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SCUOLA DI INGEGNERIA INDUSTRIALE
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EXECUTIVE SUMMARY OF THE THESIS

Listings and delistings on the Italian Stock Exchange: an analysis of strategies and their correlation with firm performance

TESI MAGISTRALE IN MANAGEMENT ENGINEERING – INGEGNERIA GESTIONALE

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Introduction

The listing of a company on the stock exchange represents, in the capitalist world, the crowning of an entrepreneurial project. From a technical perspective, being listed gives investors the opportunity to buy or sell shares of a company in a faster, simpler, and cheaper way compared to trading a private firms' shares. However, beyond the mere technicality, becoming publicly listed introduces a discontinuity in the life of a company and a complete change of paradigm, since from that moment the equity value of the firm will be determined by the market's perception of its real value, which can often be biased. Furthermore, going public shifts incentives from trying to lower the taxable income to rather inflate profits in order to attract the interest of investors and increase the share price. Also the regulatory requirements to which the company is subject changes, as well as its internal organization and the governance mechanisms. It is therefore clear that being listed entails a radical change in the day-to-day business of a company, opening the path to new opportunities and at the same time exposing it to new threats. During the permanence of a firm in the markets of a stock exchange, it may happen that, due to a change in the market fundamentals or in the firm's strategy and performance, the advantages of being listed decrease below its direct and indirect costs. In this case, the company should evaluate the option of going private, thus delisting from the stock exchange. Even though going-private transactions (GPTs) have been less studied by researchers compared to going-public ones, their strategic implications are just as interesting. The interest in the topic has grown especially in the latest years, when the delisting of well-established companies was perceived as a warning sign. Existing studies on the topics of listing and delisting tend to focus mostly on the largest stock exchanges in terms of market capitalization (i.e., NYSE and LSE), even though the differences in national regulations, cultural aspects and economic context suggest that the results obtained in a country might differ compared to other geographical areas. The aim of this research is therefore to investigate the phenomena of listing and delisting on the Italian stock exchange from 2002 to 2021, in particular by analysing the strategies adopted by firms and their correlation with their operating and market performances.

1. Literature review

First of all, an extensive literature review has been performed with the aim of providing a thorough overview on the existing knowledge regarding listing and delisting practices and motivations.

As regards listing, the most common way to enter a stock exchange is through the traditional *Initial Public Offering (IPO)*, where newly issued shares are placed in the market among public investors. Nevertheless, other strategies can be adopted to become publicly traded: among the most interesting and popular ones figure the listing through *Special Purpose Acquisition Companies (SPACs)*, *spin-offs*, and *reverse takeovers*. SPACs are special financial vehicles created by renowned managers and/or professionals with great experience in Mergers and Acquisitions (M&As). The SPAC is then listed on a stock exchange with the aim of collecting capital, which is used to acquire a non-listed target company through a business combination, which becomes listed automatically. *Spin-offs* are the separation of a part of a company's business into a new company, and spin-offs of listed corporations are automatically listed as well. *Reverse takeovers,* instead, consist in the acquisition of a listed company by a non-listed one, which also becomes listed. Less frequent occurrences are the listing through *direct listing*, which occurs when the company is already widely owned and it simply joins the stock markets without any effect on the shareholding structure, and through *cross-listings,* in which a company listed on its domestic market chooses to list on another stock exchange.

As for the benefits sought by companies when going public, they can be grouped into four main macro-areas: financial, operational & marketing, organizational, and fiscal. Financial benefits are very well described by Pagano et al. [1], and they mainly relate to the fact that public firms can rely on additional ways to finance its growth and capital needs, as they can easily issue new shares in the market. This entails a greater bargaining power towards banks [2], which, combined with the fact that public companies can more easily re-balance their capital structure and leverage ratio, allows the latter to access debt financing at a lower cost. From the perspective of incumbent shareholders, going public gives them wider exit opportunities by increasing the liquidity of the stock. Operational & marketing benefits mainly derive from the higher visibility that being listed grants, which not only increases the prestige of the company and motivates managers and employees, but also strengthens the competitive position in a strategic market (i.e., through *cross-listing*) and reassures both suppliers and customers of the company's trustworthiness. Organizational gains are induced by the stricter monitoring mechanisms that listed companies are subject to, which force them to implement state-of-the-art practices. Fiscal incentives depend on the national regulatory frameworks of the single stock exchanges, and they usually come in the form of tax deductions.

As regards delisting practices, a distinction that is widely accepted in the literature is between involuntary and voluntary [3]. The former refers to cancellations that are imposed by the stock exchanges after a breach in the regulation, and it usually concerns firms in financial distress. In this cases, delisting might be imposed in order to safeguard both the reputation and the profitability of the stock exchange [4]. On the other hand, firms can voluntarily choose to abandon a stock exchange and become private, and they can do so in three main ways: through a takeover, a merger, or a voluntary request. Takeovers are the most adopted method in going-private transactions (GPTs), and they are carried out in the form of tender offers aimed at acquiring the floating capital in the market, thus taking the company private. Some of the most commonly cited types of takeovers are: *Leveraged Buy-Outs (LBOs)*, when the acquisition is funded by using debt as the main source of capital [5]; *Management Buy-Outs (MBOs)*, when the management team of the target company of or an external one gains a majority stake in the target company; *hostile* or *friendly takeovers*, according to the sentiment of the incumbent management board; *Buy-Out offer with Squeeze-Out*, when after a takeover the bidder company reaches an ownership threshold which grants it legal right to buy the remaining securities on the market at a fair price [6]. As for the motivations that can be found in the literature supporting the delisting decision, they can be grouped in three macro-categories as proposed by Djama et al. [3]: *traditional*, related to *agency costs,* and linked to the *financial structure*.

Traditional reasons promote delisting when costs of being listed are greater than the benefits cited above. Among the others it is worth mentioning direct costs, linked to registration fees and annual listing fees; indirect costs, like external auditing activities and expenses related to investor relations; opportunity costs, mainly linked to the market volatility and to the fact that a firm's value might decrease only due to a negative business cycle. *Agency costs* are incurred when a principal

(i.e., shareholders) delegate decisional power to agents (i.e., managers) on their behalf [7]. This strand of literature argues that firms with a diffused capital ownership, which is the case of public firms, suffer from high agency costs due to the lack of control over the board of directors. A takeover from a limited number of investors allows to reunify ownership and control, thus applying a stricter monitoring over the management. Another disciplinary effect that can be achieved especially in LBOs is the reduction of free cash flows, defined by Jensen [8] as the cash flow that exceeds the amount required to fund all projects with expected return higher than the cost of capital. In companies generating large amount of free cash flows, managers are incentivised to invest them in projects that increase the firm size - due to higher prestige and power [9] - even if at an Internal Rate of Return lower than the return on capital required by shareholders. After a levered acquisition a large part of cash flows is used to repay interests on debt, therefore forcing the management to invest the remaining cash available in projects with the highest expected return for shareholders, thus realigning their interests to the ones of shareholders [10]. Finally, reasons linked to the *financial structure* argue that major tax savings can be achieved when a substantial amount of debt is used to finance the acquisition (i.e., in LBOs) thanks to the deductibility of interest payments on debt from the taxable income. Also, private companies can execute restructuring operations in a much simpler way thanks to their more concentrated ownership structure.

2. Literature gaps and research questions

The comprehensive review of the literature revealed that many studies thoroughly analysed the strategies that companies can follow in order to list or delist from a stock exchange, as well as the potential benefits that they can gain from such decisions. Nevertheless, the empirical evidence on the topics is strongly biased in favour of the most renowned stock exchanges, with the majority of studies focusing on the US ([10], [11]) and UK ([12]) markets, or aggregating exchanges at European level ([13], [14]), while smaller stock exchanges like Borsa Italiana have been quite neglected. Indeed, the existing literature on the Italian stock exchange is very limited and mostly focused on specific aspects of listing only ([15], [16]), thus lacking a comprehensive analysis. Furthermore, empirical results obtained by researchers in different countries were sometimes conflicting, showing significant differences across countries and thus suggesting that smaller stock exchanges might show interesting peculiarities. Therefore, the goal of this research is to thoroughly analyse the flow of companies entering and leaving the Italian stock exchange from 2002 to 2021 to better understand the reasons for Italian companies to enter and exit the stock markets, and the correlation that exists among the strategy adopted and their performance. The specific research questions that this thesis addresses can be summarised as follows:

RQ1: what are the main reasons that drive companies listed in the Italian Stock Exchange to become private?

RQ2: which is the correlation between listing and delisting strategies and the firms' market and operating performances?

RQ3: do companies enter and exit the stock exchange opportunistically to the detriment of external investors?

3. Dataset creation methodology

Due to the lack of an existing database on the topic, it has been necessary to create an ex-novo database that would include the record of all the companies that have entered or exited the Milan stock exchange in the last 20 years (2002-2021). Between 2002 and 2021, using data provided by Borsa Italiana, 784 transactions were recorded, of which 448 were newly listed companies and 336 were firms that abandoned the Italian stock exchange. For each company were recorded the company name, its tax code, and ISIN code as primary identifiers, as well as the market where it was listed (the regulated one, EXM (ex MTA), or the non-regulated one for small and medium enterprises EGM (ex AIM Italia) and the date of the operation. It was also collected the sector of belonging and, only for listed firms, the total value of the offer and the overall market capitalization. Each transaction was then labelled according to the strategy used. Listings from 2002 to 2012 were the following:

- IPO (379): 138 on EXM, 241 on EGM.
- Spin-off (17): 16 on EXM, 1 on EGM.
- Direct listing (10): 6 on EXM, 4 on EGM.
- Reverse Merger (21): 19 on EXM, 2 on EGM.
- Business combination (21): 6 on EXM, 15 on EGM.

As regards delistings, they have been classified according to the following schema, which was inspired by the literature review and then tailored to the Italian landscape:

- Termination of activity (47): 40 on EXM, 7 on EGM.
- Lack of requirements (29): 10 on EXM, 19 on EGM.
- M&A by external actor (100): 87 on EXM, 13 on EGM.
- Infra-group merger (49): 46 on EXM, 3 on EGM.
- SPAC delisting after business combination (22): 5 on EXM, 17 on EGM.
- Initiated by incumbent shareholders (89): 80 on EXM, 9 on EGM.

Also, data regarding the operating and market performances of the firms in the sample were recorded for the last ten years, from 2012 to 2021. It must be noted that SPACs before the business combination have been excluded from the analysis as they are not operating. The indicators chosen to measure operating performances are revenues, EBITDA, and net profit, thanks to their ability to capture, respectively, the ability of the company to sell its products, to generate profits from its core activities, and from the overall activities. When available, these performance indicators have been collected for six years, ranging from three years before the operation to two years after it, in order to capture potential trends. Financial firms have been treated separately due to the different accounting standards, recording as a measure of turnover net interest margin for banks and gross premium for insurance companies, while net profit before taxes as a measure of profitability. The datapoints were collected using a combination of AIDA, Thomson Reuters, "Calepino dell' azionista" by Mediobanca, and IPO prospectuses. As regards market performances, the yields up to three years after the listing and three years before the delisting were recorded. The average daily value from 2009 to 2021 of the market index MIB was also recorded, in order to calculate differential yields with respect to the market. Datapoints of the punctual prices have been extracted using Factset and Refinitiv Eikon.

4. Empirical analyses and results

First, an analysis of the overall number of companies listed on the markets of Borsa Italiana from 2002 to 2012, as well as of the flow of companies that entered or abandoned its stock exchanges, was conducted with the aim of capturing the general trends that are shaping the Italian market. The record 407 companies listed on Borsa Italiana at the end of 2021 hid a bittersweet truth: it was mostly nourished by a strong growth of the unregulated market EGM, while the main market EXM experienced a constant decline since 2007. This trend towards smaller firms is confirmed by the fact that, in the 2002-2021 period, a total capitalization of €148,4 billion was brought into the markets of Borsa Italiana, against a loss of €179,3 billion due to delisted companies, resulting in a net loss of almost €31 billion. Also, the overall market capitalization at the end of 2021 (€768,8 billion) was still lower than the one at the end of 2007 (€778,5 billion). A comparison with the main European stock exchanges (UK, France, Germany) revealed a common impoverishing of the main markets, with the only exception of France. Then, the analysis of the performances for listed and delisted companies was restricted to the last ten years, from 2012 to 2021.

4.1. Performances of newly listed firms

As regards listing, the sample of transactions in the 2012-2021 period is strongly unbalanced towards IPOs, with 86,7% of all transactions, while the other four categories have therefore very little statistical relevance in the Italian market. Therefore, performances have been analysed by using other criteria, like the subdivision by quartiles based on the turnover in the year of listing/delisting.

Operating performances do not show particular discontinuities linked to the listing: firms in both EXM and EGM markets showed growing revenues in the three years before going public (on average 14,4% and 58% CAGR, respectively), and the trend continues with a similar behaviour in the two years after going public (on average 14,7% in EXM and 29,5% in EGM). EBITDA also increases progressively before and after listing, while EBITDA margin tends to grow for companies in the main market (reaching an average 19,1% after two years) and to decrease for companies in the non-regulated one (with a 10,6% after two years). net profit instead tended to rise significantly in the year of listing and in the following one, in particular for companies in the main market EXM. Financial firms (banks or insurance companies) also experience an increasing trend in interest margins and gross premia before and right after

going public (with an impressive average growth of 50,5% in the year of listing and 35,5% the year after), and profits before taxes improve considerably after joining Borsa Italiana. More interesting results are shown by market performances, as listing proved to create average positive wealth gains for shareholders (Figure 1). Indeed, companies in both markets showed a significant increase in their share price compared to the offer price (on average +31,7% in EXM and +20% in EGM after three years). Differential yields are lower than absolute ones, but still positive.

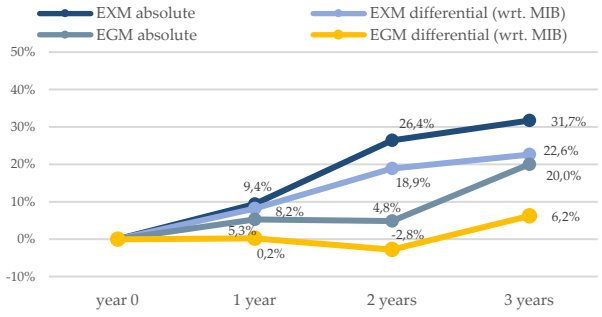

Figure 1: mean absolute and differential yield, by market

Nevertheless, by deepening the level of analysis, it was possible to notice that the positive returns are actually generated by large companies with market capitalization above the median values (+44,5% after three years), while the half of the companies with lower capitalization generated slightly negative yields (-3,4% after three years). Also, by segmenting performances by market and by year of listing, the highest yields appear to be driven by companies listed on EXM, especially from 2014 to 2016, and by those listed on EGM only in 2018.

4.2. Performances of delisted firms

As for listings, also delistings have been analysed in the 2012-2021 time frame. However, a slight adjustment to the classification presented in chapter 3 was required to obtain homogeneous clusters for which it is worth to carry out a performance analysis. In particular, "termination of activity" and "lack of requirements" clusters are often interconnected, as companies that do not comply with the requirements of Borsa Italiana in most cases encountered financial difficulties, and they have been merged. Also, delistings of SPACs upon a business combination have been excluded from the analysis, as they start operating after acquiring the target company. The resulting four homogeneous clusters are the following ones:

"**Defeated":** composed of the 48 companies that were delisted due to "termination of activity" (26) or due to "lack of requirements" (22), thus corresponding to involuntary delistings. As can be expected, these firms performed very poorly according to all operating performances indicators, with a constant deterioration in the three years preceding the forced delisting. Similarly, market yields registered average drops of -53,2% in EXM and -69,2% in EGM in the last three years.

"Preys": it includes the 50 companies delisted upon a merger or an acquisition by an external actor, in 90% through a tender offer.
As regards operating performances, median revenues increased in the three years before delisting by 33%, from €260,2 to €346,4 million, in EXM, and by 119,4% in EXM, from €19,1 to €41,9 million. EBITDA margin and net profit increased in both markets as well, suggesting that bidders are in general interested in acquiring healthy companies with strong growth opportunities and able to improve their performances. Performances have also been analysed by segmenting according to the nature of the bidder, dividing into industrial groups (Italian listed groups, Italian non-listed groups, foreign groups), and financial investors (PE funds). The analysis revealed that industrial groups were more interested in growth opportunities and sound operating performance (EBITDA) rather than a solid net profit, probably hoping to improve it thanks to post-merger synergies, financial investors acquired fast growing firms with sound levels of net profit as well.
Average market performances were extremely satisfactory in both markets, mostly due to the large premia offered to complete the takeover. Average yields in the 12 months preceding the delisting reached 50% in EXM and 46,4% in EGM. The largest premia were offered by foreign groups and financial investors, which both paid a price around 83% higher than one three years before.

"Restructuring": in this cluster are present 23 cases of "Infra-group mergers", thus mergers among companies of the same listed group that are aimed at simplifying and restructuring the shareholding structure of the latter. The reason for delisting derives from strategic choices made at group level and is not necessarily strictly related to the performance of the target company. Operating performances slightly decreased, and market yields are in line with the MIB index.

"Regretful": composed of 43 companies**,** this is an extremely interesting cluster because the going private operation has been strategically chosen by the incumbent shareholders and managers of the company. In 63% of the cases (27) this happened after being listed for more than 10 years. The peculiar characteristic common to firms in this cluster is the sudden drop in net profit the year before being delisted, trend that is confirmed also when segmenting according to the technique used (voluntary request, merger with a non-listed company, voluntary takeover bid, mandatory takeover bid), with the only exception of mandatory tender offers. For 15 firms that survived after the takeover it was also possible to analyse performances after being delisted. Surprisingly, they showed on average an increase in revenues already in the year of delisting (+9%), which proceeded also after one and two years. Also EBITDA, EBITDA margin and net profit showed great improvements after delisting, with the latter registering the highest increase both in mean (+61,6%) and median terms (+113%). These results provide partial support to the hypothesis that some companies might delist due to opportunistic reasons in order not to share future profits with public investors. Market performances ranged around an average 12% for companies in EXM, while companies in the EGM market lost around half of their market value in the three years before going private. When looking at the technique used, companies delisted through voluntary request were the worst performing ones, while those delisted through voluntary tender offers showed a double-digit yield in the year before delisting, mostly due to the premia offered to shareholders. A final analysis on the overall return for investors revealed that "Preys" were the only firms providing positive annualized returns in both EXM and EGM markets.

5. Conclusions

This thesis investigated the phenomena of listings and delistings on the markets of Borsa Italiana, with a particular focus on the correlation between the listing or delisting decision by a firm and the operating and market performances of the latter. With respect to the research questions that were intended to be answered, this researched highlighted some interesting facts. Despite reaching a record 407 firms listed on the Italian stock markets, Borsa Italiana is experiencing a mutation in the profile of its markets, much more oriented towards smaller capitalized firms. This trend is confirmed by the net loss of capitalization of around €31 billion from 2002 to 2021, and it is common to the other major European stock exchanges, partly due to the high liquidity accessible by companies and Private Equity funds in contexts of low interest rates.

Then, listing and delisting strategies were analysed, as well as their correlation with firm performance. The most adopted strategy to go public was by far through IPO (86,7% of all transactions). In most cases they showed consistent growth in turnover and margins before going public, which maintained the same trend even after the listing. As far as market performances are concerned, an average positive absolute return is observed over the ten-year period for both markets. As regards delisting, a classification tailored to the Italian landscape has been developed, with "M&A by external actors" and "initiated by incumbent shareholder" being the most common cases. By slightly modifying this classification, four homogeneous clusters have been obtained, on which performance analyses were performed. "Defeated" companies, in most cases suffering financial distress, showed very disappointing operating and market performances. "Preys" were delisted upon a merger or an acquisition by an external actor (50), in 90% through a tender offer. They were characterized by satisfactory balance sheet ratios and, especially in the year before delisting, generated discrete returns for investors. "Restructuring" companies were reabsorbed into other listed companies of the same group, and generated modest performances and market yields. "Regretful" companies were delisted by initiative of incumbent shareholders. They experienced significant drops in the net profit the year before delisting, while most indicators improved significantly in the two years after delisting. Thus, it cannot be denied that, in some cases, delisting is an opportunistic manoeuvre aimed at withdrawing shares at "cheap" prices, knowing that performances will improve in the short term. However, listing should be seen as an event that generates long-term opportunities: many healthy companies raise precious capital for nourishing their growth by going public, generating employment, innovation, and great returns for their investors.

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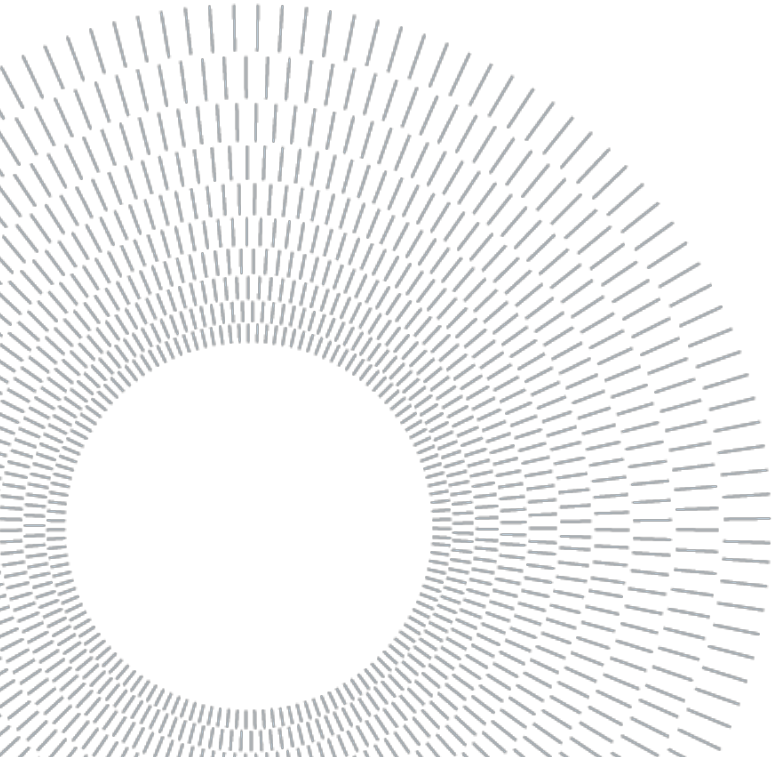


"Friendship is the hardest thing in the world to explain. It's not something you learn in school. But if you haven't learned the meaning of friendship, you really haven't learned anything."

M. Ali

"…Sail away from the safe harbour.
Catch the trade winds in your sails.
Explore. Dream. Discover."

M. Twain

Abstract (English)

While the phenomenon of listing has been widely studied in the literature, the one of delisting has attracted more interest in relatively recent times. For both topics, however, the most relevant studies are concentrated in the major financial centres (i.e., US and UK), while smaller trading venues, such as the Italian Stock Exchange, have been subject to little research, mostly concerning specific and punctual aspects.

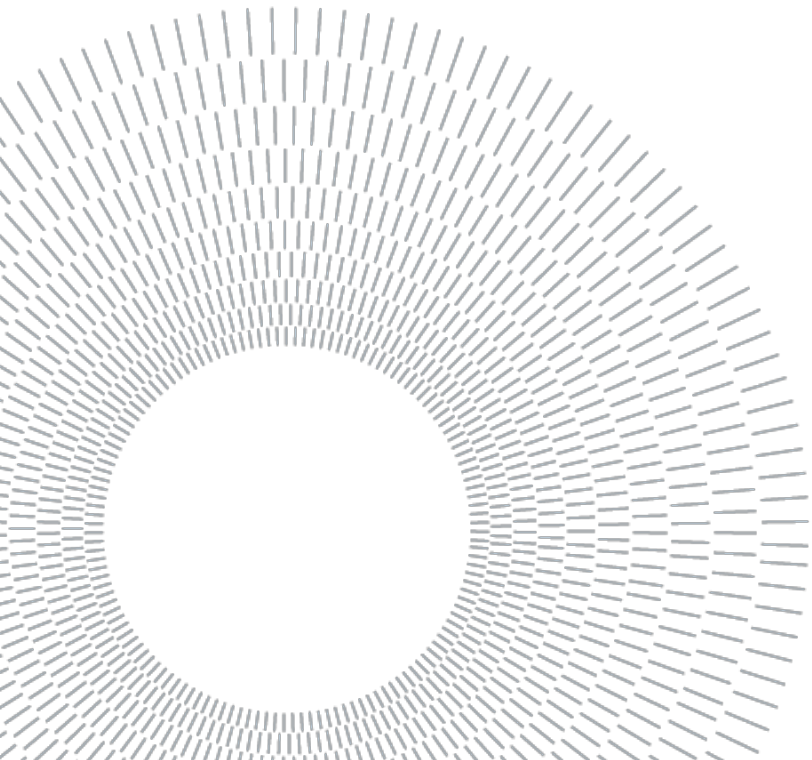
The main contribution of this research is therefore to holistically analyse the listing and delisting practices on the Italian Stock Exchange from 2002 to 2021, highlighting the main strategies adopted by companies and studying their correlation with operational and market performance. Results show a depopulation of the main market in favour of the one reserved for small and medium-sized companies, a trend observed in the other major European stock exchanges as well. As for newly admitted companies, in 86% of the cases listed through an IPO, an upward trend in the main operating indicators before listing is shown, which continued in the following two years. Of particular interest is their market performance, which on average generated quite satisfactory returns, especially for large companies listed on the main market. Regarding delisting, the performance analysis was carried out separately for the four clusters identified. The first is the cluster of "Defeated" companies, delisted due to liquidation or lack of requirements, which generated disappointing operating and market and returns. The cluster of "Preys" includes companies that were merged or acquired by external actors, and showed on average good revenue growth in the years prior to delisting; as for bidders characteristics, industrial buyers were more interested in growth than profitability, while financial buyers also demanded substantial net profit levels. Market returns for "Preys" were particularly driven upwards by the "premia" offered in takeover bids. "Restructuring" companies have been acquired or merged by listed companies of the same group in order to restructure the shareholding structure of the latter, and showed rather stable returns in line with the market. The cluster of "Regretful" includes firms delisted by strategic initiative of the incumbent shareholders. It cannot be excluded that in some cases this happened for opportunistic reasons, as they often experienced a sharp drop in profitability in the year prior to delisting, followed by a rapid increase in all indicators in the following two years.

Key-words: Listing, Delisting, Borsa Italiana, Strategy, Performance

Abstract (Italiano)

Mentre in letteratura la quotazione in Borsa è stata da tempo studiata con molto interesse, l'abbandono dei listini è una tematica che ha suscitato maggiore interesse in tempi relativamente recenti. Per entrambe le tematiche, comunque, gli studi più rilevanti sono concentrati nei maggiori centri finanziari (i.e., USA e UK), mentre quelli di dimensioni più modeste come Borsa Italiana sono stati oggetto di poche ricerche, per lo più riguardanti aspetti specifici e puntuali. Il contributo principale di questa ricerca è quindi di analizzare in modo olistico i fenomeni di *listing* e *delisting* sui mercati di Borsa Italiana dal 2002 al 2021, evidenziando le principali strategie adottate dalle imprese e studiandone la correlazione con le *performance* operative e di mercato. I risultati evidenziano uno spopolamento del listino principale a favore di quello riservato a piccole e medie imprese, fenomeno riscontrato anche nelle altre maggiori Borse Europee. Per quanto riguarda le imprese neo-quotate, nell'86% dei casi ammesse tramite IPO, si evidenzia un *trend* di crescita dei principali indicatori prima della quotazione, che continua nei due anni successivi. Particolarmente interessante è la *performance* di mercato, che genera mediamente ritorni piuttosto soddisfacenti in particolare per le grandi aziende quotate nel mercato principale. Per quanto riguarda il delisting, sono stati individuati quattro *cluster* omogenei, per i quali sono state analizzate le performance. Il primo è quello delle "Sconfitte", aziende delistate per liquidazione o mancanza di requisiti che hanno generato rendimenti operativi e di mercato deludenti. Il cluster delle "Prede" include aziende fuse o acquisite da soggetti esterni, e mostrano mediamente una buona crescita del fatturato negli anni precedenti il delisting; gli acquirenti industriali sono più interessati alla crescita che alla profittabilità, mentre quelli finanziari richiedono anche livelli di utili sostanziosi. I rendimenti di mercato per le "Prede" sono spinti particolarmente al rialzo a causa dei "premi" in sede di OPA. Le "Ristrutturande" sono state acquisite o fuse da aziende quotate dello stesso gruppo per ragioni di ristrutturazione societaria dello stesso, e mostrano rendimenti piuttosto stabili ed in linea con quelli di mercato. Le "Pentite" vengono delistate su iniziativa degli attuali azionisti per ragioni strategiche. Non è da escludere che in alcuni casi questo sia avvenuto per ragioni opportunistiche, visto che spesso hanno riscontrato un brusco calo della profittabilità nell'anno precedente il delisting, seguito da un rapido incremento di tutti gli indicatori nei due anni seguenti.

Parole chiave: Listing, Delisting, Borsa Italiana, Strategia, Performance



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Introduction

The listing of a company on the stock exchange represents, in the capitalist world, the crowning of an entrepreneurial project. From a technical perspective, being listed gives investors the opportunity to buy or sell shares of a company in a faster, simpler, and cheaper way compared to trading a private firms' shares. However, beyond the mere technicality, becoming publicly listed introduces a discontinuity in the life of a company and a complete change of paradigm, since from that moment the equity value of the firm will be determined by the market's perception of its real value, which can often be biased. Furthermore, going public shifts incentives from trying to lower the taxable income to rather inflate profits in order to attract the interest of investors and increase the share price. Also the regulatory requirements to which the company must comply with changes, as well as its internal organization and the governance mechanisms. It is therefore clear that being listed entails a radical change in the day-to-day business of a company, opening the path to new opportunities and at the same time exposing it to new threats. During the permanence of a firm in the markets of a stock exchange, it may happen that, due to a change in the market fundamentals or in the firm's strategy and performance, the advantages of being listed decrease below its direct and indirect costs. In this case, the company should evaluate the option of going private, thus delisting from the stock exchange. Even though going-private transactions (GPTs) have been less studied by researchers compared to going-public ones, their strategic implications are just as interesting. The attention to the topic has grown especially in the latest years, when the delisting of well-established companies was perceived as a warning sign by observers in the market. Existing studies on the topics of listing and delisting tend to focus mostly on the largest stock exchanges in terms of market capitalization (i.e., NYSE and LSE), even though the differences in national regulations, cultural aspects and economic context suggest that the results obtained in a country might differ compared to other geographical areas.

The aim of this research is therefore to investigate the phenomena of listing and delisting on the Italian stock exchange from 2002 to 2021, in particular by analysing the strategies adopted by firms and their correlation with their operating and market performances.

1 Literature review

First of all, an extensive literature review has been performed with the aim of providing a thorough overview on the existing knowledge regarding listing and delisting practices, with a focus on the strategies that can be adopted and the possible reasons supporting them.

1.1. Listing

One of the most crucial topics analysed in corporate finance is whether a firm should go public or remain private. Most corporate finance textbooks only briefly mention the decision's motivation while focusing instead on its institutional aspects. As reported by Pagano et al. [1], according to many studies going public is solely a stage in the development of a company that is eventually reached as the firm grows. Although it contains some truth, this thesis is insufficient to account for the observed listing pattern, as even some major corporations including Rolex, Versace, Barilla, and Ferrero chose to remain private. Publicly traded corporations are more rare than common in other nations, such as Germany and France, and many private companies are far larger than the typical publicly traded company. These cross-sectional and cross-national differences show that going public is the result of a crucial strategic decision rather than a stage that all companies eventually reach [1]. This raises the question of why certain businesses opt to use public equity markets to nourish their growth, while others prefer to maintain their status of private companies.

The decision to go public and issue new equity, as described by the Pecking Order Theory [2], is the most costly source of financing for a company. According to this model, the cost of financing increases with increasing asymmetric information. There is, therefore, a hierarchical order in the choice of financing sources. The least expensive one is internal funds, followed by debt, for example in the form of bank loans or through the issuance of bonds, and finally equity capital. Notwithstanding the above, some economists [3] believe that a stock market listing is necessary at a certain point in the life cycle of a company that is growing its business. This process, referred to in

the literature as the “Going Public Process”, can have additional benefits other than the monetary ones, and thus represents a valid alternative to other sources of financing. In fact, through listing, companies are able to raise large amounts of capital, injecting large sums of liquidity that can be used for various purposes, such as in R&D, mergers and acquisitions and capital expenditures, as analysed in the work of Kim and Weisbach [4].

As explained by Ritter and Welch [5], "the main benefit of listing and the main reason for companies to adopt such a choice is to raise capital". With the capital raised, companies can redefine their financial structure according to their needs, gain market share more quickly by financing various projects and be more competitive in the market.

Going public has major implications for a company. A public listing exposes the company to the increased regulatory and transparency obligations of stock exchanges, as well as to intensive analyst and media scrutiny. The processes of going public and the regulations set by the Securities and Exchange Commissions are quite similar worldwide. In order to be listed, a company must meet the qualifications set by the stock exchanges and continue to meet those qualifications while listed.

The following section presents the main methodologies that companies can adopt to list on stock exchanges and the main advantages companies look for when undertaking this process, according to existing literature.

1.1.1. Taxonomy of typologies

Listing is a long and complex process that requires adequate preparation and the involvement of external advisors and consultants. The outcome of the process leading to listing depends, therefore, not only on the structural characteristics of the business, but also on the planning capacity and the managerial set-up that, together, make the company a good candidate for becoming listed. In view of the listing, it is advisable for the company to focus on certain areas in order to be as prepared as possible. These areas range from the certification of financial statements by external auditors to the strategics analysis of the industrial sector in which the company operates, as well as the preparation of a coherent, reliable and financially sustainable business plan. In addition, the presence of a competent management team and suitable corporate governance practices contribute, together with the elements mentioned above, to define the equity story. These activities are crucial for a successful listing regardless of the methodology adopted. Once the company is compliant with the requirements set

by Borsa Italiana to be eligible for becoming listed, it must choose the most appropriate way to do so.

