Serial acquirers in Italy and Europe: impact on stock market and operational performance

Bocconi University, MSc in Finance Thesis

Programmatic M&A and long-term performance in Sweden: the role of industrial holding companies and the roll-up model

Stockholm School of Economics, MSc in Finance Thesis

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Master Thesis
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SERIAL ACQUIRERS IN ITALY AND EUROPE

IMPACT ON STOCK MARKET AND OPERATIONAL PERFORMANCE

GIUSEPPE SPIEZIA

Master Thesis - Finance

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Abstract:

This thesis builds on a core premise, namely the structural scarcity of domestic consolidator firms within the Italian industrial landscape, and the resulting tendency for the country's numerous small and medium-sized enterprises to be acquired by large multinational corporations or private equity funds. This phenomenon reflects deeper structural weaknesses embedded in Italy's national industrial and institutional framework. Against this backdrop, the study investigates the impact of acquisitive behavior on both market (stock market) and operating performance of Italian listed companies. In particular, it distinguishes between serial acquirers that pursue growth primarily through mergers and acquisitions and firms that rely mainly on organic expansion, with the objective of assessing the long-term performance implications of these alternative growth strategies. The empirical analysis provides evidence that firms adopting programmatic M&A as their main growth lever are able, over the long run, to generate a positive and statistically significant performance premium relative to other market participants. This outcome is consistent with the presence of learning effects, whereby repeated acquisition experience enhances integration capabilities and value creation, thereby highlighting the advantages of M&A-driven growth strategies. In a second step, the analysis is extended to a broader European context. Italian consolidators are found to be not only competitive with, but in several dimensions superior to, their German and French counterparts. This result suggests that acquisitive Italian firms may serve as paradigmatic benchmarks for non-acquisitive or less acquisitive domestic firms, with the ultimate objective of fostering a more dynamic Italian corporate environment and promoting a more balanced intra-European competitive landscape. Overall, the findings confirm that programmatic M&A represents a powerful strategic tool for Italian companies seeking to compete with more advanced European industrial systems, while simultaneously underscoring the urgency of addressing the structural deficiencies that characterize the Italian corporate and M&A ecosystem.

Keywords:

Serial acquirers, SMEs, Consolidation, Compounders, Stock-market performance, Operational soundness

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1. Introduction

The following research project draws inspiration from a structural phenomenon that negatively affects the M&A activity in Italy, namely the limited number of national strategic (corporate) buyers acting as consolidators. This deficiency, particularly striking when considering other European countries as a benchmark, is primarily driven by small scale, peculiar ownership structure and undercapitalization associated with Italian companies (Morpurgo, 2023). Hence, this dissertation aims at analyzing the extent to which being acquisitive as a firm, i.e. relying on M&A activity as a strategy for growth, has a positive and statistically significant impact on long-term performance, both in terms of stock market figures and operational activity (hereinafter, the *core research question*). The same relationship will be investigated for non-acquisitive companies that rely on organic growth or a combination of organic and inorganic expansion.

The empirical analysis unfolds on a dual level. The primary focus will be on Italy, thus highlighting how Italian publicly listed firms that pursue inorganic growth perform relative to the non-acquisitive (publicly listed as well) ones, with the expectation that the formers have better market market-based positioning and are more financially sound. The study then extends to a European perspective, comparing Italian public corporations engaged in acquisitions (which represent a small subset) with European public consolidators that likewise consider programmatic M&A a foundational part of their business model and a catalyst for the creation of big industrial groups. Consequently, the discussion on the outcome of the analysis will serve as a wake-up call for Italian firms to consider the adoption of a consolidation-based approach for long-term growth. This could contribute to making the Italian M&A market more dynamic, as well as invigorating its industrial fabric, thanks to the creation of hubs and districts, all in conjunction with a wave of concentration acquisitions affecting the fragmented world of SMEs, which the Italian corporate landscape is overflowing with.

Section 2 will go over the specifics of the national industrial DNA and M&A market, thus pointing out the *theoretical framework* of this research project. Accordingly, considering

that the whole analysis revolves around acquisitive firms, a proper definition for this kind of corporations will be clarified (hereinafter, the *acquisitiveness* paradigm). In particular, the number of deals (volume) carried out during a pre-defined time horizon will be taken into consideration and will allow to select the set of acquisitive companies (hereinafter, *Tier 1* firms). Secondly, the *super-acquisitiveness* paradigm will be presented, hence the second sample will be identified (hereinafter, *Tier 2*). This concept is mainly related to serial acquirers with a successful track record in performing multiple and consecutive mergers and acquisitions, thus being able to integrate targets with increasing efficiency and flexibility over time, thanks to a learning effect. Pointing out the *theoretical framework* will be instrumental for answering the *core research question* alongside its ramifications. Indeed, it will serve as the basis for the implementation of the statistical analysis aimed at assessing the long-term stock market performance, mainly by means of Total Return for shareholders as well as operational soundness, i.e. the evaluation of the economics and fundamentals resulting from the financial statements of the selected *Tier 1* and *Tier 2* corporations.

In Section 3, the existing literature on this topic will be illustrated, with a focus on three main themes, consistently with the *theoretical framework*: (i) a brief and general overview of the studies on the relationship between M&A activity and value creation, ranging from seminal papers to more recent analyses; (ii) the learning effect, which is conducive to outstanding performance for serial acquirers; (iii) the investigation of the main findings obtained when primarily focusing on M&A activity in Italy and then when comparing the national acquisitive landscape to other countries. Consequently, a potential gap to be filled will emerge. Indeed, while there is a very extensive set of empirical studies on the first theme, most of them analyze short-term effects of M&A activity and often focus on the nature and features of a deal per se, thus overlooking the structural attributes that fundamentally define acquisitive companies, irrespective of the specifics related to a single transaction. Furthermore, only a modest number of comprehensive studies deeply delving into the comparison between acquisitive and non-acquisitive publicly listed firms, both when considering the Italian market on a standalone basis and relative to other European countries, has been found out.

Section 4 will delve into the empirical analysis and related methodology at the Italian level. Firstly, the sample of Italian companies to be compared with each other will be presented, according to the *theoretical framework*. Firms that fit the definition of *acquisitiveness* (*Tier 1*) and *super-acquisitiveness (Tier 2*) will be compared with companies focused on organic expansion or a mix of organic and inorganic growth. Both these kinds of corporations are part of the macro-set of non-acquisitive companies (*Tier 3*), despite being classified according to separate definitions. Moreover, the database will be enriched with the indication of the type of deal of carried out by the buyer, in terms of rationale and strategic purpose expected. At this stage, there will not be a focus on a specific industry, even though structural differences in terms of frequency and relevance of M&A activity among verticals and sectors will be highlighted and tackled with a specific methodology in Section 5. Therefore, following the set up of the full database, OLS regressions will be instrumental in pointing out the impact of the *acquisitiveness* and *super-acquisitiveness* paradigms on both the stock market and operational performance. The expectation is that Italian acquirers will have a positive impact on performance, based on both price movements, and hence shareholders returns, and impact on financial metrics, relative to their non-acquisitive counterparts. Additionally, if super-acquisitive players will be found out to have a higher and more significant impact on these figures compared to “basic” acquirers, the benefits of a potential learning effect will emerge.

Lastly, Section 5 will delve into the methodology applied at the European level. The same screening logic as before will be applied to French and German companies. However, only publicly listed acquisitive and super-acquisitive firms will be short-listed and consequently compared to their Italian counterparts resulting from Section 4. At this point, the benchmarking exercise will also factor in a consideration on the industry of operation and the extent to which belonging to an industry rather than another is conducive to a specific long-term performance, which can be attributed to sectoral idiosyncrasies. The ultimate objective, through some applications of the Cluster Analysis framework, is to determine whether the few Italian companies currently acting as consolidators can compete with the major serial acquirers based in other European countries. These Italian players could then serve as models of best practices to emulate for non-acquisitive Italian players, encouraging them to change their strategies and pave the way for the creation

of industrial hubs and districts that would be distinctly Italian in origin and culture. This will result in the rejuvenation of the M&A market and ultimately the whole industrial fabric.

2. Literature Review

Before delving into the *theoretical framework* and consequential empirical analysis, it is fundamental to provide an overview of the main results found out by the literature on this topic. The analysis will be based on three macro arguments, as anticipated in Section 1.

(i). Firstly, it is noteworthy to acknowledge the variety of research studies existing on the general corporate M&A landscape, including the investigation of the impact of mergers and acquisitions on performance, within the context of a single deal or the whole set of deals completed by buyers during specific time horizons. A foundational pillar is undoubtedly represented by Penrose's work, which dates back to the remote 1959, i.e. the first study ever comprehensively discussing growth strategies operated by the corporate sector. Following this seminal work, numerous authors have contributed significantly, enhancing the depth of theoretical argumentation and empirical analysis concerning M&A as a growth strategy. The resulting body of work is quite impressive in its breadth and sophistication. One of the main concerns in the M&A literature has been associated with the short-term announcement effects of acquisitions. This kind of assessment is usually performed by means of Event Study methodologies: authors delve into stock price reactions for both bidders and targets around the announcement date. Thanks to a comparison between what would have happened without the acquisition and what occurred as a result of the deal, it is possible to extract whether the market perception is positive or negative. In a similar fashion, when considering the impact on operational performance, they examine the differences in key accounting metrics over two relatively short-term periods: one covering *n* number of years pre-deal and the other covering *n* number of years post-deal. Specifically, research indicates that the announcement of acquisitions often results in negative returns for the acquiring companies (for instance, Andrade et al., 2001; Bruner, 2004). Furthermore, the purchase

consideration structure is a parameter that should be factored in when observing stock price movements following the announcement of an acquisition. For instance, Asquith et al. (1987) find out that cash deals allow for zero or positive buyer's shareholders returns, whereas when stock is the payment method, returns are negative. On the contrary, this research project challenges the relevance of such studies that have a focus on short-term returns, considering that investors' initial reaction cannot take into account long-term effects of acquisitions. Accordingly, Gregory (1997) points out that the short-run effect may be biased due to not considering all the factors than can have an impact on the bidder's returns, including those occurring in the long-haul. Additionally, when conducting theoretical and empirical analyses on the stock price of acquirers, many times, no distinction is made between serial and non-serial acquirers. In fact, Leshchinskii & Zollo (2004) report that acquirers develop M&A capabilities when executing several deals, in a serial kind of logic. Instead, as in this dissertation, this separation is deemed to be fundamental for understanding the deepest perks of utilizing M&A as a long-term strategy for growth. Lastly, short-term negativity, as explained by Mitchell & Pulvino (2004), is mainly driven by merger arbitrage short selling pressure and thus it must be considered as a temporary situation. On a different note, when considering other and more optimistic perspectives, Bradley & Sundaram (2004) demonstrate that, when an acquisition is followed by an announcement according to which the acquirer will continue to encompass an acquisitive strategy, returns are positive. Moreover, Fuller et al. (2002) find out that, when buying public firms, acquirers have negative returns, whereas, when private firms or subsidiaries are the targets, returns are positive, and deals create more value. Accordingly, a link with the Italian market can be captured in this regard, based on the *theoretical framework* depicted in Section 2 regarding the intrinsic specifics of the Italian industrial fabric and the missed opportunities for bigger Italian corporations. Consolidating by acquiring small and private companies seems to be a way for Italian firms to really tap into an idiosyncratic characteristic of the Italian corporate landscape, i.e. the abundance of SMEs, for improving their specific performance, as well as creating flourishing industrial poles.

Short-term focus aside, even when considering the long-haul, research seems to be limited and often showcases a pessimistic view around M&A strategies. Empirical

analyses on this topic range from delving into the impact on Abnormal Returns, in the form of Buy-and-Build Abnormal Return (BAHR), for instance, through to Comparison Groups methodologies, where subset of firms engaging in acquisitions are compared to a control subset of companies that are not tapping into M&A for growth, while being comparable in terms of business, industry, size and financials, thus isolating the impact of inorganic growth, *ceteris paribus*. Finally, Econometrics models, especially based on OLS regressions, are utilized to assess the impact of certain explanatory variables, including the payment method (purchase consideration structure), the type of deal and the strategic purpose to be achieved, on specific market-based and financial metrics. It has been found out that stockholders of acquiring firms incur in wealth losses, in a statistically significant way (for instance, Loughran & Vijh, 1997; Moeller et. al., 2005; Bouwman et al., 2003). However, this is probably related to the purchase consideration structure, as mentioned before. Moreover, according to Franks et al. (1991), no abnormal post-deal performance in terms of returns can be acknowledged. When considering studies on long-term performance, many articles even point out some methodological mistakes: according to Barber et al. (1996), test statistics based on the abnormal returns used for the reference portfolios are not specified correctly. Also, the bootstrapping methodology used to calculate abnormal returns seems to be inappropriate (Mitchell & Stafford, 2000), as well as defining the announcement window is often challenging (Gregory, 1997).

Within this wide set of research, some key research projects have been identified and consequently pinned, as they show consistency with the *theoretical framework*. Firstly, Cools & Van de Laar, as explained by Ronneboog (2006), perform an empirical analysis on 705 US firms over a 10-year period (1993-2002), distinguishing acquisitive companies from the non-acquisitive ones according to a specific *acquisitiveness* paradigm. They measure the impact of a company being acquisitive on stock market and operational performance and find some relevant conclusions. Indeed, according to their study, the stock returns of frequent acquirers are higher than those of less frequent acquirers. Moreover, they also find out that the acquirer's massive growth is driven by acquisitions and thus acquisitions lead to performance and not the other way around.

(ii). Moreover, literature also presents some studies that investigate the experience that companies extract from multiple M&A deals and the consequential learning effect, as anticipated in Section 2.2. According to Bernardo & Chowdhry (2002), learning is at the very heart of any firm and it applies to every kind of activity that is carried out within the organization, including implementing mergers and acquisitions, which are complex as per definition, in a successful way. Being recognized as a serial acquirer implies a certain ability to master and carry out challenging acquisition processes. This allows for moving beyond mere reflections on a single deal. Hence, encompassing aggressive M&A strategies not only empowers the learning process, but is also a catalyst for being able to smoothly manage the obstacles inherent with the integration of targets (Very & Schweiger, 2001). On a more profound note, Leschinskii & Zollo (2004) study the long-term impact on performance of learning from previous acquisition experience. Thanks to a research project that concerns the 1977-1998 time frame and investigates 564 M&A deals performed by 47 US banks, they suggest that mere experience in acquisitions does not inherently enhance post-acquisition outcomes. Instead, the deliberate structuring and documentation of experience through formal mechanisms and codification patterns represent the tools that are truly conducive to long-term positive results. Additionally, thoroughly assimilating the acquired entity into the operations of buyers tends to boost the long-term outcomes. Greater levels of integration also amplify the benefits gained from formalizing knowledge. To sum up, the study explores the two primary methods of learning within an organization: learning-by-doing, which relies on accumulating experience from serial acquisitions, and a strategic approach that focuses on intentional investments in the documenting and codification of insights from previous acquisitions. Hence, only to the extent M&A activity is tackled as a formal process to be engrained within the firm's core operations, the benefits of a learning effect emerge. Among other contributions, Van de Laar (2004), when going through the analysis of companies implementing multiple M&A deals, discovers that the more recent ones are more successful relative to earlier acquisitions. These relatively recent studies on the relationship between learning effect and acquisitions have followed one of the first historical contributions on the topic. Indeed, Schipper & Thompson (1983) state that a differentiation should be considered between individual acquisitions and programs of

acquisition activity. Indeed, significantly positive abnormal performance associated with the announcement of extensive acquisition programs has been discovered. Indeed, a corporate shift towards M&A activity positively impacts the value of firms that announce such intentions. Therefore, besides a tangible positive effect on performance in the long-term resulting from a learning mechanism, the perks of being a serial acquirer seems to materialize already at the announcement level, even before any acquisitive strategy is implemented. On a related note, serial acquirers have been investigated also relative to the performance of firms growing organically. Vermeulen & Barkema (2001) demonstrate that over a long-term horizon (30 years), corporations growing via M&A are more flexible and have more chance of survival relative to non-acquisitive firms. Moreover, being a serial acquirer does not necessarily mean to engage in high-value transactions. On the contrary, just engaging in multiple small acquisitions at regular intervals is a catalyst for continuously instilling dynamism within the organization (Vermeulen, 2005). A connection to the current Italian situation, as described in the *theoretical framework*, becomes striking once again. The Italian corporate arena is populated by numerous small-sized companies that have recently become targets for financial buyers and large international industrial players. Italian larger corporations should seize this opportunity, considering findings that, while not directly related to stock market and operational performance, highlight the use of M&A as a strategy for maintaining organizational viability and promptly responding to industry dynamics**.** The concept that Vermeulen (2005) refers to is called “hybrid vigor”*,* which is meant as a form of fruitful diversification brought to organizations, following acquisitions.

