523
Standard Error	31962300,4
Observations	35

Figure 7: Regression statistics output

The value of R^2 obtained from the model turns out to be high, which implies a good fit of the model, in fact, 81% of the variability of the dependent variable is explained by the independent variables of the model. On the other hand, the value of Adjusted R^2 is lower (although still high, it is equal to 72%). The Adjusted R^2 parameter allows R^2 to be adjusted for the number of variables used in the model. The fact that Adjusted R^2 is lower than Simple R^2 indicates that some of the variables used in the model are useless and unnecessary to improve the explanatory power of the model itself. As illustrated in Table 16 (correlation matrix) the fact that Adjusted R^2 is lower than R^2 is because there is a high correlation between some variables.

Table 16: Correlation matrix

	EBITDA	*GROSS MARGIN*	*COST OF PERSONNEL*	*NON CURRENT ASSETS*	*D/E*	*NET DEBT/EBITDA*	*NET DEBT*	*CYCLE*
EBITDA	1							
GROSS MARGIN	0,18211319	1						
COST OF PERSONNEL	-0,2559632	-0,770570496	1					
NON CURRENT ASSETS	-0,1584762	-0,091194245	0,055824348	1				
D/E	0,11927805	0,125655083	-0,006222209	0,070408817	1			
NET DEBT/EBITDA	0,21335771	-0,059906862	-0,067637308	-0,098952001	0,011039814	1		
NET DEBT	0,1243975	-0,01538854	0,007329292	0,757214783	-0,005837282	-0,150178992	1	
CYCLE	-0,0633192	-0,259698204	0,058762053	-0,096721909	-0,793299528	0,012572405	0,025339793	1

Some of these correlations were expected and foreseen already from the moment the regression model was set up as some variables are also logically related. The strong negative correlation between the Cost of Personnel and Gross margin or, for example, the relation shown between Net Debt and Non-Current Assets. This last result illustrates how, those companies that are not following policies of strong retrenchement, also use the form of debt to finance their investments. The previous mentioned strategy is the one used by both Retelit and Scrigno that,as we will see during this thesis, have both made investiments during their own turnaorund period, increasing so the value of Non-Current assets. These investmenets were made by increasing the Debt level of the company, as illustrated by the fact that for both companies also the value of Net Debt increases.

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	8	1,2066E+17	1,5083E+16	14,7643137	6,93468E-08
Residual	27	2,7583E+16	1,0216E+15		
Total	35	1,4825E+17			

Figure 8: Anova output of the model

The model illustrated above (Figure 8) is characterized by 8 degrees of freedom (df) indicating the presence of 8 independent variables. The ANOVA output of the regression model shows that the model is significative, as illustrated by the value returned by Significance F that is very low ($6.9 * 10^{-8}$) implying that at least one of the drivers used is able to explain with significance the dependent variable (Equity). Figure 9 shows the output related to the coefficients of the model.

	Coefficients	*tandard Erro*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95,0%*	*Upper 95,0%*
Intercept	0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
EBITDA	2,19864464	0,27396666	8,0252271	1,26633E-08	1,636511494	2,76077779	1,63651149	2,76077779
GROSS MARGIN	25662338	33628322,9	0,76311679	0,452010303	-43337281,21	94661957,2	-43337281	94661957,2
COST OF PERSONNEL	47153643,3	78661345,9	0,59945127	0,553869478	-114246106,7	208553393	-114246107	208553393
NON CURRENT ASSETS	0,72897738	0,1722703	4,2315906	0,000239223	0,375507924	1,08244684	0,37550792	1,08244684
D/E	20203,9281	73229,2296	0,27589978	0,784725808	-130050,0398	170457,896	-130050,04	170457,896
NET DEBT/EBITDA	-19456,691	73740,1297	-0,2638549	0,793895227	-170758,9399	131845,557	-170758,94	131845,557
NET DEBT	-0,4760266	0,06310092	-7,5438932	4,08883E-08	-0,605498981	-0,3465542	-0,605499	-0,3465542
CYCLE	31542,5536	27167,7114	1,16103094	0,255791661	-24200,98567	87286,0928	-24200,986	87286,0928

Figure 9: Coefficient output of the regression model

The EBITDA driver turns out to be highly significant (p-value lower and inferior to α) and has a positive effect on the dependent variable (equity). The model used therefore shows a significant direct relationship between EBITDA and equity. This result is in line with the assumption made on EBITDA in Chapter 4.

A similar result is obtained for the driver Non-Current Assets, which is significant (p-value inferior to alpha) and has a positive effect on the dependent variable (equity). The model used therefore shows a positive relationship between fixed assets and equity. This is not consistent with the assumptions made in Chapter 4 regarding the variable. In fact, in the previous chapter it was assumed that fixed assets and equity were negatively correlated.

This result, unexpected at first sight, allows us to draw two conclusions (obviously valid only for the perimeter analyzed):

- The asset reduction strategy, although used in most turnarounds, has not led to significant improvements in equity.
- The presence of recovery phases (as predicted by the Pearce & Robbins model) in some companies which, after an initial phase of retrenchment, have started to invest, thus entering the new phase (recovery). Some examples are the following: Retelit and Scrigno. These two companies made investments, both companies made acquisitions

and Retelit in particular invested heavily in new network infrastructure. Both types of investment are of the type foreseen by the Pearce and Robbins model in the recovery phase. In fact, according to Pearce and Robbins model a classic sign of the presence of a recovery phase is the presence of investment made in merge and acquisition, with the aim of reinfornce market position of the company.

A different result, in line with the assumptions, is instead obtained for the driver Net Debt, which turns out to be significant (p-value inferior to alpha) and has a negative effect on the dependent variable (equity). The model used therefore shows a significant negative correlation between net debt and equity. This is in line with the assumptions made in Chapter 4 regarding the variable. Indeed, in the previous chapter it was assumed that the two variables were negatively related and that a decrease in net debt was associated with an increase in equity. The other variables used in the models do not have a significant impact, as indicated by the p-value being higher than the significance level.

Thanks to the analysis conducted through the regression model it is so possible to answer to some research questions:

- Yes, there are three drivers that, according to the model and the sample used are statistically significant. Two of them have a positive relation with the dependent variable and these are EBITDA and Non-Current Assets, one of them has a negative relation and it is the Net Debt.
- Considering for the moment only the Drivers that turn out to be statistically relevant two of them (EBITDA and Net Debt) shows a behavior that was in accordance with the assumption, while Non-Current Assets had an opposite result compared to the assumption based on the literature review.

5.2 Turnaround driver analysis

The aim of this section is to analyze both the isolated behavior of each individual driver in the turnaround process and the pattern followed by turnaround players. In this way, we want to analyze the singular behavior of the driver with the aim of identifying any trends and the presence of any specific patterns due to different strategies adopted by different

turnaround actors. Through this analysis, it will therefore be possible to identify the presence of any outliers, which will then be the subject of a deep dive analysis in order to determine the nature of this spike.

Before starting this analysis, the table below (Table 17) shows the breakdown of the companies analysed, indicating the contribution of each turnaround player to the total number of operations analysed in this thesis.

TABLE 17: Tunaround player weight

Player	Number count	Weight %
Pillarstone	6	17%
Dea Capital	7	19%
Ibla Capital	3	8%
Oxy Capital	4	11%
QuattroR SGR	4	11%
WRM goup	3	8%
Phi Industrial	3	8%
Clessidra	5	14%
Azimut	1	3%

Thanks to this chapter it'll possible to answer to the following research question: "If there were any drivers that were considered significant in explaining changes in equity, what was their average change relative to the sample of companies analyzed?"

EQUITY

We start this analysis with the value of equity, this driver was used as a dependent variable in the regression model previously illustrated. In total, the equity value has increased for a value of 758,428,686 euros, thus creating about 758 million new values for companies that have undergone and are undergoing a turnaround process. On average, the value increased by 21 million per company and, of the 35 companies analysed, 22 experienced an increase in equity, representing an increase of 63%. The increase in equity was significant in all 23 cases all of them had an increase in equity of more than 10% (10% is the threshold setted in this thesis to identify significant change occurred during the turnaround). Analyzing now the relative results, the data shows that the average increase of the equity in the sample

of 35 analyzed companies has been pairs to a +310%, very high value and partly due to the presence of some values to be considered as outliers:

- TAS, which, unlike its predecessor, had an exponential increase in equity in percentage terms, corresponding to +7200%, but due to a smaller increase in equity in absolute terms, corresponding to an increase of only 37 thousand euros. The increase is very high in percentage terms, while it is modest when compared to the magnitude values of the other companies. If we analyse the data in more detail in relation to TAS, we can see that a large part of the percentage increase in equity is due to the delta between the first year of the turnaround and the year before (2015-2016), in which there is an increase of 4200%. This increase can be explained by the recovery plan that TAS signed with credible banks in August 2016. This agreement was based on a 20,000 "capital reserve" waiver and a 10,000 capital increase.

Excluding this outlier, the percentage increase in total equity for the sample analyzed is +105%.

EBITDA

Like Equity, the value of EBITDA for the 35 companies analyzed in the sample also increased in aggregate. The average increase in EBITDA is more than EUR 5 million. Considering that EBITDA is less than a multiplier equal to the valuation of a company (valuation by EBITDA multiple), this implies that the increase in EBITDA has resulted in value creation.

In absolute terms, EBITDA increased for 19 of the 35 companies analyzed (54% of the time), for a total of more than 170 million euros of value created thanks to the improvement in EBITDA. The higher contribution to EBITDA generation in absolute terms is mainly due to the turnarounds of Ferroli and Premuda.

Ferroli recorded an increase in EBITDA of €77,117,548 during the turnaround period. The situation of Ferroli in 2015, the year before the entry of Oxy Capital, was also distressed and characterized by negative EBITDA values. Much of the increase in Ferroli's EBITDA is due to the correct positioning of the company on the market, benefiting from government

incentives on the Italian market "Bonus 110" has seen a significant increase in revenue from 384 million in 2021 to 496 million in 2022 (+30%) with a consequent increase in EBITDA Figure 17. We can therefore say that part of the success of Ferroli's turnaround is due to the right investments and the right repositioning on the HVAC market, taking advantage of favourable market conditions. This type of behaviour falls into the categories described by the Pearce and Robbins model, which illustrates the presence of investments to enter a new market sector as a symptom of a recovery phase.