The review of existing literature revealed six main modalities through which a company can become listed on a stock exchange:

- **Initial Public Offering (IPO):**

  The Initial Public Offering (IPO), defined by Borsa Italiana as: *'an instrument through which a company obtains the diffusion of its securities among the public (forming the so-called float), which is a fundamental requirement for obtaining the listing of its securities on a regulated market'*[6], represents the most common methodology to become listed. It requires an offer of shares, either primary (newly issued) or secondary (already existing), whose purpose is to have the company's securities owned by a multitude of investors in the market and thus become publicly listed on the stock exchange. IPOs are carried out by companies, whose capital is usually held by entrepreneurs or a small number of shareholders, who agree to open the floor to a larger audience in order to enhance the company's potential, its corporate image, reduce its indebtedness or more simply to finance new investments. There are three distinct procedures through which an IPO can be executed:

  Public Subscription Offer (PSO)

  In an PSO, the shares offered to investors are newly issued, following a capital increase resolution, whose countervalue is collected by the issuing company, which will experience a proportional increase in equity [7]. The primary objective of this modality is usually to raise liquidity, which can then be used to carry out acquisitions or large cash-intensive investments.

  Public Offer For Sale (OFS)

  In a OFS, the shares offered to investors are already existing and are sold by the incumbent shareholders of the company who wish to monetise their stake at the time of listing by cashing in the countervalue of the shares held [8]. The OFS is mainly used as an exit strategy for private equity funds, in privatizations and in cases of generational handovers. In fact, the company does not acquire new capital, but only experience a change in the composition of the ownership structure, thus

facilitating generational change or the disinvestment of a private equity fund or public entity.

Public Offer for Sale and Subscription

In the public offer for sale and subscription there is a mixture of the two traditional procedures just described, with an offer to investors consisting partly of newly issued shares and partly of pre-existing shares [9].

The main difference characterizing the two types of offers lies in the destination of the capital deriving from them. In fact, while in PSO the cash from the transaction is allocated to finance the company, with a consequent increase in capital, in OFS the capital is intended to monetise the shareholders' holdings by changing the ownership base and not the overall equity.

The initial public offering is one of the most complex and costly financial transactions faced by companies, which is why the company is supported throughout the process by one or several underwriter banks, which have the task of organizing the issue and subsequent placement of securities. The process that allows a company to go public is very long, taking more than six months. The underwriter bank accompanies the company through all the journey usually playing a threefold role: firstly, it offers the company legal and financial advice, secondly it can itself subscribe a part of the shares, finally it sells it to the public.

As regards the development of IPOs over the years, the first recognisable modern IPO occurred in the Dutch Republic in March 1602 when the Dutch East India Company (also known by its acronym VOC) became the first company in history to issue debt securities (bonds) and shares to the public, with the aim of increasing its capital stock. The VOC was officially the first company to list on an official stock exchange, the Amsterdam Stock Exchange. In the US, on the other hand, the first IPO occurred two centuries later, the first company to issue its securities to the public was the Bank of North America in 1781 [10].

Today, the market for IPOs has expanded incredibly. With 2,682 deals raising US$ 608bn [11], 2021 became the most active year for IPOs in the past 20 years. Beating the previous record of 1,452 in the year 2020.

Among listing methodologies, IPO has long held the position of leading listing methodology, due to its universality and safety. However, the high costs resulting from direct fees and all indirect costs induced by the IPO process make this

methodology very expensive and not convenient for all types of companies. For these reasons, alternative means of accessing the capital market are becoming increasingly popular, which allow a faster and less expensive listing on the stock exchange.

- **Special Purpose Acquisition Company (SPAC)**

  A Special Purpose Acquisition Company (SPAC) is a special corporate vehicle created by initiative of a number of individuals, defined as promoters (or alternatively founders, management team or sponsors), characterised by a high professional standing as well as specialised in specific industries and flanked by operators with high experience in the M&A and private equity sectors. The SPAC is then listed on a stock exchange through an IPO in order to raise capital from investors, and subsequently proceeds with the business combination with an unlisted company, defined as a target, within a relatively short period of time (usually 18 to 24 months). In this way the target company is merged into the SPAC, and the resulting company is listed. The final step is to change the name of the company into the target company's one, which therefore finds itself listed in a much quicker way than by preparing an IPO.

  When the SPAC is listed on the market, specific units consisting of shares and one or more warrants are placed on the market, which are "in the money[1]" from the time of placement, thus being convenient for the investor himself. Initially, before this particular financial product gained popularity, the investor base was constituted mostly by long-only investment funds and HNWI (High Net Worth Individuals) investors, whereas today, not infrequently, it is also possible to find insurance companies, mutual funds, and other vehicles which fall within the macro-area of institutional investors. However, it is important to specify that not all issues are the exclusive domain of institutional investors or qualified private individuals, but they are gaining popularity also among retail investors, as demonstrated by the experience of Glenalta [13], an Italian SPAC placed on the AIM market in July 2017.

[1] An option is said to be in the money when its exercise is profitable: in the case of calls when the strike price is lower than the current value of the underlying asset, and in the case of puts when the strike price is higher than the current value of the underlying asset[12].

After the placement on the market, most of the resources raised are separetad through special mechanisms, represented by trust on which interest accrues from so-called risk-less investments, in such a way as to be unavailable to the promoters and to be allocated to the completion of the transaction through the corporate integration with the target company. As mentioned above, the SPAC has a limited time horizon, since within, and no later than, 24 months (except in special cases where an extension of a further 6 months may be granted), the management team must identify the target company and proceed with the business combination, which must be approved with appropriate qualified majorities, approximately 75-80%, by the shareholders and investors' meeting. Otherwise, if this is rejected, the management team has two alternative routes to take: either present a new target company or liquidate the investors; the latter option is pursued even in the event that no business combination is approved, and even in this case there follows withdrawal by the investors, who will be reimbursed with the cash held in the funds while retaining ownership of the warrants. For the sake of completeness, the four categories by which Lewellen [14] categorizes SPACs in their life cycle after the IPO took place are presented below.

- No target found (NT): the SPAC has not announced its intention to acquire a target company.
- Target found (TF): The SPAC has announced, but not completed, the proposed acquisition.
- Acquisition completed (AC): the SPAC has completed the acquisition of one or more target companies.
- Acquisition withdrawn (AW): the SPAC, after announcing the acquisition, withdraws it.

One last focal point concerning the life of a SPAC, but one of the most important in terms of the success of the entire operation, regards the modality through which the business combination can take place:

- Shares in the target company may be purchased from the current shareholders.
- New shares issued by the target company can be subscribed.
- A direct or reverse merger can take place between the SPAC and the target company.

The method most commonly used to complete the transaction is that of a merger.

It should be noted that there are two different interpretations as to how the business combination is carried out: one part of the academic literature argues that the transaction is a full merger [15], while a second interpretation argues that it is a reverse merger [16].

The reverse merger is a particular type of merger that, in the case of SPACs, involves a listed company that is inactive or in any case devoid of assets (typically referred to as a shell company); among other things, it is an operation that in the US context has a negative reputation, as it is associated with the back-door listing process. In the first case, on the other hand, one starts from the conception that the SPAC was created with the objective of taking an unlisted operating company public by providing fresh capital and the necessary expertise of its promoters, in order to ensure the success of the operation.

- **Reverse takeover**

  Reverse takeover, also called reverse IPO, is a strategy to list a private company on the stock exchange by acquiring an already listed company and thus avoid the costly and time-consuming process of listing through IPO. These transactions can also take place for other motives, for example a strategic point of view by the acquirer to expand inorganically or even to improve business functions if they see value in a public company. Small capitalization companies who either do not meet the standards to go public through an IPO or who are looking for a more affordable alternative to go public typically choose this back-door listing.

  Prior to the Reverse Takeover, it is not uncommon for the shell company to have had little or no recent activity. The latter has two main motivations for participating in this deal. First, it expects that through the new deal they will have the opportunity to develop its business again. Second, it is a great opportunity for the shareholders to recover part of their losses.

  The reverse takeover allows the private company to move its operations into the shell company with relative ease, while having several advantages over IPOs [17]:

  – Faster process: the common way to be listed via Initial Public Offering takes months or years due to various regulatory requirements, whereas listing via Reverse Takeover can be done in just a few weeks. It helps the company's management save time and effort.

- Lower risk: Many times, depending on the microeconomic, macroeconomic, or political situation, as well as the company's recent performance, management may decide to go back on its decision to go public because being listed at that time may not get the good response from investors and may deteriorate the company's valuation.
- Reduced costs: before going public, there are many other tasks that the company must undertake to create a positive sentiment in the market for its IPO, which includes roadshows, meetings and conferences. These tasks require significant effort on the management side, as well as costs for the company necessary to hire investment banks as consultants for these tasks. In the case of a reverse takeover, most of these costs can be avoided.
- Advantages of being listed: Once the company goes public, the company will enjoy all the advantages of a listed company.

In conclusion, it is worth to point out that, despite the many advantages of this methodology of listing, reverse takeovers usually have lower survival rates and performance in the long run than companies that go public through a traditional IPO.

- **Direct listing**

Although traditional IPOs carried out with the help of underwriters' banks continue to be the most common form of listing today, the need of private companies wishing to go public and save on listing costs, listing time and, above all, avoid possible underpricing, has made necessary a different modality of listing. This can be done through direct listing. This process can be defined as a method through which private companies become publicly traded without going through an IPO process, which can be achieved either when a company already has a broad ownership structure (thus it meets the minimum floating capital requirements and it is simply admitted to trading) or by selling shares directly in the markets without the intermediation of an investment bank [18]. This methodology has several differences from the traditional IPO:

- Lower costs associated with the listing: companies wishing to list via direct listing, thus not relying on an investment bank to act as intermediary, avoid paying extremely high listing fees that reduce the net amount collected.

- Absence of the lock-up period: In a traditional IPO, the lock-up clause binds certain shareholders not to dispose of all or part of the shares held, for a certain period after the conclusion of the offer [19]. This clause represents a sort of guarantee that the market requires from the controlling shareholders and the top management of the company and, at the same time, represents a protection to the underwriters as it prevents the placing of further securities on the market that can create an oversupply situation with possible negative repercussions on the performance of the stock. In direct listing this period is absent, increasing the liquidity of the shares themselves and increasing flexibility for individual shareholders.
- Market price: the price is no longer predetermined by the broker, but is formed through the mechanism of supply and demand. This price methodology considerably reduces the risk of underpricing on the day of listing.
- Equal access to shares: with direct listing there is no preferential criteria for selling shares, as all investors can buy shares on the markets.

There are various reasons why a company may prefer direct listing. Usually, companies opting for this methodology do not own or do not want to spend money on commissions, do not want to dilute the shareholding by issuing new shares, or want to avoid clauses inserted by banks to allow listing. In any case, it should be pointed out that although this methodology as mentioned above eliminates the presence of the underwriter bank, it is always carried out with the help of a financial advisor. The role of investment banks is thus reduced but still present within the process itself. In fact, they will still support the company in the listing process, but with a marginal role compared to the one traditionally played. In recent years, numerous companies operating in the most diverse sectors are opting for this methodology. The most striking and significant case is that of the Swedish digital music company Spotify, which was listed on the NYSE on 3 April 2018 [20].

The direct listing process is not only simpler than the traditional IPO, but also much faster. The entire operation leading up to the actual listing varies in duration, theoretically ranging from a few days to a few months, but it is anyway shorter than a normal IPO, where much of the time is devoted to the documentation preparation phase which often takes at least two months before being approved by the SEC.

Usually companies opting for this type of listing usually have a well-defined profile characterized by the following elements [21]:

- They are companies that interface directly with customers and have a strong brand identity.
- They present business models that are easy to understand.
- Their main motivation to become public is not the collection of additional capital but rather the other induced benefits that will be described in paragraph 1.1.2.

It is intuitive to understand why companies with such a profile are more likely to choose this methodology. Since they are already known to the public and have simple and effective business models, they can afford the risk of listing themselves without needing the purchase guarantees that normal IPOs typically have with the help of investment banks acting as underwriters of the shares. In fact, their name and market presence are often already sufficient collateral to be able to guarantee the full placement of the shares, thus circumventing further unnecessary costs.

The modalities of direct listing are still evolving. On 23 December 2020, the SEC approved a proposal by the New York Stock Exchange, which expands the possibilities of listing through this method allowing companies to raise capital by issuing new shares [22]. This decision also prompted the NASDAQ to move in this direction, culminating in the SEC's decision to allow this type of direct listing on the NASDAQ stock exchange as well. Two different types of direct listing processes can thus be executed, the first so-called “classic one” concerns only the sale of shares already held in the portfolio by shareholders. And a second, which also entails the issuance of new shares not held in the portfolio, thus aiming at executing a capital increase.

In conclusion, direct listing has numerous advantages, which, if properly exploited, make it possible to avoid many of the typical direct and indirect costs arising during an IPO listing. However, it is important to emphasize that the main weakness presented by this methodology also lies in the cause of its greatest strength, namely the absence of an underwriter bank.

- **Cross-listing**

  Cross listing is the financial transaction in which a company, already listed on the domestic market (primary listing), decides to list on a second stock exchange (secondary listing), thus obtaining its shares listed on two different markets. Above all, the 1990s were characterized by large waves of cross-listing, with companies aiming to expand their presence in international markets and give a major impetus to their growth process. With the advent of the 21st century, various reasons including the progressive deterioration of the trade-off between the costs and benefits of listing and the crisis involving the major international stock exchanges, led an increasing number of these companies to abandon foreign markets, either voluntarily or as a consequence of the Stock Exchange's decision.

  In one of You's [23] most significant contributions, he emphasises the fact that a company that decides to join a foreign stock exchange already has a previous listing experience in its home country and therefore considers cross-listing as an important step in its gradual growth process. He also highlights how this phenomenon has expanded significantly since the late 1980s, contributing to the progressive integration of the world's regulated markets. From his study, it emerged that 76% of the cross-listings that affected the various world stock exchanges from 1964 to 2008 occurred after 1990, i.e. from the years in which more and more companies began to become aware of the important advantages that could be achieved by going public, which positively affected cross-listing as well.

  As far as the characteristics of companies that tend to adopt a cross-listing strategy are concerned, a considerable heterogeneity among them emerges, which makes it impossible to draw a typical ideal profile of a company carrying out this operation. The study by Chaplinksy and Ramchand [24], which investigates the connotations of foreign firms listed in one of the main US markets from 1962 to 2006, highlights a substantial difference between European firms and those born in South East Asia, which represent the two main places of origin of foreign listings in US markets. European companies usually present a sound economic and financial structure, with previous listing experience. Asian companies are often in the first steps of their life cycle, and aim to expand and grow in a market as competitive as that of the US.

- **Listing by Spin-off**

  A spin-off is the separation of a part of a company's business into a new company, which is legally independent from the parent company, although potentially linked by shareholding relationships. Spin-offs are often used to sell business lines on the market in order to obtain resources that can be invested in sectors deemed more convenient and strategic for the parent company. On the other hand, the company resulting from the spin-off operation can remain within the group perimeter, allowing it to pursue an orderly and sustainable development of its business over the years. Spin-offs can also be used to list a company, as spin-offs of listed corporations are automatically listed as well.

  There are numerous motivations that may lead a company to evaluate and carry out the disjunction. A company spin-off may, for instance, be determined by conflicts with antitrust regulations or other laws in force in its area of reference, such as to make it necessary to detach part of its structures, to which it gives the necessary autonomy. Sometimes, however, the spin-off is preferable for strategic evaluations, in order to provide greater visibility to a side business of the parent company, which compared to the core business is still marginal in size, albeit with excellent potential: in this way, by conferring an autonomous form to that particular business activity, the market is allowed to appreciate the entrepreneurial effort in a clearer, more evident and effective manner. Again, the spin-off may be determined by the need to separate a healthy business with sustainable performance from a business that no longer has the potential to generate positive margins. Or, finally, by motivations of a predominantly accounting nature, in order to achieve a tax advantage.

  Since spin-offs generate investment chances for capital gains from the company's stock that might not have occurred if the firm had remained under the parent corporation, activist hedge funds often advocate spinoffs. Additionally, spin-offs are seen favorably by market participants because they generate independent businesses with distinctive brand identities and are more concentrated on their main business goals rather than the parent company’s one. Moreover, large conglomerates that are managed by diverse firms might be slow to react to market developments, while spin-offs can benefit from a higher degree of flexibility that enables businesses to seek opportunities for growth [25].

- **Transfers**

  In some cases, companies choose to migrate from a stock exchange on which they are listed to another one. Usually these processes take place between stock exchanges in the same country, e.g. in the US since 2000, $1.3 trillion of value has been transferred to the NYSE from NASDAQ in terms of equity alone [26]. For qualifying companies, the transfer process can be simple and free of charge. Transferring companies may decide to move in order to benefit from the network and investor understanding of listing standards, as well as from the possible higher liquidity and tighter spreads provided by the new market model. Other times, firms can simply transfer to other markets of the same stock exchange, for example moving from the market devoted to small and medium firms to the main one.

1.1.2. Reasons to list

This chapter provides an overview of the advantages of listing and the main reasons behind this decision, even though the reader should be aware that each country presents peculiar differences in terms of regulatory framework, fiscal system, and investor characteristics, which might affect degree of relevance of the benefits achievable by listing in different geographical areas.

The possibility of drawing this overview is also favoured by the fact that, within certain limits, there is a standardisation of the phenomenon on the basis of the US model, which has historically held the role of runway opener.

The decision to go public for a company implies not only access to a new financing channel, but the beginning of a process that changes both the ownership and management system, as well as relations with customers and its financial environment in general. It is a decision of strategic importance, which must be taken after a careful evaluation of the impact on the company's business, comparing benefits and disadvantages. This section of the chapter discusses the reasons why companies undertake the listing process and the effects of doing so.

The benefits of listing can be categorised in four main categories [27]: financial, operational & marketing, organizational, and fiscal benefits.

- **Financial**

  Cost of credit minimization

  One of the advantages of listing is the reduction in the cost of credit [28]. One of the main reasons is the improved bargaining position of the company with banks.

The lower cost for accessing credit is dictated by the fact that there are more lending institutions competing with each other in providing a loan to a company thanks to the creditworthiness "guarantee" that characterizes most listed companies, thus reducing the concentration of financing. Listing is thus particularly advantageous for those companies that experience high interest rates and highly concentrated lending. Pagano et al. [1] noted that in Italy there is a significant reduction in interest rates on bank loans after listing. The lower cost of capital leads to an increase in the value of the products and services offered and thus allows to reach higher profit margins. Private companies, on the other hand, experience a higher cost of raising equity capital due to the illiquidity discount they must provide, since it will be more difficult for an investor to resell the shares in the future and liquidate his initial investment. Banks' ability to profit from their confidential knowledge of their customers' creditworthiness is another potential issue related to bank loans. A corporation can secure a cheaper cost of credit, a greater supply of external money, or both by getting access to the stock market [29]. As a matter of fact, when a company goes public it must comply with a number of regulations including disclosure obligations towards investors. Businesses with higher interest rates and more concentrated credit sources will be more likely to go public in order to take advantage of the greater bargain power with banks.

Financing growth opportunities

One of the most frequently cited reasons in the literature to become public relates to the desire of companies to raise finance on the market in order to invest in growth projects. However, the distinction between primary and secondary shares should be noted. Only in the former case is there an actual raising of new capital because primary shares are newly issued shares. Secondary shares, on the other hand, are existing shares that are sold by the old to the new shareholders and therefore do not bring new capital into the company, as has been noted in paragraph 1.1.1.

Companies could finance new projects by resorting to debt, but it is limited to a certain level of leverage beyond which this option is no longer viable due to the risk of suffering bankruptcy costs [30]. Only to the extent that self-financing represents a sufficient source, could the company choose to stay out of the market with the obvious constraints on growth that follow. Overcoming the limitations of debt recourse, equity seems to be the best alternative for that category of firms that

present a high debt-equity ratio, but above all high current investments and profitable future growth opportunities detected by a high average sector market-to-book value, i.e. the ratio between market value and book value of the firms' net worth [1].

More liquid stocks

The listing process influences the liquidity of a company's shares. In particular, liquidity grows as trading volumes increase. Indeed, listing allows shares to be traded more easily, less expensively and in a faster way compared to those of a private company. Diffused ownership improves liquidity, and this strategy would often result in investors requiring a lower rate of return, raising the equilibrium price of the company's shares. Private companies lack this option and can only be traded through informal counterpart relations, which entail substantial transaction costs. It follows that the benefits of increased liquidity are related to the size of the firm, thus it is reasonable to conclude that exploiting these benefits positively affects the likelihood of listing for large firms [1].

Portfolio diversification:

Among the reasons for companies to go public is the desire to diversify the portfolio of securities held by shareholders in order to reap their benefits. This can be achieved either directly or indirectly: directly by selling the company's shares and investing in a new business, indirectly by using the newly raised capital to invest in new companies or projects. Thus, the riskier a company is, the more likely it is to decide to go public. To confirm this, one should observe large volumes of shares sold by controlling shareholders immediately after the IPO [1].

Balancing the capital structure

Some firms may find it advantageous to go public following a period of strong growth in short-term indebtment in order to balance their capital structure [1]. Indeed, empirical evidence shows that, after listing, firms achieve a more balanced financial structure, characterized by a higher share of equity capital and long-term bond debt and a lower incidence of short-term borrowing [31]. If firms actually

enter the market to rebalance their capital structure, a significant deleverage can be observed immediately after the listing [32].

Positive and optimistic investors

The thesis that markets are a more efficient form of lending than banks (intermediated finance) is supported by Allen and Gale [33]. According to the authors, with a large number of investors there are high information acquisition costs, but at the same time each investor has the opportunity to make his or her own decision whether or not to invest based on his or her information. This allows innovative projects to be financed. Conversely, the advantage of intermediated finance is the reduced costs of acquiring information because only managers need to be informed [34]. This is not an issue when investors have similar opinions, while problems arise in the presence of divergent opinions. "If the probability of disagreement is sufficiently high, the investors may be unwilling to provide funds in the first place. Thus, intermediated finance may result in underfunding of innovative projects"[33].

Stocks as an alternative to cash

Through listing, shares, which until then were financial instruments not negotiable in regulated markets, become not only hypothetical objects of transactions, thus allowing their holders to liquidate their investment, but can even act as currency. In fact, their price, decreed after a process involving a multitude of subjects, confers liquidity on the shares, which now have a precise market value. In particular, this last aspect translates into the possibility, given to the newly listed company, of acquiring other companies, or in any case of conducting transactions of different kinds, using shares as an alternative source to money in the payment of the transaction [35].

Taking advantage of windows of opportunities

Often the listing is accompanied by a deterioration in company performance that appears to be permanent in the long run. Studying the anomalies in the pricing process of 1,526 IPOs of companies listed on the US stock exchange between 1975 and 1984, Ritter [36] sought to understand the nature of the underperformance

evident in the first three years following the IPO in an attempt to trace it back to a misreading of the companies' risk profile, bad luck or excessive investor optimism. Evidence suggests that IPO volumes varied systematically and consistently according to what appear to be window opportunities, i.e. periods when the market overestimates the growth opportunities of companies in a given sector. This conclusion finds much support in the literature [4] [1] [32], which confirms that firms tend to plan their listing when the market is optimistic about their possible growth. Pagano et al. [1] measure this optimism with the median of the market-to-book ratio of listed firms belonging to the same industrial sector. However, they point out that this index can alternatively measure the behaviour of rational investors who believe in ample future growth opportunities of the companies considered. Thus, if ex-post newly listed firms invest at very high rates and have large profits, it is likely to relate their listing to future growth expectations. Conversely, if this is not the case, it is likely that the listing is driven by the desire to exploit a window of opportunity. Furthermore, as shown by Kim and Weisbach [4], if the listing is associated with a window of opportunity, it should be observed the sale of a high percentage of shares by managers or former shareholders through secondary offerings in order to exploit the resulting private benefits.

A second interpretation of the underperformance experienced by firms after listing is associated with the phenomenon of market timing [36][1]. Indeed, firms may decide to list when they are performing well in such a way as to induce optimistic market assessments of their value. This should be reflected in a positive trend of profitability indicators in the years prior to listing and in their natural deterioration after the IPO.

- **Operational & marketing**

  Market recognition

  Listing on the major stock exchanges could bring considerable benefits to companies due to the possibility of gaining higher market visibility. Indeed, the share price is likely to rise with the knowledge investors have of the company [37]. In order to fully exploit the higher visibility that being listed grants, many firms choose to list on stock exchanges that constitute strategic markets for their core business. Such reflections seem to find confirmation in real cases, citing as an example the choice of Ferrari Spa to list on the NYSE, or of Prada Spa on the Hong Kong market.

Increase in prestige

The status of a listed company confers notoriety and prestige. From the moment a company becomes listed and its securities begin to be traded in financial markets, analysts begin to closely follow its performance. Also financial press, when the company has strong growth potential, may write articles about its history and stock performance, thus increasing investor interest. The notoriety gained helps to increase corporate recognition, which leads to greater awareness of the products and services offered and consequently an increase in sales. The increased transparency of financial statements, coupled with greater clarity of corporate strategies, improves the company's credit standing (the relationship with banks and other credit intermediaries), increasing its value. The obligation to audit financial statements, the need to provide detailed periodic information on corporate events and corporate governance rules instill confidence and security in financial markets players.

Increasing employee motivation

Listing often improves the morale of managers and the rest of the company's employees who feel part of a more prestigious organization, and are therefore incentivised to devote more effort and dedication to their work, positively affecting the value of the company [38].

Reassurance for suppliers and customers

If a company succeeds in obtaining clearance to list on the market, this element automatically improves the perception that external parties have of its strength and financial soundness. In particular, the multiple steps and rigorous process that must be undertaken to gain access to the capital market, such as - among others - the delicate due diligence process and official approval by the competent body, reassure customers and suppliers about its corporate strength and the accuracy of the data disclosed [39].

- **Organizational**

  Monitoring

  The stock market constitutes an instrument for regulating managerial behavior. According to the theory of Jensen and Meckling [40], one of the main agency costs of capital is precisely the monitoring and control activities (e.g. internal audit, budget constraints, formal controls, incentive contracts). Listing facilitates and make these processes less costly. The increased attention of the authorities to the company's activities should limit the incentives to pursue opportunistic and sometimes borderline behaviours. Mismanaged companies have higher probability of performing poorly in stock markets, thus paving the way for a takeover bid threat. If a transfer of ownership takes place, the new controlling group usually replaces the management team responsible for the company's decline, with heavy effects on its reputation. Should the threat of being fired not be enough, listing also gives the company the opportunity to construct incentive contracts, in which a part of the managers' overall remuneration is linked to the company's performance. Part of the salary can be given in shares, so that managers are incentivized to maximize the company's profit in the long term [41].

  Change in control

  The study by Zingales [42] stems from the evidence that in the three years following the listing the transfers of control are twice as high as in similar private companies. From the point of view of the controlling shareholders, listing would enable them to achieve an ideal ownership structure while providing them with the possibility of maximising their return from an eventual sale of part of the company. Indeed, controlling shareholders can change their right to share in the profits (cash-flow rights) and their private benefits of control (control rights). It is important to emphasise that, while the right to receive profits accrues to all shareholders in proportion to their shareholding, private benefits accrue only to the controlling shareholder. It is easy to see that the market for cash flow rights is almost in perfect competition whereas in the market for control rights there are a few large shareholders competing. If potential buyers are expected to increase the value of cash-flow rights, listing is always worth and the problem that controlling shareholders have to solve is to choose the right combination of cash-flow rights and controlling rights. Typically, they will decide to sell the cash-flow rights to a dispersed shareholder and retain the control rights in order to be able to continue

to exploit the private benefits derived from them. In conclusion, the number of transfers of control after the going public process is a good indicator to understand the real reasons behind the listing of companies. If transfers are high, it means that the listing is probably done in order to optimise the exit options of the controlling shareholders and a negative correlation between transfers and the profitability of the firm should be detected [1]. The same effect occurs when a firm decides to list due to the moral hazard phenomenon, thus when it realises that its profitability will permanently deteriorate.

Talent attraction

As already stated, becoming listed company increases a company's prestige and strengthens its image. Obviously, this can be a trigger to attract qualified professionals [43], eager to achieve greater visibility through a prominent role in the newly listed company. Another aspect related to talent attraction is represented by stock options, which give the holder the right to buy shares in the company at a certain future date, paying for them at a price set at the time the contract is concluded (strike price). The opportunity to construct Pay-for-Performance incentive systems encourages competition in the market for managers, allowing for the quick replacement of incompetent ones, who maximize the private benefits of control at the expense of public ones.

Better scenario for existing shareholders

Reference is made here to a higher return on investment and increased earnings for investors. This can be qualified as a consequence of the tortuous and delicate listing process. As already mentioned, in order to gain access to regulated markets, a company must meet certain requirements, as well as adopt corporate management schemes. With respect to organizational issues, it is well known that a listed company must equip itself with an effective internal management control system; this entails costs but undoubtedly also brings benefits in terms of possible efficiency and productivity gains in its operations. This can also indirectly benefit its own investors and generate a competitive advantage. Furthermore, structuring a company in a more organic manner, especially for SMEs, means moving away from an organisation that is centralised on the figure of the entrepreneur towards a greater managerialisation of the organisation [44].

- **Fiscal**

  Finally, among the determinants of listing tax incentives must be mentioned. After recognizing the value generated by a stock market listing for the economic system, several countries have introduced incentives linked to fiscal deductions over time. In the Italian landscape of particular relevance is the Tremonti Decree of 1994 and Decree Law 466/1997 (with the so-called Super Dual Income Tax). More recently, the 2018 Budget Law approved the tax credit on 50% of consultancy costs incurred for the listing of SMEs on the stock exchange, a measure refinanced for 2022, with a ceiling of €200,000 per company [45].

1.2. Delisting

The operation of listing the shares of a company on a stock exchange has been widely analysed in the literature, both in terms of modalities through which a company can obtain the status of "publicly traded" and in terms of the benefits that companies seek to achieve when becoming public. On the other hand, the operation of abandoning a stock exchange (delisting) is considered relatively new especially in Continental Europe, while the USA already experience an intense wave of Mergers & Acquisitions (M&A) that brought many companies private already in the 1980s [46]. Only recently, the increasing number of going private transactions (GPTs) started drawing the attention of the press and of researchers around the topic.

The parties affected by a delisting policy are multiple: first of all, exchanges are affected through revenue effects since they lose the commissions that are charged for every trade. Issuers instead experience an abrupt reduction in the liquidity of their shares, which can increase their cost of capital due to illiquidity premium that should be given to new investors. Current investors are affected both by the lower liquidity of the stocks they own and by the lower degree of information that will be disclosed regarding the company. Finally, future investors will be less protected from frauds, as well as less assured of the firm quality [47]. The modalities through which a company can delist from a stock exchange are rather similar among different countries, where minor differences are due to national regulations, whereas the reasons that lead a company to become private can vary significantly according to the country where its shares are exchanged and the one where it operates. Indeed, as will be explained later, empirical studies carried out in the US led to partially different results compared to the ones obtained in the UK and in Continental Europe.

The following section presents the main findings of the literature review in two sections: the first presents the modalities through which companies can become private, while the second presents the benefits that company seek to achieve when they voluntarily withdraw their shares from the stock market.

The first distinction that can be made, which is the most widely accepted in the literature, regards the nature of the delisting itself: it can either be involuntary, thus imposed by the stock exchange, or voluntarily initiated by actors in the market [48].

1.2.1. Unvoluntary

Stock exchanges set precise regulations that companies must comply with in order to be eligible for remaining listed, and the violation one or more of those requirements might result in a forced delisting imposed by the Stock Exchange. The main reasons behind involuntary delisting can be divided into two main categories: protecting the reputation of the stock exchange and ensuring its profitability:

- **Protecting the reputation of the stock exchange**:

  In order to better understand the rationale behind the rules imposed by exchanges, it is first necessary to briefly describe them and their role in financial markets. First of all, exchanges provide a broad range of services to both issuers and investors, among which standardization of governance rules, monitoring of trading activities, clearing and settlement of transactions, providing liquidity to the stock securities, and providing a signalling function to the market regarding the integrity of the firms [47]. All these actions aim at preserving the reputation of the exchange as a trading venue that carefully selects trustworthy firms and thus guarantees high degrees of investor protection. Expelling firms that do not comply with the regulations allows exchanges to maintain credibility, and to assure investors of the integrity of listed firms. Examples of cases in which the stock exchange might consider delisting to protect its reputation and investors are when a company's operating assets have abruptly decreased in size, when it files for bankruptcy, when the designated advisor that is in charge of supporting a company towards the listing and during its permanence in the market decides to abandon the company, or when it engages in operations that are considered against the public interest.

- **Ensuring the profitability of the stock exchange**:

  Secondly, the nature of stock exchanges changed significantly during the mid-1990s, with many of them being transformed from member-owned organizations or governmental institutions to privately-owned for-profit organizations [49]. For this reason, there has been a growing attention to the profitability of the relationship with listed companies, which affects both revenues and costs: by looking at the balance sheet of the New York Stock Exchange (NYSE), one of the major exchanges worldwide, the main source of revenue for stock exchanges derives from the "Exchange segment", where they "operate regulated

marketplaces for the listing, trading and clearing of a broad array of derivatives contracts and financial securities" [50]. Among "Exchange segment" revenues are included both the initial and annual listing fees charged to listed companies, as well as fees gained from transactions and clearing activities. On the costs side, maintaining a firm listed entails expenses of various nature like collecting, storing and analysing data, providing reports and information's to investors and monitoring the compliance to the standards. When the costs to maintain a company listed exceed the revenues that can be generated (sum of annual listing fees and trading fees) it is more convenient for the stock exchange to exclude the company by imposing the delisting. Some examples of requirements that aim at guaranteeing a profitable relationship for the stock exchange are a minimum number of shareholders, of publicly held shares, of trading volume in a period of time, and minimum market capitalization and closing price.

Even though the criteria to remain listed are clearly formalized, some empirical studies conducted in the US by Chen and Schoderbek [51] showed that regulators are instead quite flexible: among the sample of 150 firms involuntarily delisted from the American Stock Exchange (AMEX) between 1981 and 1992, only 21,7% were delisted upon the first violation, while 31% had violated the requirements several times in the five years prior to the delisting, suggesting that other factors play a crucial role in the AMEX decision to delist a firm. Therefore, they modelled the delisting decision as a function of multiple variables through a logistic regression, finding confirmation of their intuition. The main factors were the opening of a bankruptcy filing, shareholders lawsuits and SEC investigation, the auditors' opinion on going concern, firms trading volume, and one year stock return [51]. Surprisingly, according to their model, the violation of the established guidelines was the least important factor that contributed to involuntary delisting.