(iii). The third argument primarily concerns Italy-specific investigations of national acquisitive companies. Secondly, the literature has been reviewed also in relation to considerations on Italy vs Europe, within the *acquisitiveness* rationale. As far as the Italian M&A landscape is concerned, deals are mainly a national phenomenon (Caselli & Gatti, 2023).

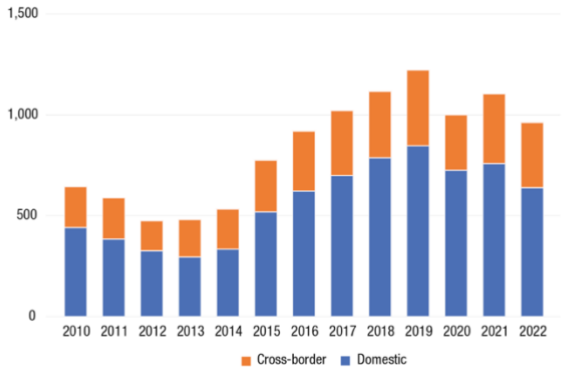


Figure 3. Domestic vs Cross-border deals in Italy

Source: Caselli & Gatti (2023)

Figure 3 shows that most transaction are represented by domestic deals. This points out Italian firms' challenges to pursue M&A abroad. This is likely attributable to the small size of Italian firms, which makes them less inclined toward large-scale transactions. Instead, they prefer medium-sized deals that are more in tune with the entrepreneurial spirit that defines Italy. Once again, this is consistent with the reasoning of the Italian owners' attitude and mentality, as depicted in Section 2. Moreover, when considering research projects that point out to the long-term performance of acquisitive vs non-acquisitive corporations, no Italy-specific assessment on stock market and operational performance seems to be existing, thus suggesting a gap in the literature that could be partly filled with this dissertation.

Finally, when considering the broader European level, some studies point out what Italy is lacking relative to the most advanced markets and economies in Europe, as already mentioned when discussing the *theoretical framework*. In terms of directly comparing Italian publicly listed firms and their European counterparts in relation to the *acquisitiveness* framework, Mariani et al. (2015), within their Working Paper, started an

analysis on the difference between companies listed on the Milan Stock Exchange and UK publicly listed firms, in terms of how acquisitions impact on accounting and market performance. They include all the publicly listed companies in the 2005-2011 time frame, operating in the manufacturing and services industry. Hence, the sample includes 98 corporations for the Italian part and 86 for the UK stock exchange. The total number of deals for the Italian sample is 417, whereas 1,183 deals have been considered for UK. They perform simple linear regression analyses taking into account several types of M&A deals (in a fashion similar to the type of deals pointed out in Section 2.1.) as dummy variables. In the first instance, they find out that UK companies are more active in mergers and acquisitions activity. Indeed, the number of deals for British firms averages 14, whereas the same figure for Italian companies stands at just 4. However, this stringer corporate acquisition ferment in the UK is not conducive to positive effects on accounting (ROI) and market (Tobin Q) performance. On the other side, the acquisition strategies of Italian companies show the predominance of a neutral effect on performance. Moreover, they find out that in the UK there is a major focus on concentration and horizontal type of deals. Indeed, 79% of the companies included in the sample decided to double down on consolidation, whereas 84% preferred horizontal over vertical. The combination of these two strategies allows firms to focus on their core market and further increase their market share, while curbing competition and achieving economies of scale. Interestingly, the Italian companies have been discovered to be more focused on diversification (76%) and vertical (29%) deals. Furthermore, consistently with Caselli & Gatti (2023), Italian firms are less keen on cross-border deals (57%), relative to British corporations (67%). This empirical study is regarded as a benchmark, as it enables the investigation of the Italian corporate landscape in comparison to companies from another country, aligning with one of the primary objectives of this research project. To build on the findings of Mariani et al. (2015), Italy will be compared to France and Germany. Their industrial environments and M&A markets are deemed to be more similar to the Italy's ones, making the comparison particularly relevant.

Once the existing literature on the topic has been recalled, a summary of the contributions of this dissertation follows:

i. Most studies solely focus on single deals' specifics, highlighting only the short-term market reactions and variations in key accounting metrics over a few years before and after the deal announcement and completion. In contrast, this dissertation will not only emphasize the characteristics of individual deals but also thoroughly analyze the structural fundamentals of acquisitive companies. It aims to assess the long-term impact on stock market performance and financials in terms of accumulated growth over time. The subject of interest will not be the mere change in the relevant metrics between periods, but a cumulated figure, with the aim to capture the compounded and sustained level of growth over time.

ii. There seems to be a lack of comprehensive studies comparing Italian acquirers and non-acquirers in terms of stock market performance and operational conduct. Therefore, Section 4 will go through the database building stage and the consequential empirical analysis to point out some significant results on the topic.

iii. There seems to be a modest number of studies comparing Italian acquirers and European acquirers in terms of stock market performance and operational conduct. Mariani et. al (2015) represents a good yardstick for a further analysis, in which more comparable countries will be factored in (France and Germany).

3. Theoretical framework

The national M&A market is known, among others, for being characterized by a limited number of big strategic (corporate) buyers, relative to more advanced European countries (Morpurgo, 2023; Caselli & Gatti, 2023). This feature is interconnected with other structural idiosyncrasies permeating Italy and its industrial arena, which have to do with the business demographics as well as stock market considerations. In particular, three main arguments have been identified as core catalysts for the rigidity and drought that define the Italian M&A landscape:

(i). The Italian landscape is crawling with an array of small and medium-sized enterprises (SMEs), a category that factors in micro-corporations as well. According to a research analysis conducted by Angelino et al. (2023), 163,794 companies meet the SME requirements. Among them, 134,264 are small businesses, whereas 29,530 are medium-sized enterprises. Their aggregate turnover exceeds EUR 900bn, whereas the total value added produced is EUR 210bn, as well as the exposure to credit institutions, which indicates the stock of debt they bear in their balance sheets, amounts to over EUR 200bn. Furthermore, Italy is a leader among the major European Union nations in terms of SME employment magnitude (OECD, 2020; Salesforce, 2020), with 78.7% of the workforce employed by SMEs. This includes 45.6% in micro-enterprises with up to 10 employees, 20.4% in small enterprises with a range of 11 to 49 employees, and the remaining 12.7% in medium-sized enterprises with up to 250 employees, a figure that is higher than the European average of 69.4%. In particular, Italy surpasses the UK (75.3%), Spain (72.8%), Germany (62.9%) and France (61.4%), among others. The main takeaway is that micro and small enterprises with a number of employees lower that 50 constitute the backbone of the Italian SME system and the broader industrial fabric. These figures directly suggest the reduced scale of Italian companies, which acts as a clear limitation when discussing potential strategies based on acquisitions for consolidation. Table 1, according to a study conducted by OECD (2020), provides another type of intra-European comparison exercise, according to which the share of “small” firms in Italy (88.2% and 90.0%, according to Eurostat and Orbis, respectively) is higher than the same figure in France (84.0% and 89.8%) and Germany (83.8% and 76.3%).

	Small		Medium		Large	
	Share in total	Number of companies	Share in total	Number of companies	Share in total	Number of companies
Italy – Eurostat	88.2%	170 290	10.1%	19 518	1.7%	3 249
Italy – Orbis	90.0%	285 729	8.4%	26 683	1.6%	5 086
France – Eurostat	84.0%	125 240	13.2%	19 657	2.8%	4 199
France – Orbis	89.8%	232 139	8.0%	20 635	2.2%	5 613
Germany - Eurostat	83.8%	373 276	13.6%	60 505	2.6%	11 762
Germany – Orbis	76.3%	155 773	19.6%	39 953	4.1%	8 343

Table 1. European corporate landscape: Italy vs France vs Germany

Source: OECD (2020)

(ii). On another note, the small size of companies fundamentally determines how the Italian stock market is intrinsically structured, relative to countries like Germany and France. Indeed, in Italy, Euronext Growth Milan, which represents the national Alternative Investment Market (AIM), accounts for 82% of transactions and about 19% of IPO volume. In contrast, in France the same figures stand at 30% and 3%, while in Germany 12% and 4%, respectively. The variation in the dominant listing type, namely Main Segment vs AIM, resembles the typical industrial structure of these countries: Italy is mainly characterized by SMEs, while France and Germany are also home to bigger firms (Caselli & Gatti, 2023). This argument paves the way for factoring in considerations on the health status of the Italian stock market, given the relationship between stock market cycles and M&A activity and considering that the deployment of corporate M&A programs is influenced by the extent to which the underlying national financial market is dynamic (Cartwright & Schoenberg, 2006). Indeed, the buyer could secure that budgetary and investor support that is deemed to be fundamental for such complex transactions (Mariani et al., 2015). Accordingly, one way of looking at the current conditions of the Italian stock market is to focus on the ferment around the IPO activity.

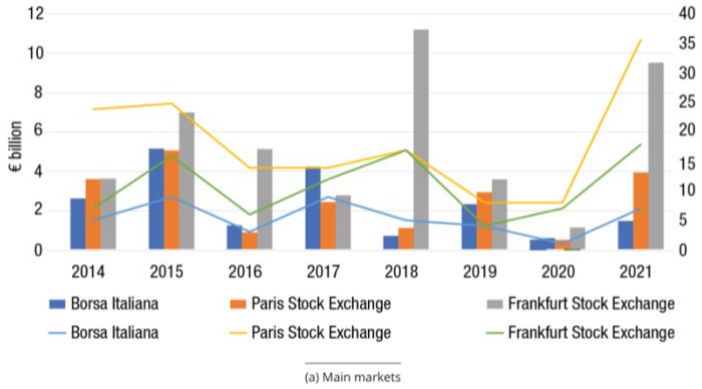


Figure 1.1. IPO deal flow: Italy vs France vs Germany (volume & value), Main Segment

Source: Caselli & Gatti (2023)

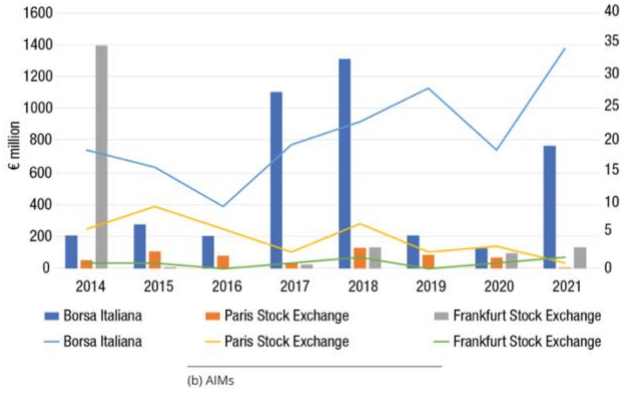


Figure 1.2. IPO deal flow: Italy vs France vs Germany (volume & value), AIM

Source: Caselli & Gatti (2023)

Figure 1.1 and Figure 1.2, while pointing out again the overabundance of smaller scale firms in Italy (see the blue bars and line representing the volume and value, respectively, of IPOs in the Italian AIM in Figure 1.2), also highlight the poor IPO performance of the Italian Main Segment (Figure 1.1), both in terms of volumes and value, in the 2014-2021

time horizon. This phenomenon is coupled with the increasing number of delistings occurring in recent years.

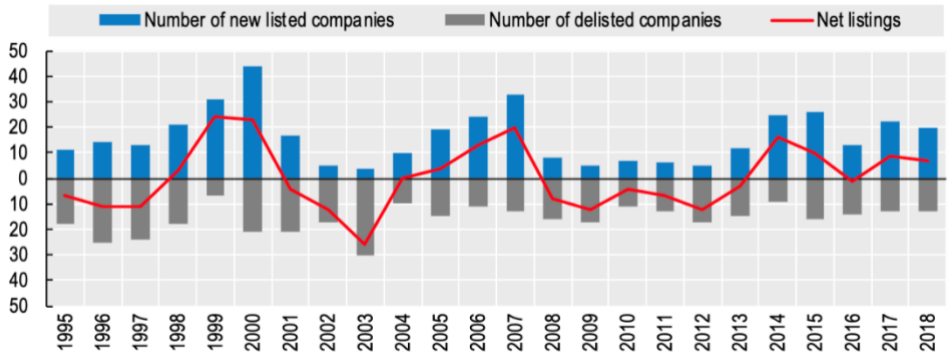


Figure 2. Listed and delisted Italian companies

Source: OECD (2020)

Figure 2 shows that in Italy, between 1995 and 2018, there have been 395 new listings and 394 delistings, with a net effect of only one additional company in the Italian Stock Exchange. Moreover, the red line shows that over this time span, there have been net listings only for five years. Accordingly, the drought in the Italian IPO market and the increasing number of delistings provide evidence of a financial market that can attract neither issuers nor investors. This problem results in undercapitalization of firms and, even though Equity Capital Markets are theoretically deemed to provide more easily available and broader financing opportunities to sustain growth and investments of any kind, including M&A, they fail to act in this direction when considering the Italian context. This has an indirect negative impact on the national M&A landscape, considering that a solid stock market could be a driving force in growing through external paths (Pauto, 2023). Such argument could also be considered the other way around. Indeed, as Ronneboog (2006) and, more recently, Caselli & Gatti (2023) pointed out, M&A is crucial

for small businesses, aiding their growth and helping them achieve the size needed to access Capital Markets.

(iii). The third main argument concerns the peculiar ownership structure of Italian firms. Indeed, Baltrunaite et al. (2019), following one of the first contributions on the topic from Aganin & Volpin (2005), confirm the dominance of family ownership and report significant ownership concentration, as well as substantial overlaps between ownership and control and a high degree of localized management focus, both for listed and private corporations. In a more recent study, Caselli et al. (2021) also demonstrate a massive presence of shareholders with very high voting power. On one side, this primarily results in positive effects for firms, since they benefit from the long-terms presence of families and founders that always put the company's well-being first. Moreover, they can offer management a sufficiently forward-looking perspective to execute successful and sustained long-term investment strategies. On the other side, the negative component is represented by a lack of a diversified pool of investors within the ownership structure. Founders' willingness to keep control of their company at all costs and safeguard the authenticity of the business they created and nurtured over decades might hamper the beneficial effects of capital injections from institutional investors. Hence, they could prevent their own companies from having access to that *fire power* that is necessary for starting and implementing an acquisitive program. Moreover, this structural component of the Italian industrial environment has a direct impact on the second argument that has been mentioned above, i.e. the IPO activity. Families and founders have been historically reluctant to go public, as they fear falling under intense scrutiny, as well as jeopardizing the equity story that has been built over time. Moreover, once listed, the threat of potential hostile takeovers is always looming and represents the main reason why successful corporations like Ferrero have never considered landing on Borsa Italiana a viable option. Nonetheless, it is noteworthy to mention that in recent years, the founders of the Italian SMEs have been more willing to cash out by selling the totality of their company or, which is the more frequent case, just dispose a stake to finance future growth in an increasingly competitive industrial environment (*development capital*). This attitude is more striking now relative to three years ago, amid the economic and geopolitical uncertainties related to the Covid-19 crisis, rising energy and commodity prices, supply chain disruptions, as

well as wars in Ukraine and the Middle East (Morpurgo, 2023). In such a setting, surviving as a small standalone company is much more challenging. Besides this change in the attitude of sellers in recent times, it is likewise true that over the past couple of decades the *Made in Italy* concept has consistently attracted interest, with numerous cross-border deals mainly involving foreign buyers and Italian targets. This is happening not only for smaller Italian targets but also for established brands, with the likes of Valentino, Lamborghini and Ferretti, now owned by international corporations, namely the French luxury juggernaut Kering, the automotive German giant Volkswagen and the Chinese industrial conglomerate Weichai, respectively. Hence, it is primarily large foreign industrial groups and financial buyers who are benefitting from this opportunity, while the number of big national players is very limited. Among them, some listed and non-listed entities, including Ferrero, Ariston, Webuild, Zucchetti, Perfetti, Recordati, Campari, Barilla, Fedrigoni, Poste Italiane, Eni, Leonardo and Italgas, as well as multi-utilities like A2A and Acea (Pauto, 2023), stand out. Over time, these players have been doubling down on extensive M&A programs, thus creating powerful industrial hubs that are meant to compete with international groups across different industries. The solid roots that such corporations have established in Italy by means of a programmatic acquisitive path should serve as a paradigmatic example for other players to follow in a long-term perspective.