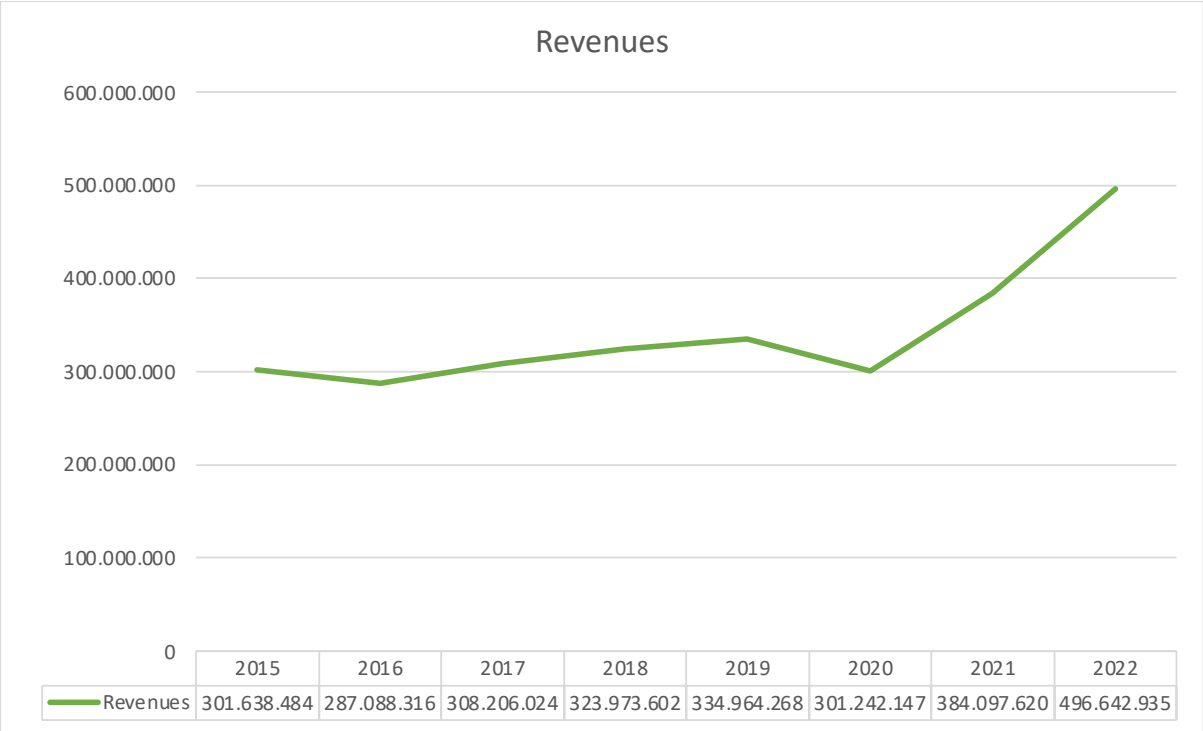

Figure 17: Revenues increase for Ferroli

Premuda's EBITDA increased by € 94,690,000 during the turnaround period. Premuda's EBITDA has evolved throughout the turnaround, from a situation of distress in 2016, when EBITDA was negative at around -15 million€, to a situation of prosperity in 2022, as shown in Figure 18.

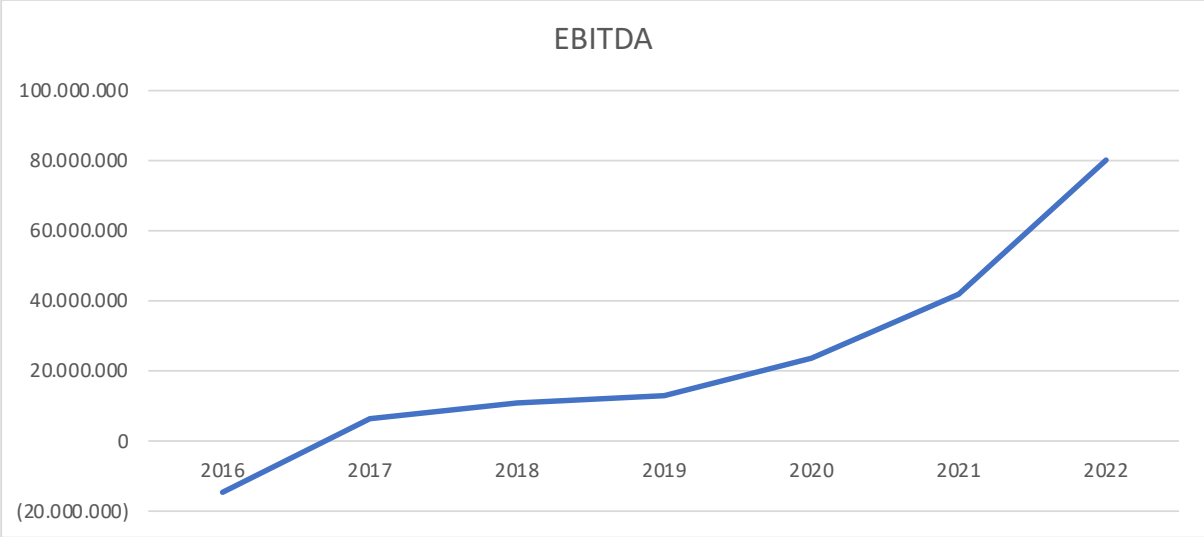

Figure 18: EBITDA trend for Premuda during turnaround

The improvement of EBITDA for Premuda is due to several factors, among which the main ones are the following:

- Increase in revenues, particularly an exponential spike starting from 2021 (just after overcoming the negative impacts of COVID-19);
- Significant decrease in personnel costs starting from 2018, a sign of retrenchment policies and personnel reduction. This is mainly linked to crew cost reduction due to fleet size reduction;
- Market positioning: Thanks to his ability in market positioning, focusing on the best sector in the best period (during the pandemic biennium 19-20 specializing more on the DRY sector while starting from 21 shifting the focus on the Tanker sector) Premuda has managed to ride favorable periods in both markets, without suffering too much the drops due to the pandemic of Covid-19;
- Increase in Gross Margin thanks to a reduction of direct costs. Direct costs related to the Premuda business model are divided into two categories: OPEX and Passive Leasing. Regarding the former, there has been a 13% reduction in these costs during the period under review. While concerning costs related to Passive Leasing, there has been a complete elimination of these costs starting from 2018. This was due to a change in the company's business model. Since 2018, Premuda has terminated passive leasing contracts due to the burdensomeness of this business and the low charter rates in the same market segment.

Gross Margin

Gross margin is used as a driver to assess a company's operational improvement. The increase in this parameter is due to an increase in net sales or a decrease in COGS, and can therefore be attributed to two strategies:

- Expansive strategies, which lead to an increase in sales and therefore net sales;
- A retrenchment strategy aimed at reducing costs, including a reduction in COGS.

An increase in the gross margin implies an improvement for the company profitability, which is also confirmed by the regression model in which the gross margin has a positive value (although this parameter has low significance due to the p-value > α).

However, the results of this driver are analyzed separately for the 35 companies in the sample, it can be seen that only 13 of the 35 companies (37%) experienced an increase in gross margin. However, it can be seen that 10 of the 14 cases where the gross margin increased are also characterized by an increase in equity.

On aggregate, it can be seen that on average the gross margin has remained stable, the average increase in the sample is 1%. In particular, for this analysis it has been very important the remove outliers, in particular Casalasco which has seen an increase of 2300% in the gross margin over the period analyzed. A closer analysis of the situation of Casalasco reveals an inconsistency in the comparative analysis between 2022 and 2021 since 2022 is the first year of operation of Casalasco Società Agricola S.p.A. During 2021, Casalasco has not been able to develop its operating income, and for this reason, the delta between 2021 and 2022 is exaggerated, especially in percentage terms.

Excluding the case of Casalasco, which turns out to be a real outlier, the gross margin is increased on average by 1%.

An excellent result was achieved by Natural Way in terms of an increase in the gross margin and, consequently, an improvement in the operating level. Between 2016 and 2018, the company experienced a strong increase in sales, which led to an increase in Gross Margin (as the direct cost of raw materials and services did not increase proportionally to sales). In fact, Natural Way was able to benefit from a growth in the supplement market in terms of sales of 6.5% in 2016 and 5.8% in 2018.

Cost of Personnel

This driver analyses the incidence of personnel costs on turnover; a reduction in this indicator may implies the adoption of a retrenchment policy characterized by layoffs. Contrary to the hypotheses in which a reduction of this variable was assumed, in the population analyzed it can be noted that only in 15 of the 35 companies analyzed there has been a reduction in the incidence of personnel costs, a percentual equal to 43%. It's important to note the different behavior of this variable with the equity variable:

- In the 22 cases in which equity is found to have increased, personnel costs are found to have decreased 11 times (50%);
- In the 13 cases in which the equity turns out to be decreasing instead, the personnel costs turn out to be decreasing only 4 times (31%).

These results therefore show how a reduction in personnel costs is related to an increase in equity. This confirms the hypothesis made by Pearce and Robbins, which states that successful turnaround begin with a retrenchment phase characterized by cost reduction.

Non-Current Assets

The analysis of this turnaround driver is linked to the results of the literature review, which show how the strategic importance of asset restructuring is further accentuated by its dual focus: the reduction of long-term financial assets and the reduction of long-term intangible assets. These approaches are essential for the survival and turnaround of firms in difficulty, as shown by the research of O'Neill (1986), Gibbs (1993), and Hofer (1980). These studies show how reductions in these types of assets can lead to improvements in financial stability, as measured by measures such as the Altman Z" score.

Analyzing the results obtained on the sample of 36 companies analyzed, it can be seen that 25 of the 36 companies analyzed showed a decrease in fixed assets (about 70% of the cases), with an average decrease of -2.7 million euros. This result is in line with the assumptions made in the assumptions section, but it is not in line with the results obtained from the regression model, a model in which fixed assets and equity are positively correlated. This is because, although the general trend is towards a reduction in long-term assets, there are cases in which equity has increased and in

which it is possible to identify an increase in Non-current assets. These situations are part of the recovery phase of the Pearce & Robbins model, a phase in which the presence of investments is previewed to widen the own offer on the market and investments for M&A. Two relevant cases that reflect the above are Retelit and Scrigno. Both companies have made investments in the turnaround period for acquisitions to expand on the market (M&A transaction).

Moreover, Retelit has made investments (16 million invested in 2017) for network infrastructure. Both of the aforementioned companies recorded an increase in non-current assets of more than 100 million in the period under review (170 million for Retelit and 125 million for Scrigno).

Net Debt

As illustrated in the literature review by John (1993), Debt restructuring is a key component of financial turnaround. In this work we use three different drivers to analyze the presence of financial turnaround strategies related to debt restructuring and so related to the capital structure of a company:

- $Net\ Debt$
- $\frac{Net\ Debt}{Equity}$
- $\frac{Net\ Debt}{EBITDA}$

Differently from the others two, the Net Debt drivers is a simple delta between the debt situation at the begin of the turnaround period and at the end. This means that it is not influenced by the starting value of Equity and EBITDA, which is usually negative or really low when referred to distressed companies. This assumption is also reinforced by the output of the regression model which states that both $\frac{Net\ Debt}{Equity}$ and $\frac{Net\ Debt}{EBITDA}$ are not significant drivers while Net Debt is a significant driver. The results of $\frac{Net\ Debt}{Equity}$ and $\frac{Net\ Debt}{EBITDA}$ are very volatile and

impacted by the starting value of both Equity and EBITDA that, in case of distressed companies, turned out to be negative.

For this reason, this chapter only analyzed in detail the behavior of the Net Debt drivers. Recalling the literature review, over-leverage led to a significant contributor to financial distress as per Molina (2005), plays a critical role in this context. Opler & Titman (1994) and Zingales (1998), which link leverage reduction to performance improvement.
According to the findings of Giroud et al. (2012), debt reduction leads to significant performance improvements.