1.2.2. Voluntary

This category differs from the previous one both in terms of the actor that initiates the delisting procedure and in terms of the rationale behind the decision. In particular, the firm voluntarily goes private through a going private transaction (GPT), initiated by an actor that is now external to the stock exchange, either by existing investors in the company or by new ones [48]. The following sections will describe the main ways companies choose to go private, as well as the benefits that could derive from a GPT according to the literature around this topic.

1.2.2.1. Taxonomy of typologies

There are three main modalities through which a company can voluntarily decide to become private, namely takeover, merger, and voluntary request, and their adoption can vary significantly according to the country where it takes place.

- **Takeover:**

  The most common way used to take a public company private is by acquiring the totality of floating shares available in the market, or at least enough to break the requirement of the minimum number of shares held by public investors and be delisted due to technical reasons. Takeovers of public companies are carried out in the form of tender offers, through which a bidder offers to buy the floating shares in the market at a certain price and incumbent shareholders can sell their shares in a determined time frame. As regards the legal aspects, in 2004 the European Commission formulated the European Directive on Takeover bids [52] with the aim of "coordinating the laws, regulations, administrative provisions, codes of practice and other arrangements of the Member States (…) relating to takeover bids" which became the reference regulatory framework with relevance in the European Economic Area (EEA). Member States are forced to comply with the minimum requirements set out in the general principles of Article 3, although they are allowed to lay down more stringent provisions than those of the Directive. The general principles mostly lay down provisions that protect the shareholders of the offeree company (of which its securities are the subject of a bid). Particular attention has been paid to protect minority shareholders of an offeree company, for example through the mandatory bid defined in Paragraph 1 of Article 5: whenever a natural or legal person – as a consequence of an acquisition – gains an amount of voting rights that give him/her control of the company, "(…) such a person is required to make a bid as a means of protecting the minority shareholders of that company". The price of the mandatory bid is defined in Paragraph 4 as "equitable price", which is the highest price paid for the same securities by the offeror in a period of time between ranging from not less than 6 month and not more than 12 months before the bid that granted the control of the company. Also, Member States are required to designate a supervisory body in charge of monitoring the compliance of bids with the principles of the Directive.

  It is worth to introduce the most common types of takeovers that can be found in the literature, since most of the empirical studies conducted so far aim at analysing past transactions according to the type of delisting occurred. It should be noted that

it is not an exhaustive and mutually exclusive list, as the categorization refers to different variables and classes may overlap according to the perspective adopted.

Leveraged Buy-Out (LBO):

Buyouts can be characterized according to the type of financing used in the acquisitions: leveraged buyouts refer to acquisitions financed mostly with debt instead of equity (up to 70%-80% of the purchase price), which will be repaid in the following years with the cash flows generated. It is usually carried out by creating a new company (newco) which borrows debt capital and then acquires the target company through a reverse merger, which transfers the debt to the target company [53]. For this reason, the ideal candidate for an LBO is characterized by a solid financial position, able to generate stable and abundant cash flows and that requires low capital expenditures [54]. The peculiarity of LBOs is that they enhance expected return on equity capital thanks to the increased leverage, a result consistent with Modigliani & Miller's Trade-off Theory of Leverage [30], although increasing risk of financial distress in case of lower cash flow generation. For these reasons, LBOs are mostly carried out by private equity funds, which have extremely demanding targeted returns (usually higher than 20%-30%) and are very experienced in managing risks [54].

As regards the development of LBOs over the years, the first recognizable modern LBOs appeared first in the US and in the UK starting from the late 1970s and grew substantially ever since, while Continental Europe saw the first transactions materializing around 1996. Also in terms of deal value, while the UK broke the £10 billion deal barrier in 1997, in Europe the first LBO larger than £3 billion was carried out in 2000 [55]. The fact that Continental Europe markets developed much later compared to the UK, despite showing interesting growth rates, is confirmed by the value of buyout transactions to a country's GDP, a common indicator used to measure the relative maturity of buyout markets. In 2004 this indicator registered values around 1,6% in the UK and in the Netherlands, 1,2% in Germany and France, and only around 0,5% in underdeveloped markets like Italy and Spain. One of the reasons cited by Wright et al. [55] to explain the underdevelopment of such markets is the reluctance of founders and managers to give up control. Since the UK is one of the most advanced markets for LBOs, and the one that developed earlier, it is worth analysing the evolution of this type of takeover first in the UK, and then comparing it with Continental Europe. They also argue that the

development of the UK buyout market took place in five sequential phases. The first phase began in the 1980s during the 1979-1982 recession, where many of the deals were targeting companies in the brink of failure or in the process of restructuring. The second wave took place from mid-1980s to the end of the decade as a result of corporate refocusing strategies. During this second wave two particular types of LBO took place, namely the Management Buyouts (MBOs) and Management Buy-ins (MBIs), where the initiating actor is the management of the target company (MBOs) or of the acquiror company (MBIs). These two types will be described in the next paragraph, and are therefore not analysed here. The third phase began with the recession of the early 1990s, where both in the UK and in the US the number of LBOs and the overall deal value fell sharply. The main concern was the solvency of those firms that resulted from highly leveraged deals completed in the previous years. As a consequence, many banks exited the leveraged buyout market, and the few that remained imposed stricter covenants and conditions. After the end of the recession in 1994 began the fourth phase, when a new peak in terms of deal value was reached. The dot.com bubble severely hit the total LBOs value, marking the end of the fourth phase. The last phase started with a strong growth in 2004, which rapidly set new records both in terms of number of deals over £100 billion closed and in terms of overall deal value [55].

It is interesting to analyse the financial structure of LBOs and its evolution during the years. Initially, leveraged deals were financed mainly using traditional senior debt and privately placed mezzanine – a hybrid form of debt and equity that may give to the lender equity interests under some conditions. Nevertheless, these two forms of financing alone could not meet the growing demand for funds induced by the rapid growth in deals value, thus requiring a significant boost in financial innovation. The most relevant novelty that allowed the buyout market to expand was the emergence of high-yield debt market. Until 1997 larger buyouts in Europe resorted to the US high-yield bond market, thus incurring in foreign exchange risk, while the development of a European subordinated high-yield debt market allowed to finance large buyouts without incurring in such risk. Also, the securitization of these loans became more popular in this period, which further encouraged banks to invest in high-yield debt instruments [55].

Management Buy-Out (MBO) and Management Buy-in (MBI)

The core element that distinguishes a management buyout/buy-in is the nature of the acquiring party taking a controlling equity stake in the company, which in this case is the management team of the target company or of an external one, respectively. This operation is usually carried out in cooperation with a PE fund or a credited lender in the form of a LBO, even though managers are required to contribute with their own capital in order to align their incentives to successfully grow the company in the long term. From the point of view of the vendor, selling the company to its management (MBO) has several advantages [56]: first, it compensates management with equity stake in the future of the company; then, it dramatically reduces the risk of spill-over of confidential information, which instead can be the case when entering a negotiation process with a competitor; also, management knows the business of the company better than anyone else, thus reducing the need for a due diligence and the overall timeline of the sale process; finally, the actual management team might not be available to remain in case of a takeover from a third party, which could disrupt the future of the company. Nevertheless, MBOs also have drawbacks from a vendor point of view: the main one consists in the fact that management usually has a more limited access to capital compared to PE funds and other specialized investors, therefore resulting in a generally lower valuation [56].

Hostile/Friendly takeover

Another criterion that can be used to classify takeovers is the general sentiment of the relationship that is established between the bidder and the target during the acquisition process. In particular, Morck et al. [57] define "hostile" takeovers as those where the initial bid for the target was neither negotiated with the management board of the target company, nor accepted by the latter. Instead, if the board approves the bid and cooperates to successfully close the deal the takeover is defined "friendly". Their paper provides evidence that target companies of hostile and friendly takeovers have very different characteristics: while targets of friendly takeovers are very similar to nontarget companies (the control sample of firms remained public), targets of hostile takeovers tend to be older, slowly growing, and with a much lower Tobins' q value[2] – suggesting high

[2] The q ratio is defined as the market value of a firm divided by the replacement value of its assets [58]

undervaluation. They also find evidence supporting their conjecture that friendly takeovers are usually synergistic, meaning that the expected gains of the bidder come from higher market power, tax benefits, higher R&D innovation, cost optimization, while hostile ones are more likely to be disciplinary, thus aiming at correcting the non-value-maximizing practices put in place by the existing management of the target firm and creating value through an internal reorganization.

Also, studies show that in the UK hostile take-overs result in a turnover of the senior management team and executives after the acquisition [59]. Since a job loss after a hostile takeover damages the managers' reputation in the market, reducing their value [60], the incumbent management board is often incentivized to take the company private through an MBO when they suspect an hostile takeover might occur [61]. Even though an MBO usually involves a PE fund that increases monitoring of the management board, as it has been described above, it is still convenient for them rather than losing their job [62].

Even though the difference between hostile and friendly takeover is relevant, the incidence of hostile takeovers in going private transactions (GPTs) is rather limited. In the UK, after a wave of friendly acquisitions in the 1990s, hostile ones made up only about 2% of overall transactions [62]. In Continental Europe Geranio and Zanotti [46] argue that hostile takeovers are not common due to the shareholding structure of European firms, which tend to have a very limited number of floating shares publicly traded in stock markets, thus making more difficult to gain a controlling position without a direct negotiation with the majority shareholders.

Buy-Out offer with Squeeze-Out (BOSO)

This category is the only one that can be objectively identified, as it is a particular case of tender offer regulated at European level by the European Directive on Takeover bids mentioned at the beginning of the chapter [52]. In particular, while article 3 and 5 aimed at protecting minority shareholders in case of a takeover, article 12 introduces the "right to Squeeze-out": an offeror that, following a bid made to all shareholders, holds securities that guarantee him at least 90% of the voting rights, has the legal right to buy the remaining securities on the market at a fair price. Member states are allowed to further restrict the minimum requirement in terms of voting rights that must be reached to exercise the right of squeeze-out,

even though it must not be higher than 95%. This form of GPT is the most common in Europe [63] due to the highly concentrated shareholding structure of firms.

Martinez and Serve [63] argue that a BOSO can be achieved in two ways. First, after an acquisition by a third party that gathered enough voting rights to overcome the threshold for a squeeze-out. Second, after the historic controlling shareholder further strengthens its control and reaches the squeeze-out threshold. Firms going private through a BOSO are very different from those subject to a LBO: The former is usually initiated by a corporation or a family, while the latter is mostly executed by Private Equity investors. Also, LBOs tend to target companies with low ownership concentration in the attempt to reduce agency costs by increasing monitoring, whereas BOSOs are the result of an extremely concentrated ownership. Finally, LBOs have a significant impact on the financial structure of the target company due to the increased leverage, and often require a capital injection to mitigate it, while BOSOs are more likely traditional takeovers that do not require capital increases. Therefore, the driving factors behind the two delisting decisions will also be different [63].

- **Merger:**

  In the process of delisting through a merger, the public company merges into a private one and the latter becomes the only owner of the target company, therefore resulting in a going private transaction. It is important to notice that the merger must be approved by the stockholders of the public firm.

  Very often, the private company is a "shell" corporation created precisely with the purpose of taking private the target company. The shareholders of the shell corporation become the only owners of the securities of the target, and the public shareholders are required to sell their shares in exchange for a payment in cash, even though they sometimes receive debt or preferred stock of the new entity. The delisting through merger is also applied in the Italian market to the SPACs, which are delisted after the business combination that brings the target company to the stock exchange through a reverse takeover.

- **Voluntary request:**

  The last macro category of ways to achieve the delisting of a security from a stock exchange is by voluntary request coming from incumbent shareholders. Differently

from the two previous categories, voluntary request does not lead to a change in the ownership structure of the company. Instead, the shares that are publicly traded in the stock exchange are simply withdrawn from it, and it is no longer possible to publicly exchange them. This also applies to companies that are listed on more than one exchange and that decide to delist from one of them through a request. The securities will no longer be exchanged in that market but will remain public in the remaining ones.

The only essential requirement that a voluntary request must satisfy is to be approved by the majority shareholders, and it is therefore more likely to be used by smaller firms with concentrated ownership [48].

1.2.2.2. Reasons to delist

While involuntary delisting is imposed by the stock exchange due to the reasons explained in the previous chapter, voluntary delisting is initiated by actors in the market as the result of a strategic cost-benefit analysis. Given the heterogeneity that distinguishes companies in terms of financial structure, sector in which they operate, country-specific regulations, governance, the reasons that may motivate the decision of going private are various. After an exhaustive review of the existing literature on the topic, the macro-structure that has been chosen to cluster the most relevant reasons to take a company private is the one proposed by Djama et al. [48], which distinguishes three main areas of motivations: Traditional, derived from Agency theory, related to the financial structure. "Traditional" motivations can be applied to all countries and types of GPTs, while "Agency theory" and "Financial structure" ones are much more variable according to the country and type of delisting. Then, the main motivations found in the literature have been gathered and categorized according to this macro-structure.

- **Traditional**

  Increase in listing costs:

  Being listed in a stock exchange is very expensive for firms. One of the most traditional and straightforward reasons that can induce companies to abandon the stock exchange is an increase of the costs of being listed compared to the benefits. Listing costs are divided in two categories: direct and indirect.

  Direct costs include the fees that must be corresponded to the stock exchange in exchange for the services that it provides [64]. Examples of direct costs are the registration fees to be paid *una tantum* at the moment of the listing [48] (i.e. US$

295.000 for the NYSE) and the annual fees (i.e. a minimum of US$ 74.000 for the NYSE and increasing according to the shares listed [65]). De Angelo et al. [64] argue that, since bigger firms are more able to amortize the fixed costs and their incidence on the overall costs is relatively low, small firms are more likely to abandon the stock exchanges upon an increase in listing costs.

Indirect costs are instead those costs that are not directly paid to the stock exchange but are induced by the status of listed company. For example, listed companies are required to periodically disclose a large amount of information concerning the companies' performances, risks, future outlook, and the production of such information requires time and efforts of dedicated people [46]. Also, public companies need to have their financial statements audited by a third party in order to guarantee the veracity of the information disclosed [48]. Moreover, listed companies are subject to stricter regulations and corporate governance standards, which cause a compliance cost [66]. For example, public companies are required to establish an investor relations department with employees dedicated to managing the communication with the investors' community [67]. Final, one of the most discussed and analysed type of indirect cost is the opportunity costs. Undervaluation is an example of such costs that arises when the market value of the stock is lower than the true value of the firm according to managers and owners [46], [55], [60], [67], due to information asymmetry between the management and the market. Therefore, firms going private aim at reducing both direct and indirect costs of being listed.

Empirical evidence supports the undervaluation hypothesis in most markets. In Continental Europe the studies of Geranio et al. [46] and of Croci and del Giudice [68] provide very strong results, as undervaluation is found to be one of the most relevant factors that motivate the delisting operation through an acquisition. Empirical confirmation is found by Renneboog et al. [67] and by Weir et al. [60] in the UK and in the US by Halpern et al. [69], who identify two types of lower performing firms, those with extremely low managerial equity and those with excessive managerial equity stakes.

Decrease in listing benefits:

Specular to the increase in listing costs is a decrease in the benefits that the company sought to achieve when it decided to become publicly traded. One way in which being listed does not bring sufficient benefits is when the financial visibility of a

security deteriorates. Financial visibility is defined by Mehran and Peristiani [70] as the capability of a firm to attract a sufficient investor interest and can be measured through analyst coverage [63] and liquidity of the security [46], [71], where analyst coverage reflects the general level of interest of the market in the company, and liquidity represents the volume and frequency of trading of the security. Illiquidity of a stock is a major factor that affects the decision of going private because selling an illiquid security causes prices to drop significantly, thus making more difficult to raise equity capital [60]. Small companies incur in a higher risk of being illiquid, since they are ignored by big funds managers that execute massive orders in the market. One of the reasons that explain the scarce interest of institutional investors is that their minimum size of investment that justifies the costs incurred in finding a suitable investment target would likely surpass the public disclosure obligation threshold [46], which could generate turbulence in the market and drive prices up.

Another benefit that going public provides is to reduce risk for a controlling shareholder by sharing it with public investors, which eliminate idiosyncratic risk by diversifying their portfolios [72]. Since a diversification of risks entails a lower expected return, if idiosyncratic risk decreases it might be more convenient to take the company private [48].

Finally, a firm may not benefit from remaining public when it does not need to raise additional capital in the form of equity [63], which can happen for multiple reasons. First, when a firm operates in a low growth and low capital-intensive industry it may not need to resort to external financing to fund its investments, and cash flows generated from operating activities might be sufficient. This result is confirmed by Bharat and Dittmar [71],who showed that American firms with little investments and low future growth opportunities are more likely to go private. Second, firms may have access to alternative forms of financing, such as debt, for example through the issuance of bonds or by getting a bank loan. As regards bonds, they are usually complex, expensive, and carry some of the disadvantages of being listed; the fact that they are exchanged on the secondary market requires a minimum level of financial visibility and liquidity to attract the investors' attention. For these reasons bonds are more frequently issued by large firms, even though recent developments of the traditional credit market brought to the creation of new instruments tailored to the needs of small and medium enterprises. An example of such instruments in the Italian market are minibonds, an instrument that allows

companies with at least € 2 million revenues to access funding in an easy and cheaper way compared to bonds [73]. As regards loans, the propensity of banks to grant loans depends both on the financial structure of the firm and on the macroeconomic context: a firm with a high leverage ratio is considered to be more risky and banks will either refuse to provide lending or require a substantial risk premium interest rate; instead the macroeconomic context affects credit availability since a tightening monetary policy reduces the quantity of credit banks are available to give and increases the interest rates charged to obtained a loan. These two scenarios provide examples of situations in which accessing the debt market might be complicated, thus remaining listed could be more convenient. Martinez and Serve [63] found empirical confirmation that delisted firms in Continental Europe had significantly lower levels of leverage ratios compared to firms that remain listed, indicating that they can raise capital in the form of debt and they are not dependent solely on equity capital. Also, their financial visibility appeared to be much below the benchmark values of the market, thus lacking an important benefit that the listing status should bring.

Exposition to market volatility and business cycle:

Firms publicly traded in the market are subject to the market volatility, which can be influenced by the general sentiment of the economy and does not always reflect expectations on future performances of the specific firm. Also, high volatility can be determined by the impact of an order placed by an institutional investor [46]. Business cycle is also a crucial factor that influence market prices, as many companies see their stock price dropping only due to a negative cycle or due to issues that affected a player in the same industry, without any evidence of adverse impacts on them [71]. In these cases, delisting can allow management to focus on running the company with a long-term view, without worrying about short term market volatility and external events that might impact the stock price unjustifiably.

Information spill-over:

As highlighted above, public firms are obliged to periodically disclose financial, operational and strategic information to the financial community, in order to reduce information asymmetry and allow agents in the market to take more

informed decisions. A major threat that come from this obligation is the information spill-over to competitors, especially non-listed ones, which may benefit from knowing sensible information about the company [74].

Stricter dividend policy:

It is in the interest of public companies to build a stable and fruitful relationship with its plethora of shareholders, in order to avoid excessive volatility. One of the main tools that the company can exploit to do so is through the distribution of dividends, which are one of the two ways through which investors gain on their investments, together with a variation in the stock price. Despite dividends have a discipline effect on managers [75], due to the fact that they have lower free cash flows available and therefore are incentivized to select the projects with the highest expected returns, an excessive pay-out ratio can hinder the future growth of the company by reducing cash available to fund additional investment projects. This is especially true for companies in a phase of intensive growth, which are keener on exploiting cash available to increase self-financing rather than rewarding shareholders.

Opportunistic behaviour:

Shareholders' goal is the maximization of the value of their investment, and it might occur that in some situations controlling shareholders aim at maximizing their wealth to the detriment of minority shareholders. Once again, this behaviour is made possible by the information asymmetry that exists between controlling shareholders and minority ones. Similar to the undervaluation hypothesis described under the indirect costs of being listed, Bebchuck and Kahan [76] argue that one of the possible reasons for controlling shareholders to take a company private is to exploit private information to delist the company just before a period of expected good performance. In this way, the market price of minority does not incorporate the future improvements and controlling shareholders can benefit the most from them, without the sharing the additional profits.

Croci and Del Giudice [68] analysed the role of controlling shareholders in going private transactions in Europe, also looking for evidence of extraction of private benefits through opportunistic behaviours. Nevertheless, the evidence they found does not support the hypothesis of a controlling shareholder effect on post-

delisting operating performance. Indeed, although the UK market and Continental Europe one show significant differences under many aspects, neither of those markets show performance improvement after a going private transaction.

Protection from hostile takeovers:

It has been noted that hostile takeovers are often associated with a significant turnover of senior management and top executives [59]. Therefore, in order to avoid a harmful job loss which would damage their image on the market, one option that the management has is to take the company private through an MBO [67]. Weir et al. [62] investigated the factors that influence the decision of a company to go private in the UK. While they find evidence for many of the hypotheses found in the literature, they found no evidence that firms going private experienced higher pressure from the market in terms of hostile takeovers. Also Renneboog et al. [67] discarded the hypothesis that hostile takeovers lead to higher returns offered to incumbent shareholders in the UK, even though the low number of hostile takeovers in the sample analysed (13 out of 172) might have an influence in the results. In Continental Europe Geranio and Zanotti [46] discarded the hypothesis of protection from hostile takeovers due to the very low incidence that they have. In the US landscape some support to the hostile takeover protection hypothesis is provided by Lowenstein [61], according to whom managers tend to consider a MBO when faced with the threat of an hostile takeover.

- **Agency costs**

Incentives to go private linked to agency costs are among the most popular in the literature, and they have been widely analysed both from a theoretical perspective and from an empirical one. Agency costs are described in the branch of research called "agency theory", which studies the mechanisms of delegation of power through principal-agent models [77]. When a principal delegates and agent to take decisions and actions on his/her behalf some problems may arise due to the fact that they have different objectives and they benefit in different ways from the decisions, thus resulting in different incentives. Agency theory perfectly applies to the corporate world, where shareholders act as principals and the management teams act as agents appointed by shareholders with the purpose of taking decisions on their behalf. In the literature three main ways through which delisting can

reduce agency costs were identified: by realigning incentives between managers and shareholder, by forcing management to invest cash flows more wisely, and by increasing control and monitoring.

Incentives realignment

Kaplan [78] mentions incentives realignment as a crucial factor in the delisting decision. Firms with diffused capital, where ownership and control are well separated, are acquired by a limited number of investors, thus reunifying ownership and control. The gains in terms of shareholders' wealth that arise from a GPT can be used to provide rewards for the managers in order to incentivize them to act in the interest of investors [48]. In fact, managers whose financial stake is not affected by the performance and market value of the companies that they manage may act in ways that are beneficial for them, but that decrease overall investors' wealth [79]. One way to increase incentives alignment is by offering managers stock-options as a variable component of their compensation, which give managers the possibility to buy shares of the company at a discounted and pre-defined price. Another way frequently used by Private Equity funds when acquiring a company is to require management teams to invest substantial resources of their own in the form of company stocks [80].

These practices became very common towards the 80s and 90s, as the median exposure of CEOs wealth to variations in companies stock prices tripled in the period between 1980 and 1994, and further doubled from 1994 to 2000 [81]. Although the introduction of financial incentives allowed to increase interest alignment, it also brought new problems. First, results obtained by Bergstresser [79] showed that linking management incentives to the stock price has had the side effect of encouraging managers to manipulate earnings on the upside in order to attract investors' interest. Second, an excessive managerial can be lower expected shareholders returns as managers will tend to be more risk adverse when a large share of their personal wealth is involved [80]. Financial incentives remain a powerful tool to incentivize managers, but they require careful considerations of their possible side-effects.

Empirical evidence of the incentive realignment hypothesis is found by Weir et al. [62] and Renneboog et al. [67] in the UK, by Kaplan [78] in the US, while in Continental Europe incentive realignment is not a strong driving factor for going private transactions [48].

Reduction of free cash flow:

Free cash flow is defined by Jensen [75] as the cash flow that exceeds the amount required to fund all projects that have positive net present values when discounted at the cost of capital. He argues that organizations that generate substantial amounts of free cash flows, which are generally the ones generating relevant economic rent or quasi-rent, are likely to generate conflicts of interests between managers and shareholders. In fact, managers are incentivized to employ them by investing into projects that increase the firm's size, even though they generate an Internal Rate of Return lower than the cost of capital and are therefore destroying value from the shareholders' perspective. This can be explained by the fact that a bigger firm offers managers greater compensation, power, and career opportunities [69]. On the other hand, shareholders would rather receive the additional cash in the form of dividends instead of investing money into projects that provide returns lower than their cost of capital. Going private transactions can reduce agency costs due to free cash flows when they are funded with a significant amount of debt, like in the case of LBOs. By issuing debt to buy back the floating shares in the market managers are bonding their commitment to pay future cash flows in the form of coupon payments, a much more powerful way compared to the simple promise of increasing dividends in the future due to the penalty in case of default [75], [82]. Agency costs of free cash flow are thus mitigated by reducing free cash flows available for spending by managers. It must be noted that issuing debt is not always the optimal choice, as it carries costs and risks like increased bankruptcy probability and cost of debt. It is also not so beneficial to all kinds of organizations, for example those with high growth opportunities, large amounts of profitable investments and no free cash flows, as they will need to regularly seek funds in financial markets [75].

As regards empirical evidence on the free cash flows hypothesis, in the US Lehn and Poulsen [82] obtained results consistent with it, while Servaes [83] did not find confirmation for it. Such mixed evidence is explained by Halpern at al. [69] through the heterogeneity hypothesis: they argue that there are two types of poorly performing firms where there is interest misalignment, one where managerial stakes in the company are too low, the other where they are too large. In the first case managers tend to extract private benefits rather than maximizing shareholders' value, since they do not benefit from it, while in the latter managers will tend to be too conservative and risk-adverse in their investment decisions.

Since many of the results they found are either not consistent with or not explained by the free cash flow hypothesis they argue that their heterogeneity hypothesis describes the LBO population better and call for a rethinking of the previous research on the topic. In the UK neither Renneboog et al. [67] nor Weir et al. [62] find any evidence sustaining the free cash flow hypothesis, while in Continental Europe the studies of Achleitner et al. [80] provide a sound confirmation.

Increased control and monitoring

The last strand of arguments related to the agency theory regards the amount of control that is exercised by shareholders or supervisory bodies over the management team. Public firms tend to have a dispersed ownership due to the plethora of investors holding little amounts of shares in the market, resulting in a lower level of control over the management [48]. In those companies that present weak internal governance and low monitoring by outside shareholders, a going private transaction can allow to generate significant value by reunifying ownership and control and implementing stronger monitoring mechanisms [57]. A corporate governance practice that generates weak control is duality, which occurs when the roles of CEO and chairman of the board are combined in the hands of the same person. Such a practice is often used by European companies as a way to reduce costs, but it leads to an excessive concentration of power and hinders the monitoring capabilities of the board, resulting in a lower ability of the firm to adapt to a changing environment [46], [57].

The value creation through an increase in control is typical of Private Equity funds, which can exploit their experience and expertise in the fields to recognize companies with a weak corporate governance and implement the best practices after the acquisition. Achleitner et al. [80] analysed the impact that ownership and control have on the likelihood of being target of an acquisition by a Private Equity in Continental Europe. Their results provide strong empirical evidence for the control hypothesis: firms where the large shareholder carefully monitors the management are less subject to private equity acquisitions due to the lower value creation that they can obtain. Also, firms where the large shareholders use their control rights to extract private benefits are usually avoided by PE funds, as they are likely to be willing to sell their stakes at a premium that compensates the loss of benefits. In the UK there has been growing attention to corporate governance mechanisms since the 90s, when the London Stock Exchange supported the

creation of a Code of Best Practice that public companies should adopt in order to mitigate agency problems. The Code identifies some governance characteristics that are considered "good practices". The main recommendations in terms of board structure are to maintain a significant representation of non-executive directors in the board and to split the role of the CEO and the chairman (avoid duality).

In the UK Weir et al. [62] found results consistent with the monitoring hypothesis, as firms going private were more likely to have duality and generally non optimal board structures. Renneboog et al. [67] also reports evidence that supports the control hypothesis in terms of premium that bidders are willing to pay, as firms with stronger outside shareholders were bought with lower premium returns.

- **Financial Structure**

The third strand of incentives to go private that can be found in the literature regards benefits linked to changes in the financial structure of a company that are enabled by the going private transaction. The most relevant ones that have been identified are interests deducibility, easier execution of restructuring operations, and wealth transfer from bondholders to shareholders:

Interest payments deductibility

Tax incentives can be achieved thanks to interest payment deductibility, and therefore they are not common to all types of GPTs but only to those that occur with a substantial increase in the leverage, like LBOs. The substantial increase in coupon payments creates a major tax shield that allows the company to dramatically lower their taxable income and almost pay no taxes for a long period, increasing shareholders' gains [48]. Clearly, the amount of the tax benefits depends not only on the amount of debt issued to complete the acquisition, but also on the interest paid on debt and on the country regulation in terms of marginal tax rate. The amount of value generated yearly by tax savings can be calculated as in Equation 1.1, obtained by Modigliani and Miller [30] by introducing taxation to their first proposition, where t_c is the marginal tax rate, r is the interest paid on debt and D is the amount of new debt issued to carry out the going private operation.

$$tax\ savings = t_c * r * D \qquad \text{Equation 1.1}$$

The tax incentive hypothesis finds empirical confirmation in the US by Lehn and Poulsen [82] and Kaplan [78], that estimates tax benefit in US GPTs to be between 21% and 72% of the premium paid to shareholders and notes that many of the tax benefits could not be reached without going private. Lowenstein [61] even calls for a reduction of tax benefits in LBOs, arguing that they are so large that firms are disincentivized to create real value in other ways. In the UK Weir et al. [62] do not find support of the tax benefits as a key determinant in the decision to go private. Similar results are obtained by Renneboog et al. [67], even though they find that higher premia are paid for firms with low debt to equity ratios, suggesting that the unused debt capacity could allow to create additional tax shield in the future. In Continental Europe strong confirmation of the tax benefits from increasing leverage during an acquisition is found by Achleitner [80].

Easier execution of restructuring operations:

An important driver of going private transactions is the will to gain full control over the company and avoid the risk that a third party obtains a relevant decisional power by buying shares in the public market. This is even more relevant when relevant restructuring operations or changes in the corporate strategy are programmed by managers or controlling shareholders, since they will be more easily and quickly executed [84]. Also, the market tends to react negatively when important restructuring operations are announced, as it is likely to depress short-term profits especially in smaller firms. By taking the firm private managers can focus on the long-term goals, agreed with the controlling shareholders, without the need to satisfy market expectations for short term profits and dividends [46].

There is a lack of empirical studies that analysed the correlation between the delisting decision and the plan of a restructuring operation, thus the hypothesis finds confirmation mainly from a theoretical perspective.

Wealth transfers from bondholders to shareholders:

According to Masulis [85], redistribution of wealth among security holders can occur due to capital structure changes when there are limitations in the protective

covenants linked to the securities. He argues that such limitations arise "(…) if one or more classes of senior securities fails to strictly preclude increases in the amount of securities of equal or senior standing." An acquisition financed by the unexpected exchange of additional debt for existing common stocks introduces an adverse redistribution of wealth for outstanding debtholders with equal or lower seniority, and at the same time harms preferred stockholders by converting junior common stock into senior debt.

Since a firm's leverage tends to increase in a going private transaction, especially in LBOs and MBOs, some of the shareholders' gains in a GPT can derive from the wealth transfer from bondholders of the target company [82]. Indeed, many well-known going private transactions involved a significant drop in the value of the target firm's outstanding bonds. One example is the acquisition of RJR Nabisco, whose first announcement made the stock price increase by 61.8%, while the price of its outstanding bonds declined by 16.5%. Empirical confirmation of wealth transfer is found by Kaplan [78] in the US, by Renneboog [67] in the UK, and by Achleitner [80] in Continental Europe.

2 Literature gap and research questions

After a comprehensive analysis and review of the literature that can be found on the topics of listing and delisting from a stock exchange, this paragraph summarizes the main findings and gaps that the current literature does not cover and that this research aims at fulfilling.

As regards listing, in a historical period, such as the one we are currently experiencing, in which the banking system is increasingly reluctant to provide financing to companies, listing on the stock exchange presents itself as a valid alternative to solve the persistent problem of fund raising. However, apart from meeting the need to raise the necessary capital to pursue the company's objectives, it also implies an upheaval in the corporate structure, with a related dilution of ownership. Over the years, many authors have discussed the main advantages and motivations of entering the stock market, which have been thoroughly described, and which can be divided into four fundamental clusters: financial, operational, organisational and fiscal. Also, the modalities that can be used to become publicly listed are mostly traditional and well known, with the IPO being the most common one, even though some emerging practices are recently gaining popularity, like the business combination through a SPAC.

To date, the main studies that have been carried out deal with the benefits of listing. Bancel and Mittoo [86], in their publication "Why Do European Firms Go Public?", surveyed the Chief Financial Officers (CFOs) of companies in 12 European countries to find out what are the main motivations for these figures to list their companies on the stock market. Pagano et al. [1] focused instead on the Italian Stock Exchange, examining 2,182 companies between 1982 and 1992 that have at least a minimum chance to list, in order to study what are the determinants of the decision to go public. Also Röell [87], investigated the main advantages for going public, researching in particular the main causes of the wide variation in countries' propensity to list.

The main insights in the literature on listing are international, both for temporal reasons, as the phenomenon was concentrated in the US and subsequently expanded internationally, and because the Italian market is a relatively small capitalized one,

without considering the heavy consequences that the economic-financial crisis has left on the entire Italian economic system, in particular on those small-medium enterprises that could have fallen within the orbit of the stock market. Within these difficulties relative to the national academic landscape, it is however possible to find interesting insights, from professionals in the sector, that deserve attention.

What is lacking in the literature is a study on the correlation, in the Italian stock exchange, between listing strategies and the firms' market and operating performances and an analysis to understand if companies do enter in the stock exchange opportunistically to the detriment of external investors in recent years.