Based on this *theoretical framework*, this dissertation aims at empirically proving that inorganic growth is more conducive to long-term positive performance relative to growing organically. Therefore, this should serve as an admonition for Italian companies to disrupt their traditional way of thinking around strategies for growth and give much more credit to the M&A operational framework. Within a virtuous cycle logic, this will enhance the creation of big industrial players within the Italian territory, with an easier access to Capital Markets and thus a positive spillover effect on the Italian stock market and the competitiveness of its players relative to European counterparts. Before delving into the current state of the literature on the topic, Section 2.1 will point out the exact attributes that make a company acquisitive. Instead, Section 2.2 will complete the argumentation on the *theoretical framework*, by separately identifying corporations that are deemed to be more than “basic” acquirers, in the sense that they execute an extensive array of consecutive deals with a level of increasing efficiency, thanks to the advantages offered

by a learning effect. Companies that reflect these specifics will be called super-acquisitive. These definitions will be instrumental for the consequential empirical analysis, in particular when collecting the relevant data for the database, where *Tier 1* and *Tier 2* will be identified.

3.1. Tier 1: the *acquisitiveness* paradigm

The *acquisitiveness* paradigm investigates the features of a company being acquisitive and the extent to which this fundamentally impacts its long-term performance. Firstly, *acquisitiveness* concerns the number of deals carried out in a specific time horizon, which, in this case, is 2010-2023 (see Section 4 for further details on the choice of the time horizon). Hence, a threshold number that allows to primarily distinguish acquisitive from non-acquisitive companies has been identified. Table 2 shows the definition of a company being acquisitive, which will be instrumental in populating the so-called *Tier 1* sample at the empirical analysis level.

Acquisitiveness paradigm	***Definition***
Acquisitive	Companies engaging in n deals such that $15 < n \leq 20$ throughout a pre-defined long-term horizon

Table 2. Overview of the acquisitiveness paradigm

Source: own elaboration

The threshold, while arbitrarily chosen, has been defined after the data collection process has been completed (see Section 4 for further details). Considering the length of the time

horizon, this categorization is deemed to truly identify Italian corporations acting as acquisitive companies.

Furthermore, from a theoretical perspective, the *acquisitiveness* paradigm based on the number of deals has been coupled with the indication of the type of M&A deal executed, in terms of strategic purpose expected by the buyer. Indeed, the combination of the company being acquisitive and the type of transaction it specializes in implies a specific impact on long-term performance, which is expected to diverge from the effect of simply analyzing the number of deals. This kind of interaction will be accounted for in the empirical analysis in Section 4. Accordingly, M&A activity can be implemented in a variety of ways, which are all indirectly linked to a specific rationale and the root purpose that the management wants to achieve as well as industry-specific dynamics. In particular, seven potential M&A strategies can be identified and divided in three categories:

Category 1	***Category 2***	***Category 3***
#Consolidation	#Horizontal	#National
#Diversification	#Vertical	#Cross-border
#Differentiation		

Table 3. Types of deals in terms of strategic purpose

Source: own elaboration

As for Category 1, companies with a focus on consolidation aim at strengthening their position in the core business sector/industry of expertise, thus increasing their market share and curbing competition. In addition, consolidation sounds effective when there is room for concentration in fragmented industries, thus creating industrial districts.

Alternatively, M&A can be deployed to diversify operations in another vertical of the same industry or in a completely new sector. This primarily allows for capturing uncorrelated revenues sources to minimize risk. Additionally, it fosters the emergence of new and exciting business opportunities, while addressing the maturity of the company's historical sector of expertise and thus necessitating new avenues for survival and renewed enthusiasm. Thirdly, differentiation entails making a company's products and services unique compared to peers. This can be achieved organically through a strong emphasis on R&D and Capex, or inorganically by acquiring companies that provide distinct products, services, or components that enhance the uniqueness of the buyer's portfolio of offerings (Kumar, 2019).

As far as Category 2 is concerned, horizontal and vertical acquisitions are related to the positioning of the target in the value chain. The latter involves buyers and targets that serve different value chain functions, with the aim of eliminating efficiencies. The former refers to a kind of transaction where the parties compete in the same or similar market. Consequently, the competition is expected to decrease after the deal has been carried out (Kumar, 2019).

Category 3 investigates the geographical perspective, with companies engaging in national acquisitions and thus having a more local scope. On the other side, implementing cross-border M&A implies the adoption of a wider perspective. This strategy specifically involves the buyer acquiring a target located in a different country, with the aim of gaining immediate access to the acquired company's market, resources and capabilities.

For the selected companies, choosing a sub-category rather than others will be crucial in contributing to the outcome associated with their long-term performance. Consistently with the *theoretical framework* and the current conditions of the Italian landscape, consolidation will be the main type to be assessed, based on the wide national fragmentation of SMEs operating across different industries and the consequential room for deploying concentration strategies.

3.2. Tier 2: the *super-acquisitiveness* paradigm

Following the definition of acquisitive companies, the *acquisitiveness paradigm* is further extended, thus resulting in the *super-acquisitiveness* paradigm, as follows:

Super-acquisitiveness paradigm	***Definition***
Super-acquisitive	Companies engaging in n > 20 deals throughout a pre-defined long-term horizon

Table 4. Overview of the super-acquisitiveness paradigm

Source: own elaboration

The decision to factor in this enrichment within the *acquisitiveness* framework is meant to point out whether being more than an acquirer in its standard version, namely a full-fledged serial acquirer, is conducive to better results, in terms of both how the market values an aggressive M&A strategy and long-term impact on financial soundness. The rationale behind this argumentation is that when a company engages in multiple acquisitions, close to each other and within tight time frames, far beyond what is meant to be the "basic" threshold for being acquisitive (at least according to this study), it is then able to build up skills in integrating targets with an increasing level of efficiency. This translates in lower costs, reduced time and higher accretion. Moreover, investors positively react when these serial acquirers carry out one of their quick and fast deals. In this case, it has been demonstrated that this kind of buyer can reap benefits from such empowered M&A strategy not only in the long haul, but also in the very short-term, thanks to an "announcement effect", once an extensive acquisitive program is announced (see for instance Asquit et. al, 1983; Schipper & Thompson, 1983) and enthusiast investors guarantee a continuous shift upward for the stock price, thus increasing shareholders

returns. Therefore, the *super-acquisitiveness* paradigm is highly interconnected with the benefits of a learning effect (for instance, Bernardo and Chowdhry, 2002): companies continuously engaging in acquisitions learn integration and management skills from previous deals, thus making the success rate of a deal close to 100%.

In a fashion that resembles the previous argumentation on “basic” acquisitive companies, the interaction between a corporation being super-acquisitive and the type of deals carried out will be investigated, too.

In conclusion, this paradigm and its empirical analysis in relation to the Italian landscape will potentially serve again as a means for elevating a strategy based on growth through programmatic M&A to the rank of key strategies that most Italian publicly traded companies should adopt not only for their idiosyncratic performance but also, from a systemic perspective, to revitalize the Italian corporate landscape.

4. Empirical analysis at the Italian level: a comparative analysis of Italian consolidators and Italian non-acquirers

Once the current state of literature on the topic and the *theoretical framework* and have been pointed out, the next step consisted in carrying out the empirical analysis at the Italian level, in line with the main objective of this research project.

4.1. Research Hypotheses

The *core research question* will be investigated by means of specific hypotheses. They are categorized according to two main classifications, with *H1* and *H2* focusing on stock market performance while *H3* and *H4* investigating the operational conduct. Finally, *H5* holds for both categorizations, as it aims to address an argument that is associated with both market and accounting soundness.

H1: In the long run, acquisitive companies can positively influence their stock market performance relative to firms based on purely organic growth and/or a mix of organic and inorganic growth, in terms of Total Shareholder Return (incl. dividends) and Price Change (excl. dividends), both cumulated over a pre-defined time horizon.

H2: In the long run, super-acquisitive companies can positively influence their stock market performance relative to firms based on purely organic growth and/or a mix of organic and inorganic growth, in terms of Total Shareholder Return (incl. dividends) and Price Change (excl. dividends), both cumulated over a pre-defined time horizon**.**

H3: In the long run, acquisitive companies can positively influence their operational performance relative to firms based on purely organic growth and/or a mix of organic and inorganic growth, in terms of CAGR of Revenues and EBITDA, both cumulated over a pre-defined time horizon.

H4: In the long run, super-acquisitive companies can positively influence their operational performance relative to firms based on purely organic growth and/or a mix of organic and inorganic growth, in terms of CAGR of Revenues and EBITDA, both cumulated over a pre-defined time horizon.

H5: In the long run, super-acquisitive companies can positively influence their performance relative to acquisitive firms, both in terms of stock market and operational performance, thus proving the existence of benefits associated with the so-called learning effect.

The core argument behind these hypotheses is that companies that make M&A foundational to their business models and growth strategies, in an acquisitive or super-acquisitive logic, can obtain long-term benefits that are conducive to better positioning relative to their peers. Differently from the bulk of literature on the topic, which is focused on the short-term impact of acquisitions and often factors in two different time horizons, i.e. a *n* period of months/years before the deal is performed and a *n* number of months/years post-acquisition, this thesis aims at delving into one long-term period and studies the impact on the improvement of performance over time, within a cumulative rationale. Therefore, instead of focusing on a single deal's effect, pre- and post-transaction, the focus is on the *acquisitiveness* features of a company, meaning the way in which being acquisitive as a firm fundamentally contributes to building a sustained path of compounded growth over the years. Furthermore, the following empirical analysis also aims at providing evidence that being more than a "simple" or "basic" acquirer, which is expressed by the *super-acquisitiveness* paradigm, rises to be the strategy that allows for the best long-term stock market and operational standing (as *H5* suggests).

Table 5 provides a quick overview of the 5 hypotheses that will be tested.

#	***Hypotheses***
H1	In the long run, acquisitive companies can positively influence stock market performance relative to firms based on purely organic growth and/or a mix of organic and inorganic growth
H2	In the long run, super-acquisitive companies can positively influence market performance relative to firms based on purely organic growth and/or a mix of organic and inorganic growth

H3	In the long run, acquisitive companies can positively influence operational performance relative to firms based on purely organic growth and/or a mix of organic and inorganic growth
H4	In the long run, super-acquisitive companies can positively influence operational performance relative to firms based on purely organic growth and/or a mix of organic and inorganic growth
H5	In the long run, super-acquisitive companies can positively influence performance relative to acquisitive firms, both in terms of stock market and operational performance

Table 5. Overview of the research hypotheses

Source: own elaboration

4.2. Methodology

This section will delve into the set up and consequent implementation of the empirical analysis aimed at providing an answer to the identified research hypotheses.

4.2.1. Database Building and Descriptive Analysis

The first step consisted in collecting data to build the database utilized for the empirical analysis, based on some relevant assumptions. Firstly, only publicly listed companies have been considered, across the three main Italian Stock Exchanges, namely Euronext Star, Euronext Milan and Euronext Growth Milan. The decision to exclude from the operating database private companies stems from inaccuracies in terms of key financial

and accounting metrics, as well as limited information related to their M&A transactions since they are not always included in national and international databases. Moreover, obviously no market perspective, by means of stock price movements and thus returns, could be factored in if non-public companies were to be considered.

Secondly, the selected time horizon for the data collection and consequential analysis, as anticipated, was 2010-2023, which is deemed to be satisfying, as it allows to capture stock price movements and operational performance across cycles, within sub-periods of economic downturns and booms, coupled with years of sustained stability, gradual growth or stagnant status of the economy. In particular, it encompasses periods of significant macroeconomic uncertainty and fluctuations, including the Sovereign Debt Crisis of 2010-11 as well as the wars in Ukraine and Middle East in 2022 and 2023. It also covers phases of economic expansion, zero- or low-interest rate environments (between 2014 and 2021), and later (between 2022 and 2023) tightening monetary policies with higher rates aimed at curbing inflation. Notably, this period is not excessively long, as it excludes the 2000-2010 time span, which was marked by a distinctly different industrial landscape and a prolonged market bubble that culminated with the Great Financial Crisis of 2008-09. Furthermore, this choice was consistent with the general objective of pointing out a long-haul perspective. Lastly, most of the existing literature on the topic focuses on analyzing companies over a rather distant time horizon, spanning from the 1990s to the early 2000s and concluding with the Great Financial Crisis. Thus, extending the examination of this phenomenon to the subsequent period, up to last year, was considered an appropriate decision.

Accordingly, a database has been built and managed to analyze companies that satisfied the pre-identified criteria, by counting the number of deals during the 2010-2023 time frame, in which each of them acted as a buyer, both directly and indirectly, thanks to their national and international subsidiaries serving as consolidators. Due to the abovementioned lack of information and key figures on M&A deals, especially in relation to the Italian market (which holds even for a discrete number of public corporations), less relevant in terms of prestige and size when compared to the broader European landscape, a blending of information from LSEG Refinitiv (SDC Platinum), Mergermarket

and Zephyr for each Italian listed corporation has been performed, coupled with a cross-check assessment on companies' websites, newspapers, annual reports as well as the official press releases on the acquisitions agreements.

Furthermore, specific exclusions have been considered when selecting acquirers. No banks, insurance companies and other financial institutions, including Asset Management Companies, Investment Holdings, Private Equity firms and Family Offices, have been considered in the analysis, due the uniqueness of their business based on completely different metrics and fundamentals, which could hamper potential comparisons in terms of operational performance. Accordingly, the same applied for companies belonging to the sports industry and for Real Estate firms, in light of the distinctive financials that are used to evaluate these companies. On the other side, besides traditional corporations, the panel also includes Industrial Holdings. Indeed, compared to Investment Holdings, they precisely align with the core premise and *theoretical framework* of this thesis, which focuses on firms serving as consolidators with the broader and ambitious aim to establish industrial hubs in the Italian arena. Indeed, differently from Investment Holdings, they consider a longer time horizon and give much more credit to the industrial scope of their acquisitions, rather than just focusing on profit maximization and return on investment. Finally, companies in liquidation were excluded.

One obvious assumption when building the panel of companies to be compared with the consequent statistical analysis was to consider only corporations that have been publicly listed during the whole pre-selected 2010-2023 timeframe. Nonetheless, differently from the analysis of Cools & Van de Laar, as explained by Ronneboog (2006), two different datasets have been initially created: the first one also includes firms that went public in the years following 2010, with the aim of performing the analysis of the a*cquisitiveness* framework in the context of a larger dataset. Indeed, relative to the U.S., the Italian stock market is much smaller and only a limited subset of companies would have been considered if only firms listed throughout the whole period were considered. Obviously, this choice had some consequences when collecting data, given the lower number of years in which they were listed and thus a lower number of stock prices on which to compute returns, as well as the lack of financial metrics in the years prior to the IPO. In

order not to distort the statistical analysis and negatively affect the inter-company comparability, some precautions have been adopted when executing OLS regressions, as Section 4.2.2 will explain. On the other side, the second panel reflects Cools & Van de Laar's decision to consider only companies listed throughout the whole period. This second approach is aimed at making the comparison as coherent as possible, thus pointing out the different results across Italian companies with the same number of years of data available, too. Furthermore, it is worth noting one additional simplification when performing such analysis. Each industry has its own intrinsic dynamics in terms of consolidation trends. Therefore, some industries are renowned for structurally or intrinsically showcasing a more active M&A activity, based on their cycle, and as such players operating within them engage in a higher number of acquisitions. When comparing companies, this industry-specific component should be considered. One alternative was to just analyze and compare peers in one or a few sectors. Nonetheless, such a choice would have implied too negative consequences in terms of breadth of the sample, once again due to the low number of firms listed on the Italian stock market. Moreover, this deficiency in being sector agnostic will be partly superseded in Section 5, thanks to specific applications of the Cluster Analysis framework, wherein a benchmarking methodology will allow to point out cross-industry performances. A more detailed sectoral analysis will be then considered when introducing the European level analysis.