Analyzing the results on a single level of the sample of 36 companies it is possible to state that for 20 out of 35 companies (57%) there was a reduction in the Net Debt, while on the aggregate level, there was a total reduction (sum among the 35 companies) of around 860€ million, an average reduction of 24€ million per company that enters in turnaround.
The stabilization of the capital structure is also evidenced by the trend (even with some interference as mentioned before) of the $\frac{Net\ Debt}{Equity}$ equity which results to be decrease for 23 out of 35 companies (66%). Looking now at the driver $\frac{Net\ Debt}{EBITDA}$, due to the previously mentioned limitation, in this thesis it has been chosen to split the variables and analyze the single behavior. By combing the two results it is possible to state that, among the 19 companies that show an increase in the EBITDA, Net Debt has increased 9 times (47% of cases). Moreover, it is interesting to note that, only considering the companies that have an increase in the EBITDA in aggregate the Net Debt has increased for approximately 215€ million, although on aggregate Net Debt decreases across the population. This last result is impacted by two companies, Scrigno and Retelit, that as was already mentioned in the previous paragraph related to Non-current assets, follow a strategic pattern linked with recovery strategies.

These two results combined tell us that the Italian market, at least for the 35 companies analyzed, it has been characterized by strategies that pursue a stabilization in the capital structure.

Turnaround Player

This section of the thesis aims to identify the presence of strategic patterns characteristic of some turnaround players. The purpose of this section then shifts from the analysis of individual turnaround drivers, as done in the previous sections, to a more aggregated analysis. The analysis is aggregated at the player level and for each player and each driver the percentage increase of a given driver is calculated. With this analysis, we want to determine the percentage increase of a given driver compared to the behavior of the companies that are part of the portfolio of a given player.

To better explain this concept, we can use the following example: suppose we have Player X, which has 4 companies that have undergone a turnaround process. Let's say that of these 4 companies, three have seen an increase in EBITDA over the period, while only one has seen an increase in fixed assets. The result we get is a percentage increase in EBITDA of 75% and a percentage increase in fixed assets of 25%.

After this aggregated analysis at the player level, we move on to a more detailed analysis, this time looking at how the player operated at the individual asset level. In this section not all the turnaround players and their assets were analyzed, but only the following players, which together represent 62% of the companies in our sample (Table 19):

- Dea Capital;
- Pillarstone;
- Clessidra;
- Oxy Capital.

Before starting this analysis, it is important to specify which drivers are to be measured and how they are expected to behave according to the assumptions made and the literature review. The selection of these drivers is based on the analyses carried out in the literature review section (chapter 1) and in the methodology section (chapter 4.2), where it is explained why the specific driver was chosen and what the expected trend of a successful turnaround is, according to the literature, for the specific driver chosen. The table below (Table 18) therefore lists the drivers that will be measured in this analysis, together with the associated hypothesis and the type of strategy to which the driver is linked.

Table 18: Mapping of turnaround driver and linked strategy

Driver	**Hypothesis**	**Turnaround strategy**
EBITDA	Increasing trend	Operational Turnaround
Gross Margin	Increasing trend	Operational Turnaoround
Cycle	Decreasing trend	Operational turnaorund
Cost of personnel	Decreasing trend	Retrenchment & Operational turnaround
Non-current assets	Decresing trend	Retrenchment
Net Debt	Decreasing trend	Financial restructuring
Net Debt / Equity	Decreasing trend	Financial restructuring

Before diving into the analysis Table 18 summarizes the turnaround payer analyzed and the relative weight in the sample used as a dataset for this analysis

TABLE 19: Turnaround player weight

Player	Number Count	Weight
Pillarstone	6	17%
Dea Capital	7	20%
Ibla Capital	3	9%
Oxy Capital	4	11%
QuattroR SGR	3	9%
WRM goup	3	9%
Phi Industrial	3	9%
Clessidra	5	14%
Azimut	1	3%

In Table 20 are highlighted the output of the analysis conducted at the turnaround player level. For each driver, it has been identified the top (highlighted in green) and bottom performers (highlighted in red). In this case, performance is considered positive if the driver follows the behaviour described in table 18, so to summarise and give an example, we can say that player X has performed well in terms of Operational Turnaround if its underlying assets have shown an increase in EBITDA and/or Gross Margin. Similarly, if a player has a low value in the NON-CURRENT ASSETS INCREASE% column, it can be said to have performed well

from a Retrenchment point of view, because it means that its underlying assets have generally seen a decrease in non-current assets.

TABLE 20: Turnaround player results by driver

Player	Cost of personell increase %	NET DEBDT Increase %	Cycle increase %	Gross Margin Increase%	D/E increase %	Non-Current assets increase %	EBITDA Increase %
Azimut	100%	0%	100%	0%	100%	0%	0%
Clessidra	60%	60%	20%	60%	40%	80%	80%
Dea Capital	43%	14%	57%	14%	29%	14%	43%
Ibla Capital	67%	100%	0%	100%	67%	100%	67%
Oxy Capital	25%	25%	25%	25%	50%	25%	75%
Phi Industrial	100%	33%	33%	0%	33%	0%	33%
Pillarstone	67%	17%	33%	67%	17%	17%	50%
QuattroR SGR	33%	67%	67%	0%	0%	0%	33%
WRM goup	67%	100%	33%	33%	33%	67%	67%

As can be seen from the table above, where the percentages are given concerning the single driver for the single turnaround player, it is possible to identify the presence of different strategic patterns followed by different turnaround players. So, some turnaround player focused more on Operational improvement while others put their focus on Asset retrenchment and improvement of financial stability.

We begin this analysis with an analysis of the players that stood out for their performance in terms of operational turnaround. Reconnecting to Table 20, the drivers to consider analyzing the presence of an operational turnaround are the following:

- Decreasing Operating Cycle;
- Gross Margin Increase;
- EBITDA increase;
- Cost of personnel decrease.

Based on the results shown in the Table 19 It is possible to identify some player who put their focus more on the operational section of the turnaround. These player are the following:

1. Oxy Capital: Oxy Capital achieved excellent results from the point of view of operational turnaround, in fact the Cost Of Personell% decreased in 75% of the cases, the same result was obtained in the operating cycle. Another excellent result was obtained thanks to an increase in EBITDA in 75% of the cases;
2. Clessidra: Like Oxy Capital, Clessidra had an excellent result thanks to the reduction of the operating cycle in 80% of the underlying players and thanks to an increase in both gross margin (60% of the cases) and EBITDA (80% of the cases), a symptom of the player's strong focus on achieving operational turnarounds;

In the following, the most relevant individual assets for each player will be analysed in more detail in order to determine how the performance of these assets have enabled the two players mentioned above to achieve excellent results in terms of operational turnaround. The selection of the assets analysed is made on the basis of their performance during the turnaround process: only those that have undergone significant changes in line with the player's trend (as shown earlier in Table 20) are considered.

Oxy Capital

Oxy Capital is characterized by the following assets in its portfolio (related to the assets analysed in this thesis work):

- Ferroli S.p.A.
- Gpack S.p.A.
- Olio Dante S.p.A.
- M.Stretch S.p.A.

Among these assets, Ferroli S.p.A. and Olio Dante S.p.A. will be analysed in more detail, as the other two assets mentioned above did not show such a positive performance trend that required an in-depth analysis.

For example, analysing the results obtained by Gpack S.p.A., despite a positive increase in EBITDA, which went from negative values in 2020 (the year prior to the entry of Oxy Capital) to positive values in the last financial statements in 2022, there was no significant improvement in the other factors that characterise an operational turnaround:

- The gross margin fell by 5% over the period, but this reduction is due to a 26% increase in turnover, which was offset by a 36% increase in the cost of sales;
- Personnel cost incidence: the personnel cost incidence fell by 7% over the period, indicating an attempt to reduce operating costs through redundancy strategies (in this case, unlike Ferroli, personnel costs also fell by 5% in absolute terms). However, this reduction is not significant (< 10%) to be considered significant from the point of view of operational turnaround;

- Operating cycle: a reduction in this factor implies better management of the company's working capital and therefore better management of its liquidity. In the case of Gpack S.p.A., however, this driver showed an upward trend, even if, on closer analysis, this trend is due to a significant reduction in DPOs, which fell by 44% over the period analysed. However, as with the previous driver, the trend was not such that it could be considered an operational turnaround.

Turning now to an analysis of the results obtained by M. Stretch S.p.A., it can be noted that both EBITDA and Gross Margin decreased during the period under review. This can be explained by the slight increase in Revenues of only +2%, while the COGS increased by 5%, resulting in a 13% decrease in EBITDA and a 3% decrease in Gross Margin. On the other hand, the results obtained from the personnel costs and operating cycle drivers are not significant due to changes of less than 10%.

Ferroli

Ferroli is active in the heating and air conditioning market. Ferroli is a global company with factories in Europe and Asia, a sales network in 12 countries and around 2,500 employees.

Ferroli's performance has been declining since 2009, when the company started a financial restructuring process due to unfavourable market conditions. The year 2015 was characterised by a distressed situation, as evidenced by a negative EBITDA of more than EUR 3 million, an indication of operational inefficiency. In addition, the company's financial situation was in severe distress due to the poor operating performance in 2015 and especially in 2014 (with operating losses of EUR -26 million in the former and more than EUR -170 million in the latter). On 8 June 2015, Ferroli applied for admission to the arrangement procedure (art. 161 paragraph 6 of the Bankruptcy Law). At the same time, Oxy Capital Italia Srl and Attestor Capital LLP started negotiations with Ferroli's lending banks on a debt restructuring proposal.

As stated above in the summary section on Oxy Capital, the turnarounds undertaken by this player, as in the case of Ferroli, were characterised by improvements from an

operational point of view. In fact, the EBITDA trend for this asset improved, as shown in the chart below (Figure 19).

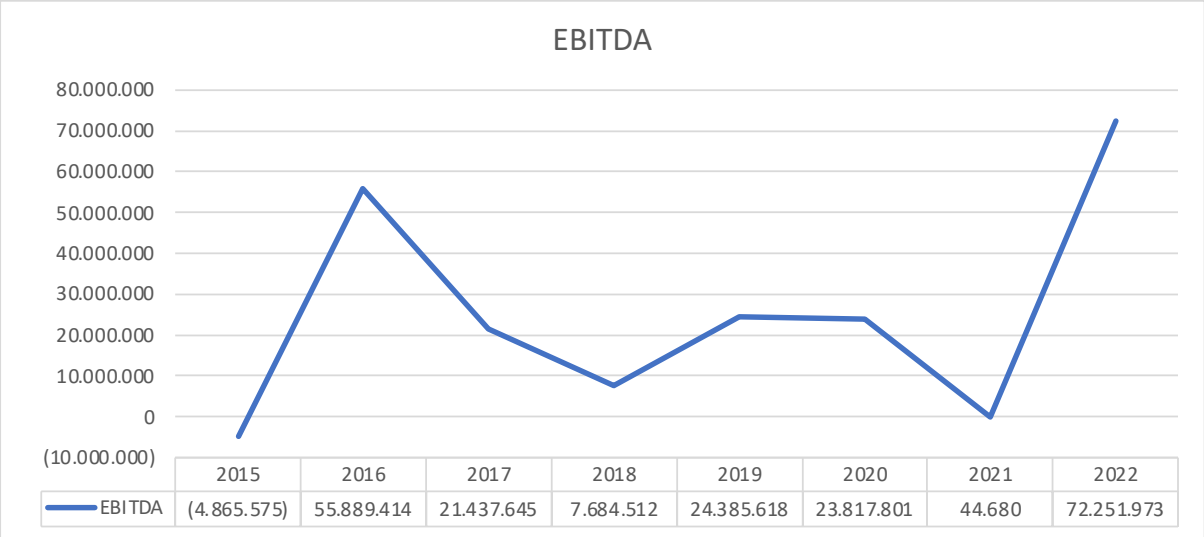

Figure 19: EBITDA trend of Ferroli during the turnaround

The most significant increase occurred between 2021 and 2022. This was possible thanks to the correct positioning in the Italian market, which allowed the company to take advantage of certain government incentives, including the famous 110% bonus. As can be seen from the graph below, there is a significant spike in revenue growth between 2021 and 2022, which can also be explained by taking advantage of a favourable market trend, as mentioned above (Figure 20).