For what concerns delisting practices, instead, the literature is not as comprehensive and complete as for listing, since it is a phenomenon that caught the interest of the market at a later stage. Most economists and researchers agree on the main theoretical benefits that public companies can exploit by going private which have been thoroughly described and that Djama et al. [48] divided into traditional, related to agency theory, and financial. Nevertheless, empirical studies not always confirm all the hypotheses that have been formulated from a theoretical standpoint, and they show significant differences across countries and economic areas. Some hypotheses that are empirically supported in the US proved to be not valid in the UK or in Continental Europe, and vice versa. This reflects the importance that the macroeconomic context, cultural heritage, and national regulations play in providing incentives to become public, remain public, or to go private. Due to the relative novelty of the delisting phenomenon, most efforts made to better analyse it have been focused on the largest stock exchanges (i.e., NASDAQ or NYSE) or by aggregating small exchanges of different countries together (i.e., exchanges in Continental Europe). The latter practice has the relevant drawback of not allowing to capture the impact of national contexts in the delisting decision by assuming that an economic area is quite homogeneous within itself. Also, most studies conducted on the topic focus on specific delisting practices (i.e., LBOs, MBOs, BOSOs), and therefore do not allow to compare clusters of firms delisted through different techniques from the same exchange in the same timeframe.

The review of the literature has revealed that very few of the most renowned papers on the topic analyse specifically the Italian stock exchange (Borsa Italiana), and none of them specifically investigated in a complete way listing and delisting practices. Some Master theses addressed the Italian landscape from a theoretical standpoint, describing the history and structure of Borsa Italiana and the national regulatory

framework in place [88], but do not provide any empirical evidence regarding the market and operating performance of firms. Vastano [89] analysed the market performance of a sample of delisted firms from 2011 to 2015 in order to calculate the reaction of the market to the announcement of the delisting decision in a window of 30 days before and after the announcement, but does not analyse operating performances. Barzaghi and Camorcia [90] instead focused their work on the SMEs segment of the Italian stock exchange, analysing the growth of newly listed companies also through performance and accounting indicators, but do not consider delisted ones. There is therefore a lack of a comprehensive empirical analysis on listing and delisting practices in the Italian market, which not only investigates the listing and delisting typologies, but also their correlation with the market and operating performance of the firms.

Therefore, the goal of this research is to thoroughly analyse the flow of companies entering and leaving the Italian stock exchange in the last 10 years to better understand the reasons for Italian companies to enter and exit the stock market and the correlation that exists among the strategy adopted and their performance. The specific research questions that this research aims at investigating can be summarized as follows:

RQ1: what are the main reasons that drive companies listed in the Italian Stock Exchange to become private?

RQ2: which is the correlation between listing and delisting strategies and the firms' market and operating performances?

RQ3: do companies enter and exit the stock exchange opportunistically to the detriment of external investors?

3 Focus on the Italian landscape

This chapter aims at providing an overview of the Italian stock exchange (Borsa Italiana), starting from a brief history of its evolution [91], proceeding with a description of the markets that are operated by Borsa Italiana and concluding with the regulatory framework in place.

The Italian stock exchange was funded in 1808 by the viceroy Eugenio Napoleone under the name of "Borsa di Commercio di Milano", a public entity with the aim of providing an appropriate venue for the exchange and trade of goods, currencies and government bonds, which until that moment took place in the squares of the most important cities. During the 1830s the financial market in Northern Italy developed significantly, mostly pushed by the silk production and trading industry, until in 1858 the first equity stock became publicly traded. During the 1870s, beside the large number of government bonds that were issued after the creation of the "Regno d'Italia", many rail companies and credit institutions became listed, while manufacturing companies turned to capital markets only at the end of the century, as they historically resorted to auto financing and bank loans. After a period of strong volatility during the two world wars, in the following years Italy experienced a strong industrial and financial expansion, until the economic expansion decreased in the 60s. In the 70s the Italian stock exchange lost its function as a source of financing for firms, partly because savings were mainly used to buy government bonds, in a context of high interest rates, and partly because of the lack of transparency in the market. In order to reduce information asymmetry in the market, a law introduced in 1974 forced public companies to periodically disclose to the market their financial statements and information regarding their corporate governance. Also, the same law established a monitoring body named Consob (Commissione nazionale per le società e la borsa), which is still active presently and aims at verifying the correct functioning of the financial system and ensuring that investors have sufficient information available to invest consciously [92]. A turning point was reached in 1983, when the first Italian mutual funds were established. They brought two main benefits to the Italian financial landscape: first, they massively bought securities to build their portfolio with a

positive effect on the market prices; second, they allowed to enlarge the pool of investors to non-experts other than those who were actively operating in the market. Important innovations were carried out during the 1990s, when a telematic platform was developed and trading activities ceased taking place physically. Such a platform had a huge spill-over effect, enabling an efficient integration of international markets and the development of more advanced financial products. An additional boost came from a period of privatizations of government-owned firms, when many large companies were listed on the stock exchange (i.e., Eni) and gathered significant capitals to finance their growth as publicly owned entities. The wave of privatizations involved the stock exchange itself, which in 1998 went from being managed by a government agency (Consiglio di Borsa) to a private company in the form of a joint-stock company named Borsa Italiana S.p.A. This allowed to further develop regulated markets and maximize their liquidity, transparency, and competitiveness thanks to the adoption of the most advanced international standards. In the following ten years Borsa Italiana went from being a single company to being a diversified group operating in financial services, and continued growing the number of listed companies. By the end of 2007 the Italian companies traded in the markets of Borsa Italiana were 301, for a total market capitalization of around 48% of the national GDP. A crucial turning point for Borsa Italiana is represented by the merger with London Stock Exchange that created the London Stock Exchange Group. Under the new governance, Borsa Italiana's strategic plan focused on developing its markets, a difficult task in the years following the great financial crisis, on strengthening the relationship between investors and companies, and on valorising cultural activities. In April 2021 Borsa Italiana Group was bought from the London Stock Exchange Group by Euronext, a European exchange operator, thus creating the leading pan-European market infrastructure and main venue in Europe for listing and trading both equity and debt securities [93].

3.1. Markets operated by Borsa Italiana

Borsa Italiana manages several markets, each of them tailored to a specific type of security traded, characteristics of the issuer, and investors. There are five main types of securities that can be exchanged on its markets: shares, bonds, ETF/ETC, funds and certificates. Since the focus of this thesis is on shares, only the markets dedicated to the trading of stocks will be described in detail of stocks, while all the other ones will be just listed in Table 3.1 for the sake of completeness, but not analysed in the text.

The panel of markets and segments offered by Borsa Italiana is wide and aims at supporting the diverse needs that companies and investors have. As after the acquisition of Borsa Italiana by Euronext the names of the markets slightly changed, the previous ones are reported in parentheses. In particular, the three main markets operated by Borsa Italiana are [94]:

- **Euronext Milan - EXM (ex MTA):**

  It is the regulated market which addresses medium and large companies by offering them the best practices that are adopted internationally. It allows to bridge the gap between Italian firms and global investors by providing the latter a direct information and access to the Italian landscape.

  Euronext Milan comprehends Euronext STAR Milan (Segmento Titoli Alti Requisiti), a segment dedicated to small and medium enterprises which comply with strict requirements in terms of governance, transparency, and liquidity. This allows SMEs with extraordinary characteristics to benefit from the international visibility of the EXM Market, which would otherwise be restricted to large companies only.

- **Euronext Growth Milan - EGM (ex AIM):**

  It is a non-regulated market dedicated to dynamic and competitive SMEs that seek new capital to finance their growth and higher visibility. As a non-regulated market, the level of transparency and liquidity is generally lower compared to the regulated ones.

  The peculiarity of this market is that it supports firms by offering a listing process tailored to their characteristics and needs. A crucial figure in this market is the Euronext Growth Advisor (previously called NOMAD), which is assigned to every company that starts the listing process and has the role of supporting the firm both

during the process and afterwards. In particular, the Euronext Growth Advisor supervises the due diligence process of the company in order to declare the appropriateness of the company to become public; he/she supports the company in the listing process by making sure it operates in accordance with the regulations; once the company has become listed, the advisor assists it throughout the whole permanence in the market in complying with the requirements of the Euronext Growth Milan [95].

Similarly to EXM, also EGM provides a particular segment, called "Segmento Professionale", devoted to SMEs that want to access the market with a gradual approach or to start-ups generating sales for less than a year.

- **Euronext MIV Milan (ex MIV):**

  It is the Investment Vehicle Market, point of reference for funds and vehicles that invest in securities linked to the real economy. There is no requirement of a specific nationality of the vehicles – they can be either Italian or foreign funds – and of the type of investors – both retail and professional investors can operate in the MIV.

Table 3.1: Securities exchanged on Borsa Italiana and its markets

Type of security	Market of Borsa Italiana
Shares	Euronext Milan Euronext Growth Milan Euronext MIV Milan
Bonds	MOT ExtraMOT EuroTLX
ETF/ETC/ETN	ETFplus
Funds	Euronext MIV Milan
Certificates	SeDex Cert-X

3.2. Regulatory framework

3.2.1. Supervisory body - Consob

As mentioned in chapter 3, the supervisory body of Italian financial markets is CONSOB (Commissione Nazionale per le Società e la Borsa), established with law n. 216 on June 7th 1974). Its mandate is to protect investors in the market by ensuring the following principles [96]:

- Transparency and fair behaviour of all the actors participating in financial markets with the aim of preserving trust in the financial system and its competitiveness.
- Disclosure of reliable information regarding by listed companies to investors in order to put them in the position to take informed decisions.
- Accuracy of the facts published in the prospectuses related to offerings of securities to investors.
- Investigations regarding potential violations of the regulations, insider trading, and market manipulation with the aim of preventing and sanctioning unlawful behaviours.
- Compliance with regulations by auditors entered in the Special Register.
- Maximum efficiency of trading activities in terms of quality of market prices and efficiency in the modalities for executing contracts in regulated markets.

The reference regulation is articulated in 17 macro areas on which the institutional activities of Consob are focused, and each of them is structured according to the source of origin. In particular, the regulation is the result of five main contributions [97]:

- **European legislations:**

  National regulations must keep into consideration and comply with the legislations and recommendations set by the European Commission. They are mainly of three types [98]: Regulations are mandatory in all their elements and directly applied to all Member States; Directives instead bind Member States as to the results that need to be achieved, although leaving some freedom in implementing their own laws on how to reach such goals; Recommendations are not binding and do not have any legal consequences, but propose a suggested line of actions to Member States. All of them are taken into consideration in defining the regulatory framework on financial markets.

- **Primary national legislations:**

  Second in the hierarchy are the laws defined by the Italian Parliament with regard to financial markets. They can be in the forms of laws or legislative decrees and must be complied with, thus need to be included in the reference regulation.

- **Secondary national legislations:**

  It refers to regulation issued by the Consob itself or by other supervision authority, as well as ministerial regulations.

- **Guidelines and opinions issued by ESMA:**

  ESMA (European Securities and Markets Authority) is an independent EU Authority that contributes to safeguarding the stability of the EU's financial system. One of its main activities is the completion of a single rulebook for EU financial markets by developing Technical Standards and providing advice to European institutions on the legislations [99]. ESMA's guidelines and Q&A on different topics are often integrated in the Consob's regulatory framework, for example those regarding MiFID II appropriateness and execution-only requirements.

- **Guidelines adopted by Consob:**

  They refer to guidelines and recommendations made by the Consob itself on the macro-topics of the regulation. Sometimes they refer to the ones made by ESMA, even though they can also differ from them.

3.2.2. TUF (Testo Unico sulla Finanza)

The TUF was introduced in 1998 with the legislative decree n. 58 and constitutes the main regulatory source for financial markets and intermediaries. Its main novelty was to gather, rationalize and structure in a rational way the laws enacted up to that moment regarding the different areas of the financial legislation [100] [101]. Since its constitution, the TUF has been modified several times in order to embed the novelties

introduced at a European level, such as Directive 2004/39/EC, known as MiFID, Directive 2003/6/EC on market abuse and Directive 2003/71/EC on prospectuses.

TUF regulates a wide spectrum of actors, activities and behaviours and is structured in the following six parts:

Part I presents the common provisions to all chapters, like the definitions of concepts dealt with in the rest of the document and the coordination with foreign supervision authorities.

Part II regulates financial intermediaries, starting from the entities in charge of monitoring activities (i.e., Consob and Banca d'Italia) to the providers of services and investment activities like collective asset management companies.

Part III concerns the regulation of markets and centralised management of financial instruments and sets different norms according to the type of security that is exchanged in the regulated markets.

Part IV contains the regulation regarding issuers of securities, with a particular focus on public companies. It sets specific requirements in terms of periodic disclosure, corporate governance, shareholding structures, auditing practices, shareholders rights.

Part V thoroughly describes most of the misconducts that can be implemented by actors in financial markets, describing the associated civil and penal sanctions. Among the most relevant ones are insider trading, which refers to the extraction of private benefits through the abuse of privileged information, and market manipulation, which is defined the act of spreading false information, simulating operations, or other actions aimed at altering the normal prices of financial instruments.

Part VI concludes the law with the transitory and permanent dispositions.

A market is defined regulated if it functions in conformity with the market discipline defined in Part III of the TUF, which stems from the European Directive 2014/65/UE. These markets are managed by market management companies, authorized by the Consob, which should facilitate sellers and buyers of financial instruments to enter into contracts in a trustful environment [102]. Regulated markets are characterized by a high level of information availability regarding the issuer of a security and by a large plethora of financial instruments [103].

Non-regulated markets are for under many aspects similar to regulated ones as they are systems of multilateral negotiation authorized by the Consob and disciplined by

the Consob itself, but they are not subject to the specific regulation of the market discipline (Part III of the TUF) and to the authorization of monitoring authorities, nor are the market operators and the securities exchanged. As a consequence, these markets can be manged also by entities different from market management companies upon a formal authorization by the Consob. Consob can require the organizers of non-regulated markets, the issuers and the operators, to provide data and documents on transactions. Consob can establish the modalities and frequency of information disclosure towards the public regarding trades. In case of a threat for investors, it has the power to suspend and even prohibit exchanges in the market [104].

4 Dataset creation methodology

In order to carry out a complete and exhaustive analysis of the phenomenon of listing and delisting from the Italian stock market, and due to the lack of an existing database on the topic, it has been necessary to create an ex-novo database that would include the record of all the companies that have entered or exited the Milan stock exchange in the last 20 years (2002-2021). The aim of this chapter is to explain in detail how the database was created, which variables have been recorded for each company and how this information was collected.

Between 2002 and 2021, using data provided by Borsa Italiana, 784 transactions were recorded, of which 448 were newly listed companies and 336 were companies that abandoned the Italian stock exchange. For each transaction, a set of three variables has been collected with the aim of both identifying in a unique way the company and easily retrieving information from public databases, namely the company name, tax code and the ISIN code. In particular, the ISIN code, attributed by the Bank of Italy in its capacity as National Numbering Agency, is an international code that uniquely identifies financial instruments, while the tax code uniquely identifies each company at the national level in the "Registro delle Imprese". These variables allowed to identify the financial and non-financial data of public and private companies. For each firm it was also recorded the market to which it belongs - Euronext Milan (EXM), Euronext Growth Milan (EGM) or Euronext MIV Milan (MIV) - in order to develop specific analyses and identify potential differences in strategies and operating results for companies listed on different markets. In addition, the date of the transaction was collected in order to monitor the flow of listings and delistings year by year and, above all, to analyse the differences in various periods. Evidence suggested that volumes vary systematically and consistently according to what appear to be window opportunities, for example during periods when the market overestimates the growth opportunities of companies in a given sector.

Furthermore, three more variables have been recorded in order to segment the sample of firms according to multiple criteria:

- **Sector of belonging:**

  By exploiting the data provided by Borsa Italiana, the companies that entered and exited its markets in the last three years have also been labelled with the sector to which they belong, in order to have a closer look at the recent trends happening on the market. Results are presented in paragraph 5.1.2.

- **Total value of the offer:**

  It refers to the total amount of capital gathered by the company from public investors after an IPO process, both for industrial companies and SPACs. For simple admissions without an offer this value has been considered null as shares are already widely owned.

- **Market capitalization after the first day:**

  It represents the overall market value of the company after the first day of being listed. It is calculated as the stock market price at the end of the first day of trading multiplied by the number of outstanding shares, and it is provided by Borsa Italiana in its monthly statistics. It provides a measure for what the market perceives the total worth of the company is, therefore allows to segment the performances according to the market capitalization.

4.1. Listing classification

Subsequently, both going private and going public companies have been labelled according to the methodology used to execute the transaction. As regards new admissions, the classification that has been adopted follows the findings of the literature review in paragraph 1.1.1., where the main methodologies used to become public are described. In particular, the five categories identified are:

- **IPOs:** admissions in connection with a placing of equity securities on the market, intended for professional investors and/or retail investors, by a company appearing on the stock exchange for the first time and therefore committed to build up the free float capital.

- **Spin-offs:** admissions caused by the split of a branch of a listed company or other similar transactions which have the technical effect of listing the newly formed corporation.

- **Admission without placement:** admissions of companies that already meet the free float capital requirements, either because they were already listed in the past and they maintained a widely-owned shareholding structure or because they are widely controlled by nature (such as cooperatives). In these cases the admission does not require a placement of shares in the market since the minimum amount of floating shares already exists, and the going public transaction consists in admitting the shares of the company to be publicly traded in the markets of Borsa Italiana.

- **Mergers:** admission of companies that merge with already listed companies and are admitted to listing without a public offer.

- **SPAC:** admissions following a business combination of a SPAC (Special Purpose Acquisition Company). As described in chapter 1.1.1., also the Italian regulation allows a private company to merge, through a reverse takeover, with a special vehicle (the SPAC) that had previously been created for this purpose and listed on the stock exchange through an IPO, with the simultaneous delisting of the SPAC.

4.2. Delisting classification

As regards delistings, the classification adopted is slightly more detailed and takes into account not only the modality through which a company abandons the Milan stock exchange, but also some more subjective features that characterize the going private transaction, and that are referred to voluntary delisting due to their strategic nature. The classification is inspired by the results of the literature review presented in chapters 2.1.1 and 2.1.2.1 regarding involuntary and voluntary delistings, although it has been adapted to the Italian landscape and to the type of analysis that has been carried out.

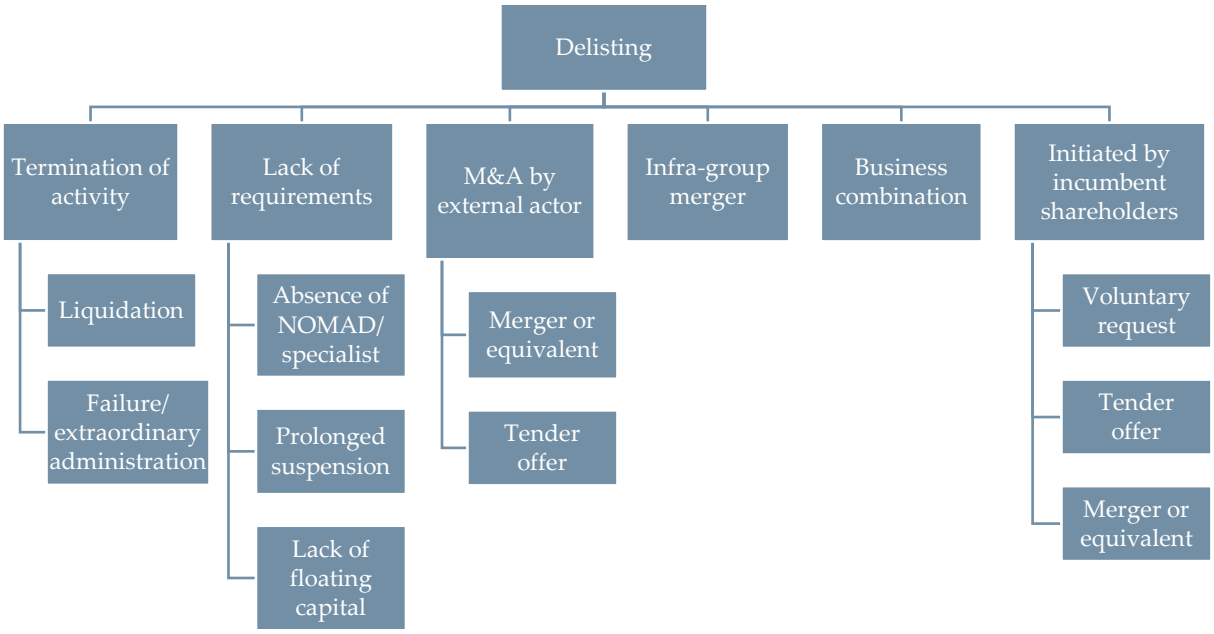

Figure 4.1: Delisting taxonomy

In particular, the classification that proved to be more comprehensive and useful for the purpose of the analysis is the one presented in Figure 4.1, where delisted companies are divided into six main clusters. The first two clusters cover all the cases related to involuntary delistings, while the remaining ones aim at capturing different aspects related to voluntary delisting. The six clusters are functional to the analyses that will be described in chapter 5, and they are presented hereinafter:

- **Termination of activity:**

  The first cluster includes companies that cease to exist or interrupt their ordinary activities. Among these are included companies that undergo liquidation (including also SPACs that did not find a target to acquire through a business combination and are therefore liquidated) and companies that filed for bankruptcy or extraordinary administration procedures.

- **Lack of requirements:**

  Companies delisted due to lack of requirements are still operating, but they are expelled by Borsa Italiana due to the lack of compliance with the regulation established by the latter. The most frequently encountered cases in the sample of companies under examination are the NOMAD's abandonment of the issuer (now called Euronext Growth Advisor), the Specialist's refusal to quote bid and ask prices for the company's shares, the prolonged suspension from trading imposed by Borsa Italiana or the violation of a minimum number of floating shares in the market as defined in the Regulation of Borsa Italiana. As regards the Euronext Growth Advisor's abandonment of the issuer, it usually happens due to the lack of an appropriate information disclosure by the company or due to a very distressed financial situation.

  Other less frequent cases might be the annulment of the company's equity capital, the beginning of composition with creditors procedures, or the lack of certification of financial statements by an external auditor.

- **Mergers or acquisitions by an external actor:**

  This cluster gathers companies that are acquired by or merged with a company that is not related to the controlling company of the group, nor to the existing shareholders of the company. In these cases, delisting can occur either because the target company is merged with the bidder, therefore ceasing to exist as a stand-alone entity, or because the floating shares in the market are bought by the acquiring company through a tender offer. In the second case it is not necessary to acquire the totality of floating shares, but it is sufficient to breach the minimum floating shares required to remain listed, thus achieving delisting through a technicality. Furthermore, the tender offer has been classified according to its

nature, either voluntary or mandatory, the latter being imposed by the Regulation in case of an acquisition that leads to obtain the majority of voting rights.

An important variable that has been recorded for companies belonging to this cluster is the nature of the bidder company, as suggested by Geranio (ref), although the classification has been adapted to the Italian landscape based on the characteristics of the sample. In particular, four main buyer types have been identified: listed Italian groups, unlisted Italian groups, foreign groups, and financial investors.

- **Infra-group merger:**

  This very specific cluster deals with companies that are merged with a listed company which is part of their same group. These operations are usually performed with the aim of restructuring the ownership structure of the group and their peculiarity is that the target company remains inside the perimeter of the stock exchange, although as a division of another listed company instead of being directly listed.

- **Business combination:**

  This cluster encompasses SPACs that delist after executing a Business Combination with the target companies. This technical operation has a double effect that counterbalance each other and result in a null effect on the overall number of listed companies, as the SPAC delists and the target company becomes listed.

- **Initiated by incumbent shareholders:**

  The particularity of this last cluster is the fact that the delisting procedure is initiated by incumbent shareholders and not by an external actor or imposed by Borsa Italiana. Therefore, it is one of the most relevant ones for the purpose of this research since it is the result of a strategic choice made by shareholders.

  The main ways through which existing shareholders can take a company private are through a tender offer, through voluntary request brought forward by the majority shareholders, or through a merger with a non-listed company. Tender offers are usually initiated by a financial holding owned by the existing

shareholders themselves, and they can be voluntary or mandatory (paragraph 1.2.2.2).

An important remark to make is that transfers from other markets of Borsa Italiana (e.g. from EGM to EXM) or admissions of companies already listed on foreign markets that want to expand their visibility in Italy (this is the case of cross-listing, i.e. companies already listed abroad that also begin trading on Piazza Affari) are registered in the database but they have been excluded from most of the following analyses.

4.3. Choice of performance indicators

Once labelled all the transactions according to the listing and delisting classifications described above, the timeframe of the analysis has been restricted to the last ten years, i.e. from 2012 to 2021. For the companies included in this timespan, the variables on which the analyses that will be described in chapter 5 are based on were collected.

The most crucial variables are the ones concerning operating and market performances. As regards the former, financial firms have been excluded as the indicators differ from the ones described below. The three variables chosen to analyse the operating performances of industrial companies are consolidated revenue, consolidated EBITDA, and consolidated net profit, as they together provide a quite thorough perspective on the operating performance of a company.

- Revenues are an important indicator of the size of a company in terms of sales. It is crucial to analyse whether the listing or delisting from the Italian stock exchange has impacted the overall turnover of the company.
- EBITDA is a profitability indicator that looks at how the core business of the company is managed without taking into consideration amortizations, financial, and fiscal aspects, and is also a commonly used proxy for operating cash generation.
- Net profit instead looks at the overall profitability of the company after considering all types of revenues and expenses, and not only the ones related to the core business.

Furthermore, the combination of these absolute indicators allows to easily obtain relative ones, for example net profit margin (which is obtained as the ratio between net profit and revenues) or EBITDA margin (calculated as the ratio between EBITDA and revenues). These performance indicators have been collected for six years, ranging from three years before the operation (either listing or delisting) to two years after it, in order to capture potential trends or patterns. Data was not always available for the whole time frame, for example for those companies created through a spin-off, as well as those that cease to exist as a separate entity after a merger.

The datapoints were collected using a combination of AIDA, Thomson Reuters, "Calepino dell'azionista" by Mediobanca, and IPO prospectuses (only for listed companies). The operating performance of SPACs before the business combination is also not included in the database, since they are a financial vehicle created for the

specific purpose of acquiring a target company, and only companies with which they have carried out a business combination were considered.

Financial firms like banks and insurance companies have been treated differently, as their balance sheet follow different standards and metrics. In particular, as a measure of turnover net interest margin was used for banks, and gross premium was used for insurance companies. As a measure of profitability, net profit before taxes was the metric chosen.

As regards market performances, the yields up to three years after the listing and three years before the delisting were recorded. Again, for companies originated through a spin-off or merged into other companies it has not been possible to determine their performance as stand-alone companies, and have therefore been excluded. Similarly to what described for operating performances, SPACs are also not considered until they execute the business combination. Datapoints of the punctual prices have been extracted using Factset and Refinitiv Eikon by providing the ISIN code of the company and the date requested. The yield has then been calculated as the percentage change from the year of the operation (listing/delisting) to one, two, or three years forward/backward. Furthermore, in order to compare the companies' performances with the market yield, the differential performance with the Italian market index *MIB* has been calculated. In order to do so, firstly the average daily value of the *MIB* was recorded for every day in the timespan 2009-2021, then the differential performance was calculated considering the prices of the *MIB* in the same precise dates.

5 Empirical analyses and results

This chapter presents the analyses that have been performed on the database constructed as described in chapter 4, as well as the most relevant results that have been obtained. The following paragraphs will first present an overview of the flow of companies that entered and abandoned the Italian stock exchange in the period 2002-2021, highlighting general patterns and confronting them with some of the major European stock exchange. Then, the analysis will focus on a more restricted time frame (2012-2021) in order to dig deeper into the two thematic areas that this research aims at investigating: the phenomena of listing and delisting from the markets of Borsa Italiana and the potential correlation that the Italian market shows among such practices and the operative and market performances of the companies involved. It must be noted that a higher effort has been put in the analysis of delisting due to lower amount of research and efforts made to that investigated this topic, which made such an analysis very significantly contributing to the literature.

5.1. Flow of companies in Borsa Italiana (2002 to 2021)

This paragraph analyses the flow of companies that have joined or left the markets of Borsa Italiana from 2002 to 2021 and the change in the overall market capitalisation that these transactions caused over the years, and concludes with a comparison with some of the largest European financial centres.

Figure 5.1 shows the evolution in the number of listed companies in the markets of Borsa Italiana divided by market. Other than the markets already described in paragraph 3.1.1, there used to be more markets that have now ceased to exist: Nuovo Mercato was absorbed into MTA in 2005; Mercato Ristretto became Mercato Expandi in 2004 and was then absorbed into MTA as well, and finally MAC (Mercato Alternativo del Capitale) was absorbed into AIM Italia in 2012.

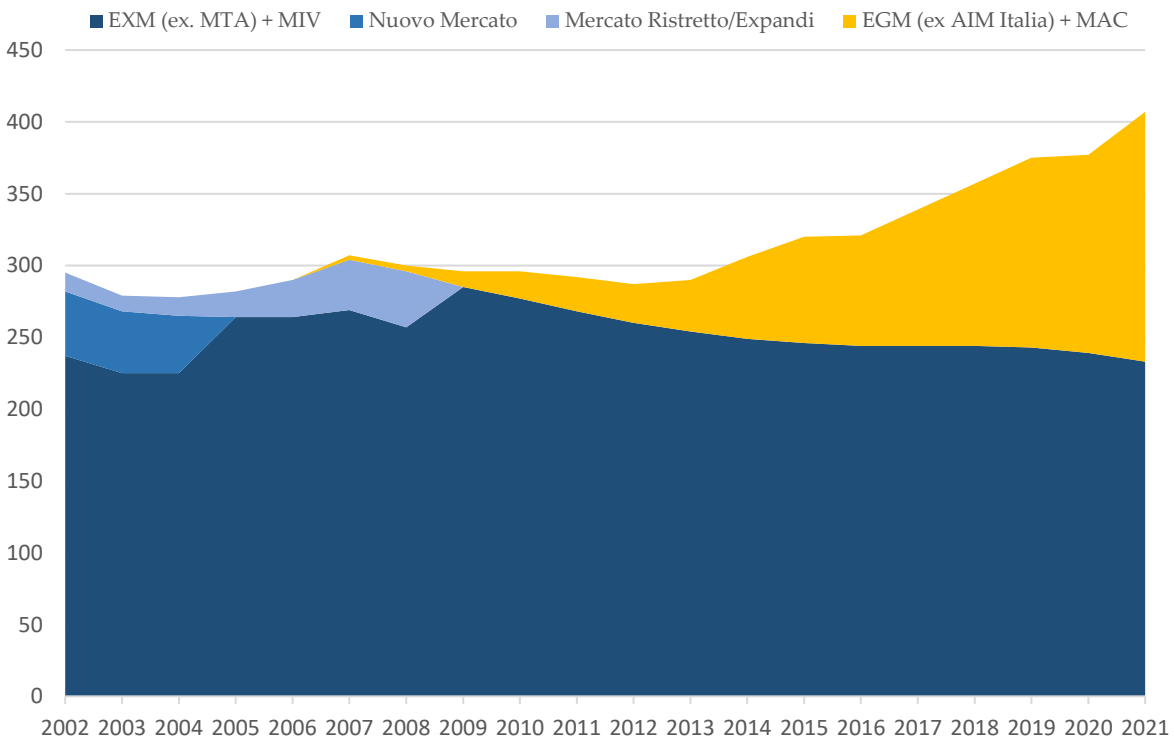

Figure 5.1: Number of companies listed in Borsa Italiana, by market

As Figure 5.1 shows, the number of companies listed on the Italian Stock Exchange has grown considerably since its minimums of 2003-2004, reaching a record of 407 in 2021. However, the largest contribution comes from the unregulated market EGM (Euronext Growth Milan, formerly AIM Italia), which has experienced significant growth since

2013 and currently counts 174 companies, while the main market EXM (Euronext Milan, formerly MTA) has seen a gradual decline since 2007. To appreciate at a higher level of detail the movements that led to the situation just described, Figure 5.2 shows the evolution of new listings and delistings from the Italian Stock Exchange, broken down by market. Overall, there were 448 new listings in the last twenty years, of which 185 on the main list (including also MIV, Mercato Ristretto/Expandi and Nuovo Mercato) and 263 on the unregulated EGM. The total number of cancellations was 336, of which 268 on the main list and 68 on the EGM.

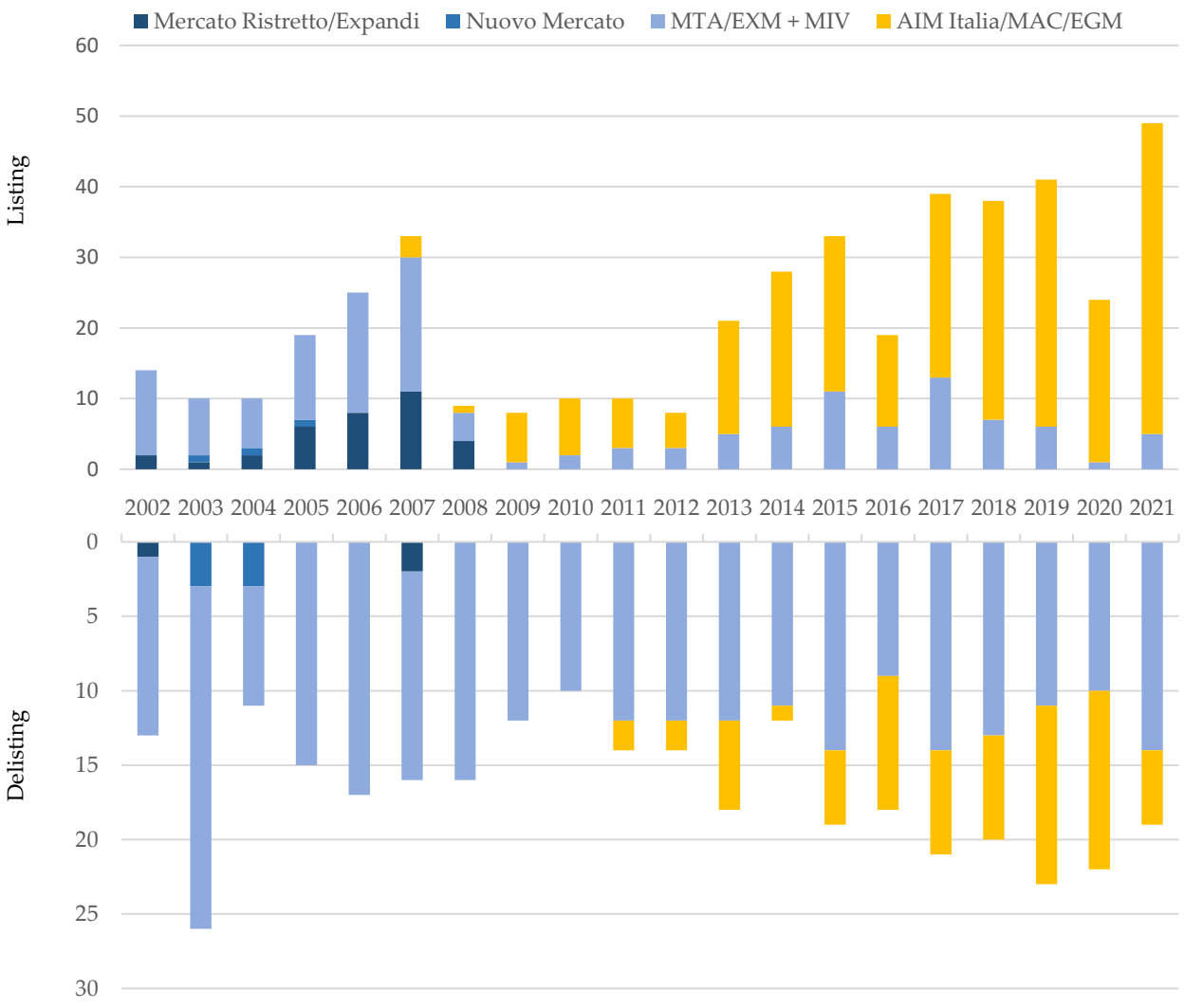

Figure 5.2: Flow of listings and delistings from Borsa Italiana, by market

It is evident that the decreasing trend of companies listed on the EXM highlighted above is not due to an increasing drop-out - which has remained fairly constant since 2002 - but rather to a drastic reduction in new entrants following the financial crisis. The lower number of firms that chose going public as a way to raise additional capital after the great financial crisis can be partly explained by the resulting recession, which depressed the general economic system and saw many firms struggling to survive. These results are coherent with the traditional hypotheses found in the literature and described in chapter 1.2.2.2. In particular, companies with tighter margins will be less likely to be willing to incur in the non-negligible costs of being listed. Also, since the public status entails a high risk of being exposed to the business cycle, the company valuation on the market is likely to be significantly lower to its real value during a recession, especially one triggered by a great financial crisis, leading to undervaluation and shareholders' wealth loss. On the other hand, the exponential growth in the EGM market is not matched by a proportional increase in the dropouts, justifying the overall growth in the number of listed companies. Table 5.1 and Table 5.2 provide another perspective on the flow of admissions and cancellations compared to Figure 5.2, as they segments them according to the classification presented in chapter 4. The contributes coming from professional segment MIV, Mercato Ristretto (which became Expandi), and Nuovo Mercato are presented together with the main market.