The first dataset, which does not consider the listings occurred after 2010 as a factor for excluding companies from the sample, presents 228 firms across 22 Industries. Table 6 summarizes the categorization of the selected companies by industry.

Industry	***# of Companies***
Infrastructures & Construction	7
Energy & Utilities	25

Fashion & Luxury	13
Logistics & Transports	5
Entertainment	12
Services	16
Healthcare	9
Chemical, Biotechnology & Pharmaceuticals	6
Industrial Manufacturing & Components	20
Machinery & Engineering	23
Apparel Footwear Sportswear & Accessories	3
Furniture lighting equipment & interior design	6
Home & Personal Care	8
Automotive	7
Communication	5
TMT	39
Food & Beverage	10
Aerospace & Defense	5
Food Supplements	1
Consumer	2
Packaging	3
Retail chains	3

Table 6. Summary of industry categorization

Source: own elaboration

A certain level of fragmentation across a variety of industries can be extracted from the simple visualization of this categorization, with some industries prevailing over others, including *Energy & Utilities*, *Industrial Manufacturing & Components*, *Machinery & Engineering*, as well as *TMT*[1]. All these companies are listed on the Italian Stock Exchange, across Euronext Milan, Euronext Star Milan and Euronext Growth Milan, with multiple listings in some cases (i.e. Tenaris) on other global Exchanges. However, two firms, namely Prada Group and Stevanato Group are not listed on Borsa Italiana, but on the Hong Kong Stock Exchange and S&P500, respectively. Moreover, all the selected firms are registered in Italy, with the exception of seven companies (Ariston Holding NV, Brembo NV, Ferrari NV, Iveco NV, Media for Europe NV, Stellantis NV and STMicroelectronics NV), which are headquartered in the Netherlands. One last observation should be considered with regard to one of the Italian companies that has been defined as serial acquirer, in particular super-acquisitive, i.e. Stellantis NV. Indeed, this entity was founded in 2021 from the merger of Fiat Chrysler and PSA Group (legally know as Peugeot SA). Hence, when selecting the number of deals carried out during the 2010-23 time horizon, for the years preceding the foundation of Stellantis NV, the historical Fiat Group, founded in 1899 by the Agnelli family, is considered as the reference company. In particular, from a purely historical perspective, Fiat Group and the American Chrysler Group announced a global alliance, with an initial 20% stake of the former in the latter, thus initiating a period of profound reorganization. The Group was fundamentally reshaped with the disposal of its capital goods business and the creation of two distinct entities, Fiat and Fiat Industrial. Therefore, in 2014, the Italian company at the time led by Sergio Marchionne increased its stake in Chrysler Group to 100%, thus paving the way for the consequential formal union of the two groups and the creation of a multinational organization in the form of a fully integrated global automaker within a 4-year strategic plan, until 2018. In 2021, as anticipated, Fiat Chrysler and the French Group

[1] Within this research project, *TMT* includes a variety of verticals, such as Telecommunications, Software as a service (SaaS), providers of AI solutions, System Integrators, IoT and Cybersecurity corporations

PSA approved an all-stock cross-border merger aimed at creating the fourth largest global automotive OEM by volume and third largest by revenues (Stellantis North America, n.d.). Considering that the main shareholder of the new entity, i.e. Stellantis NV, has always been the Agnelli family via the Exor NV vehicle (currently 14.9%[2] vs 7.4%[3] for PSA) since the foundation in 2021, Stellantis is deemed to be an Italian company as well as what is left of one of the most renowned and prestigious corporations in the Italian industrial landscape. Therefore, it was considered in the screening process for the analysis at the Italian level. Regardless of these exceptions, the 228 corporations included in the database have Italian foundations and are deemed to determine its industrial DNA. Starting from this core structure, the next step consisted in collecting data for each company in terms of number of deals and type of strategic purpose pursued from 2010 to 2023. Based on the definitions provided in Sections 2.1 and 2.1 in relation to the *acquisitiveness* and *super-acquisitiveness* paradigms, a distinction between Italian acquirers and super-acquirers was considered. Moreover, for completeness's sake, companies have been categorized also based on two additional variables, considering that they grew organically (almost purely) or by means of a mix of organic and inorganic strategies (*Tier 3*). The final set of definitions concerning the *theoretical framework* is summarized in Table 7.

Theoretical framework	***Definition***
Purely Organic	Companies engaging in n deals such that $n < 3$ throughout a pre-defined long-term horizon
Mixed Growth	Companies engaging in n deals such that $3 < n \leq 15$ throughout a pre-defined long-term horizon

[2] FactSet, as of 11/08/2024
[3] FactSet, as of 11/08/2024

Acquisitive	Companies engaging in n deals such that 15 < n ≤ 20 throughout a pre-defined long-term horizon
Super-acquisitive	Companies engaging in n > 20 deals throughout a pre-defined long-term horizon

Table 7. Final overview of the theoretical framework

Source: own elaboration

As a result, the following categorization emerged:

Growth strategy	**#**
Purely Organic	110
Mixed Growth	87
Acquisitive	8
Super-acquisitive	23

Table 8. Categorization based on the theoretical framework

Source: own elaboration

The result of this data collection process confirms the limited number of consolidators in the Italian corporate arena. Moreover, out of the 400+ firms listed on the Italian Stock Exchange, across all its segments, the total number has been cut down to 228, according to the exclusions mentioned in the previous paragraph. In addition, firms for which the retrieval process for some financial figures was not possible were excluded as well. The total number of deals executed by the identified companies equals 1,735. After counting

the number of deals per company, the next step was to analyze the type of acquisitions each firm executed in terms of purpose, to capture the specific rationale for the M&A strategy, according to the three categorizations discussed in Section 2.1. These additional data are instrumental in understanding not only how much the number of deals has an impact in terms of stock market and operational performance, but also whether consolidating, diversifying, differentiating, horizontally or vertically, nationally or on a cross-border perspective, contribute more or less to market- and accounting-based results in the long haul. The following table summarizes the number of total deals identified for each type of deal across the three categorizations[4]:

Category 1		***Category 2***		***Category 3***	
#Consolidation	1,199	#Horizontal	1,413	#National	1,058
#Diversification	389	#Vertical	322	#Cross-border	677
#Differentiation	147				

Table 9. Division by strategic purpose

Source: own elaboration

The second database, as anticipated, excludes companies that went public in the years following 2010, for comparability's sake. According to this assumption, 88 companies have been factored in, across the same industries as before.

[4] The three categorizations are mutually exclusive, meaning that the sum of the deals within each category is equal to the total number of deals identified, i.e. 1,735

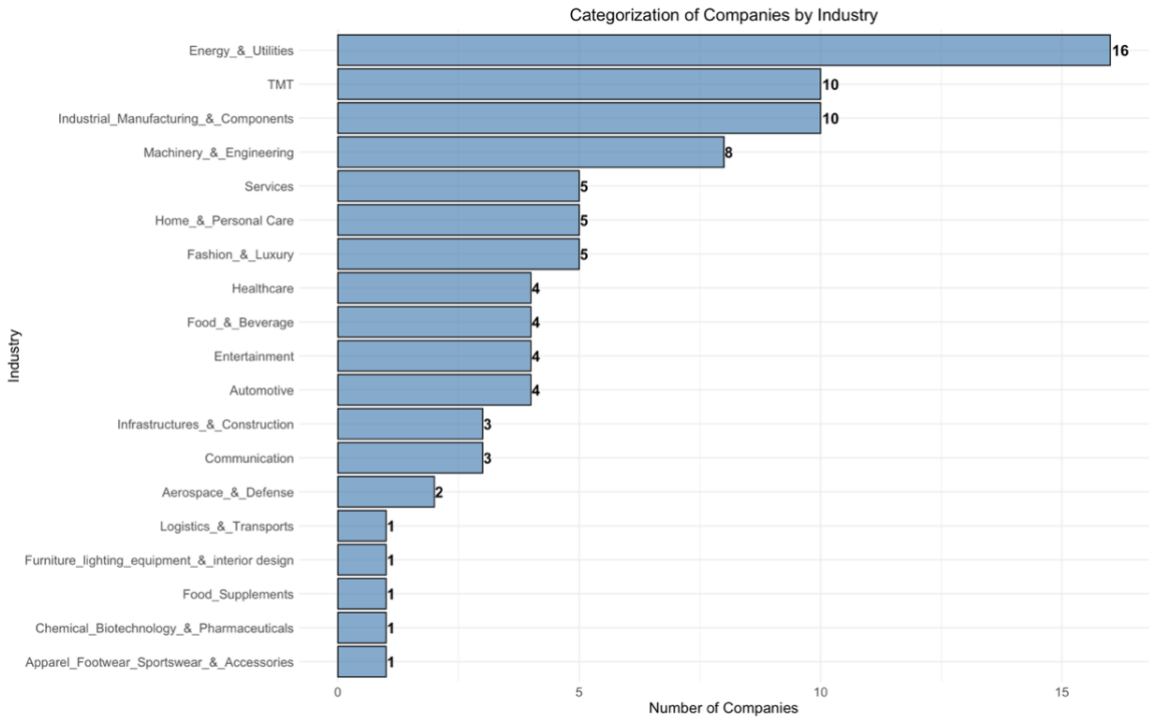


Figure 4. Summary of industry categorization

Source: own elaboration trough R software

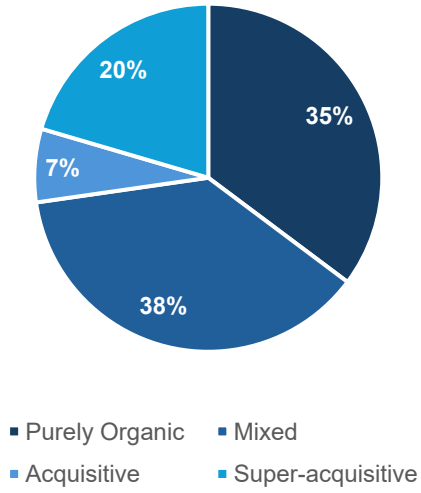
As a result of the *acquisitiveness* framework used before, the following categorization emerged:

Growth strategy	**#**
Purely Organic	31
Mixed	33
Acquisitive	6
Super-acquisitive	18

Table 10. Categorization based on the theoretical framework

Source: own elaboration

Figure 5. Categorization based on theoretical framework



Not surprisingly, the number of acquirers and super-acquirers within the sample is limited, relative to firms that rely on a purely organic or mixed growth strategy. In addition, the total number of deals executed by the identified companies equals 1,035. Once again, the next step consisted in analyzing the type of acquisitions per company. The following table summarizes the number of total deals identified for each type of deal across the three categorizations, in terms of strategic purpose:

Category 1		***Category 2***		***Category 3***	
#Consolidation	673	#Horizontal	828	#National	573

#Diversification	287	#Vertical	207	#Cross-border	462
#Differentiation	75				

Table 11. Division by strategic purpose

Source: own elaboration

Finally, for the two databases, figures referring to stock market performance and operational conduct have been collected, via LSEG Refinitiv, FactSet and annual reports, as well as other publicly available information. Specifically, when considering stock market performance, the following metrics have been considered:

	Stock-market variables	***Brief Definition***
Dependent variables	Price_CAGR	*Compound annual growth rate of the share price in the pre-defined time horizon*
	PriceChange_cum	*Total change (%) in the price of the share in the pre-defined time horizon on a cumulated basis*
	TR_CAGR	*Compound annual growth rate of Total Shareholder's Return in the pre-defined time horizon*
	TR_cum	*Total shareholder's return in the pre-defined time horizon on a cumulated basis*

Table 12. Overview of the stock-market variables

Source: own elaboration

Price_CAGR represents the compound annual growth rate (CAGR) of the share price. It is the geometric average of the growth rate in the pre-defined time horizon, thus showing how much the stock price has grown or decreased annually on average. *PriceChange_cum* is the total percentage change in the price of the share in the pre-defined time horizon on a cumulated basis. In a similar fashion, *TR_CAGR* stands for the compound annual growth rate of Total Shareholder's Return, thus factoring in both price appreciation and reinvested dividends and representing the geometric average of the annual growth rate of TSR. Lastly, *TR_cum* is the TSR on a cumulated basis. Considering that the latter variables include dividends, they are deemed to provide a more comprehensive overview of the return profile for investors. These metrics, both in their annual and cumulated bases, represent the dependent variables within the context of the empirical analysis in relation to the stock market performance. Moreover, the GAGR of Price Change and TSR and the subsequent cumulations over time, which will be considered also for other variables related to operational performance (as explained later in the paragraph), have been computed with the following formulas:

$$(a)\ CAGR\ =\ (\frac{Value\ EoP}{Value\ BoP})^{1/\tau}\ -\ 1$$

$$(b)\ CAGR\ cumulated\ =\ (1+\ CAGR)^{\tau}\ -\ 1$$

where:

- τ represents pre-defined time horizon (2010-2023)
- *EoP* stands for End of Period while *BoP* stands for Beginning of Period

In terms of operational performance, the following financial metrics have been considered:

	Operational variables	***Brief Definition***
Dependent variables	Avg_EBITDA_margin	*Average EBITDA margin over the pre-defined time horizon*
	Avg_EBITDA_margin_cum	*Average EBITDA margin over the pre-defined time horizon on a cumulated basis*
	Revenues_CAGR	*Annual growth rate of Revenues over the pre-defined time horizon, accounting for the effect of compounding*
	Revenues_CAGR_cum	*Annual growth rate of Revenues over the pre-defined time horizon, accounting for the effect of compounding, on a cumulated basis*
	EBITDA_CAGR	*Annual growth rate of EBITDA over the pre-defined time horizon, accounting for the effect of compounding*
	EBITDA_CAGR_cum	*Annual growth rate of EBITDA over the pre-defined time horizon, accounting for the effect of*

		compounding, on a cumulated basis
Explanatory variables	EPS_CAGR	*Annual growth rate of a company's earnings per share over the pre-defined time horizon, taking into account the effect of compounding.*
	Avg_ROCE	*Computed as EBITDA/Capital Employed, helps to understand how well a company is generating profits from its capital*
	Avg_ROCE_cum	*Computed on a cumulated basis as EBITDA/Capital Employed, helps to understand how well a company is generating profits from its capital*
	Avg_FCF_conv	*Computed as FCF/EBITDA, is a liquidity ratio that measures a company's ability to convert its operating profits into free cash flow*
	Avg_FCF_conv_cum	*Computed on a cumulated basis as FCF/EBITDA, is a liquidity ratio that measures a company's ability to convert its operating profits into free cash flow*

	Avg_Net_Leverage	*Computed as NFP/EBITDA, points out how many years of EBITDA are needed to pay back existing financial indebtedness*

Table 13. Overview of the operational variables

Source: own elaboration

Avg_EBITDA_margin is the average EBITDA margin as a percentage of Revenues over the pre-defined period. Within the Income Statement, EBITDA represents the most immediate proxy of cash flow generated by the company, by factoring in the top line and the costs of goods sold and operating expenses associated with the core business of the company, while excluding non-cash expense (i.e. Depreciation & Amortization). The peculiarity of EBITDA lies in its neutrality regarding capital structure and its insulation from the effects of taxation and non-operational policies (including Depreciation, Amortization and Impairments). EBITDA is a fundamental metric for assessing the impact of acquisitions on a company's operating performance. Additionally, the metric has been computed on a cumulated basis (*Avg_EBITDA_margin_cum*) to capture the compounded growth over 2010-2023, with the following formula:

$$(c)\ Avg\ EBITDA\ margin\ cumulated\ =\ Average\ yearly\ EBITDA\ margin\ *\ \tau$$

- where τ represents pre-defined time horizon (2010-2023).