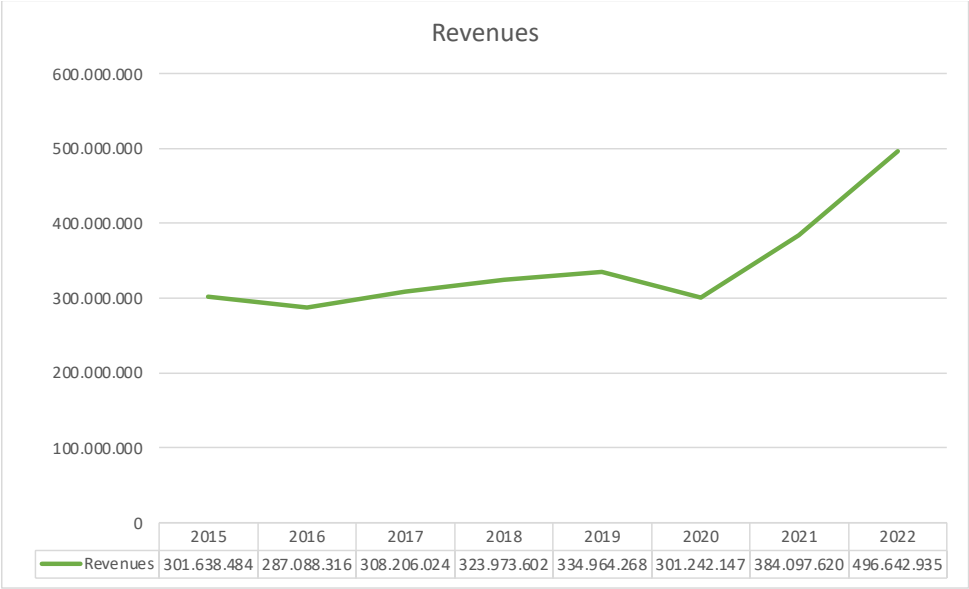

Figure 20: Ferroli's revenue increase

Ferroli shows not only an increasing trend in EBITDA, but also a decreasing trend in personnel costs. This decrease is not very significant as it was less than 10% over the period analysed. Moreover, when analysing the data, this reduction is not due to abrupt redundancies. In fact, the absolute value of personnel costs has increased over the years, but this increase has had a proportionally smaller impact than the increase in Revenues (Figure 21).

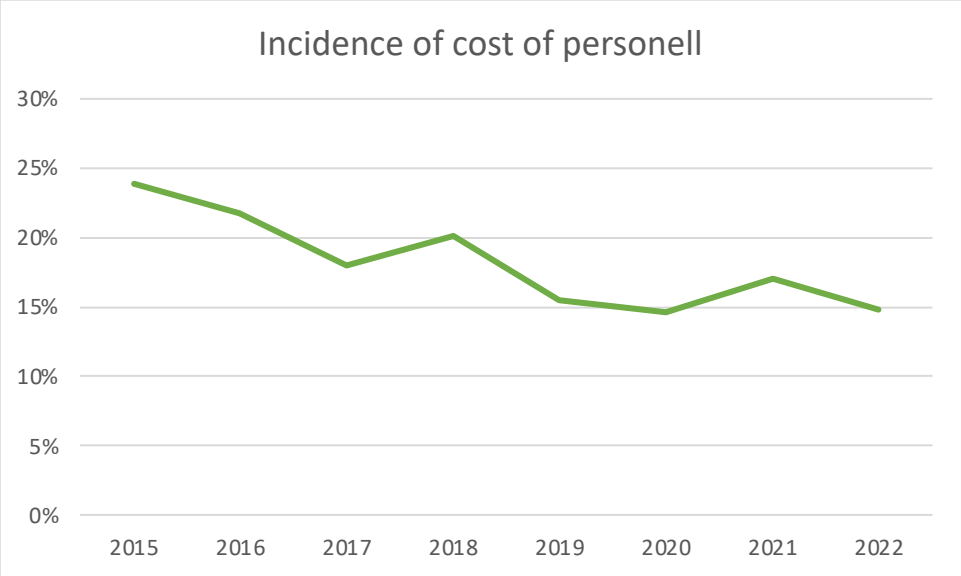

Figure 21: Ferroli's incidence of cost of personell performance

A results that illustrates Ferroli's real operational improvement is the value of its operating cycle. A reduction in this parameter allows companies to be more agile and requires less liquidity. In fact, a reduction in this value implies a lower need for working capital to finance the company's operational activities. The operating cycle will decrease by 39% between 2015 and 2022. This decrease is due to the simultaneous reduction of two variables: DOI (Days of Inventory) and DSO (Days Sales Outstanding).

Specifically, the reduction in inventory led to a reduction in Days of Inventory of around 34%, while the company's improved ability to collect receivables led to a reduction in DSO of over 37%. The overall improvement in the operating cycle was achieved despite a steady reduction in DPO. This means that the improvement in the company's working capital management was achieved without the need to delay payments to suppliers.

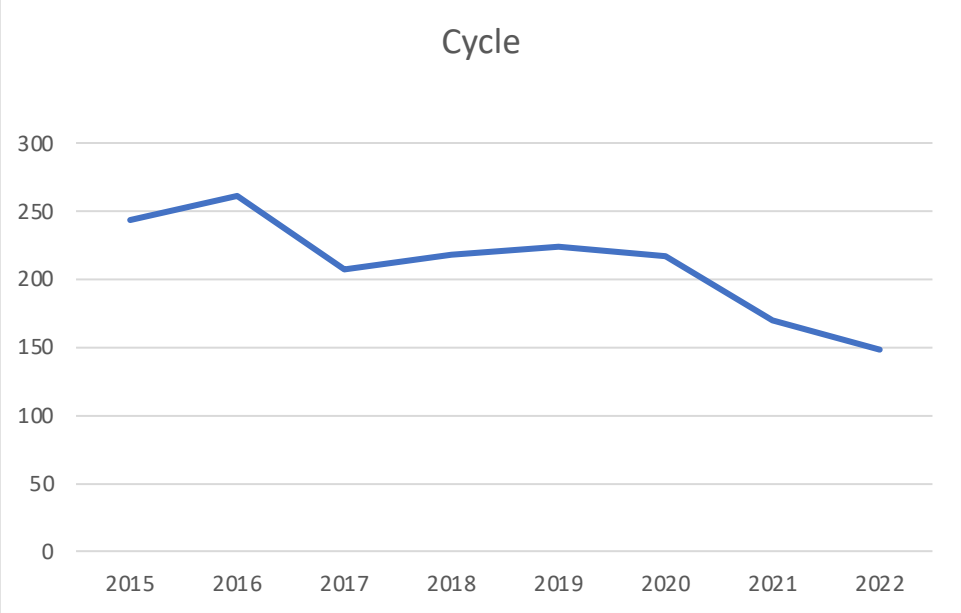

Figure 22: Operating Cycle improvement

Olio Dante S.p.A.

Olio Dante has been operating in the agri-food market and in the olive oil sector for over 100 years, since 1849. Today, Olio Dante is the number one brand in Italy in the olive oil category (NielsenIQ Q2'24 data) and is very active and specialised in exporting to foreign markets. The company also boasts a state-of-the-art industrial plant (250,000 kg of olives/day), 2 refineries (olives and seeds, 250,000 kg/day), 20 bottling lines (up to 1,000,000 litres/day) and a high-level quality control laboratory.

The sub-optimal performance from an economic point of view in 2015 pushed the company towards a restructuring process, which took place thanks to the entry of external capital from Attestor Capital, in collaboration with Oxy Capital. The entry took the form of a transaction worth 20 million euros.

- As anticipated in the first part concerning Oxy Capital, the results obtained by the player during its turnaround were characterised by improvements from an operational point of view (operational turnaround). In fact, the results achieved were positive for the drivers that are part of the bucket for analysing the operational turnaround: EBITDA: EBITDA increased by around 60% over the period, partly due to a 17% reduction in COGS. However, it is important to note that not only was there a

reduction in COGS, but also a reduction in revenues of around -14% (as we will see later in the section analysing the operating cycle, this is due to a change in strategy);

- Gross margin: Following on from the above, the reduction in COGS, despite the fall in sales, resulted in a 3% increase in the gross margin figure. This increase should not be considered significant, although it is positive, as it is below the 10% significance threshold set for this thesis;
- Operating cycle: On the other hand, the work done to reduce the operating cycle and the consequent better management of working capital deserve more in-depth analysis. The operating cycle has been reduced over the period, mainly due to the reduction of DSO by 53% over the period. The reduction in this parameter is due to the new strategy adopted by Olio Dante, which is no longer based on volume and low margins, but on customers with the highest added value. This strategy has had many positive effects on the company itself:
    - An increase, albeit not significant, in the gross margin;
    - Improved working capital management through better management and reduction of DSO;
    - By focusing on high value-added customers with a stable background (e.g. Carrefour and Esselunga), it was possible to increase the value of the receivables accounts by signing a non-recourse factoring agreement in 2021.

Clessidra

Clessidra S.p.A. is characterized by the following assets in its portfolio (related to the assets analysed in this thesis work):

- ABM Italia S.p.A.
- L&S Italia S.p.A.
- Roberto Cavalli S.p.A.
- Scrigno S.p.A.

Among the four aforementioned assets, only two will be analyzed, as ABM Italia S.p.A. and Roberto Cavalli S.p.A. did not exhibit performance improvements indicative of an

operational turnaround and Scrigno S.p.A. has been already discussed in the previous chapter, highlighting the presence of a different pattern characterized by huge investments (Chapter 5 – Non Current Assets). Specifically:

- ABM Italia S.p.A: The company experienced a moderate increase in EBITDA in absolute terms; however, the value remained negative. Gross Margin, Incidence of Personnel Costs, and the Operating Cycle did not show significant deviations, as these were below the 10% significance threshold.
- Roberto Cavalli S.p.A: In contrast, Roberto Cavalli S.p.A. exhibited negative performance, with results that diverged significantly from expectations based on the literature review. EBITDA decreased by more than 100%, now reflecting negative values. The Gross Margin also declined by 20% during the period under analysis, largely due to a sharp reduction in Revenues (-56%) coupled with a more modest reduction in COGS (-37%). The substantial decrease in Revenues further contributed to an increased incidence of personnel costs.

L&S Italia S.p.A.

L&S was founded in 1977 in Friuli Venezia Giulia, immediately entering the lighting sector for furniture. Currently, the company is a key player in the production and distribution of lighting solutions and integrated LED systems for residential, industrial, and retail applications. L&S is also characterized by a strong international presence, distributing its products in 70 countries worldwide, with a focus on China, North America, and Europe (particularly Germany).

The year 2019 was pivotal for L&S, marked by the entry of Clessidra Sgr, which, through the Clessidra Capital Partners 3 fund, acquired 80% of L&S. This year (2019) has been designated as the baseline year for this analysis to assess how the drivers of operational turnaround have evolved over time. EBITDA has grown significantly since 2019, as illustrated in the figure below (Figure 23). This growth is particularly attributed to a consistent increase in Revenues across all markets where L&S operates.