As regards listings (Table 5.1), IPO is the most commonly used method to become public especially for SMEs, accounting for 75% and 92% of total admissions in the main market and in the nonregulated one, respectively. In EXM mergers and spin-offs rank second and third, even though with a considerably lower incidence, while business combinations and simple admission are almost negligible. In the EGM market the second most used way to join Borsa Italiana has been the Business Combination with a SPAC. Noteworthy is the drop in all types of listings after the great financial crisis of 2008/2009, which started recovering only in 2013 especially in the EGM market.

With regard to delistings (Table 5.2), its distribution across time is more stable and homogeneous compared to listings. Also in terms of typology there is not a clear "winner", as was IPO for new admissions: in regulated markets acquisitions from an external player (87) and voluntary operations initiated by incumbent shareholders (80) are the most frequent techniques, accounting for 32% and 30% respectively. Surprisingly, on EGM market lack of requirements is the main cause for delisting with 19 occurrences (28%).

Table 5.1: Flow of listings on the Italian Stock Exchange

	Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total
EXM/MIV [3]	IPO	6	4	8	15	21	29	6	1	2	2	1	3	5	9	3	8	5	4	1	5	138
	Spin-off	3	2	1	1	2	-	1	-	-	1	1	1	-	-	1	1	1	-	-	-	16
	Admission	2	-	-	2	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	6
	Merger	3	4	1	1	2	1	1	-	-	-	-	1	1	1	1	1	-	1	-	-	19
	Bus. comb.	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	2	1	1	-	-	6
	Total	14	10	10	19	25	30	8	1	2	3	3	5	6	11	6	13	7	6	1	5	185
EGM	IPO						3	1	6	8	7	5	14	21	19	11	24	26	31	21	44	241
	Spin-off						-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1
	Admission						-	-	1	-	-	-	1	1	1	-	-	-	-	-	-	4
	Merger						-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	2
	Bus. comb.						-	-	-	-	-	-	1	-	2	1	2	4	4	1	-	15
	Total						3	1	7	8	7	5	16	22	22	13	26	31	35	23	44	263
	Total Piazza Affari	14	10	10	19	25	33	9	8	10	10	8	21	28	33	19	39	38	41	24	49	448

[3] The contributes coming from professional segment MIV, Mercato Ristretto (which became Expandi), and Nuovo Mercato are presented together with the main market.

Table 5.2: Flow of delisting from the Italian Stock Exchange

	Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total
EXM/MIV [4]	Termination of activity	-	1	6	4	1	2	-	-	3	4	2	5	4	5	-	1	-	-	2	-	40
	Lack of requirements	-	-	-	2	1	1	-	1	-	-	-	-	-	-	1	3	-	1	-	-	10
	M&A by external actor	3	11	3	2	6	8	7	2	4	4	2	2	3	3	6	3	5	2	4	7	87
	Infra-group merger	6	6	-	2	6	2	1	3	-	-	3	2	4	2	2	2	-	2	3	-	46
	Bus. comb.	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	2	1	-	-	-	5
	Voluntary	4	8	2	5	3	3	8	6	3	4	4	3	-	3	-	3	7	6	1	7	80
	Total	13	26	11	15	17	16	16	12	10	12	12	12	11	14	9	14	13	11	10	14	268
EGM	Termination of activity						-	-	-	-	-	-	-	-	-	1	-	-	2	4	-	7
	Lack of requirements						-	-	-	-	2	1	5	-	2	3	2	1	-	3	-	19
	M&A by external actor						-	-	-	-	-	-	-	-	-	1	2	2	3	1	4	13
	Infra-group merger						-	-	-	-	-	1	-	-	-	1	-	-	-	1	-	3
	Bus. comb.						-	-	-	-	-	-	1	-	2	1	2	4	6	1	-	17
	Voluntary						-	-	-	-	-	-	-	1	1	2	1	-	1	2	1	9
	Total						-	-	-	-	2	2	6	1	5	9	7	7	12	12	5	68
	Total Piazza Affari	13	26	11	15	17	16	16	12	10	14	14	18	12	19	18	21	20	23	22	19	336

It is also interesting to analyse not only the evolution in the number of listed companies over the years, but also how the overall market capitalisation has been affected by listing and delisting operations, as shown in Figure 5.3. The change from one five-year period to the next is the algebraic sum of four components:

[4] The contributes coming from professional segment MIV, Mercato Ristretto (which became Expandi), and Nuovo Mercato are presented together with the main market.

- **Capital increases made by incumbent companies:** it is calculated as the sum of all capital increasing operations carried out by listed companies, as they had as a result an increase in the market capitalization of Borsa Italiana.
- **Entry of newly listed companies:** the new capitalization brought by the listing of a company is calculated as described in chapter 4, therefore considering only those companies that were not in the perimeter of the stock exchange (an example of a listing that does not increase market capitalization of Borsa Italiana is the case of listing a corporation created through the spin-off of a listed one).
- **Exit of delisted companies:** similarly to the approach followed to calculate the new capitalization brought by a listing, in the case of a cancellation from the stock exchange the market value is considered to reduce the overall capitalization of Borsa Italiana if the company completely abandons the exchange (i.e., if a company is merged or acquired by a listed company it makes no contribution to the overall capitalization lost).
- **Changes in stocks values:** they are measured by the annual performance of the overall market index and they have been calculated as the residual difference between the capitalization of the whole stock exchange from a five-year period to another (which is known and provided by Borsa Italiana).

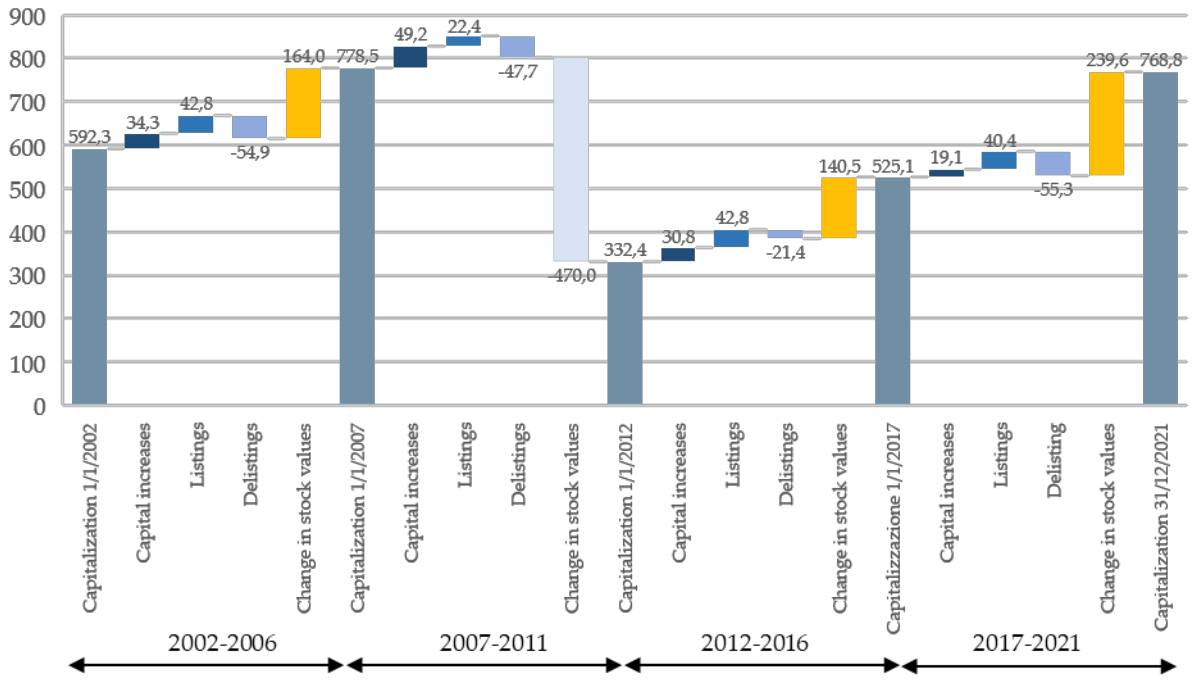

Figure 5.3: The effect of listings and delistings on market capitalisation

A noteworthy aspect is the substantial loss of capitalisation following the financial crisis in 2008/2009, which resulted in a decrease in value of over EUR 470 billion. Such a significant drop confirms the fact during a crisis overall valuations are heavily impacted due to the low confidence of investors and market operators. During this period the increase in capitalization brought by newly listed companies is around half of the average values of all other periods, coherently with the lower number of companies going public. Furthermore, it is interesting to notice that the balance between the capitalisation gain due to new entries and the decrease due to delisting is positive only in the five-year period 2012-2016, and that in the whole twenty-year period a total of €148,4 billion were brought into Borsa Italiana by new listings, against a loss of €179,3 billion due to delisted companies. Finally, capitalisation at the end of 2021 is still lower than at the end of 2006 despite the number of listed companies reaching a record high of 407, indicating that the multitude of small caps listed on EGMs has not been able to offset the loss of capitalisation, which amounted to 23% of the positive contribution made by new listings in the last five years and that is mostly concentrated on EXM market.

5.1.1. Comparison with other European stock exchanges

It is then interesting to analyse whether there are similarities between the trend observed in the Italian stock exchanges and the one shown by some of Europe's major financial centres. Figure 5.4 shows the number of domestic companies listed on the main stock exchanges (regulated or not) in the United Kingdom, France, and Germany.

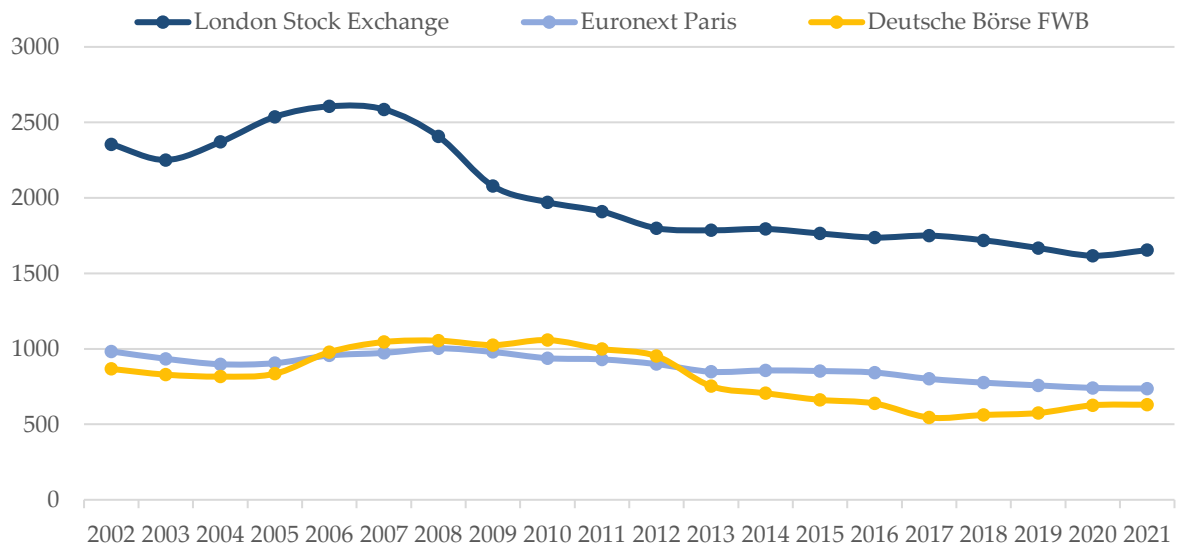

Figure 5.4: Domestic companies listed on the stock exchange in UK, France and Germany

A first difference that can be noted is that they all experienced a decrease in absolute terms over the last twenty years, unlike the Italian case where a record number of companies traded in the markets of Borsa Italiana was reached in 2021.

More specifically, the decline in the total number of listed companies is 30% in the UK, rising to 45% considering only the main market. In Germany, the overall decline is 27%, which also worsens to 45% considering only the regulated markets. In both cases, therefore, there is an increase in companies listed on unregulated markets, similarly to what was described above for Borsa Italiana. Against this trend, however, are the data related to the French stock exchange, where the overall decline of 25% is mainly due to the unregulated markets, while the main market experienced a 44% increase.

Also in this case it is interesting to highlight the flow of listing and delisting on the three stock exchanges considered.

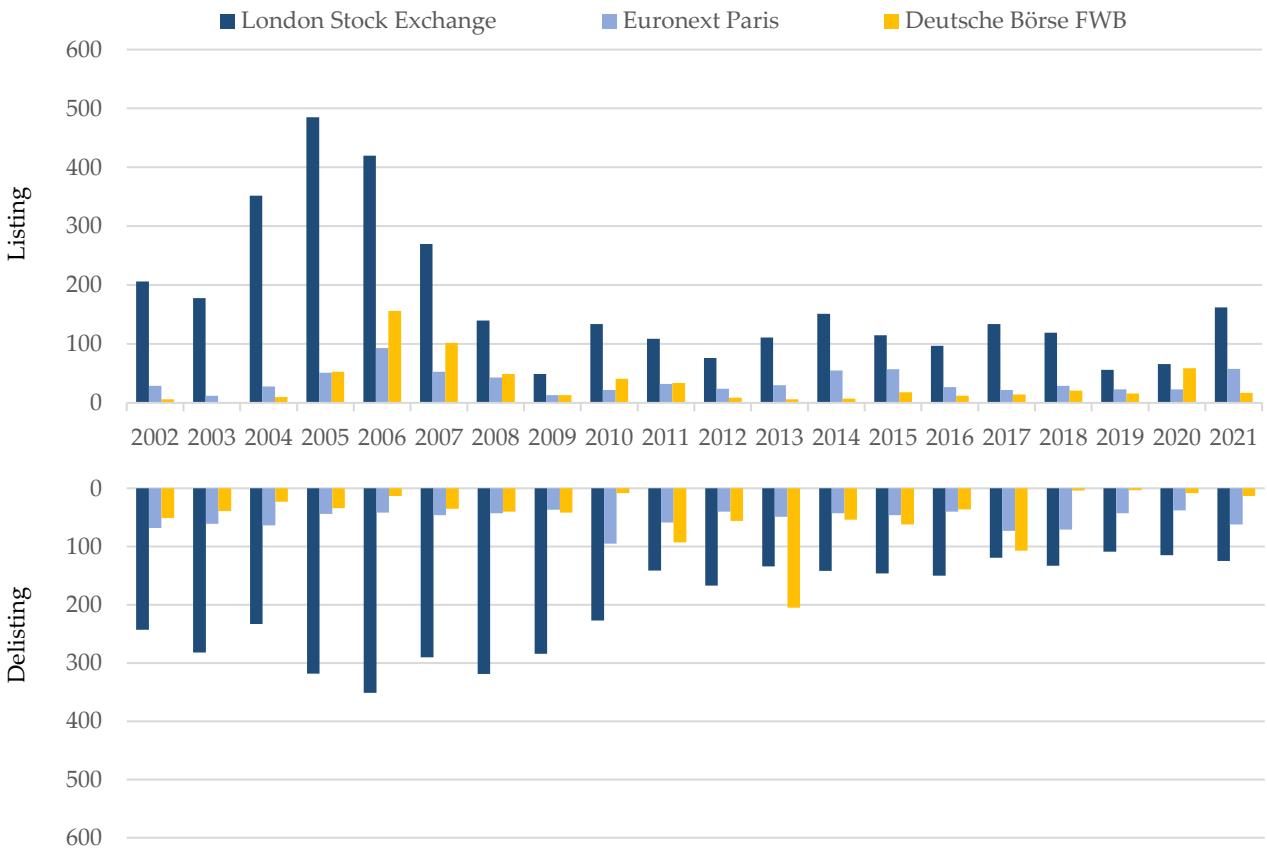

Figure 5.5: The flow of listings and delistings of domestic companies on stock exchanges in the UK, France and Germany

What emerges from Figure 5.5 is the significantly higher turnover in the UK compared to the other European financial capitals, especially in the first decade of 2000s where a record 485 companies became publicly traded. Surprisingly, after the financial crisis in 2008 both listings and delisting decreased in the UK. As regards Germany and France, they both experienced their record listings in 2006 during the period of enthusiasm and optimistic valuations that characterized the years preceding the Great Financial Crisis. Furthermore, the German stock exchange shows two main waves of delisting: the first one in 2012/2013, after the closing of the *First Quotation Board* segment due to several market manipulation scandals; the second one in 2017 after the closing of the segment *Entry Standard.* Overall, it is possible to see that, after 2008, the number of new listings decreased and remained quite low for many years, while the number of companies that left the stock exchanges increased in France and Germany, while it decreased in the UK. Finally, an interesting indicator to compare European financial venues is the ratio between the market capitalization of the stock exchange and the national GDP, represented in Table 5.3 for Italy, USA, UK, France, and Germany.

Table 5.3: Ratio of market capitalisation of domestic listed companies to GDP in different financial centers

Nation	31/12/2001	31/12/2006	31/12/2011	31/12/2016	31/12/2021
Italy (Borsa Italiana)	48,5%	52,8%	20,7%	31,8%	43,8%
USA (NYSE, NASDAQ, AMEX)	132,1%	141,6%	100,6%	145,9%	218,2%
Great Britain (London Stock Exchange)	130,7%	139,2%	109,6%	108,0%	102,0%
France (Euronext Paris)	85,4%	104,7%	54,3%	87,4%	107,6%
Germany (Deutsche Börse FWB)	55,1%	54,7%	31,6%	49,5%	59,4%

Borsa Italiana is the stock exchange that has the lowest capitalisation/GDP ratio in all periods considered, indicating that Italian companies tend to prefer other ways of financing rather than seeking capitals in the market, and similar results are obtained

in the German market as well. Coherently with the results obtained previously, the Great Financial Crisis had an impressive negative impact on the capitalization/GDP ratio, even more significant considering that GDPs declined in most countries after the recession that followed the crisis. Milan and London are the only exchanges that have not yet recovered to the pre-crisis values, while France and Germany have managed to overcome the pre-crisis value despite the lower number of listed companies. USA are the ones with the highest ratio in the 20-year period considered, with the only exception of 2011 (100,6% against a 109,6% in England), and overcame the 200% threshold at the end of 2021.

5.1.2. Focus on triennium 2019-2021

To better understand the latest trends in the market, this paragraph proposes an insight into the transactions happened in the markets of Borsa Italiana in the 2019-2021 triennium. It is an interesting timespan, where a soaring investor confidence led to record prices in 2019, followed by a collapse in March 2020 due to Covid-19 pandemic which brought the worldwide economy to a halt. Even though uncertainty was still high, in 2021 the main market indexes had already recovered to pre-Covid levels. In order to sustain and promote listing procedures even in a period of recession, the Italian Government provided incentives to SMEs in the form of tax credit for the listing fees charged by Borsa Italiana. Similar forms of incentives were provided to investors through fiscal advantages linked to PIR (Piani Individuali di Risparmio), a special type of asset management instrument. For the sake of completeness, Annex 1 lists all the new entries and cancellations on the regulated market of Borsa Italiana EXM (together with MIV) according to the classification criteria defined in chapter 4, while Annex 2 replicates the list for the unregulated market (EGM).

As regards the main market, only 12 companies joined Borsa Italiana against the 35 ones that abandoned it during the three-year period. During 2020 only one company (GVS) entered EXM, and only one (Banco di Sardegna) chose voluntarily to withdraw its shares from the market. In 2021 a rapid increase in the number of acquisitions was mostly driven by external actors, and not by incumbent shareholders. Furthermore, the acquiring companies were both industrial groups and financial players (i.e., Private Equity firms), testifying the importance that the substantial injection of liquidity in the system by central banks had in easing access to financing.

The scenario is quite different in the SMEs market, Euronext Growth Milan, since 102 companies became public in the 2019-2021 period and only 29 were delisted. After a

slowdown in the number of IPOs in 2020, in 2021 a record number of 44 listings was reached. It is then interesting to notice that many of the companies delisted due to liquidation were SPACS that dismissed their activities after failing in finding a target company to invest in.

It is finally interesting to segment listings and delistings according to the sector in which they operate, as represented in Figure 5.6: The flow of listings and delistings on the Italian Stock Exchange divided by business.

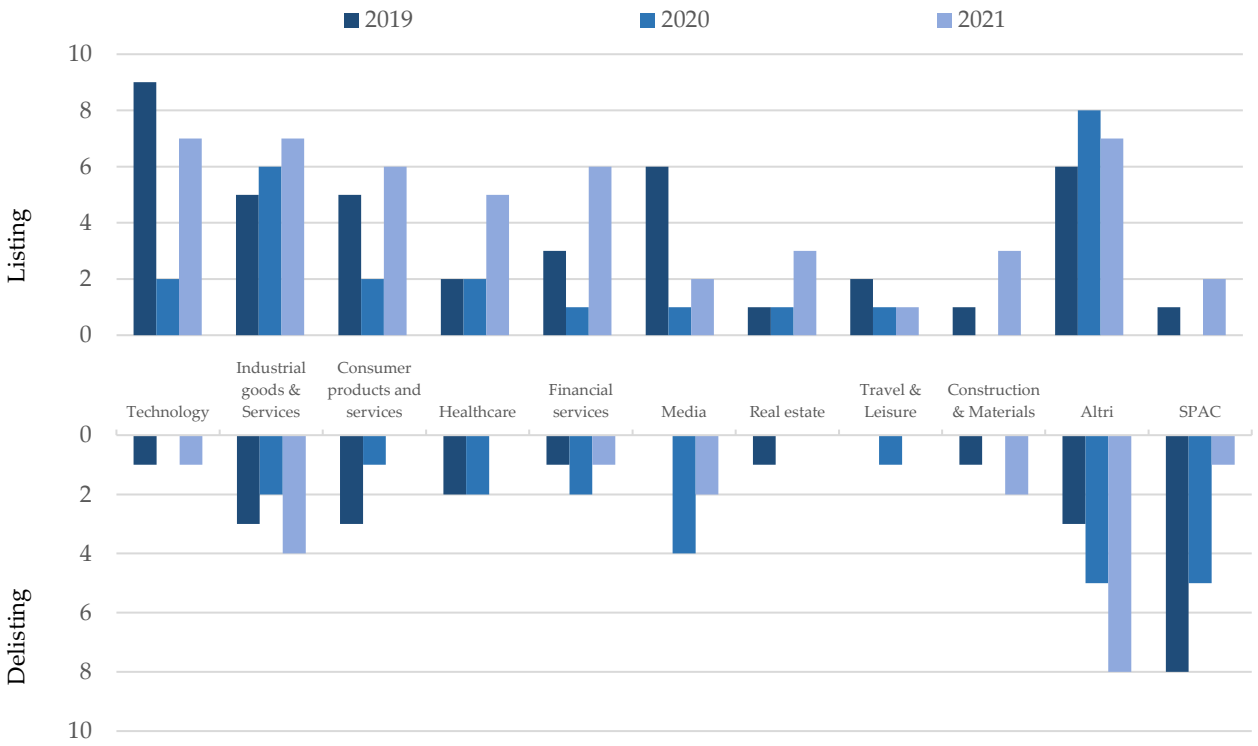

Figure 5.6: The flow of listings and delistings on the Italian Stock Exchange divided by business

Without surprise, 2020 was characterized by a very low number of admissions in all sectors except from Industrial Goods & Services, mostly due to Covid-19 pandemic which froze international and financial markets for most of the year. In 2021 new admissions rose back to pre-Covid levels, with a significant contribution coming from sectors sectors that have benefited from the change of paradigm induced by the Pandemic, such as ICT Technologies, financial services (with a special regard to fintech), and healthcare. In terms of delistings the media sector distinguished itself in 2020, while the contribution coming from SPACs is not significant since all SPACs are delisted once they complete the business combination.

5.2. Listing strategies and performances

As can be seen from the numbers at the beginning of the chapter, from 2012 to 2021 300 Italian companies entered the markets of Borsa Italiana, 63 in the main market EXM and 237 in the non-regulated one EGM. The detail breakdown of the classes defined in chapter 4.1 is provided below:

- **IPO:** 260 listings following a share placement (IPO) open to the public and/or institutional investors; they are the vast majority of the sample and are divided into 44 cases in the main market and 216 in the unregulated market. Within this group, according to Borsa Italiana statistics, there are 27 companies that qualify as investment vehicles or SPACs (special purpose acquisition companies), of which 3 on the main market (MIV segment).
- **Spin-off:** 6 companies listed following a spin-off from another listed company, all on the main market with one exception in EGM.
- **Admission without placement:** 5 admissions without placement (of which 2 on the main market).
- **Merger:** 8 companies resulting from mergers between several entities, 2 of which on EGMs, often the result of corporate restructuring for groups already present on the stock exchange.
- **SPAC:** 21 business combinations carried out by SPACs, of which 15 on EGM;

5.2.1. Operating performance

The first goal is to evaluate the operating performance of newly listed companies at the time of their listing, by analysing their financial statements before and after listing. For the purpose of this analysis, firms originating from a spin-off and those originating from a merger were excluded since there are no pre and post listing financial statements that can be compared. As explained in chapter 4.3, SPACs that are in the process of looking for a target have been excluded from the analysis, and only the performances after the business combination were analysed. Moreover, it is clear that it was not always possible to analyse performances after the listing for companies that became public in the last few years, due to the lack of financial statements available.

The performance indicators that have been analysed, in the three years prior to listing and in the three years thereafter, including that of listing, are revenues, EBITDA, and net profit, all consolidated.

For financial companies, which have specific accounting indicators, a separate analysis is conducted in the following pages.

Table 5.4 shows the development over time of consolidated revenues, broken down by quartiles - which are calculated according to the value of turnover in the year of listing (i.e. year 0) - and by market. The data were taken from AIDA-BVD and Refinitiv Eikon. For each year considered it is shown the mean and median (in brackets) value within the quartile. Table 5.5 and Table 5.6 show the same data for consolidated EBITDA and net profit.

Table 5.4: Mean and (median) consolidated revenues, grouped by quartile

(Values in € million)		Year -3	Year -2	Year -1	Year 0	Year 1	Year 2
EXM	First quartile	71,5 (64,8)	86,5 (75,9)	93,6 (83,1)	102,5 (102,0)	113,0 (94,2)	116,8 (113,2)
	Second quartile	204,2 (192,0)	216,6 (203,6)	236,1 (233,6)	245,7 (241,7)	349,0 (333,5)	348,0 (356,3)
	Third quartile	324,3 (297,2)	336,3 (279,2)	381,5 (392,6)	425,2 (432,8)	463,9 (475,4)	452,1 (429,1)
	Last quartile	2.949,3 (1.178,5)	2.848,5 (1.384,9)	2.967,6 (1.557,2)	2.727,3 (1.660,5)	2.969,2 (1.873,8)	2.923,7 (2.104,5)
	Number of firms	35	35	35	35	34	30
EGM	First quartile	7,4 (1,7)	8,1 (2,2)	5,7 (2,7)	3,3 (3,0)	6,5 (4,3)	13,6 (5,3)
	Second quartile	7,1 (7,9)	8,7 (8,8)	10,2 (9,3)	12,7 (13,2)	16,2 (16,1)	21,6 (16,0)
	Third quartile	16,6 (16,0)	20,1 (19,6)	23,7 (22,4)	26,9 (25,0)	32,2 (32,2)	32,8 (32,2)
	Last quartile	115,3 (48,8)	137,5 (53,9)	163,5 (62,6)	177,6 (75,6)	224,2 (123,7)	255,1 (147,7)
	Number of firms	143	150	159	164	142	103

As far as the revenue trend is concerned, on both markets it is possible to notice an increase in the years prior to listing, considering both the average and the median value. After the listing, the turnover seems to confirm the positive trend. As a matter of interest, it can be noted that the largest companies (those in the last quartile) that list

on EGM in the two years after listing record a turnover that is often higher than the smallest companies listed on the main market (first quartile).

Table 5.5: Mean and (median) consolidated EBITDA, grouped by quartile

(Values in € million)		Year -3	Year -2	Year -1	Year 0	Year 1	Year 2
EXM	First quartile	21,7 (13,0)	25,1 (19,1)	30,9 (26,5)	29,8 (23,3)	35,2 (23,7)	37,4 (28,2)
	Second quartile	40,7 (20,4)	44,2 (25,4)	31,1 (32,4)	47,2 (34,4)	72,5 (57,9)	81,6 (69,5)
	Third quartile	39,1 (36,2)	43,1 (50,4)	47,4 (50,6)	58,3 (46,8)	62,7 (64,1)	59,9 (55,4)
	Last quartile	359,8 (109,5)	175,1 (93,9)	80,4 (165,8)	177,0 (185,6)	113,0 (162,0)	12,0 (193,9)
	Number of firms	34	34	35	35	34	30
EGM	First quartile	2,3 (0,2)	1,2 (0,3)	0,8 (0,3)	0,7 (0,4)	1,3 (0,5)	1,6 (0,7)
	Second quartile	1,0 (0,7)	1,4 (1,1)	2,1 (1,6)	2,9 (2,2)	3,0 (2,2)	3,2 (1,8)
	Third quartile	2,6 (2,0)	3,0 (2,6)	3,7 (3,1)	4,3 (3,6)	6,2 (4,2)	5,4 (4,8)
	Last quartile	10,3 (7,0)	12,7 (6,2)	17,8 (10,5)	19,5 (14,6)	20,0 (15,3)	13,5 (11,7)
	Number of firms	143	149	158	163	141	103

Table 5.5 reports the same analysis considering the gross margin (EBITDA). In absolute terms it is possible to notice a growth both before and after listing; looking at the median on the main market, the year of listing seems to be the most unfavourable, except for the largest issuers.

Table 5.6: Mean and (median) consolidated net profit, grouped by quartile

	(Values in € million)	Year -3	Year -2	Year -1	Year 0	Year 1	Year 2
EXM	First quartile	6,6 (6,6)	8,0 (7,8)	12,7 (11,3)	15,9 (12,6)	29,6 (29,6)	25,0 (21,7)
	Second quartile	7,1 (6,0)	6,9 (7,8)	10,9 (12,5)	13,5 (10,5)	29,6 (29,6)	28,0 (17,4)
	Third quartile	6,9 (6,5)	9,0 (5,8)	14,7 (12,3)	24,1 (25,2)	26,8 (28,0)	29,1 (25,0)
	Last quartile	191,0 (50,5)	106,7 (15,5)	93,9 (66,1)	150,8 (76,3)	184,3 (101,5)	261,6 (114,4)
	Number of firms	34	34	34	35	34	30
EGM	First quartile	0,5 (0,1)	0,4 (0,1)	0,2 (0,1)	0,0 (0,1)	0,0 (0,1)	0,4 (0,1)
	Second quartile	0,1 (0,1)	-0,3 (0,2)	0,0 (0,2)	0,8 (0,7)	0,1 (0,4)	-0,2 (0,2)
	Third quartile	0,7 (0,5)	0,7 (0,6)	1,3 (1,1)	1,3 (1,2)	1,3 (1,1)	1,8 (2,0)
	Last quartile	2,6 (2,8)	5,6 (2,3)	7,7 (4,1)	8,2 (5,5)	6,6 (6,0)	0,6 (3,8)
	Number of firms	144	150	159	164	142	103

With respect to net profit (Table 5.6), the most interesting aspect is the stride in the year of listing for the largest companies, and in the year after listing for the smallest issuers on the main market. On the other hand, companies in EGM with turnover below the median value have more difficulties, showing very low or negative profits.

In order to better appreciate the dynamics of the turnover trend for the stock exchange "freshmen", Figure 5.7 shows us the mean and median value of the increase in consolidated revenues from one year to the next for companies in the main market (EXM); the sample is divided by quartiles relating to turnover in the year of listing, as described previously. Figure 5.8 replicates the analysis for the secondary market EGM. Even visually, it is possible to get the impression of a global growth in turnover, with higher percentages for smaller issuers, as one might expect. In the second year after listing, on the main market the growth seems to stabilise at median (and almost always average) single-digit percentage values. On EGMs, the average values are not very

significant: some issuers are very young, sometimes less than three years old, so the growth in turnover is extremely high. The median value is more interesting and shows almost always double-digit progress until the year after listing, which tends to decline slightly in the last year considered.