Furthermore, *REVENUES_CAGR* and *EBITDA_CAGR* have been considered. The primary expectation is that acquisitive and super-acquisitive companies benefit from an increase in net sales, as an immediate result of the integration post-acquisition. When considering EBITDA, the aim is to verify whether an increase in sales is offset by the integration costs and the additional core business expenses that will add up to the pre-existing ones, thus potentially resulting in a dilutive type of transaction and making the total net effect on profitability irrelevant or negative. The second prediction is that especially super-acquisitive companies, based on the learning effect, should be able to integrate the target companies with a lower impact on the cost structure and much more flexibility, thus allowing for an increase in the top line prevail while keeping a good EBITDA level (as a stock value) and marginality (as a % of Revenues). These two metrics capture the compound annual growth rate over the 2010-2023 time span and have been considered also on a cumulated basis (*Revenues_CAGR_cum*, *EBITDA_CAGR_cum*), by using the abovementioned formulas (a) and (b). Once again, the aim is to focus on the long-term performance, thus preventing any short-term volatility or annual-specific event from having an impact on the final results. This framework allows to extract the compound effect of growth on a cumulated basis for the 13-year time frame. The average of EBITDA margin, as well as the CAGR of Revenues and EBITDA, both in their annual and cumulative versions, represent the three dependent variables used for the operational assessment of the companies. The other metrics in Table 13 have been factored in as explanatory variables, as an addition to the variables related to the *acquisitiveness* framework (treated as dummy variables) and the type of deals. *EPS_CAGR* represents the compound annual growth rate of a company's earnings per share (EPS). *Avg_ROCE* represents the average return on capital employed. It helps to understand how well a company is generating profits from its capital as it is put to use. *Avg_FCF_conv* is the average Free Cash Flow conversion and allows to capture how much EBITDA is translating in pure cash available as fire power for a variety of purposes, including acquiring other companies, investing in Capex, or for strategic choices in terms of Capital Structure, by means of paying back or refinancing existing debt, among others. *Avg_Net_Leverage* captures the solidity of the company's Capital Structure, thus defining how many years of EBITDA are needed to pay back existing financial indebtedness.

Finally, *Avg_ROCE* and *Avg_FCF_conv* have been considered on a cumulated basis throughout the 2010-23 time span as well (using the same rationale as in formula (c)), to highlight the long-term sustained level of performance. On another note, *Avg_Net_Leverage* and *EPS_CAGR* have been evaluated exclusively on an annual basis. Theoretically, expressing the first metric in any other unit of measure would have obviously led to insignificant results, while as for the CAGR of EPS, the cumulation over time was discovered to create many outliers and volatility in the dataset. Hence, it was not considered. Based on the *theoretical framework*, before going through the empirical analysis, it is noteworthy to point out the first main findings, following the simple data collection process. The Figures that are presented below are exclusively related to the second database, which is the most appropriate one, considering the temporal consistency for data collected for each company[5]. Figure 6 shows that within the top 10 acquisitive companies, based on the number of deals, Eni ranks first, with a very high number of deals, followed by Enel and Stellantis (where the number of deals obviously also factors in the deals carried out by Fiat Group in the 2010-2013 time span and Fiat Chrysler Automobiles in the 2014-2021 time frame, before the 2021 merger with PSA).

[5] In Section 4.2.2, a more detailed explanation on the reason why the first database was overlooked will follow.

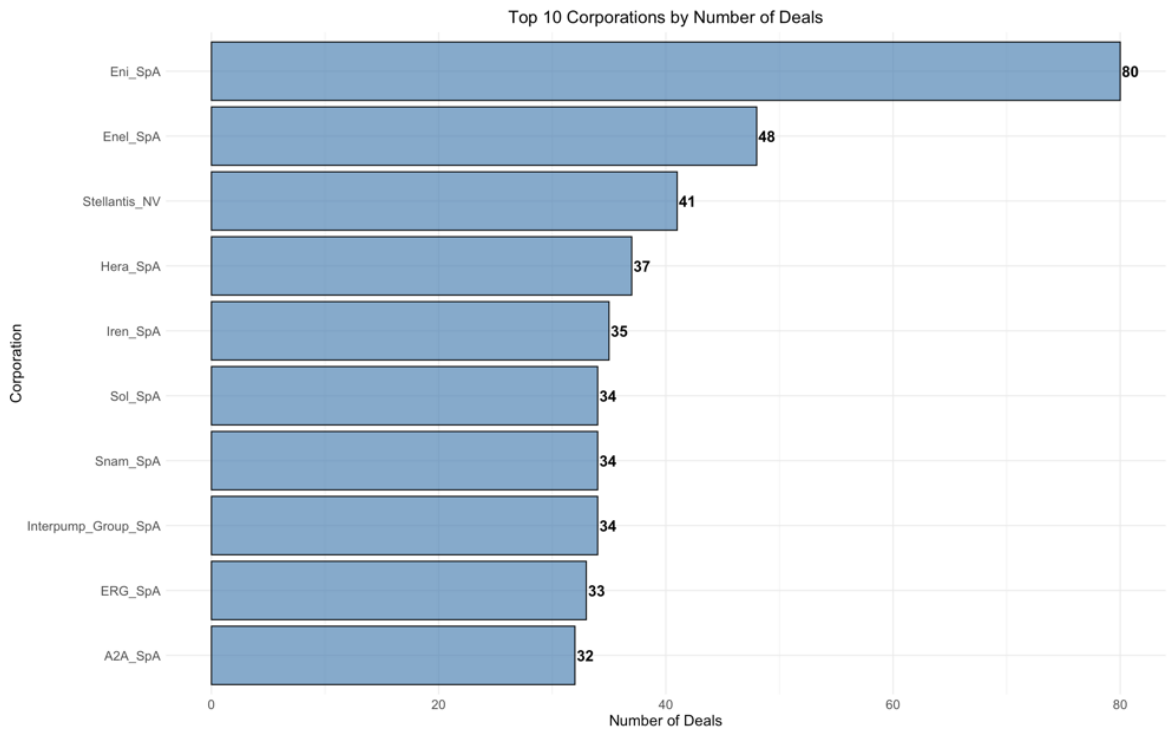


Figure 6. Ranking of companies based on #deals

Source: own elaboration trough R software

When focusing on the long-term historical performance, according to the *theoretical framework*, Figures 7-11 provide a quick overview of the market- and accounting-based positioning of the selected companies. In terms of stock market (Figures 7-8), both for Price Change and Total Return, super-acquisitive (fourth bar) and acquisitive companies (first bar) showcase better results than mixed (second bar) and organic (third bar) growth firms, in particular the formers. These findings are confirmed by Figures 9-11, which point out the operational performance, in terms of CAGR of Revenues and EBITDA cumulated over time. The only situation wherein acquisitive companies outperform their super-acquisitive counterparts happens for yearly average EBITDA margin in its non-cumulated version (Figure 11). On another note, it is important to notice that the

Interquartile (IQR) bars, by accounting for data spread, suggest that there is a certain degree of variability in the data, especially for the *Super-acquisitive* variable (see the fourth bar in Figures 7-11). Within this cluster, some companies showcased very high or very low returns or growth dynamics in terms of accounting metrics. Generally speaking, the high standard deviation (~258%) computed for the whole set of both dependent and independent variables confirms such structural variability. However, when considering the standard deviation for the data on a non-cumulated basis, the figure is much lower and amounts to ~16.4%. After all, by computing metrics on a compounded basis, any kind of variability in the yearly data, even though negligible, accumulates. Hence, moderate or low year-to-year variations may result in larger divergences on a cumulative basis in the long-term. Considering that this empirical analysis is based on cumulated figures, such variability can be considered as structurally reasonable. Nonetheless, model diagnostics and transformations implemented for the variables in order to reduce their variability will be considered in Section 4.3.

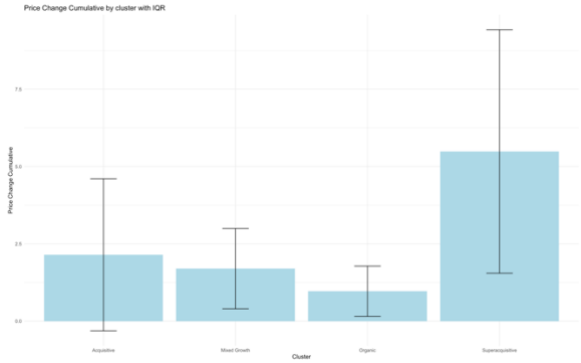


Figure 7. Price Change cumulative with IQR

Source: own elaboration through R software

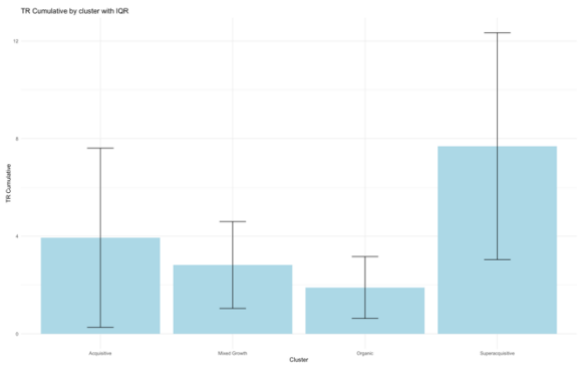


Figure 8. TR cumulative with IQR

Source: own elaboration through R software

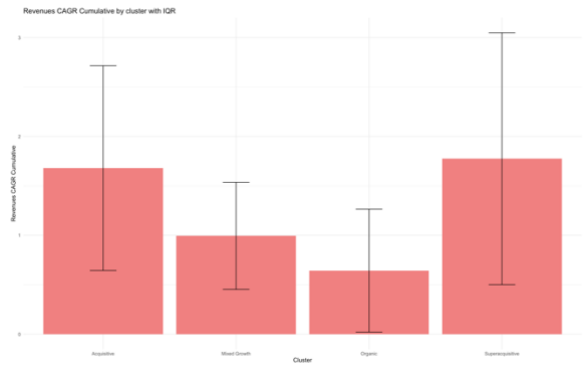


Figure 9. Revenues CAGR cumulative with IQR

Source: own elaboration through R software

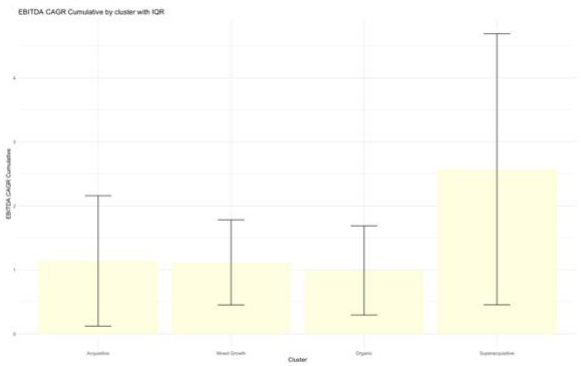


Figure 10. EBITDA CAGR cumulative with IQR

Source: own elaboration through R software

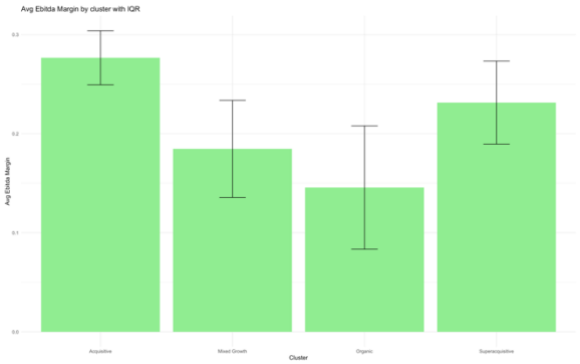


Figure 11. Avg EBITDA margin with IQR

Source: own elaboration through R software

4.2.2. Model specification

Based on this data collection process and once the main assumptions in building the complete databases have been clarified, the research questions will be discussed by means of an empirical analysis.

To test the hypotheses outlined in Section 4.1, an econometric analysis has been used, with the simplest form of a linear regression model, as follows:

$$y_i = \beta_0 + \beta_i \mathrm{x}_i + \varepsilon$$

Where y_i is either the Total Return, on an annual basis or cumulated over the pre-identified time-horizon, or the Price Change, on an annual basis or cumulated over the pre-identified time-horizon, the Average EBITDA margin, the CAGR of Revenues or CAGR of EBITDA, each of them on an annual or cumulated basis. x_i is the set of explanatory variables, i.e. the independent variables that have been mentioned above. Finally, β_0 and β_i are the coefficients to be estimated. Furthermore, considering that the focus of this research project is on long-term effects, the final decision was to prioritize the analysis of the dependent variables presented in Section 4.2.1 only and exclusively in their cumulative version. Accordingly, in the first instance, four models based on long-term metrics will be implemented by means of ordinary least squares estimators (OLS). Secondly, with the objective to capture the impact of being acquisitive on a yearly basis, a fifth model will be investigated, with a focus on the EBITDA margin only[6].

The OLS regressions will be coupled with some checks on the robustness of the models. The focus will be on multicollinearity. Indeed, the independent variables should not be

[6] Please note that four variables based on an annual unit of measure, i.e., *Price_CAGR*, *TR_CAGR*, *Revenues_CAGR*, *EBITDA_CAGR* and one variable based on a cumulative unit of measure, i.e. *Avg_EBITDA_margin_cum*, have not been considered for the OLS regressions; hence, 5 out of 10 potential models have been investigated.

highly correlated with each other; a high multicollinearity would make it difficult to distinguish the individual effects of the explanatory variables on the dependent variables, thus weakening what statisticians define as the “signal” of each predictor. Starting from the general models, a few improvements will be applied to guarantee consistency with the intrinsic assumptions associated with OLS regressions and based on the absence of multicollinearity. Indeed, as Maulud & Abdulazeez (2020) point out, such assumptions affect the accuracy of estimates and inferences.

Before delving into the estimation of OLS regression models, it is important to highlight the decision to exclusively focus on the second database, as already anticipated at the Descriptive Analysis level. Indeed, when trying to implement the empirical analysis on the first database, which factors in also companies that went public following 2010, the statistical significance of the results was poor. On another note, it is worth mentioning that some adjustments aimed at solving the inter-company comparability issue and the structural discrepancy in terms of data collected across different time horizons had been considered, before investigating the OLS regressions for this more comprehensive panel of corporations, as follows:

- After counting the number of years available for the computation of both returns (for the stock market performance) and financials (for the operational performance), the dummy variables *years_returns_dummy* and *years_financials_dummy* had been created. They assumed value equal to 1, if the whole set of 13 years (2010-2023 time frame) was available for each of the company for the computation of returns and financials, whereas the value would have been equal to 0 if a number lower than 13 was available.
- For the companies for which only a number lower than 13 was available, a “penalization” term had been created when computing cumulated metrics over the time horizon. Specifically, the cumulated figure had been multiplied by *number of years available/total number of years in the time horizon (13)*.

Nonetheless, as already anticipated, the results were not statistically significant. After all, applying this method would have implied a structural deficiency, despite of the utilization

of a penalization term. Indeed, the underlying assumption was that the growth rate observed in *n* (where *n* < 13) years would have been comparable and replicable in the 13-year interval. Hence, the model assumed that financial performance would have been constant and linear over the long haul and that companies would have grown at the same rate also for the years where no data were available. Furthermore, besides this theoretical issue, the performance of corporations was quite volatile (even) on a yearly basis (e.g. 52.6% of volatility for the CAGR of EBITDA of the corporations) probably due to the different business cycles and maturity they were facing (considering that this database included both mature and newly born firms). Overall, these results demonstrate that the attempt to adjust for the temporal discrepancy in the data was a too strong assumption and its consequences manifested with poor statistical results. Hence, the first database was ultimately excluded and hence the empirical analysis will be investigated exclusively for the second database, in the way it has been depicted before.

Models (1) and (2) are related to stock market performance. They will be used to test *H1* and *H2*, as well as *H5*. Consistently with the *theoretical framework* based on long-term market performance, the focus is on the dependent variables in their cumulated version (*PriceChange_cum* and *TR_cum*). Accordingly, when considering the set of explanatory variables, the ROCE and FCF conversion will be factored in on a cumulated basis (*Avg_ROCE_cum* and *Avg_FCF_conv_cum*) as well. Table 13.1 summarizes the whole set of variables that will be used for Model (1) and Model (2), before the adoption of any adjustment (as Section 4.3 will show).