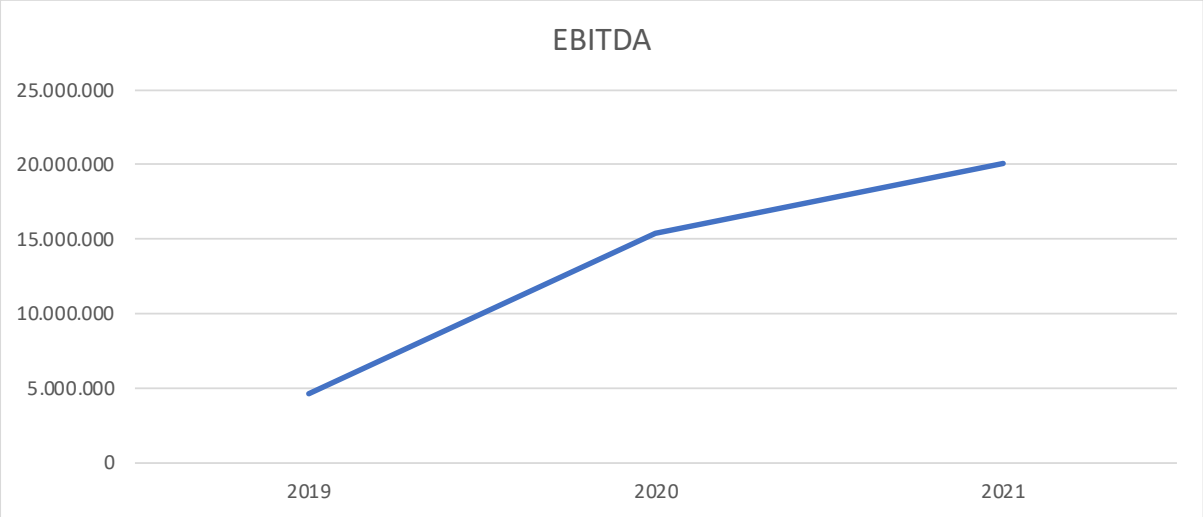

Figure 23: EBITDA performance of L&S during the turnaround

Indeed, 2021 concluded with an 18 million euro increase in Revenues, driven by growth in all major markets where L&S distributes its products (Figure 24).

(Migliaia di Euro)	2021	%	2020	%
Italia	22.511	22,66%	16.910	20,97%
Germania	50.647	50,98%	43.624	54,10%
Resto d'Europa Africa e Medio Oriente	11.516	11,59%	9.656	11,98%
Asia Pacifico	11.201	11,27%	7.694	9,54%
Americhe	3.473	3,50%	2.750	3,41%
Totale Ricavi	**99.349**	**100,00%**	**80.635**	**100,00%**

Figure 24: Revenues weight by market. Source Consolidated Balance Sheet of L&S AIDA

The same positive result obtained on the EBITDA front was not, however, confirmed by equally positive and significant results concerning production optimisation resulting from COGS reduction. The Gross Margin in the three years analysed had a fluctuating trend with positive variations between 2019 and 2020 and negative variations between 2020 and 2019. However, these variations do not appear to be significant (variations of less than 10%), so it is not possible to identify a radical strategy at L&S on the change of production procedures aimed at achieving a clear reduction in Raw Material costs. However, it is important to emphasise that the incidence of Raw Materials on sales increased from 45% to over 52% between 2020 and 2022, thus eroding a large part of profitability. It will therefore be interesting for future studies to analyse the trend of L&S profitability in order to see whether this result obtained in 2022 will be reversed or confirmed in the following years.

The Incidence of personnel costs decreased by 5% during the period under analysis, this result does not seem to be the result of layoff policies, personnel costs increased in absolute terms, but the incidence decreased due to the increase in revenues.

Thanks to a clear reduction in DOIs and DSOs, it was possible to achieve a reduction in the Operating Cycle and thus a better management of Liquidity (Working Capital optimisation) despite the fact that there was, in the same period, a reduction of about 50% in DPOs. This implies that L&S was able to improve its Working Capital optimization without resorting to extended supplier payments. This result is also confirmed by the liquidity trend as shown in Figure (24).

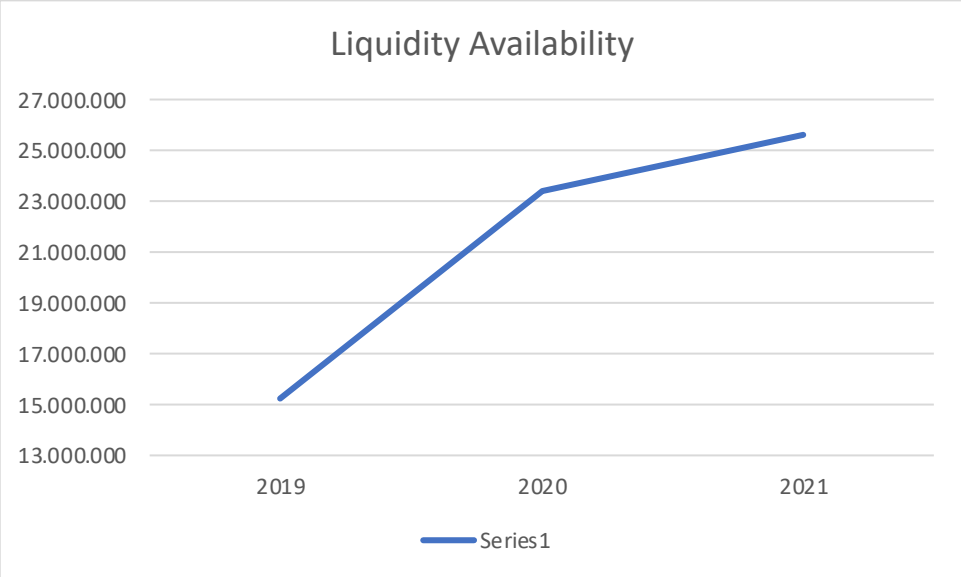

Figure 24: Liquidity availability for L&S

Shifting now the focus on our analysis from the drivers that track the presence of operational turnaround strategies by focusing on the ones that map the presence of Retrenchment and Financial restructuring strategies it is possible to determine that some turnaround players focus their activity toward the stabilization of the company, through Retrenchment strategy and Financial restructuring strategy. Reconnecting to Table 17, the drivers to consider analysing the presence of an operational turnaround are the following:

- Decrease of Non-Current Assets;
- Decrease of Net Debt ;
- Decrease of $\frac{Net\ Debt}{Equity}$ and consequently decrease in the leverage.

Based on the results shown in the Table 19 It is possible to identify some player who put their focus more on Retrenchment and Financial restructuring. These players are the following:

1. Dea Capital: The assets within Dea Capital's portfolio have shown excellent results in the drivers identified, based on the Literature Review, as those mapping Retrenchment and Financial Turnaround activities. Specifically, Dea Capital has demonstrated a strong focus on reducing Financial Leverage, as evidenced by the following outcomes:
    - Net Debt/EBITDA: This driver decreased in 57% of the assets associated with Dea Capital.
    - Net Debt: The aforementioned result was driven by an overall reduction in Net Debt, which decreased in 86% of the turnarounds analyzed related to Dea Capital.
    - Net Debt/Equity: Financial Leverage decreased in 71% of the turnarounds managed by Dea Capital.
    - Non-Current Assets: The results obtained from Dea Capital's assets also indicate a focus on retrenchment, as demonstrated by the reduction in Non-Current Assets in 86% of the cases.
2. Pillarstone: Similar to Dea Capital, the assets under Pillarstone's management have achieved results consistent with the hypotheses related to Financial Restructuring and Retrenchment:
    - Net Debt: This driver decreased in 100% of the turnarounds managed by Pillarstone, leading to:
        - Net Debt/EBITDA: Decreased in 50% of the cases.
        - Net Debt/Equity: Decreased in 83% of the cases.
        - Non-Current Assets: The focus on retrenchment is evidenced (as anticipated in the Literature Review) by the trend in Non-Current Assets, which decreased in 83% of the cases.

Dea Capital S.p.A.

Dea Capital S.p.A.'s portfolio, as analyzed in this thesis, includes the following assets:

- Calvi Holding S.p.A.

- Paolo Pigna S.p.A.
- Peralisi Maip S.p.A.
- Sinterama S.p.A.
- Snaidero Rino S.p.A.
- Targetti Sankey S.r.l.
- Util Industries S.p.A.

The analysis of Dea Capital's assets will focus, in-depth, on only two assets. This choice was made to concentrate on those assets that best represent the strategies of Asset Retrenchment and Financial Turnaround discussed in the Literature Review. As will be seen, this is not only reflected in the trends of the drivers analyzed but also in the strategies implemented, as outlined in the industrial plan formulated upon Dea Capital's entry into the individual assets. Moreover, the two assets selected for analysis are those that achieved the greatest reductions in Net Debt and Non-Current Assets.

Paolo Pigna S.p.A.

Cartiere Paolo Pigna S.p.A. is a company engaged in the production and marketing of stationery products (notebooks and writing materials). The crisis at Pigna peaked between 2014 and 2015, and in 2016, Dea Capital became involved (on January 28, 2016, it was officially admitted to the procedure for a preventive arrangement with continuity of business).

The fund's intervention occurred in June 2016 with the purchase of €10 million in non-performing loans from various banks, while its entry into the share capital was realized in April 2017 with the acquisition of 51% of the shares. Dea Capital's exit was completed in December 2019, with the sale of the remaining shares to the Buffetti Group. Regarding this turnaround, it is important to immediately highlight a strategy, already anticipated in the Literature Review, related to retrenchment policies: "Focus on core activity and divest from others."

This strategy was part of the industrial revival plan proposed by Dea Capital for the turnaround of Cartiere Paolo Pigna. In 2015, the year before Dea Capital's entry, the group operated in several foreign markets (Australia, Romania, Hungary, Singapore, and Spain)

through subsidiaries engaged in both production and distribution activities. By 2019, the year of Dea Capital's exit, only one subsidiary remained: Pigna Australia Pty, operating in the Australian market. Naturally, this strategy led to a reduction in both Revenues (due to the narrowing of operational scope) and the Cost of Raw Materials. The latter not only decreased in absolute terms but also in relation to Revenues, with its incidence falling from 74% to 70%. The trends in Revenues and the Cost of Raw Materials are illustrated in Figure 25.