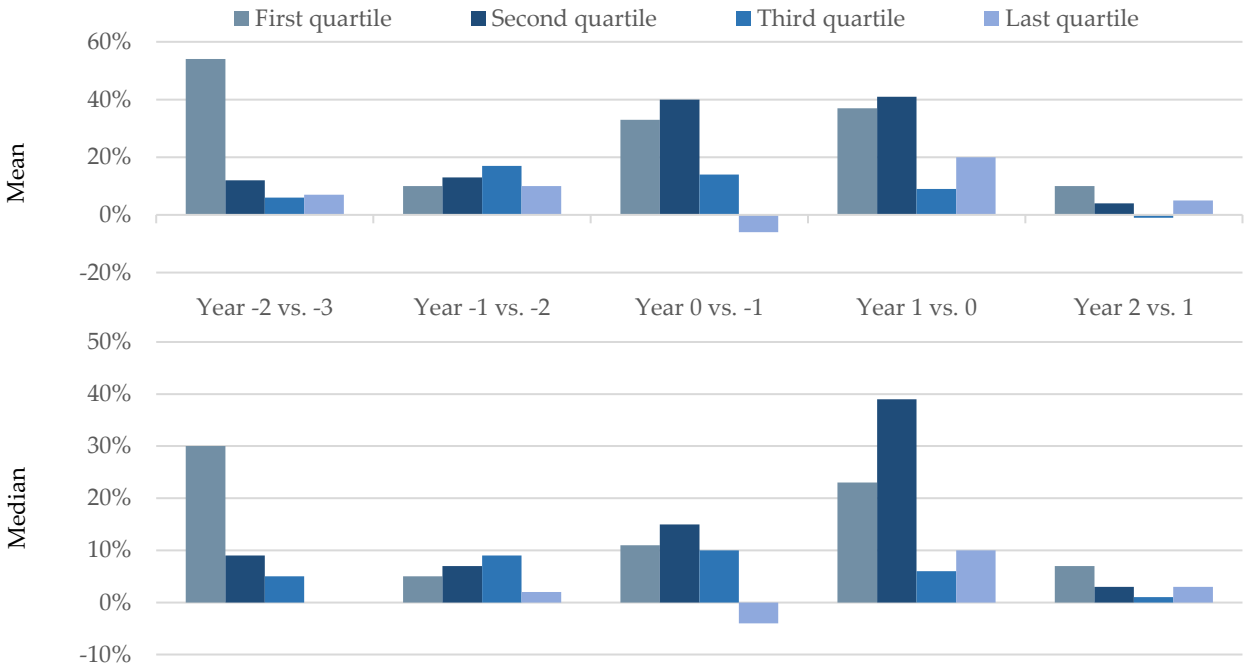

Figure 5.7: Mean and median value of the increase in consolidated revenues in EXM

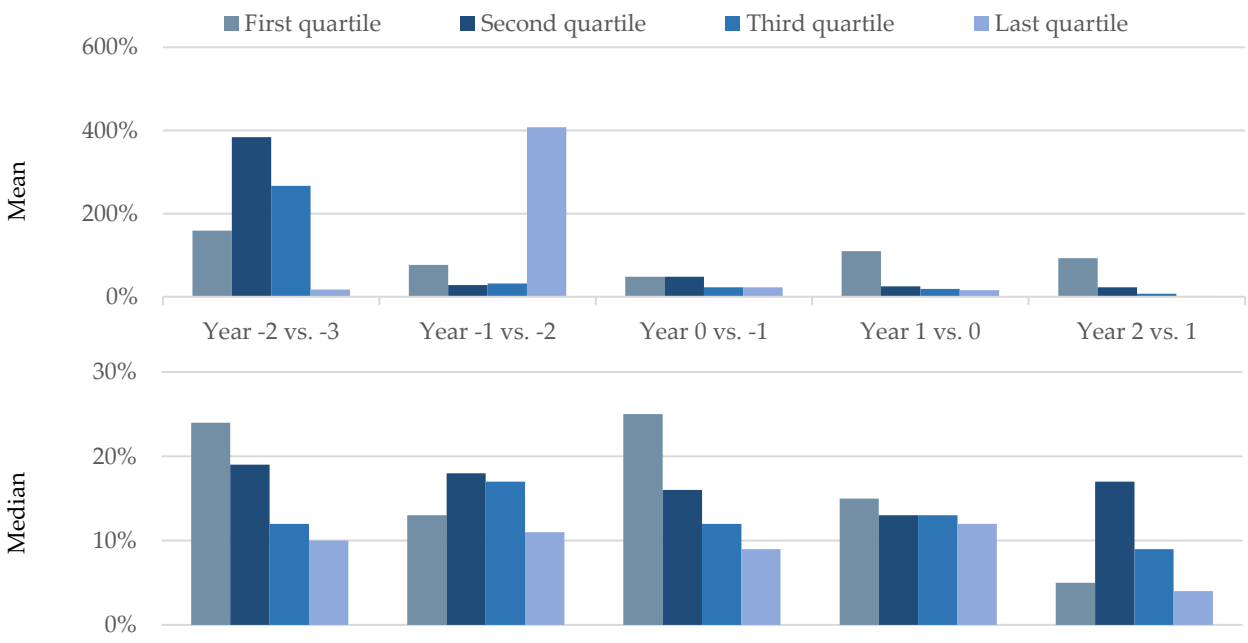

Figure 5.8: Mean and median value of the increase in consolidated revenues in EGM

Since the companies listed over a 10-year period, it is likely that the operating performance was affected by market cyclicality. To avoid such effect Figure 5.9 breaks down the total sample by year of listing, showing the median value of the annual increase in turnover. Actually, no significant differences can be seen; the only 'anomalous' figure is the second year following the 2018 freshman listing, which coincides with 2020, the year of the Covid-19-related shutdown. Even for new listings in 2019, the following year saw low growth, albeit positive in median value. On the other hand, it is interesting to notice that 2020 new issuers grew more than 2019. It is possible to speculate that there was a "selection" mechanism whereby the companies most affected by the pandemic postponed listing until better periods.

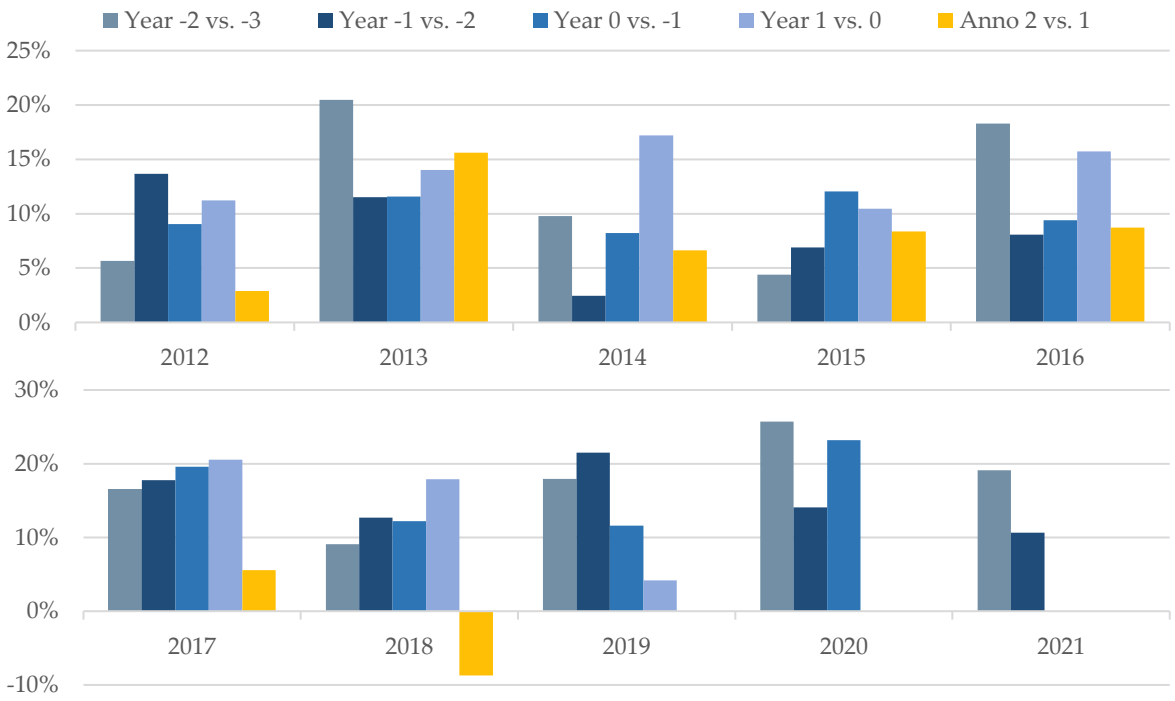

Figure 5.9: Median value of the increase in consolidated revenues, by year of listing

As a further check, the sample was also segmented by offering size and overall capitalization. Figure 5.10 shows the results according to the countervalue of the offer, defined by the value of the placement for IPOs and by the capital raised from the SPAC listing for business combinations. For simple admissions, the countervalue of the offer is null (see paragraph 4.3). Figure 5.11 instead breaks down the sample by overall capitalization, measured at the end of the first day of listing. Looking at the median values, it appears that firms with higher capitalization at the moment of listing have grown more or less evenly throughout the period. As for the countervalue of the offer,

consisting of both newly subscribed primary shares and existing secondary shares, similar results can be seen. As argued in paragraph 1.1.2, the literature points out that companies may list at a stage in their life cycle that coincides with a slowdown in future growth. Therefore, in order to compare pre and post listing performance, the yearly change in consolidated revenues over the 6-year period was calculated.

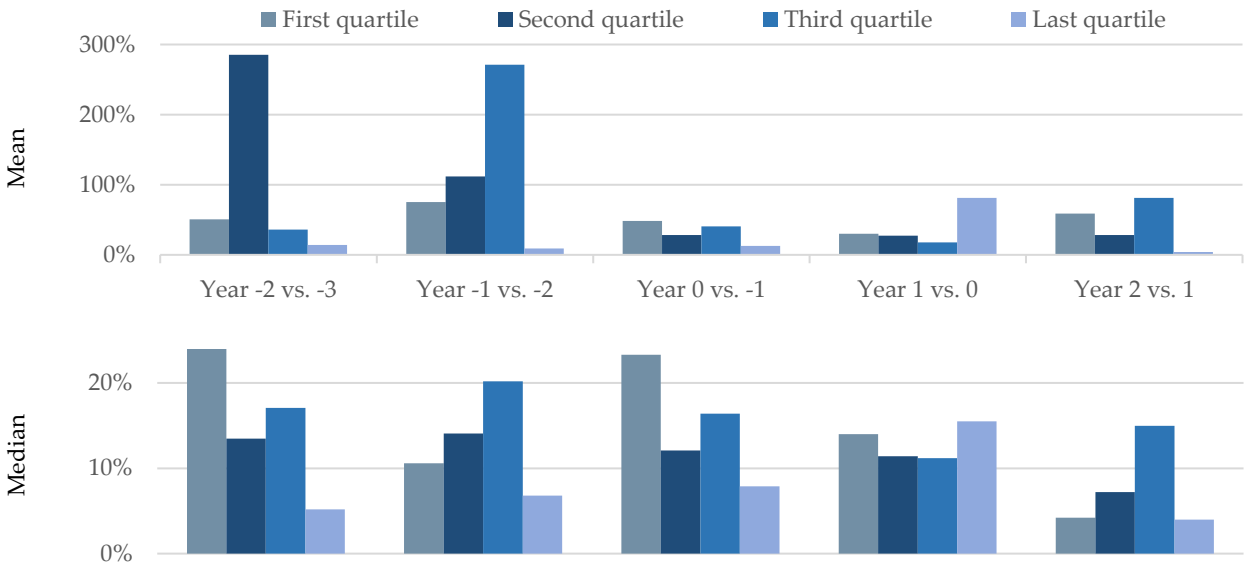

Figure 5.10: Mean and median value of the yearly increase in revenues, by the value of the initial placement

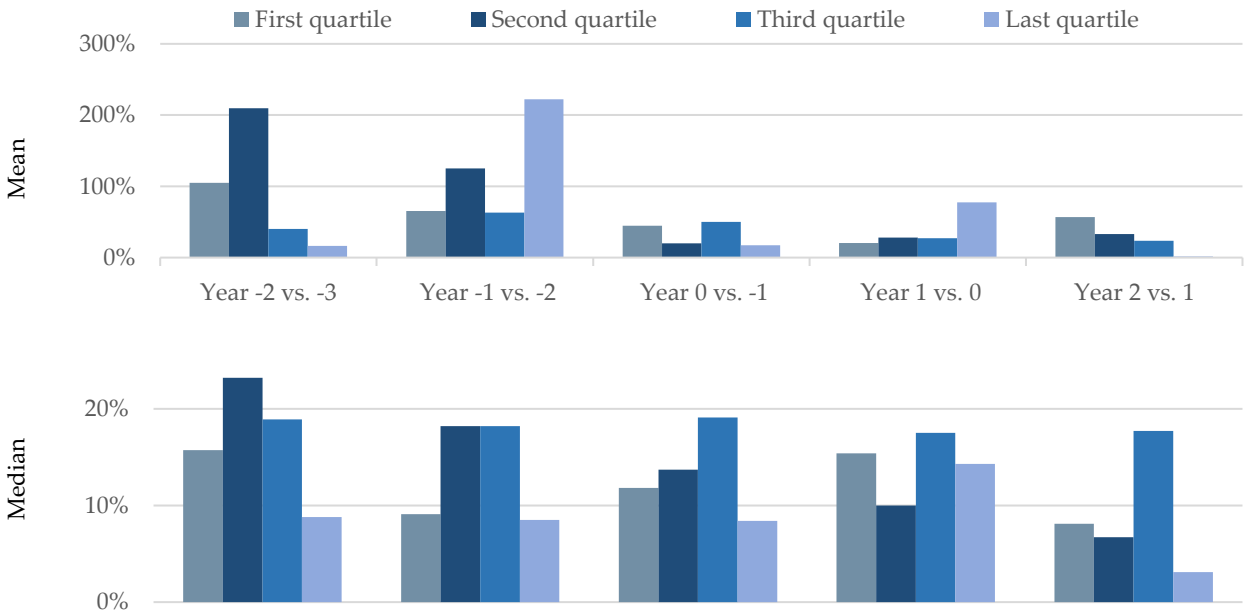

Figure 5.11: Mean and median value of the yearly increase in revenues, by market capitalization

Table 5.7 analyses the CAGR over different time windows. It should be noted that data is not always available for all issuers, as some have listed too recently (in 2020 or 2021) and therefore the latest financial statements after the listing have not been published yet. Others, instead, have been listed for less than 5 years, so the CAGR for the whole period is missing. Over the whole period (before and after listing, i.e. the first column of the table) the median CAGR value is +12.0% for the main market, +23.3% for EGM, while the median value is lower (+8.5% and +13.7% respectively). Considering only the three-year period before listing (second column in Table 5.7), the median value of the CAGR is +14.4% for the main market, +58.0% for EGM. The median value is again lower (+7.6% and +17.2% respectively). Interestingly, however, after listing, the third column in the table, annual growth is higher than before listing on the main market (average value +14.7%, median value +11.9%), while it is lower for the unregulated market (average value +29.5%, median value +16.2%, however higher than the counterparties). In general, in the last decade, very few newly listed firms have recorded negative growth in turnover before or after admission to Piazza Affari.

Table 5.7: Distribution of the revenues CAGR for listed companies

		CAGR -3;+2	CAGR -3;-1	CAGR 0;+2
EXM	**Percentile 25%**	2,1%	0,2%	0,9%
	Median Value	8,5%	7,6%	11,9%
	Mean value	12,0%	14,4%	14,7%
	Percentile 75%	17,1%	23,2%	22,2%
	Number of firms	30	35	30
EGM	**Percentile 25%**	6,0%	7,1%	2,3%
	Median Value	13,7%	17,2%	16,2%
	Mean value	23,3%	58,0%	29,5%
	Percentile 75%	33,4%	33,4%	33,7%
	Number of firms	85	142	103

In addition to the dynamics of turnover, it is also interesting to analyse how the operating marginality is affected by looking at the ratio of EBITDA to consolidated revenue. Table 5.8 shows us that, on the main market, the EBITDA margin is fairly

stable in median value (between 14% and 16%) while on EGM it is lower and seems to have a "hump" trend, reaching a relative maximum right in the year of listing.

Table 5.8: Evolution of the EBITDA margin for listed companies

		Year -3	Year -2	Year -1	Year 0	Year 1	Year 2
EXM	**Percentile 25%**	7,5%	8,6%	9,2%	9,5%	9,4%	10,3%
	Median Value	15,4%	14,5%	15,2%	14,5%	14,4%	15,9%
	Mean value	17,5%	18,0%	14,9%	18,8%	18,8%	19,1%
	Percentile 75%	21,4%	23,4%	26,3%	28,0%	27,8%	31,4%
	Number of firms	34	34	35	35	34	30
EGM	**Percentile 25%**	6,0%	6,8%	8,5%	8,9%	6,0%	5,1%
	Median Value	10,3%	12,2%	13,5%	14,5%	12,6%	10,2%
	Mean value	13,5%	9,5%	14,0%	4,9%	1,0%	10,6%
	Percentile 75%	17,9%	18,6%	22,2%	23,7%	21,3%	18,9%
	Number of firms	141	149	157	162	141	103

For what concerns financial companies, different metrics for operating performance must be used. In particular, it was analysed at the consolidated level the interest margin (for banks and holding companies) and the gross premium (for insurance companies) as a measure of turnover, while earnings before tax as a measure of profitability. Table 5.9 shows the key figures for the 13 financial companies that listed on the stock exchange from 2012 to 2020.

Table 5.9: Mean and (median) of key financial statement indicators for financial firms

(Values in € million)	Year -3	Year -2	Year -1	Year 0	Year 1	Year 2
Interest margin / gross premiums	113,9 (51,9)	156,8 (69,9)	161,1 (64,6)	251,0 (77,4)	301,2 (103,8)	175,9 (85,2)
Increase turnover % YoY		+27,4% (+23,2%)	+21,4% (+15,9%)	+50,5% (+20,8%)	+35,5% (+13,9%)	+7,8% (-0,7%)
Earnings before tax	34,8 (5,8)	23,7 (10,2)	46,7 (12,2)	49,5 (16,2)	70,8 (35,7)	69,0 (13,7)
Number of firms	12	12	13	13	11	9

A favourable trend in turnover is also confirmed for financial companies, especially before listing. In the years following the listing, turnover seems to grow slower, while profitability runs at a good pace; the small size of the sample, however, makes the data less statistically significant.

5.2.2. Market performance

As far as the market performance is concerned, it is clearly possible to determine it only after listing. Using data from Factset and Refinitiv Eikon, the absolute return of securities up to three years after listing was calculated, again excluding companies admitted by demerger or merger and SPACs, for which only the performance after the business combination is considered. The return was also adjusted for the performance of the historical MIB index during the same period, in order to show the differential performance with respect to the market.

Figure 5.12 shows the average results for the entire sample. Over the ten-year period, an average positive absolute return was observed for both the main market, reaching +31.7% after 3 years, and EGM (+20.0%). Net of the market index return, the EXM "freshmen" on the three-year yielded 22.6% while those on the unregulated market achieved a differential return of +6.2%. The result is interesting because historically newly listed Italian companies have underperformed the MIB index [27].

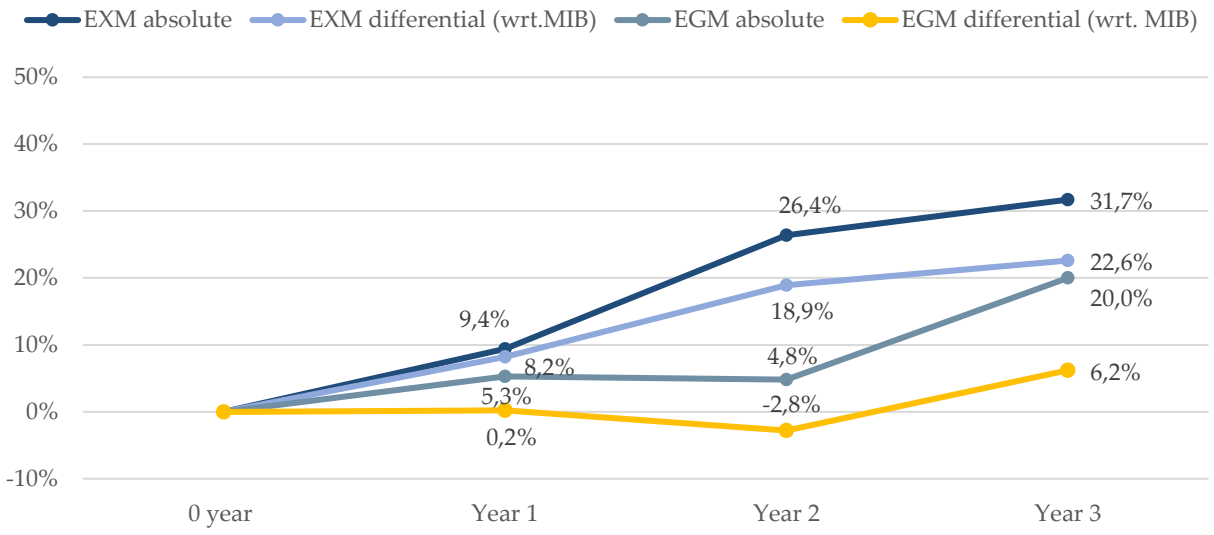

Figure 5.12: Mean absolute and differential (wrt. MIB) yield

Table 5.10 shows the details of absolute and differential market returns according to year of listing, keeping in mind the lack of data for the most recent admissions. On the main market, it is the companies listed from 2014 onwards that generated higher average returns than the market, in particular those listed from 2014-2016. In brackets is reported the percentage of "freshmen" that performed better than the market index. It is interesting to notice that in some cases (for example the 3-year returns for the 2018 newly listed) the positive average return was generated by a minority of stocks that offered a very positive performance, while most firms underperformed the index. On EGM, the situation is quite different. In fact, over the period under consideration, companies performed on average worse than the main market and in any case worse than the MIB index. What is most striking, however, is the particularly low percentage of firms that overperformed the market index, which rarely exceed 50%. This testifies to the fact that the majority of companies belonging to this market failed to beat the MIB index. Looking at the data, the situation seemed to improve in 2018-2019 and especially in 2020.

Table 5.10: Mean absolute and differential yield. In brackets the firms who "beat" MIB

Listing year		1-year performance		2-year performance		3-year performance	
		Absolute	Relative	Absolute	Relative	Absolute	Relative
EXM	**2012**	+1,7%	-21,6% (50%)	+34,8%	-16,4% (50%)	+13,4%	-55,5% (0%)
	2013	-36,6%	-56,3% (0%)	-20,3%	-55,4% (0%)	-2,2%	-18,6% (50%)
	2014	+52,4%	+42,% (80%)	+22,5%	+37,% (80%)	+68,0%	+60,5% (100%)
	2015	-3,8%	+15,2% (56%)	+32,4%	+33,5% (56%)	+27,7%	+26,3% (67%)
	2016	+28,1%	+11,4% (50%)	+83,7%	+54,9% (50%)	+89,5%	+72,0% (75%)
	2017	+6,7%	+5,8% (60%)	+6,1%	+3,1% (40%)	-4,3%	+5,4% (50%)
	2018	-3,9%	-12,0% (25%)	+7,7%	+8,8% (50%)	+44,7%	+15,9% (25%)
	2019	+6,7%	+17,1% (80%)	+44,8%	+28,8% (60%)		
	2020	+39,2%	+9,3% (100%)				

Listing year		1-year performance		2-year performance		3-year performance	
		Absolute	Relative	Absolute	Relative	Absolute	Relative
EGM	**2012**	+28,0%	+17,2% (60%)	+23,9%	-20,6% (20%)	-21,6%	-80,0% (0%)
	2013	-25,4%	-40,9% (0%)	-18,8%	-48,3% (14%)	-37,3%	-46,6% (21%)
	2014	+5,9%	-6,1% (23%)	-25,5%	-17,4% (27%)	-7,5%	-20,1% (18%)
	2015	-24,1%	-6,5% (30%)	-1,0%	-0,1% (40%)	+1,6%	-1,7% (35%)
	2016	+26,6%	+5,6% (30%)	+22,5%	-3,2% (30%)	+28,5%	+1,6% (30%)
	2017	-6,6%	-6,4% (44%)	-16,6%	-20,5% (22%)	-19,1%	-19,9% (22%)
	2018	+4,8%	+2,7% (46%)	+8,7%	+17,5% (46%)	+126,5%	+106,3% (50%)
	2019	-3,5%	+5,1% (41%)	+38,0%	+21,7% (47%)		
	2020	+59,9%	+27,6% (54%)				

To further investigate differential returns relative to the market index, Figure 5.13 and Figure 5.14 show the values for different segments of the sample, for the main market and EGM, respectively.

In EXM the highest differential returns are associated with newly listed companies with higher initial capitalization and higher initial placement value (Figure 5.13). In contrast, companies listed following a business combination with a SPAC generated the most disappointing returns, with a -20,7% after three years.

In the non-regulated market EGM, coherently with the results found so far, returns are in general lower compared to the main market, while the correlations with the size of issuers found in the main market are less evident in EGM (Figure 5.14). Nevertheless, it is worth mentioning that companies listed through a business combination with a SPAC showed particularly disappointing returns also in this market. The advantages linked to SPACs in terms of cost and time highlighted in paragraph 1.1.1. seem to not be sufficient to support the company in the long term.

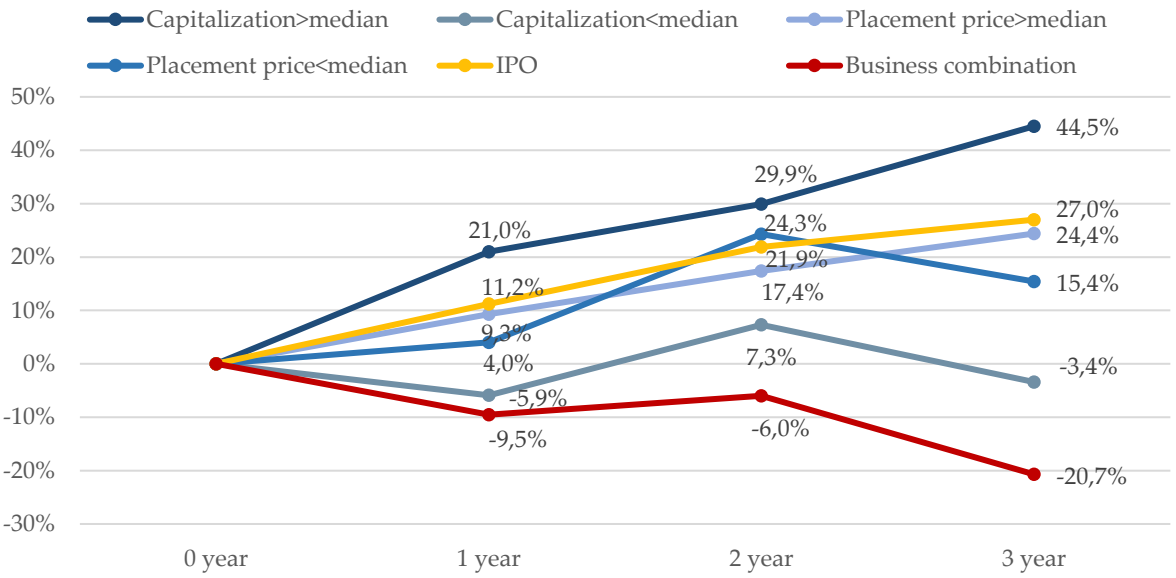

Figure 5.13: Differential (wrt. MIB) yield for companies listed on the EXM

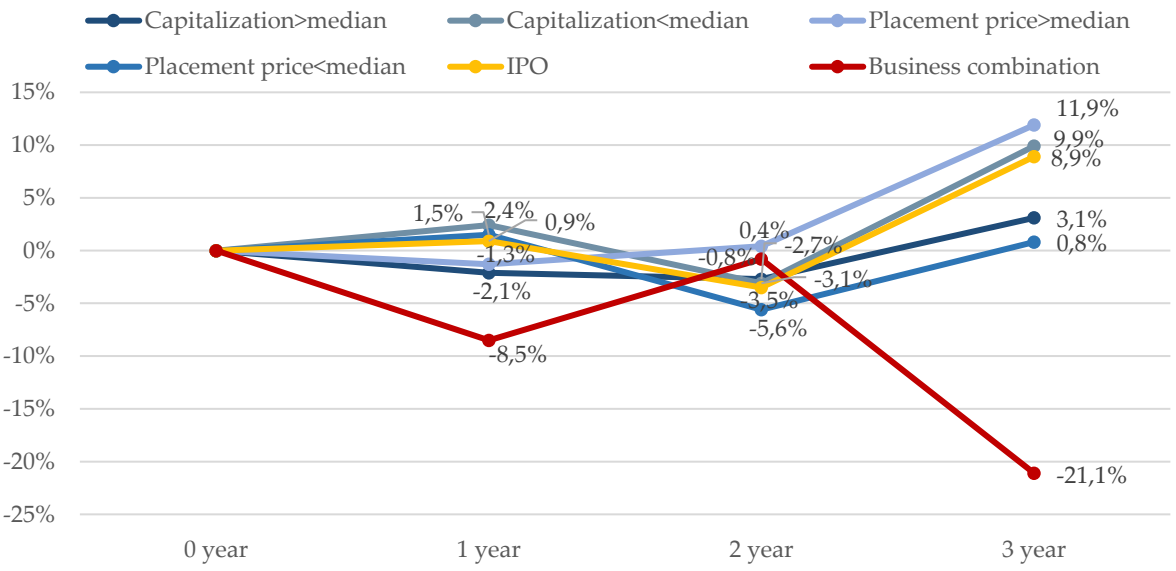

Figure 5.14: Differential (wrt. MIB) yield for companies listed on the EGM

5.3. Delisting strategies and performances

In the period spanning from 2012 to 2021 the total number of companies that left the markets of Borsa Italiana were 186, of which 120 were traded in EXM market and 66 on the EGM one. According to the categories defined in Chapter 4.2, the sample is divided as follows:

Table 5.11: Delistings from 2012 to 2021, grouped by technique and market

Type of delisting	EXM	EGM	Total
Termination of activity	19	7	26
Lack of requirements	5	17	22
Merger or acquisition by an external actor	37	13	50
Infra-group merger	20	3	23
Business combination	17	5	22
Initiated by incumbent shareholders	34	9	43

As already pointed out, companies abandon the stock exchanges for a wide range of reasons, and therefore need to be analysed separately. Nevertheless, a slight adjustment to the classification presented above is required in order to obtain homogeneous clusters for which it is worth to carry out a performance analysis. First of all, "termination of activity" and "lack of requirements" clusters are often interconnected, as companies that do not comply with the requirements of Borsa Italiana are likely to be having financial difficulties, therefore their performances are expected to be quite similar, and they have been merged together as a single cluster. Furthermore, delisting of SPACs upon a business combination are more a technical consequence of the reverse takeover that brought the target company to become listed and they are not operating until the business combination is completed, thus they have been excluded from the analysis.

Keeping into account these adjustments, the resulting four homogeneous clusters of delisted companies, for which performances have been analysed, are the following ones:

- "**Defeated**":

  This first cluster comprehends the 48 companies that were delisted either due to "termination of activity" (26) or due to "lack of requirements" (22), and in most cases firms in this cluster have experienced relevant financial distress. This cluster corresponds to unvoluntary delisting as described in paragraph 1.2.1., which is imposed by Borsa Italiana to protect its investors and its own profitability rather than chosen by the company.

- **"Preys":**

  In this cluster are included the 50 companies that have been delisted through "Merger or acquisition by an external actor". Firms in this cluster have attracted the attention of either industrial groups or financial investors (i.e., PE Funds) that have identified value creation opportunities.

- **"Restructuring":**

  Restructuring companies are the 23 cases of the "Infra-group merger" cluster, which are merged into a listed company of the same group with the purpose of reorganizing and simplifying the structure of the latter. Even though the reasons behind the reorganization are usually interesting from a strategic perspective, they might be influenced by multiple factors that do not necessarily relate to the performance of the single company.

- **"Regretful":**

  This cluster is composed of the 43 firms for which delisting was "initiated by the incumbent shareholders" and is the result of a strategic choice. It is one of the most interesting clusters for this research together with "Preys".

Figure 5.15 depicts the distribution of delistings over the last decade according to the clusterisation just presented, in order to highlight potential trends or correlations between a certain cluster and a historical period.

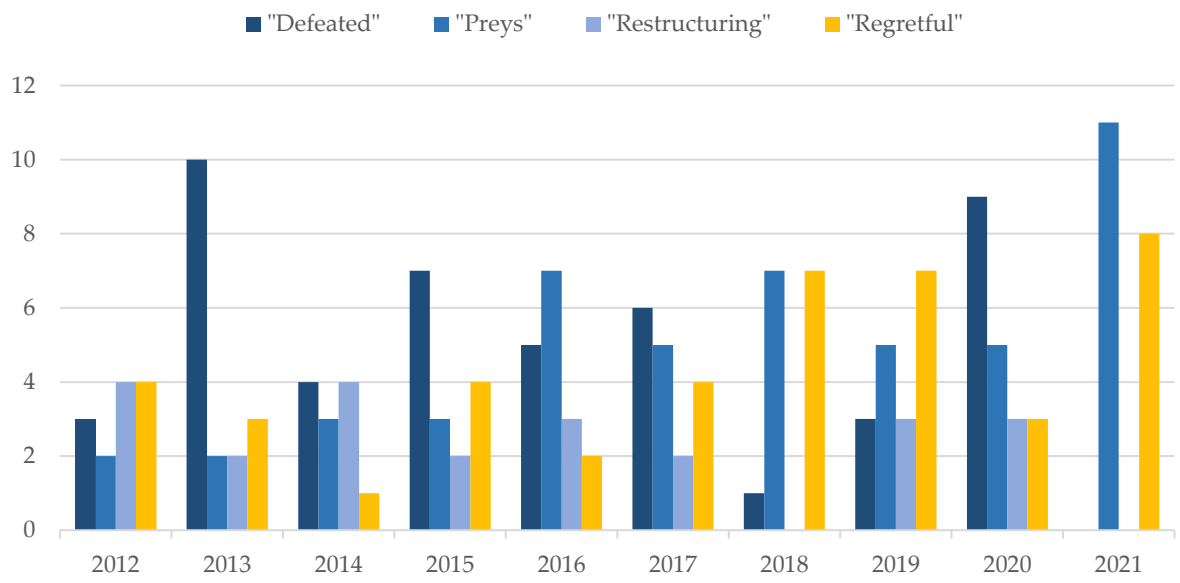

Figure 5.15: Time distribution of delistings for the identified clusters

Particularly noteworthy is the spike in "Defeated" companies in 2013, which was partly due to important changes in the Regulation enacted by Borsa Italiana in that year, which made more efficient the procedure to assess potential violations, whereas in 2020 the large number of "Defeated" companies was more linked to the financial distress induced by the pandemic, with a consequent increase in bankruptcies and liquidations. 2021 was characterized by an impressive number of companies acquired by external parties ("Preys"), which was partly motivated by low valuations after the collapse of the market in 2020, and by the context of low interest rates which allowed PE funds and other financial players to finance their acquisitions more easily and at lower costs. "Restructuring" companies are quite homogeneously distributed across the years and they never exceeded the four occurrences per year.