	Model (1) and Model (2)	***Notes***
Dependent variables	PriceChange_cum	*Stock market metric, cumulated version*
	TR_cum	*Stock market metric, cumulated version*
	EPS_CAGR	*Financial metric*

Explanatory variables	Avg_ROCE_cum	*Financial metric, cumulated version*
	Avg_FCF_conv_cum	*Financial metric, cumulated version*
	Avg_Net_Leverage	*Financial metric*
	Organic	*Dummy*
	Mixed_Growth	*Dummy*
	Acquisitive	*Dummy*
	Super_acquisitive	*Dummy*
	#Consolidation	*Type of deal, Category 1*
	#Diversification	*Type of deal, Category 1*
	#Differentiation	*Type of deal, Category 1*
	#Horizontal	*Type of deal, Category 2*
	#Vertical	*Type of deal, Category 2*
	#National	*Type of deal, Category 3*
	#Cross_border	*Type of deal, Category 3*

Table 13.1. Variables used in Model (1) and Model (2)

Source: own elaboration

In addition to the variables shown in Table 13.1., some interaction variables have been included. They combine dummy variables (i.e. *Acquisitive* and *Super_acquisitive*) with (i) some of the financial metrics (i.e. *EPS_CAGR*, *Avg_ROCE_cum*, *Avg_FCF_conv_cum*) and/or (ii) the strategic purpose that is meant to be more consistent with the *theoretical*

framework of this thesis (i.e. *#Consolidation*). Integrating interaction terms within regression models allows to extract whether the effect of an explanatory variable on the dependent variable depends on another independent variable. This is particularly useful when the combined impact of two variables might potentially diverge from the sum of the individual impacts. Lastly, it is worth mentioning that this combination can be easily applied within the context of these models because one of the interacting variables is always a dummy variable (i.e., *Acquisitive* and *Super_acquisitive*). Therefore, its presence is always detectable, making the overall impact of the interaction variables on the dependent variables easily interpretable. If both interacting variables were continuous, understanding how they interact and their total impact on the dependent variables would be more challenging.

Explanatory variables	Acquisitive*EPS_CAGR	*Interaction variable*
	Super_acquisitive*EPS_CAGR	*Interaction variable*
	Acquisitive*Avg_ROCE_cum	*Interaction variable*
	Super_acquisitive*Avg_ROCE_cum	*Interaction variable*
	Acquisitive*Avg_FCF_conv_cum	*Interaction variable*
	Super_Acquisitive*Avg_FCF_conv_cum	*Interaction variable*
	Acquisitive*#Consolidation	*Interaction variable*
	Super_acquisitive*#Consolidation	*Interaction variable*

Table 13.2. Variables used in Model (1) and Model (2)

Source: own elaboration

Specifically, the first six variables express how the combination of being acquisitive or super-acquisitive and the way the company performs from a profitability and cash generation perspectives has an impact on the dependent variables. In other words, if the interaction is discovered to be statistically significant, the effect of being acquisitive or super-acquisitive on the Total Return and Price Change varies based on the extent to which the firm showcases certain figures in terms of EPS, ROCE and FCF conversion. On the other side, *Acquisitive*#Consolidation* and *Super_acquisitive*#Consolidation* capture the combined effect of being acquisitive or super-acquisitive and the number of consolidation deals on Total Return and Price Change. A significant interaction may suggest that tapping into an M&A program based on consolidation as a strategic purpose has a different impact on the stock-market performance for acquisitive or super-acquisitive companies compared to non-acquisitive ones.

Starting with the above-mentioned set of variables as a starting point, Model (1) and Model (2) have been subsequently subjected to adjustments in order to identify the best subset of predictive variables among such a large number of candidates. The most suitable approach for improving the model and make it more efficient was deemed to be a stepwise kind of methodology. It systematically adds and removes independent variables to determine the model that best fits the data. Specifically, the RegSubset package in R was utilized, thus implementing a forward selection process, starting with no variables and adding them one at a time. This function allows to extract the optimal subset of explanatory variables of a certain regression model, where “optimal” is defined consistently with the researcher’s chosen optimization algorithm. The package taps into various selection criteria (i.e. R^2, Akaike Information Criterion (AIC), Bayesian Information Criterion (BIC)), thus offering flexibility in the identification of the right model. In this case, the sub-models with the best Bayesian Information Criterion (BIC) and Akaike Information Criterion (AIC) were chosen, thus guaranteeing parsimony in terms of predictors (Maulud & Abdulazeez, 2020). Indeed, this approach allowed to evaluate the goodness of fit of various models by means of penalizing for the number of variables factored in. Moreover, for each explanatory variable, the natural logarithm is used to manage variability in the data and reduce the effect of extremely high and low values, thus resolving the problems associated with outliers and variability (as the Figures 7-11 in Section 4.2.1 showcased

mainly in relation to cumulated figures). Adding *+1* allows to avoid mathematical issues with the logarithm of zero. Finally, the square of the number of deals is used to model a non-linear relationship between the number of deals and the dependent variables. Indeed, this function perfectly works when analyzing raw financial data, by applying transformations that are a catalyst for the identification of the best sub-models.

As far as Model (3), Model (4) and Model (5) are concerned, they refer to the operational performance. Specifically, Model (3) has *Revenues_CAGR_cum* as a dependent variable, while Model (4) focuses on the impact on *EBITDA_CAGR_cum*. Therefore, they focus on the long-term conduct of the selected companies. Consequently, the same set of independent variables presented in Table 13.1 and Table 13.2 has been utilized. On the other side, Model (5) aims at pointing out the effect on *Avg_EBITDA_margin*, thus focusing on the short-term yearly performance. Therefore, independent variables are included in their annual version rather than on a cumulated basis (*Avg_ROCE* and *Avg_FCF_conv*). Moreover, an additional variable has been considered for this model: *Annual_deals*, which captures the average number of deals performed annually by each company, starting from the total number over the 2010-2013 time horizon. All the other variables are factored in, as in the previous models.

4.3. Results

In this Section, an overview of the main findings for each model will be provided in order to answer the research hypotheses and discuss the potential existence of a statistically significant relationship between the dependent variables, i.e. the Price Change, the Total Return for shareholders, the CAGR of Revenues, the CAGR of EBITDA and the Average EBITDA margin, and the *acquisitiveness* framework, from which the explanatory variables that are deemed to be more relevant have been extracted.

4.3.1. H1 and H2: impact of *acquisitiveness* on stock market performance

As pointed out in Section 4.2., Model (1) aims at analyzing the potential impact of being acquisitive or super-acquisitive on the Price Change cumulated over the pre-defined time horizon, i.e. 2010-2023. Model (2) addresses the same kind of effect on the Total Return cumulated as well, thus factoring in the reinvestment of dividends. Tables 14 and 15 provide an overview of the regression models, following the improvements implemented thanks to the RegSubset package in R. Therefore, for both models, a subset of all the potential explanatory variables, as depicted in Section 4.2, has been considered.

```
Residuals:
    Min      1Q  Median      3Q     Max
-4.3676 -1.3714 -0.1433  0.9181  9.9992

Coefficients:
                                Estimate Std. Error t value Pr(>|t|)
(Intercept)                    -2.011037   1.489272  -1.350 0.181019
Avg_ROCE_cum                    1.632856   0.528540   3.089 0.002825 **
Super_acquisitive              -7.511716   2.192783  -3.426 0.001004 **
log(`#Consolidation` + 1)       1.891047   0.676485   2.795 0.006599 **
`#Diversification`              0.580188   0.208819   2.778 0.006919 **
I(`#Diversification`^2)        -0.011017   0.004263  -2.584 0.011729 *
`#Vertical`                    -1.067658   0.505273  -2.113 0.037971 *
I(`#Vertical`^2)                0.017100   0.008869   1.928 0.057683 .
log(`#Vertical` + 1)            2.551435   1.433630   1.780 0.079230 .
`#National`                    -0.659345   0.159536  -4.133 9.33e-05 ***
I(`#National`^2)                0.016136   0.004162   3.877 0.000227 ***
Organic                         0.550141   1.060565   0.519 0.605501
Acquisitive                    -0.340154   1.541164  -0.221 0.825924
Avg_ROCE_cum:Super_acquisitive 11.779234   1.466949   8.030 1.14e-11 ***
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 2.529 on 74 degrees of freedom
Multiple R-squared:  0.7632,    Adjusted R-squared:  0.7216
F-statistic: 18.35 on 13 and 74 DF,  p-value: < 2.2e-16
```

Table 14. Model (1) – PriceChange_cum

Source: analysis carried out through R software

```
Residuals:
    Min      1Q  Median      3Q     Max
-6.3494 -2.1812 -0.4813  1.6914 12.2113

Coefficients:
                                Estimate Std. Error t value Pr(>|t|)
(Intercept)                    -3.024271   2.101085  -1.439 0.154258
Avg_ROCE_cum                    2.737905   0.745672   3.672 0.000452 ***
Super_acquisitive              -9.098061   3.093609  -2.941 0.004365 **
log(`#Consolidation` + 1)       2.343670   0.954395   2.456 0.016410 *
`#Diversification`              0.782868   0.294604   2.657 0.009644 **
I(`#Diversification`^2)        -0.014755   0.006015  -2.453 0.016519 *
`#Vertical`                    -1.453133   0.712846  -2.038 0.045074 *
I(`#Vertical`^2)                0.023967   0.012512   1.915 0.059297 .
log(`#Vertical` + 1)            3.690416   2.022585   1.825 0.072097 .
`#National`                    -0.787173   0.225075  -3.497 0.000799 ***
I(`#National`^2)                0.020194   0.005871   3.439 0.000961 ***
Organic                         1.110096   1.496260   0.742 0.460488
Acquisitive                    -0.625572   2.174295  -0.288 0.774371
Avg_ROCE_cum:Super_acquisitive 13.801876   2.069592   6.669 4.05e-09 ***
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 3.567 on 74 degrees of freedom
Multiple R-squared:  0.7183,    Adjusted R-squared:  0.6688
F-statistic: 14.52 on 13 and 74 DF,  p-value: 1.744e-15
```

Table 15. Model (2) – TR_cum

Source: analysis carried out through R software

As far as Model (1) is concerned, it can explain ~76.3% (R^2) of the variability in the dependent variable (*PriceChange_cum*). The Adj. R^2, accounting for the number of predictors in the model and thus adjusting for overestimation given a relatively high

number of independent variables, suggests that the model explains ~72.2% of the variance in the dependent variable. This provides an indication of a reasonably good fit, thus highlighting the model's explanatory power. The F-statistic of 18.35 with a p-value < 2.2e-16 indicates that the overall model is statistically significant and therefore there is strong evidence against the null hypothesis that all predictor coefficients are equal to zero. As for the statistical significance of the various regressors, the following results can be extracted. The *Organic* variable has a slightly positive coefficient (~0.55) but not statistically significant (p-value of ~0.61). Consequently, according to this model and its underlying assumptions, corporations that make organic growth foundational to their long-term strategy do not seem to be able to positively influence their stock market performance, in the form of Price Change cumulated over time. However, the same conclusion applies for the *Acquisitive* variable, with a slightly negative coefficient of c. -0.34 but not statistically significant (p-value of ~0.83). On the other side, the *Super_acquisitive* variable provides a relevant result. Firstly, its coefficient of c. -7.51 is statistically significant (p-value of ~0.001). In contrast with expectations, these results suggest that “basic” acquisitive companies are not able to influence their long-term stock market performance, while companies classified as super-acquisitive tend to have a negative impact on the Price Change of their stock. Nonetheless, when factoring in the interaction of the *Super_acquisitive* variable with *Avg_ROCE_cum*, results are completely turned around and align with the *theoretical framework*. Indeed, the interaction variable *Avg_ROCE_cum*Super_acquisitive* has a statistically significant positive coefficient (~11.78), with a p-value of 1.14e-11. This means that while being super-acquisitive on a standalone basis generally results in a negative coefficient, thus suggesting a negative impact on the Price Change, the interaction with *Avg_ROCE_cum* completely reverses this effect as long as firms can achieve high Return on Capital Employed. From a theoretical perspective, the takeaway is that high costs and risks associated with serial M&A programs can be mitigated and turned into market-based advantages if the company maintains a strong financial performance based on efficient capital allocation. The total net effect of the *Super_acquisitive* variable is positive (+4.73), considering that the coefficient of interaction with *Avg_ROCE_cum* is multiplied by the average cumulated ROCE of the whole set of companies selected in the database (~104%).

In a very similar fashion, Model (2) can explain ~71.8% (R^2) of the dependent variables' variance. By factoring in the number of regressors that have been utilized and thus adjusting for a potential overestimation, the measure slightly decreases to ~66.9% (Adj. R^2). These figures, coupled with a high F-statistic (14.52) and a p-value close to zero (1.744e-15), prove that the model is statistically significant: the null hypothesis that predictor coefficients are equal to zero can be rejected. Moreover, the analysis of the statistical significance of the various regressors is perfectly in line with Model (1). The combined effect of being a super-acquirer and having high Return on Capital Employed has a very positive and statistically significant impact on Total Return, thus offsetting the negative impact of the *Super_acquisitive* variable in its standalone version. The total net effect of the *Super_acquisitive* variable is +5.25 (based on the same computations as before). Therefore, when factoring in the reinvestment of dividends (by considering *TR_cum* as dependent variable instead of *PriceChange_cum*), the net effect of being a super-acquirer is even higher relative to considering just the Price Change as a dependent variable. On the other side, for *Organic* and *Acquisitive*, the same results as before hold.

When analyzing the other significant explanatory variables of both Model (1) and (2), additional considerations emerge. Indeed, for Model (1), *log(#Consolidation + 1)* has a positive coefficient (~1.89) with a significant p-value (0.006599), thus suggesting that as the number of deals based on consolidation as a strategic purpose increases, the Price Change faces a positive trend upward, even though such escalation tends to decline as the number of deals increases (which is suggested by the shape of the logarithmic function). The same applies for Model (2), despite of a lower statistical significance (p-value of 0.016410). Additionally, for both models, when considering the number of deals carried out in Italy (*#National*), the coefficient is negative (c. -0.66 and c. -0.79, respectively), but positive for its square term (~0.02 for both), thus suggesting the existence of a non-linear relationship where the number of national deals in the first instance negatively affects stock price trends, but beyond a certain threshold, additional national deals result in increased returns. The evidence on consolidation and national deals seems to be coherent with the *theoretical framework*. Indeed, the Italian industrial DNA is crawling with a variety of SMEs across several industries, with a high level of

fragmentation. Therefore, there is plenty of opportunities of consolidation strategies for bigger corporations and the statistical analysis points out the potentially positive impact of such initiatives on long-term stock market performance.

To sum up, while these Models show that the first research hypothesis (*H1*) regarding acquisitive companies cannot be proven as reasonable according to this methodology, the second hypothesis (*H2*) is confirmed. Super-acquisitive companies can positively affect stock market performance, by means of both Price Change and Total Return, relative to non-acquisitive companies.

Before moving forward to the analysis of *H3* and *H4*, it is helpful to implement some robustness checks for the existence of multicollinearity, i.e. the potential correlation between the independent variables. Indeed, its absence represents one of the assumptions that underlie simple linear OLS regressions. Accordingly, in the first instance, this argument has been tested by means of a correlation matrix. In particular, the initial aim consisted in depicting the potential correlation existing between the explanatory variables in their standard version, before any transformation and selection of the most significant variables were implemented through the RegSubset package. Hence, all the variables for which the correlation has been investigated are linear. Figure 12 shows that, generally speaking, even when considering the whole set of potentially explanatory variables, there is no reason for concern in terms of multicollinearity. Indeed, despite of some positive and high correlation between some of the variables (e.g. those representing the type of deal in terms of strategic purpose expected by the buyer), the independent variables tend to have low or moderate correlations with each other. For instance, the *Acquisitive* variable has very low correlation with most of the other ones (e.g. 0.02 with *#Differentiation* and 0.14 with *Avg_ROCE_cum*). The same holds for *Super_acquisitive* (e.g. 0.07 with *EPS_CAGR* and -0.12 with *Avg_ROCE_cum*). Interestingly, *#Consolidation*, *#Vertical* and *#Diversification* have no correlation whatsoever with *EPS_CAGR*.