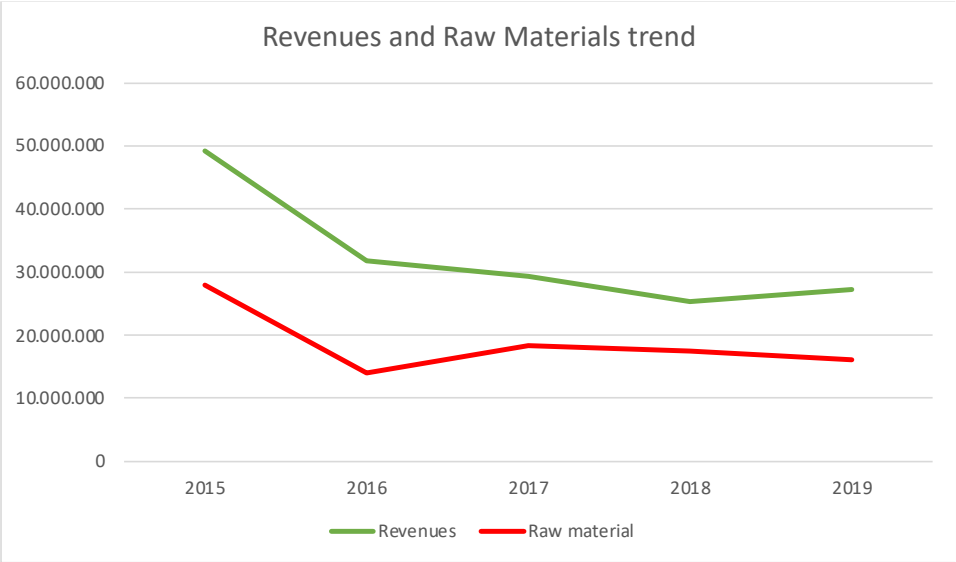

Figure 25: Revenues and Raw Material trend for Pigna S.p.A.

These operations allowed Cartiere Paolo Pigna to reduce its assets, in fact, Non-Current Assets were reduced by 56% in the period under analysis.

There was also a great focus on improving the company's NFP, Paolo Pigna in 2015 was in a situation of deep distress characterised by negative Net Assets of around 30 million. In 2019, the net worth was around + 5 million (total appreciation of +34 million in the period under analysis). It is important to emphasise, however, that this improvement is not due to significant increases in the company's margins that would explain this positive delta, but is due in particular to the positive leap between 2016 and 2017:

- Capital increase, following the conversion of 2.5 million of DeA's 10 million loans purchased in 2016 from some banks;
- Activation in 2017 of an arrangement bonus of EUR 39 million, which generated a survival;

- Debt reduction in 2017 following the repayment of 12m of exposures to banks and reduction of the 10m of debt purchased by the fund:
    - 2.5m was converted into capital, resulting in the fund becoming a shareholder with 51% of the shares;
    - EUR 7.5 million was written off.

All these operations precisely allowed Paolo Pigna to obtain a more stable NFP at the time of Dea Capital's exit (Figure 26).

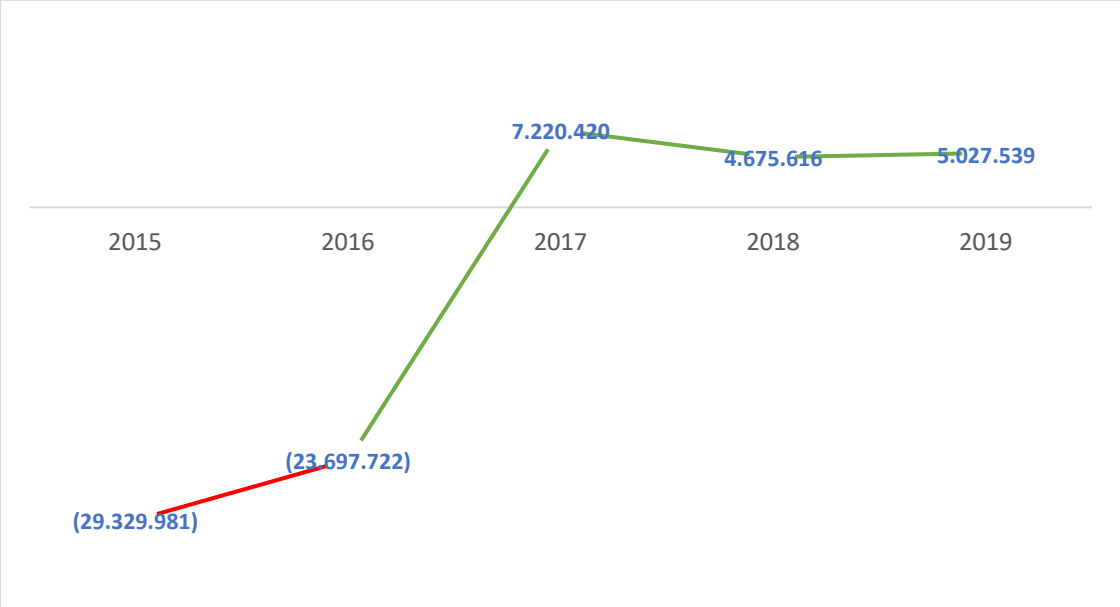

Figure 26: Shareholders Capital evolution Paolo Pigna

Calvi Holding S.p.A.

Founded in 1950, Calvi Holding S.p.A. is a company specializing in the production of cold-drawn special steel profiles. The metal deformation activity (including steel, alloys, and titanium) has historically been the core business of the Group, which over the years has achieved undisputed technological and market leadership in the design and production of special steel profiles according to customer specifications. Despite various restructuring attempts, the crisis that affected Calvi Holding persisted until 2017, following the initial

impact of the Subprime Crisis between late 2008 and 2009. DeA Capital's intervention occurred in 2017.

DeA Capital's involvement in December 2017 took place through the purchase of €56 million in non-performing loans against the holding company, representing 72% of the total exposure. These loans were partially converted into equity in March 2019 as part of an operation that resulted in the fund acquiring 26% of the shares, which remain in its portfolio (fiscal year ending in 2022).

A key aspect of this turnaround analysis is the active approach taken by the Board of Directors (and indirectly by the turnaround player) and the mid-course modification of the industrial restructuring plan following the crisis caused by the COVID-19 pandemic. As will be explored further, this modification led to Asset Retrenchment strategies, which had a positive impact on the associated drivers.

In 2017, the year of DeA Capital's entry, the company operated through 12 subsidiaries in Italy, France, Germany, Brazil, and the United States. The initial industrial plan, discussed in 2018, aimed to maintain all operational subsidiaries in the various markets and diversify their production and offerings according to the specific markets in which they operated. Consequently, investments of approximately €19 million were made in tangible non-current assets across all the Group's companies during the first two years.

However, 2020 marked a period of significant changes for Calvi Holding. The Board of Directors observed an exacerbated financial strain on the Group due to the impacts of the pandemic. A new industrial plan was drafted for the 2020-2023 period, this time focusing more on retrenchment policies aimed at streamlining the corporate structure:
Sale of 100% of the company Falci S.r.l.

- Deconsolidation of Fiav following its voluntary liquidation.
- Deconsolidation of all subsidiaries belonging to the Mechanical Division involved in the production of forklift masts (Lift-Tek Elecar, Lift Technologies, and Lift Technologies Brasil) following their sale in October 2021.

This last operation, in particular, generated a total capital gain of €57 million in 2021, providing significant benefits to the Net Financial Position (NFP) and largely explaining the increase in Shareholders' Equity during the period analyzed. Additionally, there was a 70% reduction in Non-Current Assets compared to 2016. However, it is important to note that

these retrenchment policies also led to a 60% reduction in Revenues, consistent with the "Focus on Core Activities" strategy.

Moreover, this strategy allowed for the early repayment and full extinguishment of debts due in 2023, as well as part of the medium/long-term debt, resulting in a reduction of approximately €80 million (an 80% reduction in Net Debt during the analyzed period).

Pillarstone S.p.A.

Pillarstone S.p.A.'s portfolio, as analyzed in this thesis, includes the following assets:

- Magicland S.p.A.
- Manucor S.p.A.
- Premuda S.p.A.
- Sirti S.p.A.
- Welcomm Engineering S.p.A.

As was the case during the analysis of the underlying assets of Dea Capital, also in the case of Pillarstone, the more in-depth analysis will be addressed to those assets that in terms of strategy and performance stood out, thus having followed those strategies and achieved those results hypothesized in the literature review section.

Premuda S.p.A.

Premuda holds a prestigious status as one of the oldest and most esteemed brands in the global shipping industry. Established in Italy, with headquarters located in the port city of Genoa, Premuda maintains operational subsidiaries in Italy, the United Kingdom, and Malta. As a prominent provider of dry cargo and tanker services worldwide, Premuda currently manages a fleet comprising 28 vessels.

Premuda was established in Trieste in 1907, after its foundation, Premuda was able to survive two World Wars and its relentless growth lasted until the end of 2007. In that year,

consolidated net equity reached the highest level of Euro 207 million after the distribution of an extraordinary dividend to celebrate the 100th year of activity.

Another crucial year was the 2016, year when Pillarstone entered in Premuda, the step-in of Pillarstone was providential for the Group, which was struggling with a comprehensive financial reorganization, and opened the doors of a new phase of development.

The situation in 2016 was characterized by distress on the part of Premuda, also due to the continuous poor conditions of the maritime market, which had led to a continuous erosion of Premuda's liquidity. In particular, 2016 was marked by impairment tests on the fleet, which had a significant impact, resulting in a distressed financial situation, with a negative balance of over 90 million euros.

The losses incurred during the 2016 financial year (over 200 million euros in losses between 2015 and 2016 caused by impairments) led to a reduction of over a third of the share capital, bringing it to values below legal limits. In March 2017, during Pillarstone's entry, Premuda's shareholders' meeting resolved to carry out a Capital Increase reserved for Pillarstone Italy SPV, excluding the right of option for previous shareholders (Art. 2441 of the Italian Civil Code). This operation allowed Premuda to improve its financial position, but on the other hand, it resulted in the complete loss of investment for the previous shareholders.

This turnaround, as will be examined in greater detail later, has achieved results consistent with the theoretical frameworks discussed in the Literature Review regarding Asset Retrenchment and Financial Restructuring strategies. However, it is important to emphasize that this can be regarded as a comprehensive turnaround, given that the outcomes have been extremely positive even when considering the drivers used in this thesis to map Operational Turnaround. As illustrated in Figure 6 Premuda, the operational results have been as follows:

- EBITDA increased from -€14 million to +€80 million;
- Gross Margin increased by 34%, primarily due to the removal of leasing expenses (since 2018, Premuda terminated passive leasing contracts due to the burdensomeness of this business and the low charter rates in the same market segment) and the reduction of OPEX expenses;

It is, however, crucial to note that this comparison is made relative to 2016, the year preceding Pillarstone's entry, which was marked by impairment tests leading to losses exceeding €200 million.

As extensively mentioned earlier, this turnaround was chosen and explored precisely because of the strategies adopted, which constitute a classic example of asset retrenchment strategies aimed at streamlining a company and focusing it on its core business. The behavior followed by Premuda (and so indirectly pursued by Pillarstone) can be viewed both as pure retrenchment but also following Recovery appoach illustrated by the Pearce & Robbins model. Pillarstone's entry was accompanied by the drafting of a new business plan that focused on the TANKER sector. This sector had been momentarily set aside in favor of the DRY sector due to the challenges related to the Covid-19 pandemic, because the latter was more attractive during the pandemic period. This shift, follow one of the strategy illustrated by the Pearce & Robbins model related to market positioning and following a specific market segment.

As illustrated in Figure 27, there was a 40% reduction in total non-current assets during the period under analysis, largely due to fleet cuts. It's interesting to note that from 2021 onwards, there has been a reversal in this trend that Is related to the change towards TANKER market segment. The decrease of Non-Current Assets is driven by the fleet management done by Premda following a plan agreed between shareholders.

The society sold the oldest vessels at the beginning of the turnaround (Four Springs and Four Moon sold in 2017 generating a capital gain of €456,000) and invested since 2021 in new vessels (March 2022 saw the acquisition, by the indirect subsidiary PS Tanker One Ltd, of three motor tankers).