The following paragraphs will describe more in detail each of these four clusters, as well as analyse the operating and market performances of companies belonging to these clusters in the 2012-2021 time frame.

5.3.1. Defeated

As mentioned in the previous paragraph, this cluster gathers firms that have been delisted by Borsa Italiana, and not voluntarily. The total occurrences in the sample are 48, and the detailed breakdown of the sample firms according to the delisting motivation is provided below:

- **Liquidated companies:** a total of 12 companies have been liquidated, among which 6 were industrial companies, while the other 6 were SPACs that did not find a target companies to execute the business combination within the pre-announced deadline, and therefore returned the capital to the investors.
- **Bankrupt companies:** all the 14 occurrences of bankrupt companies (or the ones that opened a bankruptcy procedure) belonged to the main market EXM.
- **Absence of NOMAD:** now called Euronext Growth Advisor, NOMAD is a figure designated to support SMEs during and after the listing process, as described in paragraph 3.1., and the reasons for its abandonment have been presented in paragraph 4.2. In the sample analysed 15 firms have been delisted due to the absence of the NOMAD, and since this figure is specific only to the EGM market all of them belonged to the latter.
- **Other reasons:** with a total of 5 delistings on the EXM e 2 on the EGM market, other less frequent reasons are the request for an arrangement with creditors, the suspension from trading for a long period of time or the impossibility of maintaining regular volumes of trades on the company's stock.

An interesting pattern is shown in Figure 5.16, which reports the number of years "Defeated" companies have been listed for before abandoning the markets of Borsa Italiana. SPACs are excluded due to the fact that they are not active during their permanence in the stock exchange.

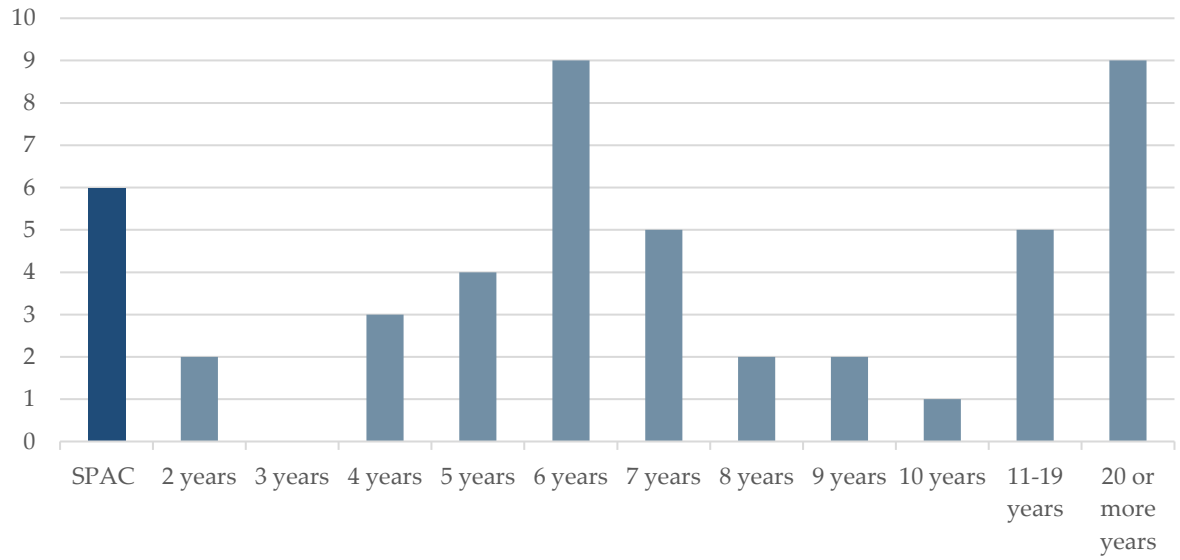

Figure 5.16: Number of years listed on Piazza Affari for "Defeated" companies

Not considering SPACs, of the remaining 42 firms almost half of them (18) were forcefully delisted within 6 years from their entrance into the Italian stock exchange, indicating a very rapid decay in their financial position. After the seventh year from the listing the probability of failure decreases considerably, and as many as 9 companies in the cluster were delisted after more than 20 years. Due to the nature of firms belonging to this cluster, their performances are expected to be disappointing both from an operational point of view and also in terms of market prices, which are both analised in the following paragraphs.

5.3.1.1. Operating Performance

In order to test the hypothesis that "Defeated" firms perform poorly in the few years preceding the delisting, Table 5.12 presents aggregate data regarding revenues, EBITDA, and net profit in the three years before the delisting (year 0), excluding financial firms and SPACs for the reasons explained in paragraph 4.3. It must be noted that the financial reports of 7 companies in the sample were not drafted or handed to the Chamber of Commerce, and are therefore excluded.

Table 5.12: Mean and (median) values of the main indicators of "Defeated" firms

	(Values in € million)	Year -3	Year -2	Year -1
EXM	**Consolidated revenues**	85,0 (35,9)	60,4 (43,7)	19,1 (10,4)
	Consolidated EBITDA	0,1 (-0,6)	-4,8 (-1,3)	-4,8 (-3,0)
	EBITDA margin (%)	-18,1% (-1,1%)	-47,4% (-5,8%)	-108,0% (-39,8%)
	Consolidated net profit	-24,6 (-9,3)	-35,2 (-13,9)	-27,1 (-16,7)
	Number of companies	15	14	12
EGM	**Consolidated revenues**	111,0 (8,7)	87,0 (14,2)	57,4 (6,6)
	Consolidated EBITDA	-5,1 (0,0)	-2,8 (0,1)	11,6 (-0,4)
	EBITDA margin (%)	-12,6% (-0,4%)	-22,2% (3,0%)	-41,3% (-4,4%)
	Consolidated net profit	-7,2 (-1,0)	-11,3 (-0,8)	3,7 (-1,0)
	Number of companies	16	16	14

Empirical results confirm the expectations regarding the operating performances of the "Defeated", as both in the EXM market and in the EGM one firms experienced very poor performances, with a general worsening for almost all indicators. As regards

revenues, it is the indicator that suffered the most remarkable drop in the 3 years before being delisted: the mean value dropped by 77,5% in EXM and by 48% in EGM from year -3 to -1, while the median value in the same period dropped by 71% in EXM and by 24% in EGM. It is worth noting that the mean value of EGM was higher than in the main market due to the particularly high values of Gala, the biggest firm in AIM Italia in terms of capitalization, which had a relevant influence in a sample of limited size. Since the median value is not influenced by outliers, its value reflects the two markets more faithfully. As regards profitability, the year before the delisting shows the worst mean and median results in both markets in terms of EBITDA, EBITDA margin and net profit (with the only exception of mean EBITDA in EGM). These results might be even worse if data from the 7 companies cited above were available. Expectations regarding the poor operating performances of firms in this cluster were fully met, while the market yields of "Defeated" firms are analysed in the next paragraph, which are also expected to follow a similar path.

5.3.1.2. Market Performance

As regards market performances, Figure 5.17 shows the absolute and differential yields, calculated as described in Chapter 4.3, for the three years preceding the delisting. In case of suspension from trading, the delisting price is the last one available before the suspension. SPACs have been excluded also in this case, since their market price is nearly always constant at the offer price of the IPO and reflects the capital collected net of the transaction costs.

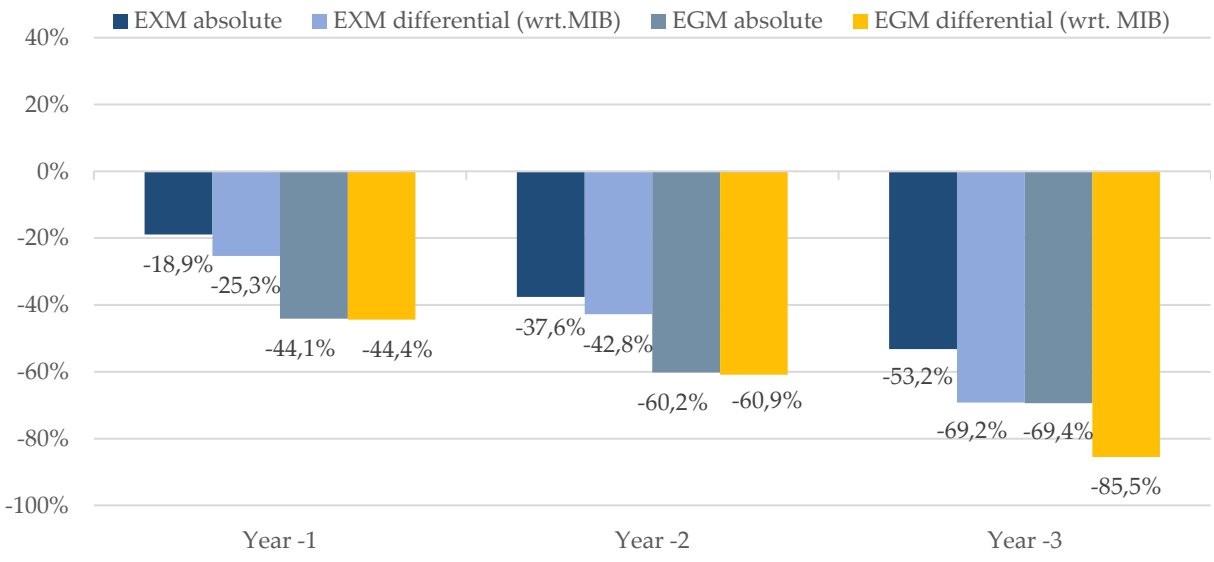

Figure 5.17: Mean absolute and differential (wrt. MIB) yield for "Defeated" companies

The first thing to note with regard to Figure 5.17 is that mean yields are always negative both in EXM (Dark Blue) and in EGM (light blue), and they gradually worsen during the three years prior to the delisting. Furthermore, firms in the EGM market tend to perform even worse than the ones in EXM, especially in the last year before the delisting (with an absolute yield of -44,1% in EGM compared to -18,9% in EXM). Also, as can be expected, differential yields of "Defeated" firms compared to the yield of the market index are even worse than their absolute ones.

5.3.2. Preys

As previously mentioned, this cluster includes companies that have been merged with or acquired by an external player, keeping into consideration that also the nature of the bidder has been collected for this cluster (see chapter 4.2). In particular, the distinction among a bidder listed in the Italian stock exchange or in a foreign one is relevant because in the first case the delisted company remains inside the perimeter of Borsa Italiana, without causing a loss of capitalization for the market, while in the second case the delisting causes also the migration of the capitalization to another stock exchange. If the bidder is a private company a loss of capitalization occurs independently on the nationality of the bidder. The detailed breakdown of the sample of 50 firms according to these two techniques is provided below:

- **Mergers with other listed companies:** it is the less frequent case with only 5 firms, of which 4 were acquired by a bidder listed in the markets of Borsa Italiana and only a case involved an acquiror listed in foreign markets.
- **Tender offer by third parties:** it regards the majority of companies in the sample (45), of which only 5 were acquired by a group listed in the markets of Borsa Italiana, while the remaining 40 were acquired by a foreign or non-listed player, causing a significant loss of capitalization for the Italian market. Interestingly, in most of the cases (29) the tender offer is mandatory, while in 16 cases it is voluntary. Also, coherently with the studies by Geranio and Zanotti in Continental Europe and Weir et Laing in the UK (paragraph 1.2.2.2), hostile takeovers are very rare and in most cases the acquisition is agreed with controlling shareholders and approved by the management team.

Figure 5.18 reports the number of years "Preys" have been listed in the markets of Borsa Italiana before being delisted.

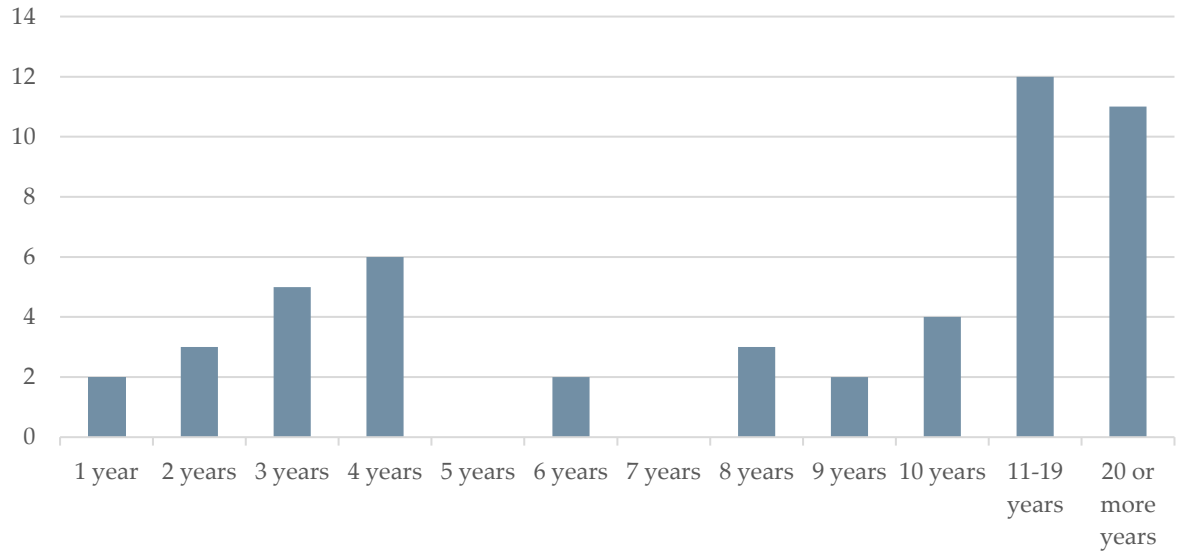

Figure 5.18: Number of years Preys" companies remained listed for

Oppositely to the same graph done for "Defeated" companies (see Figure 5.16), "Preys" at their 5th, 6th, and 7th year of listing are the ones with the lowest probability of being delisted through a merger or acquisition by an external player. "Preys" show instead two peaks: one in the first 4 years after becoming publicly traded, which supports the hypothesis of Giorgino and Giudici [27] that listing can also be exploited as a marketing lever to attract investors and acquirers, and the other one after 11 years from the listing, representing almost half of the sample. As regards the nature of the bidder, Figure 5.19 presents the different kinds of bidders according to the classification presented in Chapter 4.2, where "listed/non-listed Italian group" and "foreign group" refer to only industrial players, while "financial investors" are nearly always foreign Private Equity funds.

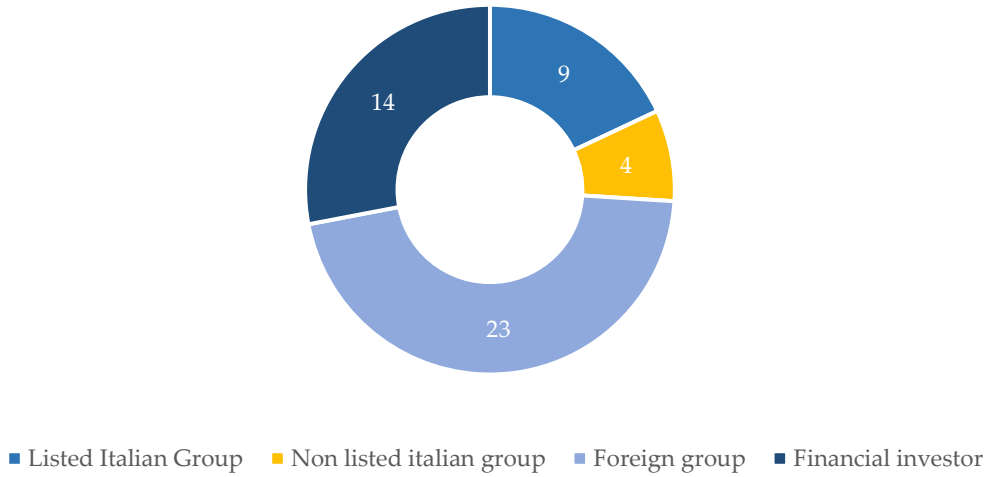

Figure 5.19: Type of "Preys" bidder

The figure shows a prevalence of industrial groups (36 of the 50 cases), indicating that the bidder foresees potential synergies stemming from the integration of the two companies. In this case the bidder is usually interested in a healthy company with promising growth opportunities and is available to pay a premium price, which is proportionate to the expected value of the synergies. Nevertheless, financial investors are gaining a significant presence both in terms of total acquisitions (14 cases) and in terms of financial support provided to industrial group to carry out acquisitions. Such an interest from financial players suggests that they might perceive some companies as undervalued or mismanaged, thus offering the opportunity to extract value for example through changes in the governance structure or more complex turnaround operations. Since the literature review suggested undervaluation to be one of the most important factors driving acquisitions (paragraph 1.2.2.2) it is reasonable to expect that PE funds look for poorly performing companies in terms of market price of the stock. As regards operating performances, all the hypotheses linked to the Agency costs (paragraph 1.2.2.2), namely “Incentives realignment”, “Reduction of free cash flow”, and “Increased control and monitoring” are based on the hypothesis that mismanaged firms are likely to be acquired by third parties that can create value by improving management practices. The analysis of the performances will reveal if and to what extent these hypotheses are verified.

5.3.2.1. Operating performance

To gain a general perspective on the operating performances of "Preys", Table 5.13 analyses the indicators chosen in paragraph 4.3 on the main and secondary markets of Borsa Italiana, without segmenting for type of bidder.

Table 5.13: Mean and (median) values of the main indicators of "Preys" firms

	(Values in € million)	Year -3	Year -2	Year -1
EXM	**Consolidated revenues**	1.247,1 (260,2)	1.341,1 (341,0)	1.439,1 (346,4)
	Consolidated EBITDA	150,1 (31,6)	195,7 (37,9)	126,0 (39,0)
	EBITDA margin (%)	7,7% (11,8%)	14,4% (13,1%)	14,7% (12,3%)
	Consolidated net profit	-16,8 (5,9)	47,9 (10,6)	48,3 (9,3)
	Number of companies	32	33	33
EGM	**Consolidated revenues**	58,1 (19,1)	69,0 (35,7)	70,2 (41,9)
	Consolidated EBITDA	5,7 (2,2)	7,8 (4,6)	6,3 (4,5)
	EBITDA margin (%)	9,5% (8,8%)	13,0% (12,1%)	11,0% (12,2%)
	Consolidated net profit	0,8 (0,7)	2,5 (0,9)	-1,4 (1,7)
	Number of companies	13	13	12

Compared to the same type of analysis executed on "Defeated" companies in Table 5.12, this time both mean and medium value reflect quite well the differences in the size of companies belonging to the two different markets, even though median values are still more stable and less affected by outliers. As regards revenues, they tend to increase significantly in the years before the delisting in both the mean (+15,4% in EXM and +20,1% in EGM from year -3 to year -1) and median values (+33,1% in EXM and +119,4% in EGM in the same period). In terms of profitability, absolute EBITDA grows remarkably in both markets with reference to median values, while mean values show a peak in year -2, as well as EBITDA margin. Net profit also shows a general increase, especially in mean values for EXM and median values for EGM. Overall, most indicators show an increase in both markets from three years before the delisting to one year before, suggesting that bidders are in general interested in acquiring healthy companies that are able to grow and improve their performances.

To analyse at a deeper level the potential correlation of the performances with the type of buyer, Table 5.14 reclassifies the sample according to buyer characteristics.

Table 5.14: Mean and (median) values of the main indicators of "Preys" firms divided by type of bidder

Type of bidder	(Values in € million)	Year -3	Year -2	Year -1
Listed Italian group	Consolidated revenues	346,4 (255,7)	438,7 (290,7)	442,9 (316,5)
	EBITDA margin (%)	-15,0% (12,9%)	10,5% (12,9%)	11,5% (12,0%)
	Consolidated net profit	-334,8 (0,6)	-13,7 (0,6)	283,9 (2,7)
Unlisted Italian group	Consolidated revenues	94,0 (58,5)	95,7 (57,5)	100,1 (61,0)
	EBITDA margin (%)	16,6% (12,6%)	21,9% (15,5%)	16,0% (12,5%)
	Consolidated net profit	9,8 (-0,4)	11,3 (0,4)	12,9 (-0,2)
Foreign group	Consolidated revenues	1.672,3 (259,5)	1.750,5 (252,3)	1.975,2 (265,4)
	EBITDA margin (%)	10,1% (10,4%)	12,4% (11,3%)	12,4% (10,4%)
	Consolidated net profit	65,5 (2,3)	71,5 (8,3)	-11,0 (4,5)
Financial investor	Consolidated revenues	220,8 (85,5)	259,2 (97,3)	271,1 (134,5)
	EBITDA margin (%)	12,9% (11,4%)	15,8% (13,7%)	15,9% (15,4%)
	Consolidated net profit	4,8 (1,7)	5,5 (3,4)	3,9 (3,0)

As regards Italian listed groups, they tend to acquire companies that show a steady and solid growth in revenues, testified by both mean and median values increasing each year until the acquisition and a good operating marginality in the last two years. Net profit does not seem to have a significant trend, as mean and median values differ a lot and tend to be negative or very low (apart from mean net profit in year -1, with an abnormal spike due to technicalities linked to the composition with creditors of Ansaldi, then acquired by Webuild). These results suggest that industrial groups tend to look for companies with interesting growth prospects rather than a very solid bottom line, which could be improved thanks to the future synergies derived from the integration of the two companies.

Italian non listed groups showed similar behaviours, aiming at companies of significantly lower sizes but with growing revenues and solid operating performance. Particularly remarkable is the EBITA margin, which showed the highest mean values in every year among all types of bidders, and lower but satisfactory median values.

Foreign groups acquire the largest-sized companies, confirmed by mean values significantly higher than median ones and just below €2 billion before the acquisition. EBITDA margins are quite stable and similar among mean and median values, while sound levels of net profits in year -2 seriously decreased in year -1.

Financial investors provide the clearest evidence in terms of performances of the companies that they acquire, with mean and median values showing the same trends. They tended to invest in mid-sized companies with growing revenues and EBITDA marginality. A significant difference with the other bidders lays in the net profit, which was always positive both in terms of mean and median values. Therefore, the empirical evidence in the Italian market shows that financial investors tend to acquire profitable firms with very strong growth prospects. It is reasonable to expect that higher premia will be requested by incumbent shareholders to sell their shares. While the majority of companies belonging to the "Prey" cluster underwent mergers or significant turnarounds that made impossible to compare pre and post delisting performances, for 19 companies that survived as stand-alone entities it was also possible to gather data after the acquisition (year 0), which are displayed in Table 5.15.

Table 5.15: Mean and (median) values of the main indicators of "Preys" firms that survived after the takeover

(Values in € million)	Year -3	Year -2	Year -1	Year 0	Year 1	Year 2
Consolidated revenues	1.432,0 (260,2)	1.482,6 (253,3)	1.647,6 (265,4)	1.483,7 (286,1)	1.425,0 (286,6)	1.515,4 (363,5)
Consolidated EBITDA	223,4 (30,4)	209,4 (44,7)	170,0 (39,0)	144,1 (33,7)	146,1 (36,7)	183,9 (102,6)
EBITDA margin (%)	13,2% (13,1%)	14,4% (13,0%)	13,3% (10,6%)	14,1% (11,0%)	16,1% (12,3%)	19,1% (13,5%)
Consolidated net profit	32,2 (5,9)	26,2 (10,6)	-59,2 (4,9)	-4,4 (1,5)	31,7 (23,0)	115,6 (20,2)
Number of companies	18	19	19	19	19	18

Median revenues kept growing consistently even after the delisting, reaching a record €363,5 Million after two years. Operating profits dampened in year -1 and 0 but started growing again after a year, and reached an impressive €102,6 Million median EBITDA in year 2 (almost the triple compared to previous years) and record EBITDA margins as well. net profit is also penalized in year -1 and 0, but it grows consistently in the following two years.

5.3.2.2. Market Performance

Figure 5.20 describes the market yields both in absolute terms and differentially compared to the market index MIB, considering the whole sample and not segmenting for buyer type. Like for the previous cluster, market performances are not calculated YoY but always with respect to the delisting price (paragraph 4.3).

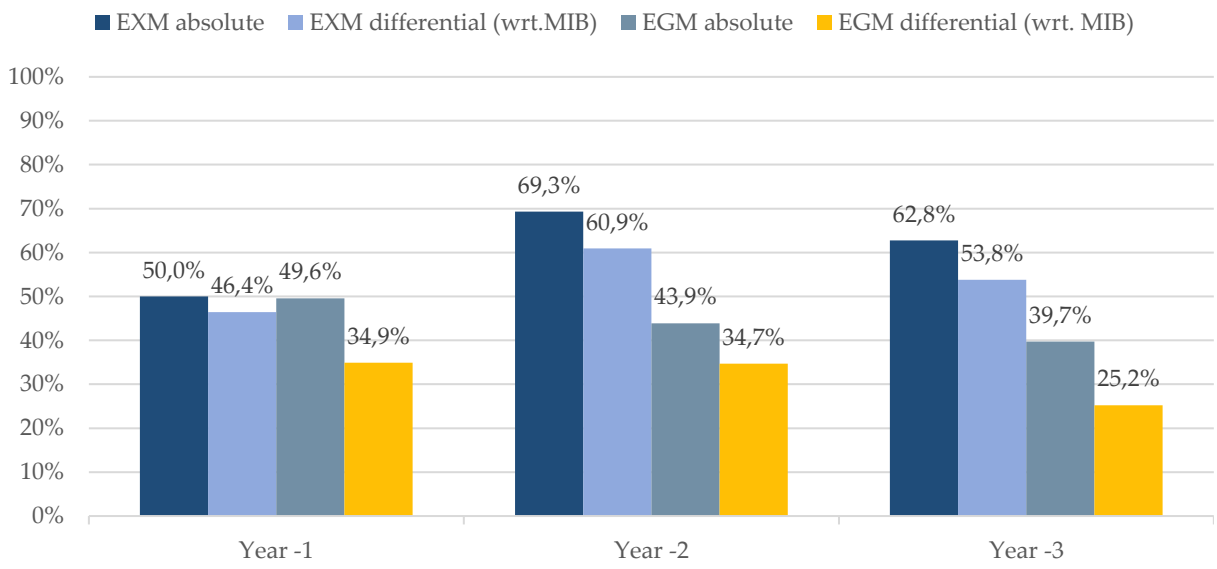

Figure 5.20: Mean absolute and differential (wrt. MIB) yield for "Preys" companies

The first remark that can be made is that “Preys” generated extremely high returns, which can be expected since the last price recorded takes into consideration the premium paid by the bidder to take full control of the company. In fact, only considering the year before the delisting companies generated an average of around 50% return in both markets, mostly due to the premia (chapter 5.4 will provide an in-depth analysis of the premia). Furthermore, companies in the regulated market EXM tend to perform better than the SMEs in the secondary market EGM, both in absolute

and differential terms. Finally, in each market absolute performances are quite higher than differential ones, indicating that in general the MIB index had a positive return.

Figure 5.20 proposes a similar analysis by restricting the field of analysis to absolute performances of "Preys", and by subdividing the sample according to buyer characteristics.

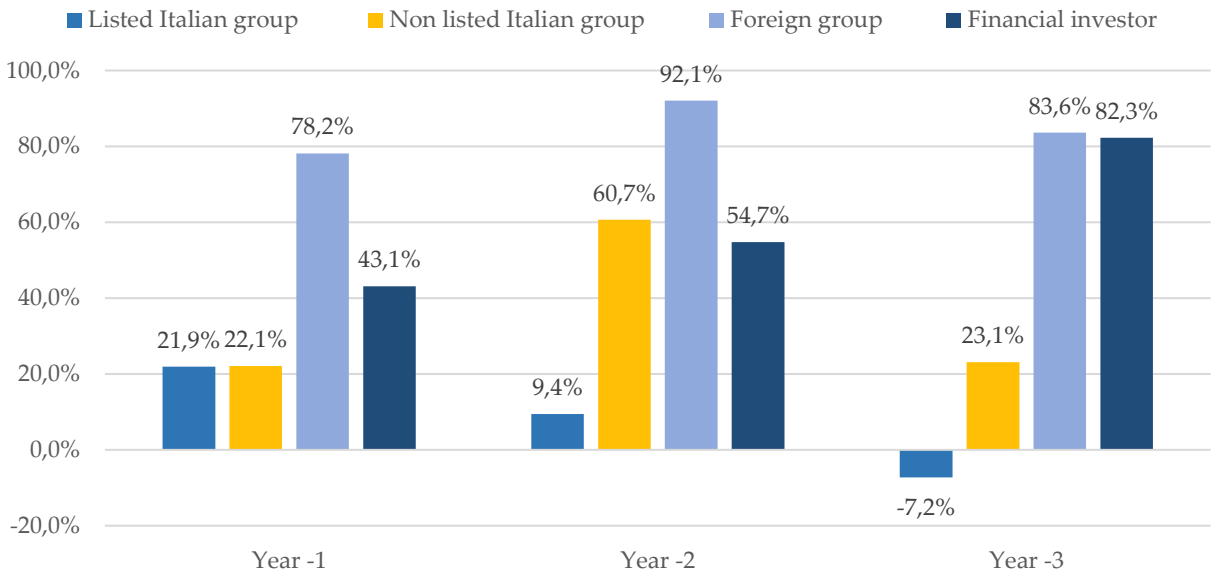

Figure 5.21: Mean differential (wrt. MIB) yield for "Preys" companies divided by type of bidder

It is easy to notice the negative yield offered by companies acquired by a listed Italian group calculated from year -3 to the year of delisting, which goes against the results obtained by the other classes of bidders. The negative value indicates that the apparent premium offered to existing shareholders in the tender offer is in reality a discount if compared to the prices of three years before. In fact, Italian listed groups seem to target in particular poorly performing firms, since the average yield was by far the lowest compared to the other bidders. Furthermore, the monotonically increasing yield from year -3 to year -1 indicates that companies targeted by Italian listed groups performed worse and worse each year until being acquired. As regards companies bought by Italian non-listed groups, data shows a peak in year -2, suggesting that they experienced a drop in their market price two years before being delisted, but recovered the year before. Companies acquired by foreign groups have the highest returns for shareholders among all classes of bidders, even though the quite stable values in the three years before the delisting suggest they are mainly related to the premium offered

to incumbent shareholders rather than due to actual market performances. Finally, companies acquired by a financial investor showed an average differential yield with an opposite trend compared to Italian listed groups, which is maximum if calculated in year -3 and minimum if calculated in year -1, indicating positive market performances before being delisted.

It is an interesting result coherent with the findings of the operating performances section (paragraph 5.3.2.1) but not confirming the hypothesis made at the beginning of paragraph 5.3.2, because it reveals that not only financial firms tend to acquire well-managed companies with interesting growth prospects and sound performance indicators, but also companies that were appreciated by the market in the three years before the acquisition. The fact that financial players are willing to pay an average price 82,3% higher than the market price 3 years before the acquisition indicates that financial players are probably more able to evaluate the potential value of a company, and do not rely solely on short-term market performances to spot undervalued firms.

5.3.3. Restructuring

The cluster of "Restructuring" companies comprehends those mergers or acquisitions between companies of the same listed group that are aimed at simplifying and restructuring the shareholding structure of the latter, for a total of 23 occurrences (of which only 3 belonged to EGM market, while the remaining were listed on EXM). As highlighted earlier, being the group listed on the Italian Stock Exchange, there is no loss of capitalization for Borsa Italiana and the delisted company remains inside its perimeter. In some cases, the delisting decision goes in the opposite direction of past transactions like listings through spin-offs (i.e., Enel Green Power, spin-off of Enel that became listed in 2010 and was then merged back into Enel in 2016).

Since the reason for delisting derives from strategic choices made at group level and is not necessarily strictly related to the performance of the target company, it is difficult to hypothesize which correlation might exist between the restructuring decision and the performance of the target company.

5.3.3.1. Operating Performance

In Table 5.16 the mean and median values of revenues, EBITDA and Net Profit are reported for the non-financial companies in this cluster.

Table 5.16: Mean and (median) values of the main indicators of "Restructuring" firms

(Values in € million)	Year -3	Year -2	Year -1
Consolidated revenues	12.861,8 (154,1)	14.207,0 (135,5)	16.307,3 (100,4)
Consolidated EBITDA	1.402,6 (26,7)	1.411,5 (33,5)	1.431,5 (9,5)
EBITDA margin (%)	16,8% (24,0%)	9,1% (27,4%)	20,9% (19,2%)
Consolidated net profit	487,6 (0,8)	194,5 (6,8)	203,5 (1,6)
Number of companies	14	15	15

It must be noted that mean values are affected by few cases of very large companies that are not representative of the whole cluster, and it is instead more appropriate to consider the median value. Revenues and operating profitability show a significant decrease the year before delisting, even though both EBITDA and EBITDA margin are satisfactory compared to the other clusters. Mean net profit is also influenced upwards by the large issuers, while median values are rather low but positive in all periods.

5.3.3.2. Market Performance

Figure 5.22 described the mean and median values of "Restructuring" companies before being delisted, both in absolute terms and differentially with respect to the market index MIB used also for the other clusters.