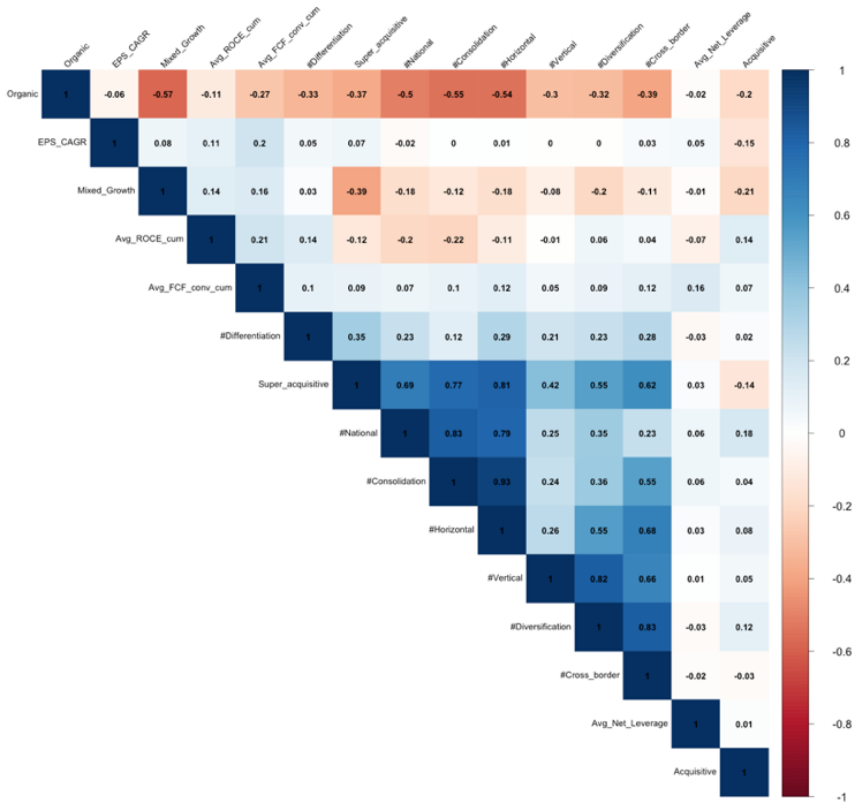


Figure 12. Correlation matrix for the variables in their standard version

Source: analysis carried out through R software

Figure 13 and Figure 14 provide the correlation matrix for Model (1), specifically for the variables that have been ultimately considered following the application of the RegSubset package. The high correlations among variables like *#Diversification* and *#I(Diversification^2)*, or *#National* and *I(#National^2)* in both models are physiological and expected due to the nature of these transformations. Indeed, they share the same kind of original information, which results in high multicollinearity. However, this does not pose an issue as such adjustments are factored in with the aim to capture non-linear relationships between the explanatory variables representing the type of deal in terms of

strategic purpose and the dependent variables (Aiken & West, 1991). Moreover, the perfect correlations between interaction terms and their basic variables on a standalone basis, i.e. *Super_acquisitive* and *Avg_ROCE_cum*Super_acquisitive*, are deemed to be intrinsic and structural due to the way these terms are built. This is expected because *Super_acquisitive*Avg_ROCE_cum* is an interaction term involving *Super_acquisitive*. Therefore, in such case high correlation does not represent a risk.

All in all, despite of the persistently high correlation inherent with the type of deals, correlations among variables are generally negligible or moderate, thus suggesting the absence of multicollinearity.

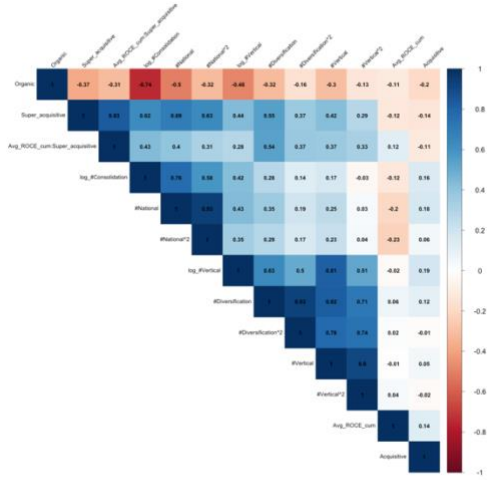


Figure 13. Model (1) – Correlation matrix for the variables following the implementation of RegSubset

Source: analysis carried out through R software

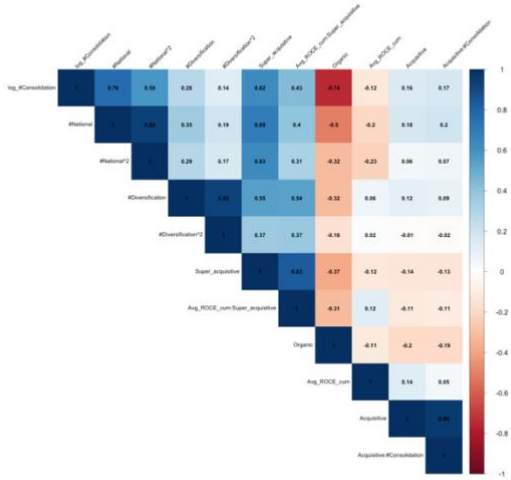


Figure 14. Model (2) – Correlation matrix for the variables following the implementation of RegSubset

Source: analysis carried out through R software

Finally, considering that the correlation matrix alone does not perfectly capture the existence of multicollinearity, a Variance Inflation Factor (VIF) analysis is performed as well. Based on Maulud & Abdulazeez (2020) or James et al. (2013), when VIF is equal to

or greater than 10, it is synonym for multicollinearity. As a consequence, a threshold of VIF ≤ 10 was considered. Consistently with the rationale followed in the choice of Model (1) and Model (2), the VIF analysis has initially been implemented on the overall set of variables identified in the database, before adjustments were applied with the RegSubset framework.

```
> print(vif_values_cleaned)
          EPS_CAGR       Avg_ROCE_cum   Avg_FCF_conv_cum   Avg_Net_Leverage
          1.087166           1.287019           1.198474           1.047999
      Mixed_Growth  Super_acquisitive        Acquisitive   `#Consolidation`
          2.141818           7.621930           1.826433          19.415042
`#Diversification` `#Differentiation`      `#Horizontal`        `#National`
          2.465850           1.877751          16.556167           3.740152
```

Table 16. VIF Analysis for the variables in their standard version

Source: analysis carried out through R software

Table 16 shows that, overall, the variables stand within the threshold, thus confirming the absence of relevant issues in terms of multicollinearity. Still, it is noteworthy to notice that *#Consolidation* and *#Horizontal* have a high VIF value, consistently with high correlation observed among the variables representing the type of deal. On another note, it is worth mentioning that in Table 16 some of the variables that are part of the whole set of explanatory variables (as depicted in Section 4.2) have been removed, following the identification and consequent elimination of aliased coefficients through the *alias* and *setdiff* functions in R. Aliased coefficients occur when there is high or perfect multicollinearity in the model, meaning that some variables in the model can be highly or perfectly predicted by a linear combination of other variables in the model.

```
> print(vif_values_cleaned)
                  Avg_ROCE_cum              Super_acquisitive
                      1.390206                      10.768201
     log(`#Consolidation` + 1)             `#Diversification`
                      6.850177                      27.042357
       I(`#Diversification`^2)                    `#Vertical`
                     16.870990                      89.609519
             I(`#Vertical`^2)          log(`#Vertical` + 1)
                     32.187278                      19.822120
                   `#National`              I(`#National`^2)
                     22.539773                      14.005442
                       Organic                    Acquisitive
                      3.532585                       2.077035
Avg_ROCE_cum:Super_acquisitive
                      5.600085
```

Table 17. Model (1) – VIF analysis for the variables following the implementation of RegSubset

Source: analysis carried out through R software

```
> print(vif_values_cleaned)
                  Avg_ROCE_cum              Super_acquisitive
                      1.390206                      10.768201
     log(`#Consolidation` + 1)             `#Diversification`
                      6.850177                      27.042357
       I(`#Diversification`^2)                    `#Vertical`
                     16.870990                      89.609519
             I(`#Vertical`^2)          log(`#Vertical` + 1)
                     32.187278                      19.822120
                   `#National`              I(`#National`^2)
                     22.539773                      14.005442
                       Organic                    Acquisitive
                      3.532585                       2.077035
Avg_ROCE_cum:Super_acquisitive
                      5.600085
```

Table 18. Model (2) – VIF analysis for the variables following the implementation of RegSubset

Source: analysis carried out through R software

Table 17 and Table 18 confirm the results obtained at the correlation matrix level. Specifically, variables related to the type of deal have high VIF values, exceeding the threshold. This is due in part to the presence of transformations of the same variables and the fact that some variables are considered in both in their stand-alone basis and when part of an interaction term. As already mentioned before, these high values of VIF are expected. Generally speaking, the main variables more directly associated with the *theoretical framework* have low VIF values. Lastly, the *Super_acqusitive* variable has a higher VIF value than in the general model (~10.8 vs ~7.6), due to the presence of the interaction variable in which it interacts with *Avg_ROCE_cum*. Therefore, once again, this is structurally expected and does not represent a reason for concern.

4.3.2. H3 and H4: impact of *acquisitiveness* on operational performance

Model (3), Model (4) and Model (5) aim at analyzing potential relationships between financial metrics, i.e. the CAGR of Revenues, the CAGR of EBITDA and the Average

EBITDA margin, respectively, and the set of explanatory variables that belong to the *acquisitiveness* framework. The aim is to provide an answer to the third and fourth research hypotheses (*H3* and *H4*) as well as the fifth (*H5*). In a fashion similar to the approach followed in Section 4.3.1, Tables 19 and 20 provide an overview of the regression models, following the improvements applied with the RegSubset package in R. Therefore, for both models, a subset of all the potential explanatory variables, as depicted in Section 4.2, has been considered.

```
Residuals:
    Min      1Q  Median      3Q     Max
-1.5593 -0.5733 -0.1597  0.4543  3.4433

Coefficients:
                                Estimate Std. Error t value Pr(>|t|)
(Intercept)                    -1.551959   0.584234  -2.656  0.00962 **
Avg_ROCE_cum                    0.891373   0.194018   4.594 1.69e-05 ***
Organic                         0.762599   0.412772   1.848  0.06857 .
Super_acquisitive              -2.726213   0.806383  -3.381  0.00114 **
log(`#Horizontal` + 1)          0.715173   0.260420   2.746  0.00752 **
`#Vertical`                    -0.524476   0.144448  -3.631  0.00051 ***
I(`#Vertical`^2)                0.011911   0.002887   4.125 9.39e-05 ***
log(`#Vertical` + 1)            1.504953   0.457786   3.287  0.00153 **
`#National`                    -0.062884   0.059271  -1.061  0.29207
I(`#National`^2)                0.003816   0.001557   2.451  0.01653 *
Acquisitive                    -0.169354   0.505119  -0.335  0.73834
Avg_ROCE_cum:Super_acquisitive  2.450021   0.549268   4.461 2.79e-05 ***
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.9562 on 76 degrees of freedom
Multiple R-squared:  0.5914,    Adjusted R-squared:  0.5323
F-statistic:    10 on 11 and 76 DF,  p-value: 5.785e-11
```

Table 19. Model (3) – Revenues_CAGR_cum

Source: analysis carried out through R software

```
Residuals:
    Min      1Q  Median      3Q     Max
-3.0870 -1.0075 -0.1025  0.6353  5.8589

Coefficients:
                                Estimate Std. Error t value Pr(>|t|)
(Intercept)                    -0.068627   0.550287  -0.125  0.90107
Avg_ROCE_cum                    0.709891   0.320299   2.216  0.02954 *
Super_acquisitive              -2.531899   1.242811  -2.037  0.04497 *
`#Diversification`             -0.180049   0.060912  -2.956  0.00411 **
`#Horizontal`                   0.085255   0.044478   1.917  0.05888 .
I(`#Vertical`^2)                0.006623   0.002118   3.127  0.00247 **
Organic                         0.346533   0.461520   0.751  0.45497
Acquisitive                     0.147710   0.738166   0.200  0.84191
Avg_ROCE_cum:Super_acquisitive  3.633692   0.799822   4.543 1.96e-05 ***
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 1.585 on 79 degrees of freedom
Multiple R-squared:  0.4257,    Adjusted R-squared:  0.3676
F-statistic:  7.32 on 8 and 79 DF,  p-value: 3.109e-07
```

Table 20. Model (4) – EBITDA_CAGR_cum

Source: analysis carried out through R software

Model (3) explains ~59.1% (R^2) of the dependent variable' s variance. The Adj. R^2 (~53.2%), which accounts for adjustments due to potential overestimation, suggests that the model has a good explanatory power, even though to a lesser extent than models based on stock market performance. On another note, the existing literature on this topic showcases from moderate to low levels of this metric. Indeed, one relevant study, as pointed out in Section 3, shows an Adj. R^2 lying within a range of 8-17% (Ronneboog, 2006). Consequently, results achieved in Model (3) are deemed to be satisfying. However, it is noteworthy to mention that this is partly attributable to the adjustments and modifications operated in relation to the explanatory variables, thanks to the RegSubset framework that was considered necessary for obtaining clearer and theoretically more

sound relationships. The F-statistic (10) as well as the p-value (5.785e-11) confirm the statistical significance of the model. As for the regressors, at first glance, estimates seem to provide a conclusion that diverges from the takeaways of Model (1) and Model (2). Indeed, the positive coefficient for *Organic* has some statistical significance, even though more marginally (p = 0.06857), suggesting that firms focusing on organic levers tend to have positive effect on the compound annual growth of Revenues, cumulated over time. On the other side, the negative coefficient for *Acquisitive* is not significant, suggesting no substantial direct impact of being acquisitive on the dependent variable (with an estimate of c. -0.17 and p-value of 0.73834). However, when considering super-acquisitive companies, the *Super_acquisitive* variable suggests results that are more in line with expectations, even though with less strong evidence. On a standalone basis, the coefficient for super-acquisitive companies is negative (c. -2.73) and statistically significant (p-value: 0.00114), thus indicating that being a super-acquisitive firm has a negative impact on the compound annual growth of Revenues, cumulated over time. Nonetheless, the coefficient for super-acquisitive companies coupled with the metric on the average ROCE cumulated is positive (~2.45) and even more statistically significant than the coefficient of the variable Super_acquisitive considered on a standalone basis (p-value: 2.79e-05). Super-acquisitive firms with higher Return on Invested Capital experience significantly better revenue growth on a cumulated basis. Moreover, the negative impact of being solely super-acquisitive can be mitigated by maintaining high ROCE. This indicates that these serial acquirers can achieve positive revenue growth outcomes, on a cumulative basis, as long as they ensure efficient use of capital and high returns. However, in terms of long-term operational performance, being a super-acquirer, coupled with benefitting from high ROCE, does not offset the negative impact of being super-acquirer on a standalone basis. In particular, the absolute value of the negative coefficient for the *Super_acquisitive* variable is greater than the absolute value of the positive coefficient for the interaction term. When computing the total net effect of the *Super_acquisitive* variable, thus multiplying the average ROCE of companies cumulated over time (104%) by the interaction coefficient (~2.45), the impact is c. -0.18. However, on another note, as already mentioned, the interaction term is statistically more significant. This, coupled with the only marginal positive effect of organic growth, overall

supports the theoretical rationale that there are some benefits associated with deploying an extensive M&A program in the long haul.

Model (4) focuses on the CAGR of EBITDA, cumulated over time, as a dependent variable, thus allowing to extract the potential creation of value resulting from acquisitions not only in terms of top line, but also from a cost structure perspective. Model (4) explains ~42.6% (R^2) of the dependent variables' variance. By factoring in the number of regressors that have been used, the measure slightly decreases to ~36.8% (Adj. R^2). Once again, considering OLS regressions estimated in the literature on the topic so far, as well as the F-statistic (7.32) and the p-value (3.109e-07), the model can be reasonably considered as statistically significant. From a regressors perspective, it yields better results than those obtained in terms of top line growth cumulated over time, pointed out with Model (3), where the term "better" refers to the degree of consistency with the *theoretical framework* of this research hypothesis. *Organic* turns again to be not statistically significant, suggesting that organic growth strategies do not have a substantial impact on the compound annual growth of EBITDA, cumulated over time. *Acquisitive* is not statistically significant as well. However, the result in terms of *super-acquisitiveness* confirms the main findings resulting from the previous models, while improving the not perfectly satisfying outcome of Model (3) in terms of operational performance. Indeed, *Super_acquisitive* is negative and significant (Estimate of c. -2.53 and p-value of ~0.04), thus indicating that being a super-acquisitive firm has a negative impact on compound annual growth of EBITDA, cumulated over time. However, when a company is both super-acquisitive and financially sound, the impact on operational performance is very positive. Specifically, the interaction variable *Avg_ROCE_cum*Super_acquisitive* has a positive coefficient (~3.63) and is statistically highly significant (p-value: 1.96e-05). Differently from Model (3), this interaction term beats the negative effect stemming from being super-acquirer on a standalone basis, both in terms of statistical significance and coefficient magnitude. Indeed, the total net effect of the *Super_acquisitive* variable is ~1.25.