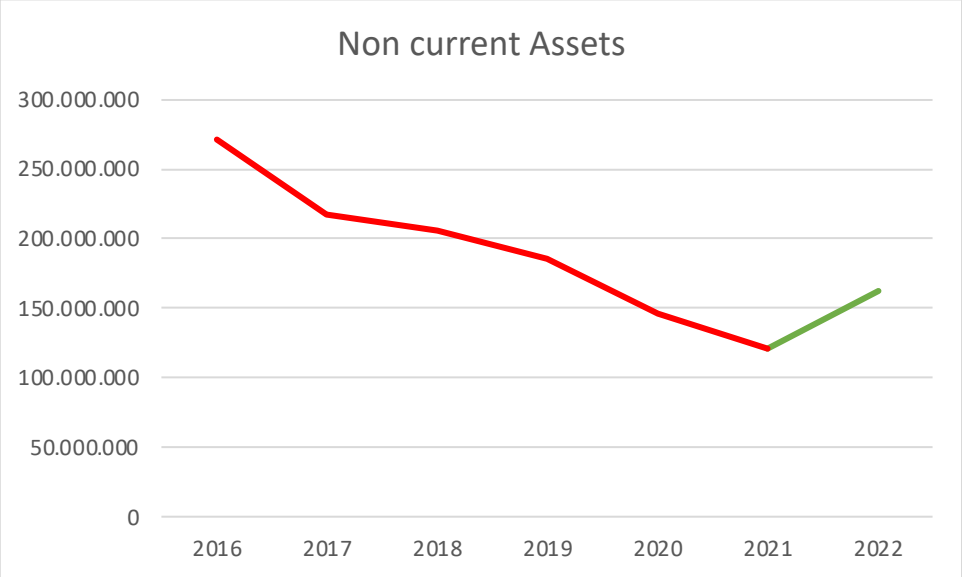

Figure 27: Non Current Assets trend during turnaround

Regarding debt reduction, which, like asset retrenchment, was significant in the case of Premuda (-75% since 2016), it is important to highlight the sharp decrease that occurred shortly after Pillarstone's entry, specifically between 2016 and 2017 (as shown in Figure). According to Premuda's financial report (AIDA source), the reduction in Net Debt between 2016 and 2017 was due to a debt restructuring agreement resulting from negotiations between Pillarstone and the creditor banks. This agreement led to a debt write-off amounting to approximately €117.5 million. A further drop in debt occurred between 2020 and 2021, which, unlike the initial reduction, is attributable to the industrial plan and fleet management strategies. Specifically, in 2021, three vessels were sold, enabling a financial maneuver that reduced indebtedness by over €40 million.

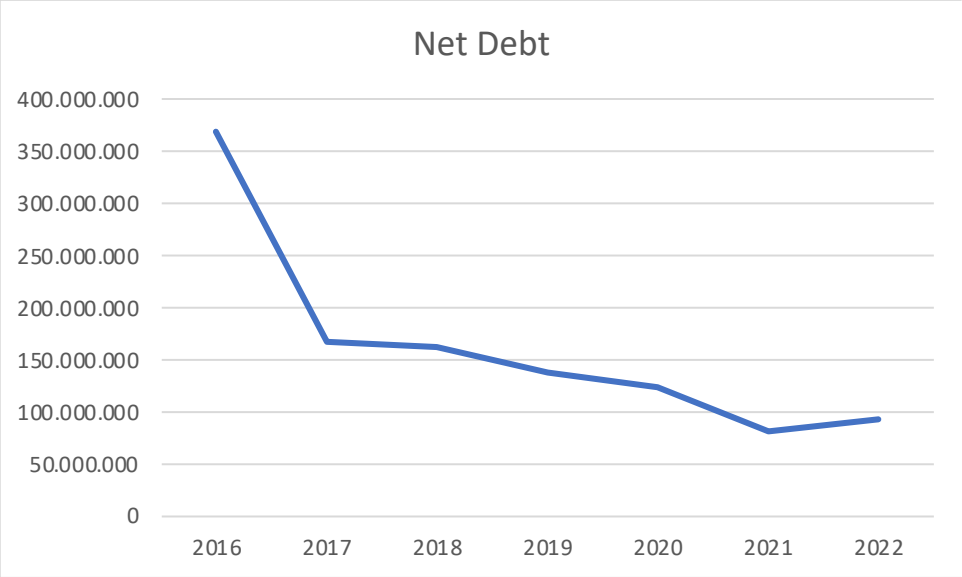

Figure 28: Net Debt reduction of Premuda

Thanks to this analysis it has been possible to answer to the research question: "*Are there specific strategic patterns (modus operandi) associated with certain turnaround players? Are there turnaround players who have focused their activities on only one of the three macro areas identified above (operational turnaround, asset turnaround, and financial turnaround)?".*

In fact, it has been possible to identify the presence of two "blocks" characterized by two different approaches to turnaround by different players. Thanks to this analysis it is possible to state that, for the sample analyzed, two players, Dea Capital and Pillarstone, focused more on Asset retrenchment and Financial restructuring strategy while other players like Oxy Capital and Clessidra focused more on Operational turnaround.

6. Limitations and future development

This thesis aims to investigate and analyze the turnaround market in the Italian context in the period between 2016 and 2022. The research was driven by the following research questions that have the goal of analyzing both the impact of turnaround drivers and the behavior of different turnaround players:

1. **Are there any statistically reliable drivers that can explain a change in the value of equity in companies that have entered a turnaround process? If so, what are they and what is their impact?**
   1.1. **If there were any drivers that were considered significant in explaining changes in equity, what was their average change relative to the sample of companies analyzed?**
2. **Are there specific strategic patterns (modus operandi) associated with certain turnaround players? Are there turnaround players who have focused their activities on only one of the three macro areas identified above (operational turnaround, asset turnaround, and financial turnaround)?**

Thanks to this research the following findings have emerged:

- The regression model used fitted with the sample analyzed as reported by the value of R^2. So the model was able to explain the variation of the dependent variable (Equity);
- Three of the drivers used (EBITDA, Net Debt, and Non-Current Assets) turned out to be statistically relevant (p-value < α);
- The output of the driver's Non-Current Assets did not follow what was supposed to be the driver's behavior. According to the output of the regression model there is a significant and positive relation between Non-Current assets increase and Equity increase;
- Turnaround players focused on different turnaround strategies, and two "macroblocks" were identified: one focuses more on Operational Turnaround, the second focuses more on Retrenchment both Asset and Financial;

While the research provides some findings as described above, the analysis conducted is constrained by the following limitations:

- The sample analyzed is quite small, so it is not possible to determine if the model may fit in general or if is it able to explain the variation only related to the narrow sample used in this thesis;

- The database used to extract the data (AIDA) didn't have all the searched data, for this reason, the sample was narrowed from 42 companies to 35 analyzed as explained in the bridge present at page 62;
- The dependent variable used was the Equity but to be more precise it should have been Equity Adj (Equity Adj = Equity + dividend), however, this is not impacting the output of the regression model since only one company (Main Oil paid 1.5€ million as dividend) paid dividends in the referred period;
- A huge number of companies just entered the turnaround phase (entered in the portfolio of turnaround player in 2022), so they were too new to assess. As we'll see later, in the "future development" section, it 'll be interesting to replicate this analysis in the future considering all the companies that entered in turnaround in 2022 (the sample will increase by 22 companies +60% compared to the actual sample);
- As illustrated in Chapter 5.2 some of the drivers used in the regression model were not independent respect to the others, this lead to have R^2 greater than $Adj\ R^2$. So, a new study may start by questioning if the drivers used in this thesis were reliable and if some drivers were missing.

Future research may start from this work and expand it by following several different ways, not covered in this research thesis:

- By starting from the fact that $Adj\ R^2$ is lower than R^2, future research may focus on this work and expand it by revisiting the drivers used in the model and adding some new drivers to try to look at the turnaround process from a different perspective;
- Considering that in this thesis the focus has been on the different strategic patterns (operational or retrenchment) followed by turnaround players, in future research another perspective can be taken, this time by dividing the companies that entered the turnaround process by sector. In this way, it will be possible to see whether a strategic pattern was followed more by a particular sector or not. In addition, by analyzing and comparing individual turnarounds by sector, it will also be possible to determine whether a major change in one or more of the drivers can be attributed to the turnaround process or whether it's related to the specific environment of the particular sector;

- Increase the sample population to test if the model will also fit with a bigger sample of analysis. The population may be increased by adding the Italian company that enters the turnaround process in 2022 (Table 21) or adding a new market to the analysis to understand differences across different countries.

TABLE 21: Society that have just begun the turnaround process "too new to asses"

Company Name	**Holding**	**Investment year**
Everton S.p.A.	Clessidra S.p.A.	2023
Impresoft S.p.A.	Clessidra S.p.A.	2022
Viabizzuno S.p.A.	Clessidra S.p.A.	2022
Landi Renzo S.p.A.	Itaca Equity Holding s.r.l	2022
Bracchi s.r.l	Clessidra S.p.A.	2023
Righi Elettroservizi S.p.A.	Clessidra S.p.A.	2023
Groupack Holding S.p.A.	Clessidra S.p.A.	2023
Gruppo Florence S.p.A.	Clessidra S.p.A.	2023
Trime s.r.l.	Clessidra S.p.A.	2022
M.G.M S.p.A.	Clessidra S.p.A.	2022
Candy Factory S.p.A.	Clessidra S.p.A.	2022
MTD s.r.l	QuattroR S.p.A.	2022
Seko Industries s.r.l.	Ibla Industries s.r.l	2022
Heila Cranes S.p.A.	Ibla Industries II	2022
Se.Fa. s.r.l.	Ibla Industries II	2022
AVR S.p.A	Azimut S.p.A.	2023
Costa Edutainment S.p.A.	Azimut S.p.A.	2022
Synergas s.r.l.	Azimut S.p.A.	2022
Pernigotti S.p.A.	JP Morgan S.p.A.	2022
Walcor S.p.A.	JP Morgan S.p.A.	2022

In conclusion, this thesis has provided a comprehensive analysis of the Italian market turnaround from 2016 to 2022. By employing an empirical approach using a regression model with eight independent variables (drivers), alongside a "number count" analysis, we were able

to dissect and understand the individual behaviors of specific drivers influencing market dynamics.

The findings illustrated above reveal significant insights into the factors that have impacted the performance of companies under the turnaround process. Despite some limitations, such as potential multicollinearity among variables and the need for further validation with a larger dataset, the study contributes meaningfully to the body of knowledge in market analysis and turnaround strategies. Future research is encouraged to build upon these findings, addressing the identified limitations and exploring additional variables that could further elucidate the complex mechanisms of market turnarounds.