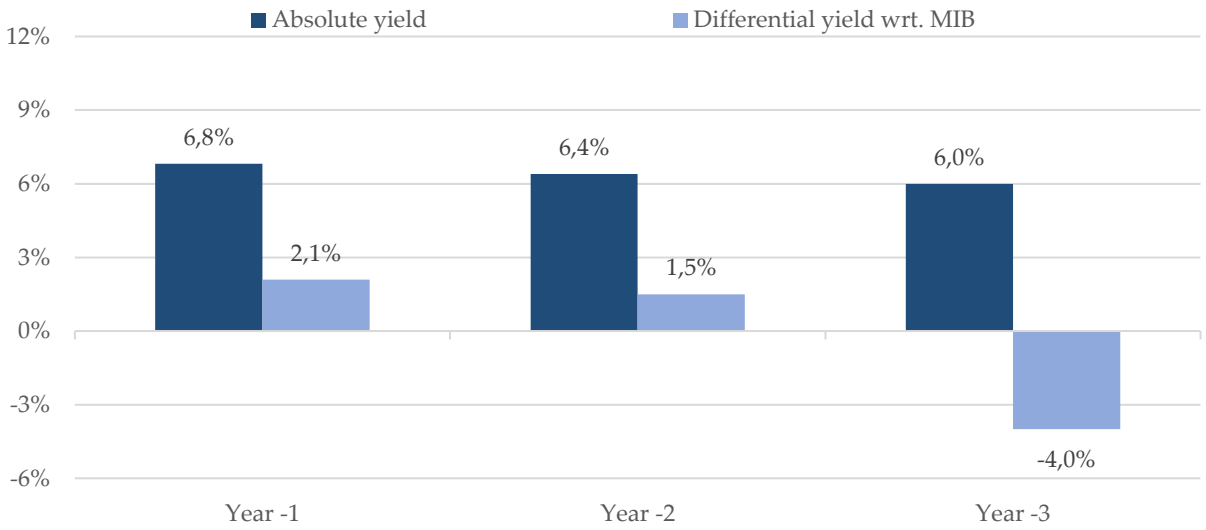

Figure 5.22: Mean absolute and differential (wrt. MIB) yield for "Restructuring" companies

As can be clearly seen, the market performance is quite different from the one recorded in the other clusters, with slightly positive but modest returns. Furthermore, it can be observed that the average absolute values calculated at one, two, or three years before delisting are very stable between 6% and 7%, while the differential one is nearly null calculated at 12 and 24 months, and it is even negative calculated 3 years before.

5.3.4. Regretful

This cluster is one of the most interesting ones for this research, together with "Preys" one, because the operation of returning to a private status has been voluntarily chosen by the incumbent shareholders and managers of the company, supposedly for strategic considerations linked to actual performances of the company and estimated future ones. The 43 occurrences in the cluster have been delisted in three main ways, as described in chapter 4.2, which are hereinafter analysed in more detail.

- **Voluntary request:** it is the least common technique in the cluster, with only 6 cases in the last 10 years, all of them in the secondary market EGM apart from a case in EXM. By analogy also the delisting of Banco di Sardegna in 2020 has been classified as voluntarily requested, since it was executed by converting preference shares (which were listed) into ordinary shares (which instead were not listed). The request to be delisted is not associated with a M&A transaction, but with the so called "going dark" process, which does not change the shareholding structure of the company and simply withdraws the shares from the stock exchange markets. This operation requires the approval of the majority shareholders, therefore it is more easily carried out in small companies with a concentrated ownership rather than in very large corporations with a wide range of investors.
- **Tender offer:** it is the most common technique used by incumbent shareholders to delist a public company, with 26 occurrences (of which only 2 in EGM). As described in paragraph 1.2.2.1, the tender offer (in Italian Offerta Pubblica di Acquisto, OPA) aims at acquiring the majority of the floating shares in the market, or at least enough to breach the minimum floating shares requirement and be delisted. In 17 cases the tender offer was voluntary, while in the remaining 9 it was mandatorily imposed by the regulation (paragraph 1.2.2.1).
- **Merger:** it refers to 8 companies, all listed in the main market EXM. In this case delisting has been obtained by merging the company into a non-listed company of the same group.

As Figure 5.15 showed, the flow of companies classified as "Regretful" increased significantly in the last few years, with 8 occurrences in 2021 alone. This trend was promptly noticed by the market and by the press, which interpreted it as a warning sign for the future of the stock exchanges (not just of the Italian one, as the analysis in chapter 5.1.1 showed). In particular, some started worrying whether companies and entrepreneurs started entering and exiting the Italian stock exchange in an opportunistic way, following short-term strategies linked to the market prices trends rather than as a way to raise capital for the long-term organic growth of the firms.

To answer this question, a first element that can be analyzed is the number of years that companies in this cluster spent in the markets of Borsa Italiana before deciding to go private, which are reported in Figure 5.23.

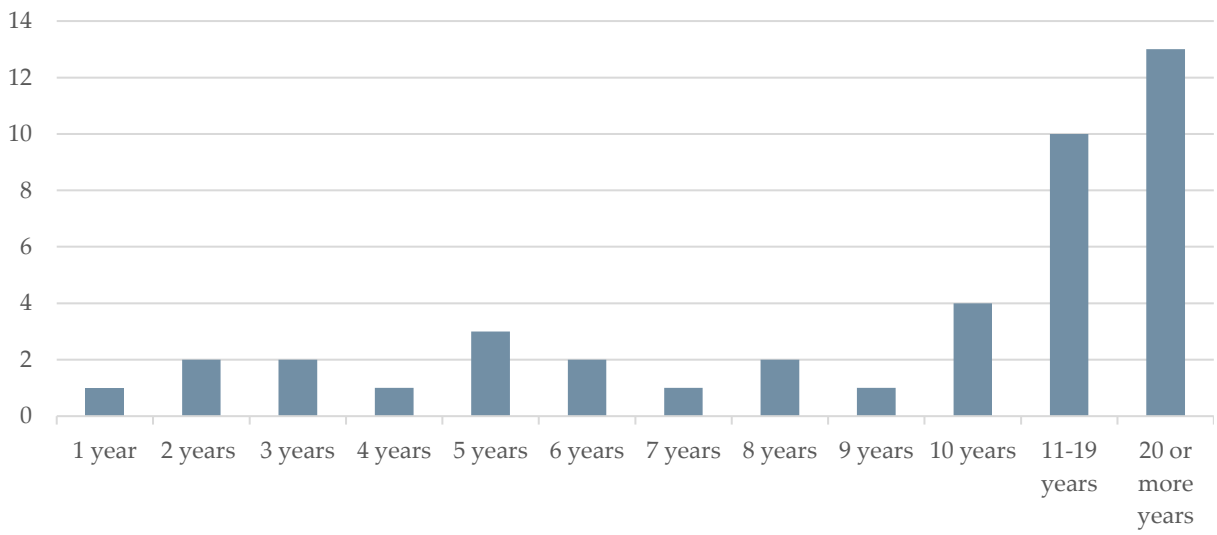

Figure 5.23: Number of years listed on Piazza Affari for "Regretful" companies

What emerges from Figure 5.23 is that very few companies chose to leave the Italian stock exchange after few years from their entrance, while the majority of firms took this decision after being listed for at least 11 years, and 13 were listed for more than 20 years. Therefore, these first results do not confirm the hypothesis that companies in this cluster follow short-term strategies when entering and exiting the stock exchange markets, but further motivations can be examined by looking and their performances.

5.3.4.1. Operating Performances

Operating performances of "Regretful" companies are analysed through the same metrics used for the other clusters, for which mean and median values are presented in Table 5.17 (excluding as usual financial companies).

Table 5.17: Mean and (median) values of the main indicators of "Regretful" firms

	(Values in € million)	Year -3	Year -2	Year -1
EXM	**Consolidated revenues**	803,8 (192,8)	833,7 (210,6)	809,9 (188,4)
	Consolidated EBITDA	135,1 (15,8)	127,4 (23,3)	116,8 (26,2)
	EBITDA margin (%)	13,0% (10,4%)	12,2% (9,2%)	12,3% (9,5%)
	Consolidated net profit	36,1 (8,8)	33,4 (9,7)	21,3 (2,8)
	Number of companies	26	26	26
EGM	**Consolidated revenues**	12,8 (8,6)	15,3 (16,6)	18,3 (15,1)
	Consolidated EBITDA	3,0 (0,5)	5,6 (0,7)	6,4 (0,7)
	EBITDA margin (%)	26,5% (8,5%)	27,7% (12,7%)	28,2% (14,5%)
	Consolidated net profit	1,3 (0,2)	0,7 (0,2)	-0,1 (0,2)
	Number of companies	8	8	8

In this first high-level analysis, all companies in the cluster are considered together and segmented only based on the market, without distinguishing according to the technique chosen. As regards revenues, they tend to decrease significantly the year before delisting in the EXM market, while in the secondary market EGM a clear trend cannot be easily identified, as mean values increase every year while median values decrease in year -1. As regards operating profitability, EBITDA margin is rather stable in EXM, while it shows great improvements. Particularly interesting is the evolution of net profit, which in the main market drops by 36.2% in mean value and by 71% in median value, while on the secondary market even becomes negative in mean values. Table 5.18 adopts another perspective by segmenting the results according to the technique chosen.

Table 5.18: Mean and (median) values of the main indicators of "Regretful" firms divided by type of delisting

Type of delisting	(Values in € million)	Year -3	Year -2	Year -1
Unilateral request	Consolidated revenues	15,5 (14,0)	15,7 (16,6)	17,2 (15,1)
	EBITDA margin (%)	9,8% (8,5%)	9,0% (11,0%)	9,7% (12,3%)
	Consolidated net profit	0,3 (0,2)	-0,1 (0,2)	-0,8 (-0,2)
Merger with a non-listed company	Consolidated revenues	416,8 (48,5)	473,1 (52,8)	420,6 (53,9)
	EBITDA margin (%)	12,7% (12,1%)	13,7% (9,7%)	16,0% (16,2%)
	Consolidated net profit	20,8 (0,1)	20,2 (0,7)	1,8 (-2,2)
Voluntary takeover bid	Consolidated revenues	611,6 (370,2)	646,6 (356,1)	645,6 (338,0)
	EBITDA margin (%)	21,8% (8,5%)	18,5% (8,9%)	14,6% (9,4%)
	Consolidated net profit	37,7 (9,7)	27,0 (7,3)	12,1 (0,5)
Mandatory takeover bid	Consolidated revenues	1.006,9 (180,3)	1.039,0 (198,2)	974,0 (178,5)
	EBITDA margin (%)	12,1% (10,9%)	16,1% (11,8%)	21,7% (13,9%)
	Consolidated net profit	28,9 (12,2)	37,9 (17,8)	37,2 (19,1)

As regards companies delisted through voluntary request, nearly all from the EGM market, the deterioration of net profits is extremely evident in the two years before delisting. This result suggests that, after a rapid drop in the profitability of the company which might worsen further in the following years, shareholders might prefer to avoid being exposed to the volatility of public markets (see "Exposition to market volatility and business cycle" in paragraph 1.2.2.2).

Mergers with non-listed companies were used by issuers with larger revenues and EBITDA margins, and also these firms experienced a serious drop in the net profit the year before delisting.

Tender offer was the technique used to delist the largest companies in terms of revenues. Companies delisted through voluntary tender offers were characterized by modest and stable EBITDA margins, while net profit kept decreasing starting from three years before the acquisition. In case of Mandatory tender offers, instead, profitability indicators showed a very peculiar trend: both EBITDA margin and net profit increased year over year until the year of delisting. These results are coherent with the fact that investors in the market are more likely to sell their shares during a tender offer if net profits are declining, while in the opposite case they might be less willing to sell their stocks, making a residual mandatory tender offer necessary.

For 15 companies that were not subject to relevant turnaround operations like mergers, and that kept existing as separate entities, it was possible to analyse their operating performance in the two years after the delisting, which are reported in Table 5.19.

Table 5.19: Mean and (median) values of the main indicators of "Regretful" firms that survived after the takeover

(Values in € million)	Year -3	Year -2	Year -1	Year 0	Year 1	Year 2
Consolidated revenues	674,8 (155,3)	686,5 (155,8)	665,6 (165,1)	725,0 (171,6)	736,9 (151,5)	830,2 (97,1)
Consolidated EBITDA	54,5 (8,7)	46,6 (7,9)	47,6 (9,4)	52,8 (7,7)	64,6 (10,2)	65,5 (11,6)
EBITDA margin (%)	11,6% (10,6%)	10,9% (9,1%)	11,7% (9,5%)	10,7% (8,0%)	12,8% (13,0%)	12,73% (9,69%)
Consolidated net profit	14,2 (5,4)	16,1 (2,4)	13,9 (2,8)	20,3 (3,0)	32,8 (6,4)	86,8 (7,6)
Number of companies	15	15	15	15	15	12

"Regretful" companies that survived after being delisted showed an increase in revenues in the same year and in the following both in terms of mean and median values, while the median value for year 2 was influenced by the lack of some financial statements relative to 2021. As regards profitability, EBITDA and EBITDA margin showed great improvements after delisting, as well as net profit which in year 1 registered the highest increase both in mean (+61,6%) and median terms (+113%). These results might provide some support to the hypothesis that shareholders might have withdrawn the company from the market at a convenient price, knowing thanks to information asymmetry that short term opportunities were still profitable.

It is therefore necessary to analyse market performances of "Regretful" companies in order to have a more comprehensive perspective on the reasons that might have pushed them to go private. According to the above-mentioned hypothesis, it is reasonable to expect quite poor market performances.

5.3.4.2. Market Performances

Regarding market performance, Figure 5.24 depicts the average simple and differentials returns (compared to the historical MIB index) of the whole cluster in the 3 years prior to the delisting.

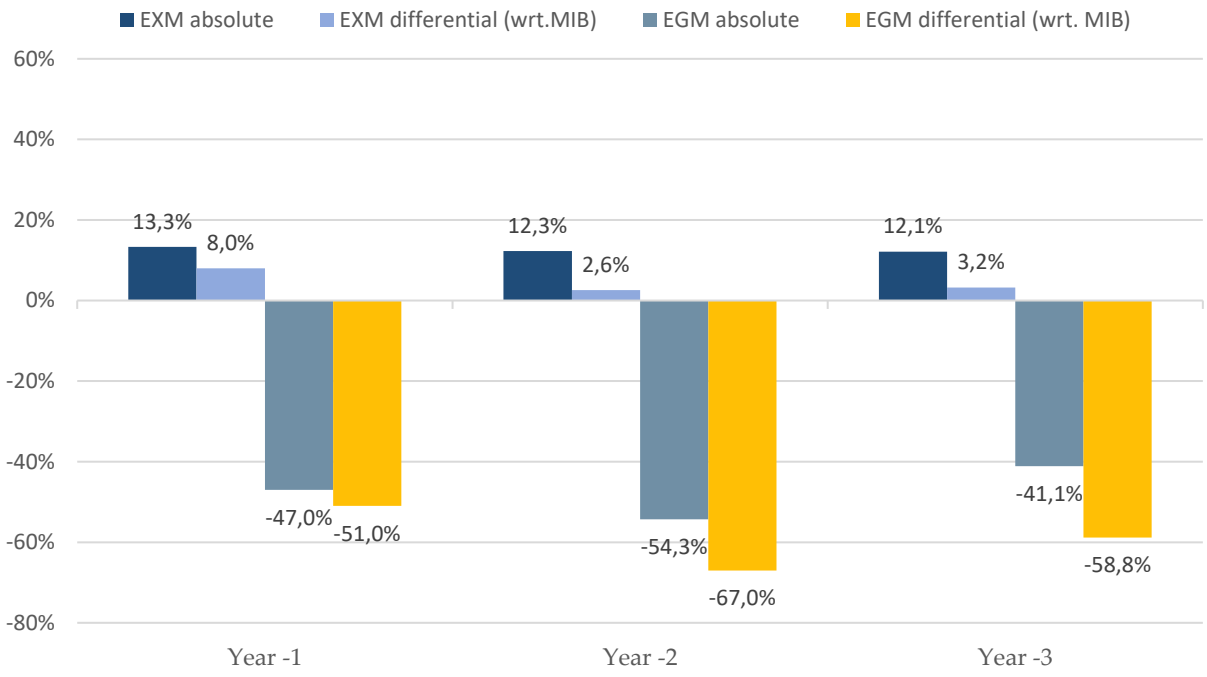

Figure 5.24: Mean absolute and differential (wrt. MIB) yield for "Regretful" companies

There is a clear difference between the main market and the secondary one: while in EXM absolute values are quite stable between 12% and 13% and differential ones are around zero, companies in the EGM market lost around half of their market value in the three years before going private, with the loest peak reached in Year -2.

Figure 5.25 instead aims at capturing potential differences in the differential market performance (again compared to the market index MIB) according to the technique used.

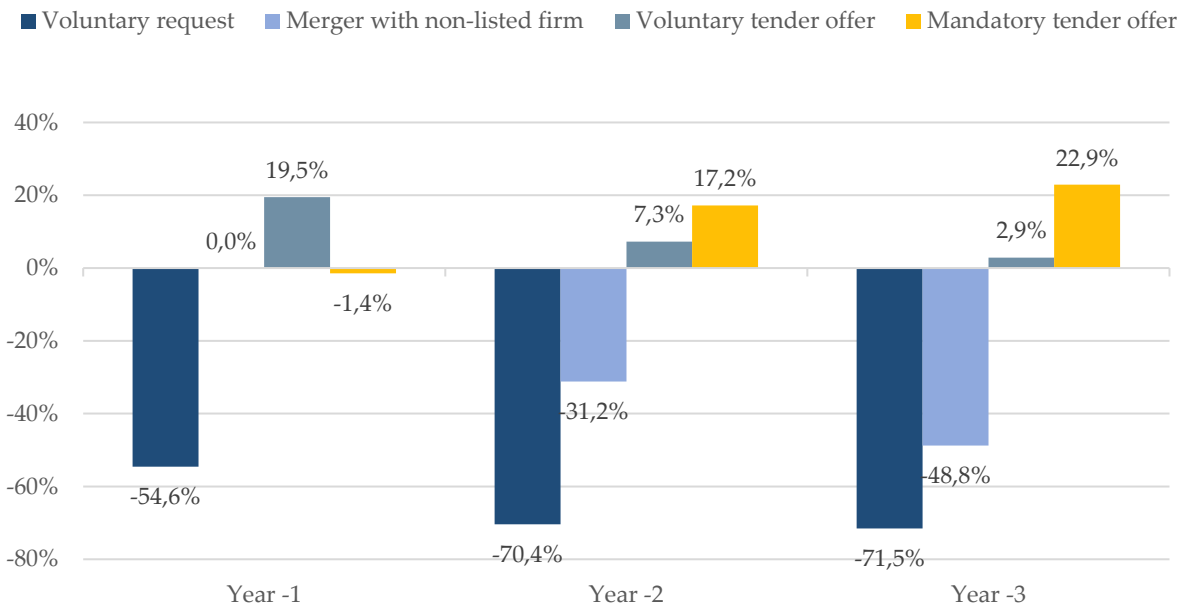

Figure 5.25: Mean differential yield (wrt. MIB) for "Regretful" companies, by technique of delisting

Without surprise, companies delisted through voluntary request were the worst performing ones with a -71,5% compared to the historical MIB index with reference to the market price three years before delisting.

Also companies that merged with non-listed firms were performing very poorly year after year, and the maximum loss was also obtained at Year -3 with a -48,8%.

Voluntary tender offers were the only ones showing a positive differential yield at 1, 2, and 3 years, with a double-digit value in the last year due to the premium offered to the market to acquire the shares, which barely compensated the negative performance in the previous three years (in fact the differential performance compared to the one of the MIB is just 2,9% over three years).

Finally, companies delisted through mandatory tender offers were on average performing better than the market, coherently with the impressive results highlighted regarding their operating performance (paragraph 5.3.4.1), while they entered in the negative field when calculating the yield at one year before being delisted.

5.4. Overall return for investors

To better understand the overall experience in the Italian Stock Exchange of delisted firms, a comparison between the placement price of the securities during the listing process and the last price registered before delisting has been performed. This indicator has been calculated for the 77 companies that joined the markets of Borsa Italiana (well divided among the two markets, with 39 issuers in EXM and 38 in EGM) through an initial placement of securities in the market since 1/01/2002, thus excluding spin-offs, simple admissions and business combinations, and that delisted in the last decade.

Table 5.20 depicts the mean and median annualised percentage yield for each cluster by considering only the changes in the market prices, therefore not taking into account ordinary dividends and corrections based on market trends.

Table 5.20: Mean and median annualized return of the companies admitted with IPOs

Market	"Defeated"		"Preys"		"Restructuring"		"Regretful"	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median
EXM (39 Firms)	-14,1%	-13,5%	+10,2%	+0,1%	-10,2%	-13,6%	-3,9%	-3,9%
EGM (38 Firms)	-14,8%	-14,0%	+11,3%	+11,9%	+15,9 %	+15,9%	-21,4%	-16,3%

The cluster of "Defeated" companies confirms the results obtained in paragraph 5.3.1.2 with a very negative annualized yield around -14%, very similar in both markets and in both mean and median values.

"Preys" are the only ones showing on average a positive yield in both markets, while the median value was strictly positive only in EGM, due to the large number of slightly negative yields in EXM. This result is partially conflicting with Figure 5.20, which shows that the highest yields were found in the main market in the three years before delisting, suggesting that companies in the EXM market tended to perform quite poorly in the first years after listing and to recover quickly in the last couple of years before being delisted, even though in most cases they barely managed to reach the placement price.

The cluster composed by "Restructuring" companies showed negative yields in EXM and positive ones in EGM, even though it is not statistically representative due to the low number of occurrences.

"Regretful" companies behaved similarly with the trends identified in Figure 5.24, with profoundly negative annualised yields in the EGM market (even lower than "Defeated" companies) and slightly negative in the main regulated market, with mean and median values at -3,9%.

Another interesting aspect to analyse is the premium price offered by bidders to investors during a tender offer in order to incentivize them to sell their shares. As explained in the previous chapters tender offers are used both by external players to acquire "Preys" and by incumbent investors to acquire the remaining floating capital of "Regretful" companies.

Table 5.21 displays the mean, median, minimum and maximum values of premia offered in the two markets of Borsa Italiana with respect to the average market price of the 3 preceding months, for the 71 tender offers that are present in the sample of delistings in the last 10 years.

Table 5.21: Premium price offered at the takeover bid compared to the previous 3 months average price

Market	"Preys"				"Regretful"			
	Mean	Median	Minimum	Maximum	Mean	Median	Minimum	Maximum
EXM (56 Firms)	+28,9%	+20,2%	-9,0%	+143,0%	+16,5%	+14,3%	-26,8%	+64,5%
EGM (15 Firms)	+42,4%	+30,0%	+14,8%	+120,2%	+5,9%	+5,9%	+5,2%	+6,7%

It is worth noting that the premia offered by external bidders were significantly higher than the ones offered by incumbent investors. In fact, "Preys" were offered mean premia of 28,9% in EXM and 42,4% in EGM, while "Regretful" companies registered a mean 16,5% in the main market and 5,9% in the non-regulated one, where only two cases were recorded. Controlling shareholders seem to be less willing or able to offer large premia to acquire the company, especially considering that it is quite frequent that the initial price of the offer is revised upwards to collect more adhesions.

Furthermore, keeping in mind the results obtained in Figure 5.24 and Table 5.20: Mean and median annualized return of the companies admitted with IPOs for "Regretful"

companies, those premia compared to the 3 previous months shown in Table 5.21: Premium price offered at the takeover bid compared to the previous 3 months average price in most cases are not sufficient to recover the losses registered in the previous years, and are actually a discount compared to the past performance of the stock.

6 Conclusions

This chapter concludes the work by summarising the main findings emerging from this research.

This thesis aimed at investigating the phenomena of listings and delistings on the markets of the Italian Stock Exchange, Borsa Italiana, with a particular focus on the correlation between the listing or delisting decision by a firm and the operating and market performances of the latter. With regard to the initial research questions that were intended to be answered, the numbers collected highlight four interesting facts. The first is that, over the past 20 years, the main market EXM has lost 268 listed companies and gained "only" 185; by contrast, the EGM market has attracted 263 newly listed companies and seen 68 delistings. The net balance is therefore positive, and by the end of 2021 the threshold of 400 listed companies was overcome. While the number of companies that have entered the stock market is greater than those that have left, the reality is that it is mainly small and medium-sized companies that have set foot in the stock market, and it is mainly medium and large sized companies that have left the Italian stock market. Over the past 20 years, companies worth €148.4 billion have entered, but €179.3 billion have left. And the same result is also reached when looking at the last five years: €40.4 billion entries, €55.3 billion exits. These numbers highlight a change in the profile of the stock market, which has lost its appeal to large companies and is increasingly oriented towards smaller capitalized companies. Also, it has been pointed out that delistings are well distributed and homogeneous across the two decades analysed, and that the lower number of firms listed on the main market of Borsa Italiana is more due to fewer newly listed companies rather than increased abandoments.

However, the phenomenon of the "depopulation" of the main markets of stock exchanges is, however, global and is only partially indicative of entrepreneurs' disaffection towards the stock market, as it is also affected by the increasing competition from private equity and institutional investors, who could benefit from the from the low interest rates regime after the Great Financial Crisis and after the outbreak of Covid-19 pandemic. According to Preqin [105], in January 2021, the

amount of cash that private equity funds could have at their disposal reached a record of $1.9 trillion, an impressive amount equal to more than twice the entire capitalisation of Piazza Affari. It is only natural that the attention towards possible listed "Preys" increased. As a consequence, as reported by Refinitiv Eikon, in the US, average valuation multiples for buyout deals hit a record high of 13.2 times EBITDA in 2020, compared to 8 times in 2008. In Europe, 2021 was a record year for buyout investments, doubling compared to 2020; the median buyout multiple was 12.8 times EBITDA.

Then, strategies to go public and to return private have been analysed, as well as their correlation with firm performance in the last ten years, from 2012 to 2021.

Newly listed companies chose in 86,7% of the cases IPO as listing strategy. In most cases they showed consistent growth in turnover and margins before going public, which maintained the same trend even after the listing. The average CAGR of revenues over the period was 12.0% for the main listing and 23.3% for EGM. As far as market performances are concerned, an average positive absolute return is observed over the ten-year period for both the main market (+31.7% after three years) and EGM (+20.0%). On average, contrary to what has been observed historically, they yield more than the market index, although the effect is mainly due to a few companies gaining triple-digit performances.

As regards the main strategies chose by companies to delist, a classification tailored to the Italian landscape has been developed, and all transactions in the database have been labelled accordingly. The six causes for delisting that emerged are: termination of activity, lack of requirements, M&A by external actor, Infra-group merger, delisting of SPAC after business combination, or initiated by incumbent shareholders. Overall, the most common technique used to become private was "M&A by external actor" (100 occurrences), followed by delisting "Initiated by incumbent shareholders" with 89 cases. The same order is reflected in the regulated market EXM, while in the secondary market EGM, surprisingly, "Lack of requirements" was the most frequent reason for delistings. In order to better analyse the performances of delisted companies, the abovementioned classification have been slightly modified, obtaining four main strategic clusters of homogeneous firms, which are described hereinafter.

"Defeated" companies gather both firms delisted due to termination of activity (26) or due to lack of requirements (22), thus falling into the category of involuntary delisting. These companies in most cases suffered financial distress: it is not a surprise they showed very disappointing operating and market performances.

"Preys" were delisted upon a merger or an acquisition by an external actor (50), in 90% through a tender offer. They are characterized by satisfactory balance sheet ratios and - especially in the previous 12 months - generated discrete returns for investors. It is important to emphasise that the "Preys" have attracted the attention of important industrial groups and investors: this means that the stock market listing is also a "showcase" to be noticed from possible Italian and foreign buyers. Performances have also been analysed by segmenting according to the nature of the bidder, dividing into industrial groups (Italian listed groups, Italian non-listed groups, foreign groups), and financial investors (PE funds). The analysis revealed that industrial groups were more interested in growth opportunities and sound operating performance (EBITDA) rather than a solid net profit, probably hoping to improve it thanks to post-merger synergies, while financial investors acquired fast growing firms with sound levels of net profit as well.

"Restructuring" companies, or the 23 cases of infra-group mergers. These firms were reabsorbed into other listed companies of the same group in order to reorganize and simplify the corporate structure of the latter, thus in some ways they remained within the perimeter of the Italian Stock Exchange. The operating results of the "Restructuring" are satisfactory compared to the other clusters and average market performance remains stable between 6% and 7%, with very similar results compared to the MIB index, even though results are not extremely significant from a statistical standpoint due to the low number of occurrences. It must also be noticed that the reason for delisting derives from strategic choices made at group level and is not necessarily strictly related to the performance of the target company.

"Regretful" companies, extremely interesting for this research, gather the 43 firms for which delisting was initiated by incumbent shareholders. Where the situation made it possible, due to the size of the free float and the number of external investors, the delisting was done through a unilateral request or by merging into another unlisted company, always attributable to the parent company. However, in most cases this was done through a voluntary or subsequent takeover bid. Much has been debated in order to understand whether this type of operation was due to opportunistic logics linked to the market cycle and contingent valuations. On one side, 63% of the cases they had been listed on the markets of Piazza Affari for 10 or more years, thus suggesting to discard the opportunistic hypothesis. On the other side, "Regretful" companies showed a common sudden drop in net profit the year before being delisted, trend that is confirmed also when segmenting according to the technique used. Furthermore,

those firms that kept existing as separate entities after going private showed significant improvements in all performance indicators, particularly in net profit. These results provide partial support to the hypothesis that some companies might delist due to opportunistic reasons in order not to share future profits with public investors.

It was also shown that the premium offered in takeover bids is on average lower than the premium offered in external takeovers of "Preys" (+16.5% on average compared to +28.9% measured on prices over the previous 3 months). This indicates that, without considering this premium into account, market returns would probably be lower than the market yield.

A final analysis on the overall return for investors revealed that “Preys” were the only firms providing positive annualized returns in both EXM and EGM markets.

In conclusion, what explains the reasons for voluntary delistings is, in some cases, the impression is that delisting is decided in order to anticipate the prospect of disappointing performance in the near future, which could lead to investors disappointment. In other cases, the exit from the stock exchange is seen as preparatory to the implementation of subsequent strategies and restructuring that would be more complex to implement with the status of a listed company. Since it has been shown that “Regretful” companies that remain active after delisting on average recover both in terms of turnover and profits, it cannot be denied that in some cases delisting is an opportunistic manoeuvre, aimed at withdrawing shares at “cheap“ prices knowing that revenues and margins will grow in the short term.

However, listing should be seen as an event that generates long-term opportunities: many healthy companies raise precious capital for nourishing their growth by going public, generating employment, innovation, value and great returns for their investors. Hence the importance of getting into the thick of things, carefully analysing business models, maintaining a constant relationship between the financial community and entrepreneurs, even more in times of transition where companies will have to cope with internal transformations (such as the digital challenge) and external ones (global megatrends) while maintaining their competitive edge. In short, staying listed very often pays more in the long run than more opportunistic short-term strategies.

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Appendix

Annex 1: Listings and delistings on EXM market of the Borsa Italiana, 2019-2021

EXM / MIV	Categories	2019	2020	2021
Listings[5]	**IPO**	Nexi - Sanlorenzo Italian Exhibition Group Newlat Food	GVS	Philogen - Seco The Italian Sea Group Intercos - Ariston Hold.
	Merger	Covivio	-	-
	Business combination	Illimity Bank	-	-
Delistings	**Termination of activity**	-	Cose belle d'Italia Stefanel	-
	Lack of requirements	Gruppo Waste Italia	-	-
	M&A by external actor	Luxottica Group Gr. Ceramiche Ricchetti	Gamenet GEDI Gruppo Editoriale Molmed Ubi Banca	Credito Valtellinese Guala Closures - Isagro Sicit Group - Astaldi Retelit - Reno De Medici
	Infra-group	Beni Stabili Gima TT	SIAS - Cir Poligrafici Editoriale	-
	Voluntary	Ansaldo STS Parmalat Nice - Damiani M&C Italiaonline	Banco di Sardegna	IMA Massimo Zanetti Bev. Techedge - ASTM Panaria Group - Carraro Poligrafica S. Faustino

[5] 12 transfers from EGM are excluded to this list

Annex 2: Listings and delistings on EGM market of Borsa Italiana, 2019-2021

EGM	Categories	2019	2020	2021
Listing	**IPO**	ILPRA Gear1 (SPAC) Neosperience Maps Soc. Editoriale Il Fatto Crowdfundme AMM - Sirio ELES Gibus Officina Stellare Relatech Marzocchi Pompe Pattern Shedir Pharma Group CleanBnB Friulchem Radici Farmaè Confinvest Iervolino Entertainment Copernico Websolute Cyberoo Arterra Bioscience Matical Fintec Ucapital 24 NVP - Fos Gismondi 1754 Doxee	Unidata Sebino Cy4gate Fabilia Sourcesense Fenix Entertainment Reti Labomar ESI Trendevice Osai Automation Systems Euro Cosmetic Tecma Solutions Promotica Comal Tenax International Igeamed Mit SIM Convergence Eviso Planetel	Vantea Smar - Almawave Casasold A.B.P. Nocivelli Reevo - Premia Finance Jonix - Acquazzurra G Rent - Revo 4AIM SICAF c2 crowdf. Aton Green Storage Meglioquesto - Spindox ID-entity - Giglio.com Ind. Stars of Italy 4 Comp. dei Caraibi - Ala Nusco Porte - Omer Ulisse Biomed Destination Italia Intermonte Part. SIM Defence Tech Holding Medica - Soluzione tasse Cofle - Racing Force Nice Footwear Alfonsino - Take Off International Care Comp. Datrix - SVAS Biosana S.I.F. Italia Sababa Security Lindbergh - Estrima Homizy - ISCC Fintech Directa SIM - Star7 Finanza.tech
	Merger	-	Ind. Chimiche Forestali	-
	Business combination	Comer Industries Antares Vision Sicit Group - Salcef Group	Franchi Umb. Marmi	-
Delisting[6]	**Termination of activity**	Ideami EPS Equipa PEP 2	Gabelli Value for Italy Spactiv - VEI1 Life Care Capital LCC	-
	Lack of requirements	-	Energy Lab - Bio On Axelero	-
	M&A by external actor	SMRE - Bomi Italia Biodue	Gruppo Green Power	CFT - Elettra Investimenti AMM - Euro Cosmetic
	Infra-group merger	-	ICF Group	-

[6] 12 transfers to the EXM are excluded from this list

EGM	Categories	2019	2020	2021
	Business combination	Archimede - Spaxs Gear1 - Alp.I - Sprintitaly Industrial Stars of Italy 3	TheSpac	-
	Voluntary	PLT Energia	Fintel Energia Group Caleido Group	Capital for Progress S.I.

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