7. Bibliography and Sitography

- Agustinus, H.M. & C. Situmeang. (2011). Financial Distress dan Corporate Turnaround. Proceding Paper at Simposium Nasional Akuntansi IV. Universitas Negeri Medan
- Agustinus, H.M. & C. Situmeang. (2011). Financial Distress dan Corporate Turnaround. Proceding Paper at Simposium Nasional Akuntansi IV. Universitas Negeri Medan
- Altman, E. I. (1968). Financial ratios, discriminant analysis and the prediction of corporate bankruptcy. The Journal of Finance, 23(4), 589-609.
- Altman, E. I. (1983). Why businesses fail. Journal of Business Strategy, 3(4), 15-21.
- Altman, E. I. (2002). Revisiting credit scoring models in a Basel 2 environment. Working paper. Altman, E. I., & Hotchkiss, E. (2010). Corporate financial distress and bankruptcy: Predict and avoid
- Altman, E. I. (2018). Applications of distress prediction models: what have we learned after 50 years from the Z-score models?. International Journal of Financial Studies, 6(3), 70.
- Altman, E. I., Iwanicz-Drozdowska, M., Laitinen, E. K., & Suvas, A. (2017). Financial Distress
- Amabile, T. M., & Conti, R. (1999). Changes in the work environment for creativity during downsizing. *Academy of Management journal*, *42*(6), 630-640.
- Arogyaswamy, K., V.L. Barker III, and M. Yasai-Ardekani. 1995. Firm turnarounds: An integrative two- stage model. Journal of Management Studies 32: 493–525.
- Baisag, S., & Patjoshi, P. (2020). Corporate Financial Distress Prediction–A Review Paper. PalArch's Journal of Archaeology of Egypt/Egyptology, 17(9), 2109-2118.
- Baliouskas, P., Llopis, J., Gasco, J., & Gonzalez, R. (2023). Implementing turnaround strategies as an entrepreneurial process. International Entrepreneurship and Management Journal, 19(4), 2037-2063.

- bankruptcy, analyze and invest in distressed debt (Vol. 289). John Wiley & Sons.
- Barker III, V. L., Luger, J., Schmitt, A., & Xin, K. R. (2024). Corporate decline and turnarounds in times of digitalization. Long range planning, 57(1), 102211.
- Basu, S. K., Thomas, J. E., & Acharya, S. N. (2007). Prospects for growth in global nutraceutical and functional food markets: a Canadian perspective. *Australian Journal of Basic and Applied Sciences*, *1*(4), 637-649.
- Berk, & DeMarzo. (s.d.). Corporate Finance 5th edition. Pearson.
- Beute, N. W. (2018). Turnaround strategies in financially distressed times-an empirical investigation of European entities in distress (Master's thesis, University of Twente).
- Bebeez (2016) *Al via il fondo per i crediti deteriorati di idea capital E hig. Le Otto Aziende coinvolte*, *BeBeez*. Available at: https://bebeez.it/private-equity/al-via-fondo-crediti-deteriorati-idea-capital-hig-le-otto-aziende-coinvolte
- Bebeez and BeBeez1 (2023) *Home Page*, *BeBeez*. Available at: https://bebeez.it/ (
- Bibeault DG. Corporate turnaround: How managers turn losers into winners. New York: McGraw-Hill; 1982.
- Brockner, J., Higgins, E. T., & Low, M. B. (2004). Regulatory focus theory and the entrepreneurial process. *Journal of business venturing*, *19*(2), 203-220.
- Budros, A. (1999). A conceptual framework for analyzing why organizations downsize. *Organization Science*, *10*(1), 69-82.
- Chandrawati, A. (2008). Analisis Faktor-faktor yang Mempengaruhi Keberhasilan turnaround pada Perusahaan yang Mengalami Financial Distress (The Factors that Affected The Successful Turnaround to Companies That Facing Financial Distress). (Unpublished Thesis). Semarang: Universitas Diponegoro.
- Chandrawati, A. (2008). Analisis Faktor-faktor yang Mempengaruhi Keberhasilan turnaround pada Perusahaan yang Mengalami Financial Distress (The Factors that Affected The Successful Turnaround to Companies That Facing Financial Distress). (Unpublished Thesis). Semarang: Universitas Diponegoro.
- Chowdhury S, Lang J. Turnaround actions, contingency influences and profitability: The case for slack and capital intensity.Canadian Journal of Administrative Sciences 1994;11:205-13
- Chowdhury, S. D., & Lang, J. R. (1996). Turnaround in small firms: An assessment of efficiency strategies. *Journal of Business Research*, *36*(2), 169-178.
- Commissione M&A e tavolo turnaround AIFI (2020), M&A E Private Capital per il rilancio delle imprese

- D'Avanzo, V. (2023). I fattori di Distress e le strategie di Turnaround delle aziende in procedura concorsuale in Italia: una analisi empirica.= Distress factors and turnaround strategies of companies in bankruptcy proceedings in Italy: an empirical analysis (Doctoral dissertation, Politecnico di Torino).
- Ferrari, A. J., Charlson, F. J., Norman, R. E., Patten, S. B., Freedman, G., Murray, C. J., ... & Whiteford, H. A. (2013). Burden of depressive disorders by country, sex, age, and year: findings from the global burden of disease study 2010. *PLoS medicine*, *10*(11), e1001547.
- Francis, J.D. & A.B. Desai. (2005). Situational and Organizational Determinants of Turnaround. Management Decision, Vol. 43 (9): 1203- 1224
- Francis, J.D. & A.B. Desai. (2005). Situational and Organizational Determinants of Turnaround. Management Decision, Vol. 43 (9): 1203- 1224
- Fan, R. E., Chang, K. W., Hsieh, C. J., Wang, X. R., & Lin, C. J. (2008). LIBLINEAR: A library for large linear classification. *the Journal of machine Learning research*, *9*, 1871-1874.
- Flanagan, D. J., & O'Shaughnessy, K. C. (2005). The effect of layoffs on firm reputation. *Journal of management*, *31*(3), 445-463.
- Freeman, S. J., & Cameron, K. S. (1993). Organizational downsizing: A convergence and reorientation framework. *Organization science*, *4*(1), 10-29.
- Goldberg, A. L., Cascio, P., Saric, T., & Rock, K. L. (2002). The importance of the proteasome and subsequent proteolytic steps in the generation of antigenic peptides. *Molecular immunology*, *39*(3-4), 147-164.
- Guthrie, J. P., & Datta, D. K. (2008). Dumb and dumber: The impact of downsizing on firm performance as moderated by industry conditions. *Organization Science*, *19*(1), 108-123
- Hansen, A. V. (2012). Corporate turnaround and corporate governance.
- Harjans, L. (2018). A comparison of Altman's z-score and the J-model in assessing corporate failure: Evidence from the USA(Bachelor's thesis, University of Twente).
- Heide, J. B., & John, G. (1992). Do norms matter in marketing relationships?. *Journal of marketing*, *56*(2), 32-44.
- Hoboken, New Jersey: John Wiley ans Sons.
- Hofer, C. W. (1980). Turnaround strategies. Journal of business strategy, 1(1), 19-31.
- Hoffman, R.C. 1989. Strategies for corporate turnarounds: What do we know about them? Journal of
- Hotchkiss, E. S. (1995). Postbankruptcy performance and management turnover. *The Journal of Finance*, *50*(1), 3-21.
- https://bebeez.it/private-equity/trinity-investments-punta-20-milioni-nellolio-dante/

- Kazozcu, S. B. (2011). Role of strategic flexibility in the choice of turnaround strategies: A resource-based approach. Procedia-Social and Behavioral Sciences, 24, 444-459
- Liang, D., Lu, C. C., Tsai, C. F., & Shih, G. A. (2016). Financial ratios and corporate governance indicators in bankruptcy prediction: A comprehensive study. European journal of operational research, 252(2), 561-572.
- Lohrke, F. T., Bedeian, A. G., & Palmer, T. B. (2004). The role of top management teams in formulating and implementing turnaround strategies: a review and research agenda. International Journal of Management Reviews, 5(2), 63-90.
- Love, E. G., & Kraatz, M. (2009). Character, conformity, or the bottom line? How and why downsizing affected corporate reputation. *Academy of management Journal*, *52*(2), 314-335.
- Nelson, M. C., Neumark-Stzainer, D., Hannan, P. J., Sirard, J. R., & Story, M. (2006). Longitudinal and secular trends in physical activity and sedentary behavior during adolescence. *Pediatrics*, *118*(6), e1627-e1634.
- https://www.oliodante.com/una-storia-italiana/
- O'Neill HM. An analysis of the turnaround strategy in commercial banking. Journal of Management Studies 1986a;23:165-88

- Prediction in an International Context: A Review and Empirical Analysis of Altman's Z-Score Model. Journal of International Financial Management & Accounting, 28(2), 131-171.Altman, & Hotckiss. (1993). Corporate Financial Distress and Bankruptcy.
- Robbins, D. K., & Pearce, J. A. (1992). Turnaround: Retrenchment and recovery. Strategic management journal, 13(4), 287-309.
- Robbins, D. K., & Pearce, J. A. (1993). Entrepreneurial retrenchment among small manufacturing firms. Journal of business venturing, 8(4), 301-318.
- Routledge, J., & Gadenne, D. (2000). Financial distress, reorganization and corporate performance. *Accounting & Finance*, *40*(3), 233-259.
-
- Schoenberg, R., Collier, N., & Bowman, C. (2013). Strategies for business turnaround and recovery: A review and synthesis. European Business Review, 25(3), 243-262.
- Schwartz, K. B., & Menon, K. (1985). Executive succession in failing firms. Academy of Management journal, 28(3), 680-686.
- Schweizer, L., & Nienhaus, A. (2017). Corporate distress and turnaround: integrating the literature and directing future research. Business Research, 10, 3-47.

- Schweizer, L., & Nienhaus, A. (2017). Corporate distress and turnaround: integrating the literature and directing future research. Business Research, 10, 3-47.
- Sheppard, J. P., & Chowdhury, S. D. (2005). Riding the wrong wave: Organizational failure as a failed turnaround. Long range planning, 38(3), 239-260.
- Shi, Y., & Li, X. (2019). An overview of bankruptcy prediction models for corporate firms: A systematic literature review. Intangible Capital, 15(2), 114-127.
- Skarlicki, D. P., & Folger, R. (2004). Broadening our understanding of organizational retaliatory behavior. *The dark side of organizational behavior*, 373-402.
- Slatter, S. S. P., & Lovett, D. (1999). Corporate recovery: Managing companies in distress. Beard Books.
- Sudarsanam, S., & Lai, J. (2001). Corporate financial distress and turnaround strategies: An empirical analysis. British Journal of Management, 12(3), 183-199.
- Suratno, S., Fitriawati, R., & Djadang, S. (2017). Determinants Analysis of Turnaround: Empirical Study on Manufacturing Company Registered in Indonesia Stock Exchange. Etikonomi, 16(1), 103-114.
- Terracchio, A. (2023). Il Distress Investing in Italia: analisi delle performance di Turnaround di alcuni fondi selezionati= Distress Investing in Italy: analysis of the turnaround performance of selected funds (Doctoral dissertation, Politecnico di Torino).
- Ugolini, C. (2023) *Chi Sono i signori del distressed in Italia?*, *Dealflower*. Available at: https://dealflower.it/chi-sono-i-signori-del-distressed-in-italia/
- When digital disruption strikes: How can incumbents ... Available at: https://www.capgemini.com/consulting/wp-content/uploads/sites/30/2017/07/digital_disruption_1.pdf
- Yu, W. H., Kumar, A., Peterhoff, C., Kulnane, L. S., Uchiyama, Y., Lamb, B. T., ... & Nixon, R. A. (2004). Autophagic vacuoles are enriched in amyloid precursor protein-secretase activities: implications for β-amyloid peptide over-production and localization in Alzheimer's disease. *The international journal of biochemistry & cell biology*, *36*(12), 2531-2540.

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