The final takeaway is that the interaction between *Avg_ROCE_cum* and *Super_acquisitive* is crucial for really reaping the benefits of engaging in inorganic growth. Super acquisitive firms should focus on maintaining high ROCE to achieve positive

EBITDA cumulated growth outcomes, mitigating and potentially offsetting the inherent risks of an aggressive M&A program.

```
Residuals:
     Min       1Q   Median       3Q      Max
-0.24833 -0.07123 -0.01878  0.03419  0.48530

Coefficients:
                                    Estimate Std. Error t value Pr(>|t|)
(Intercept)                         0.0917014  0.0391183   2.344  0.02183 *
Avg_FCF_conv                       -0.0947420  0.0307379  -3.082  0.00291 **
Annual_deals                        1.1101225  0.3395709   3.269  0.00166 **
`#Horizontal`                      -0.1087152  0.0314454  -3.457  0.00092 ***
I(`#Horizontal`^2)                  0.0005021  0.0002905   1.728  0.08826 .
log(`#Horizontal` + 1)              0.1364871  0.0658230   2.074  0.04170 *
I(`#Vertical`^2)                   -0.0015373  0.0005137  -2.993  0.00378 **
log(`#Vertical` + 1)               -0.1759233  0.0738827  -2.381  0.01991 *
I(`#National`^2)                   -0.0005242  0.0001718  -3.051  0.00319 **
I(`#Cross_border`^2)               -0.0007769  0.0002629  -2.956  0.00421 **
`Acquisitive:Avg_FCF_conv`          0.3131968  0.2505300   1.250  0.21530
`Super_acquisitive:Annual_deals`   -0.4446980  0.1940993  -2.291  0.02489 *
`Super_acquisitive:#Consolidation`  0.0452491  0.0141899   3.189  0.00212 **
`Super_acquisitive:#Diversification` 0.0565540  0.0187771   3.012  0.00358 **
Mixed_Growth                        0.0142042  0.0643948   0.221  0.82604
Acquisitive                         0.0645318  0.1450075   0.445  0.65764
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.1306 on 72 degrees of freedom
Multiple R-squared:  0.3652,    Adjusted R-squared:  0.2329
F-statistic: 2.761 on 15 and 72 DF,  p-value: 0.002084
```

Table 21. Model (5) - Avg_EBITDA_margin

Source: analysis carried out through R software

Finally, based on the attempt to expand the observations on the EBITDA marginality, which is deemed to be one of the most relevant metrics when assessing post-M&A integration, Model (5) aims at focusing on the annual average performance, rather than pointing out the cumulated growth over time. Consequently, the average EBITDA margin over the 2010–2023 time horizon is the reference metric, used as dependent variable (*Avg_EBITDA_margin*). The model explains ~36.5% (R^2) of the dependent variables' variance, while Adj. R^2 stands at 23.3%. These figures, coupled with the F-statistic (2.761) and the p-value (0.002084), point out that the model, based on annual metrics, is not as statistically significant as the previous models. In terms of regressors, it is noteworthy to notice the impact of the new variable introduced in the model, namely *Annual_deals*, which captures the average number of deals performed by each company on a yearly

basis, starting from the cumulated figure and thus assuming a homogeneous distribution of the total number of deals executed within the 2010-2023 time span. The coefficient (~1.11), coupled with a p-value of 0.00166, suggests a strong positive impact of annual deals on the average yearly EBITDA margin. In other terms, for each additional deal performed by the sampled companies, the average EBITDA margin increases by 1.11p.p, ceteris paribus. Within the context of the RegSubset framework, the *Mixed_Growth* variable, instead of *Organic*, has been factored in following the implementation of the RegSubset function; it is not statistically significant, with a p-value of 0.82604. The same applies for *Acquisitive*, with a p-value of 0.65764. Although the model does not factor in the *Super_acquisitive* variable on a standalone basis, as it is regarded not relevant according to the RegSubset framework, it is fundamental when coupled with some other figures. Indeed, *Super_acquisitive*#Consolidation* is highly significant and positive, indicating that super-acquisitive companies benefit from consolidation, leading to an increase in EBITDA margin (Estimate of ~0.05 and p-value of ~0.002). The same happens for *Super_acquisitive*#*Diversification**.** Indeed**,** this interaction is significant and positive, suggesting that super-acquisitive companies benefit from diversification too, leading to an increase in EBITDA margin (Estimate of ~0.06 and p-value of ~0.004). Super-acquisitive companies may generally face challenges in positively making an impact (or just making an impact, whether positive or negative, considering the statistical insignificance of the coefficient in its standalone version) on average yearly EBITDA margin, but strategic moves such as consolidation and diversification can mitigate these challenges and lead to a significantly positive outcome. As in the case of Model (1) and Model (2), both the correlation matrix and VIF analysis have been factored in as robustness checks for the existence of multicollinearity. This investigation for Models (3), (4) and (5) has not shown reason for concern, thus resembling the interpretations made for Model (1) and (2) (see Appendix A for insights on this analysis).

The final takeaway of Models (3), (4) and (5) is that their interpretation resembles the results achieved in terms of stock market performance with Models (1) and (2), even though with less strong evidence. Indeed, the third (*H3*) research hypothesis is rejected: in the long run, acquisitive companies do not showcase better operational performance than firms based on purely organic growth and/or a mix of organic and inorganic

expansion, in the sense that they are not able to impact their performance. On the other side, the fourth research hypothesis (H4) is reasonable. In the long-haul, super-acquisitive companies, when maintaining a high ROCE, can positively and significantly influence their financial soundness, relative to non-acquisitive corporations.

4.3.3. H5: the benefits of a *learning effect* mechanism

As already mentioned, the fifth hypothesis (*H5*) can be tackled considering the whole set of models investigated, both those focusing on stock-market performance (Models (1) and (2)) and the ones analyzing operational conduct (Models (3), (4) and (5)).

When considering the first set, where *PriceChange_cum* and *TR_cum* represent the dependent variables, Tables 14 and 15 prove that super-acquisitive companies can positively impact their performance with statistical significance, differently from their non-acquisitive counterparts. Furthermore, based on the fact this ability to positively and statistically influence market-based conduct cannot be attributed also to “basic” acquirers, Models (1) and (2) point out the existence of a learning effect, when performing serial acquisitions. Super-acquirers, while using capital in an effective way, learn to integrate target companies with higher flexibility. Therefore, the fifth research hypothesis (*H5)*, in relation to stock market performance, is proven to be reasonable. According to this research project, gaining experience through multiple acquisition programs acts as a catalyst for results that cannot be matched by simply being a “basic” acquirer.

On a related note, the analysis of Models (3), (4) and (5) related to financial soundness, as observed in Tables 19, 20 and 21, resembles this result in relation to *H5*. Indeed, while the coefficient for super-acquisitive firms is significant and implies a positive impact when these kinds of companies can keep a high level of efficiency in deploying their capital over time, “basic” acquirers do not show such feature. Hence, being a simple acquisitive corporation is conducive to statistically insignificant results, in a fashion similar to non-acquisitive firms.

The final takeaway, according to *H5*, is that super-acquisitive companies show a higher level of positive impact on their out-performance not only relative to non-acquisitive companies but also to "basic" acquirers, thus reaping, as already expected, the benefits stemming from a learning effect. Therefore, thanks to this result, this research project aligns with the broader body of literature (as depicted in Section 3) that addresses the ability to integrate target companies with increasing effectiveness as the number of deals completed over time grows, thanks to the accumulation of experience, knowledge and skills. Consequently, such companies, identified as super-acquisitive, achieve an immediate and significantly accretive effect in terms of stock market returns, return on capital, Revenues, and EBITDA, when executing their high and frequent number of mergers and acquisitions within a long haul perspective.

To conclude the analysis at the Italian level, Table 22 and Table 23 provide a summary of the most significant variables across the five models investigated by means of OLS regressions (Table 22 for Models (1) and (2), based on stock market performance; Table 23 for Models (3), (4) and (5), based on operational conduct).

		Model (1)	***Model (2)***
Explanatory Variables	***Description***		
(Intercept)		-2.01 0.181	-3.02 0.154
Organic	*Companies engaging in n deals such that n < 3 throughout a pre-defined long-term horizon*	0.55 0.605	1.11 0.460
Acquisitive	*Companies engaging in n deals such that 15 < n ≤ 20 throughout a pre-defined long-term horizon*	-0.34 0.826	-0.63 0.774

Super_acquisitive	*Companies engaging in n > 20 deals throughout a pre-defined long-term horizon*	-7.51 0.001**	-9.09 0.004**
Avg_ROCE_cum	*Computed on a cumulated basis throughout 2010-23 as EBITDA/Capital Employed, it helps to understand how well a company is generating profits from its capital*	1.63 0.003**	2.74 0.000***
Avg_ROCE_cum*Super_acquisitive	*Interaction variable expressing the combined effect of a company being super-acquisitive coupled with its ability to generate Return on Capital Employed*	11.78 1.14e-11***	13.80 4.05e-09***
log(#Consolidation + 1)	*Logarithmic transformation applied to the #Consolidation variable with the RegSubset function to manage variability in the data*	1.89 0.007**	2.34 0.016*
#Diversification	*Variable expressing the number of deals carried out during the 2010-23 time horizon, based on a diversification rationale (linear version)*	0.58 0.007**	0.78 0.009**
I(#Diversification^2)	*Transformation applied to the #Diversification variable with the RegSubset function to capture potential non-linear relationships with the dependent variables*	-0.01 0.012*	-0.01 0.017*
#Vertical	*Variable expressing the number of deals carried out during the 2010-23 time horizon, based on a vertical rationale (linear version)*	-1.07 0.038*	-1.45 0.045*
I(#Vertical^2)	*Transformation applied to the #Vertical variable with the RegSubset function to capture potential non-linear relationships with the dependent variables*	0.02 0.058.	0.02 0.059.
log(#Vertical + 1)	*Logarithmic transformation applied to the #Vertical variable with the RegSubset function to manage variability in the data*	2.55 0.079.	3.69 0.072.

#National	*Variable expressing the number of deals carried out during the 2010-23 time horizon, based on a national rationale (linear version)*	-0.66 9.33e-05***	-0.79 0.000***
I(#National^2)	*Transformation applied to the #National variable with the RegSubset function to capture potential non-linear relationships with the dependent variables*	0.02 0.000***	0.02 0.000***
Dependent variables	***Description***		
PriceChange_cum	*Total change (%) in the price of the share in the pre-defined time horizon on a cumulated basis*		
TR_cum	*Total shareholder's return in the pre-defined time horizon on a cumulated basis*		
R^2		76.3%	71.8%
Adjusted R^2		72.2%	66.9%
F-statistic		18.3	14.5
p-value		<2.2e-16	1.74E-15
*Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1*			

Table 22. Summary of OLS regressions for Models (1) and (2)

Source: own elaboration

		Model (3)	***Model (4)***	***Model (5)***
Explanatory variables	***Description***			

(Intercept)		-1.55 0.009**	-0.07 0.901	0.09 0.022*
Organic	*Companies engaging in n deals such that n < 3 throughout a pre-defined long-term horizon*	0.76 0.069.	0.35 0.455	n.a.
Mixed_Growth	*Companies engaging in n deals such that 3 < n ≤ 15 throughout a pre-defined long-term horizon*	n.a.	n.a.	0.01 0.83
Acquisitive	*Companies engaging in n deals such that 15 < n ≤ 20 throughout a pre-defined long-term horizon*	-0.17 0.738	0.15 0.842	0.06 0.658
Super_acquisitive	*Companies engaging in n > 20 deals throughout a pre-defined long-term horizon*	-2.73 0.001**	-2.53 0.045*	n.a.
Avg_ROCE_cum	*Computed on a cumulated basis throughout 2010-23 as EBITDA/Capital Employed, it helps to understand how well a company is generating profits from its capital*	0.89 1.69e-05***	0.71 0.029*	n.a.
Avg_ROCE_cum*Super_acquisitive	*Interaction variable expressing the combined effect of a company being super-acquisitive coupled with its ability to generate Return on Capital Employed*	2.45 2.79e-05***	3.63 1.96e-05***	n.a.

#Horizontal	*Variable expressing the number of deals carried out during the 2010-23 time horizon, based on a horizontal rationale (linear version)*	n.a.	0.09 0.059.	-0.11 0.000***
I(#Horizontal^2)	*Transformation applied to the #Horizontal variable with the RegSubset function to capture potential non-linear relationships with the dependent variables*	n.a.	n.a.	0.00 0.088.
log(#Horizontal + 1)	*Logarithmic transformation applied to the #Horizontal variable with the RegSubset function to manage variability in the data*	0.72 0.008**	n.a.	0.14 0.042*
#Diversification	*Variable expressing the number of deals carried out during the 2010-23 time horizon, based on a diversification rationale (linear version)*	n.a.	-0.18 0.004**	n.a.
#Vertical	*Variable expressing the number of deals carried out during the 2010-23 time horizon, based on a vertical rationale (linear version)*	-0.52 0.000***	n.a.	n.a.
I(#Vertical^2)	*Transformation applied to the #Vertical variable with the RegSubset function to capture potential non-linear relationships with the dependent variables*	0.01 9.39e-05***	0.01 0.002**	-0.00 0.004**
log(#Vertical + 1)	*Logarithmic transformation applied to the #Vertical variable with the RegSubset function to manage variability in the data*	1.50 0.001**	n.a.	-0.18 0.019*

#National	*Variable expressing the number of deals carried out during the 2010-23 time horizon, based on a national rationale (linear version)*	-0.06 0.29	n.a.	n.a.
I(#National^2)	*Transformation applied to the #National variable with the RegSubset function to capture potential non-linear relationships with the dependent variables*	0.00 0.017*	n.a.	-0.00 0.003**
I(#Cross_border^2)	*Transformation applied to the #Cross_border variable with the RegSubset function to capture potential non-linear relationships with the dependent variables*	n.a.	n.a.	-0.00 0.004**
Avg_FCF_conv	*Computed as FCF/EBITDA, it is a liquidity ratio that measures a company's ability to convert its operating profits into Free Cash Flow*	n.a.	n.a.	-0.09 0.003**
Annual_deals	*It captures the average number of deals performed by each company on a yearly basis, starting from the cumulated figure over 2010-23*	n.a.	n.a.	1.11 0.002**
Acquisitive*Avg_FCF_conv	*Interaction variable expressing the combined effect of a company being acquisitive coupled with its ability to generate FCF*	n.a.	n.a.	0.31 0.215
Super_acquisitive*Annual_deals	*Interaction variable expressing the combined effect of a company being super-acquisitive coupled with the yearly frequency of acquisitions*	n.a.	n.a.	-0.44 0.025*

Super_acquisitive*#Consolidation	*Interaction variable expressing the combined effect of a company being super-acquisitive coupled with the number of consolidation M&As*	n.a.	n.a.	0.05 0.002**
Super_acquisitive*#Diversification	*Interaction variable expressing the combined effect of a company being super-acquisitive coupled with the number of diversification M&As*	n.a.	n.a.	0.06 0.004**
Dependent variables	***Description***			
Revenues_CAGR_cum	*Average compound annual growth rate of Revenues over the pre-defined time horizon, on a cumulated basis*			
EBITDA_CAGR_cum	*Average compound annual growth rate of EBITDA over the pre-defined time horizon, on a cumulated basis*			
Avg_EBITDA_margin	*Average EBITDA margin over the pre-defined time horizon*			
R^2		59.1%	42.6%	36.5%
Adjusted R^2		53.2%	36.8%	23.3%
F-statistic		10	7.3	2.8
p-value		5.79E-11	3.11E-07	2.08E-03
*Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1*				

Table 23. Summary of OLS regressions for Models (3), (4) and (5)

Source: own elaboration

5. Empirical analysis at the European level: how Italian consolidators perform relative to European serial acquirers

Once the empirical analysis at the Italian level has been carried out, the objective of this research project is to contextualize the main findings on Italian acquisitive and super-acquisitive players within the broader European context. Accordingly, the identified Italian corporations, based on the *theoretical framework*, will be benchmarked against their German and French counterparts by means of some Cluster Analysis applications. Although only the *Super_acquisitive* variable has been found out to be statistically significant when studying the impact on performance, in this context also "basic" acquisitive corporations will be included in the panel, based on the fact these companies historically showcased better long-term performance than non-acquisitive players (see Figures 7-11) in any case. Indeed, the statistical insignificance obtained in Section 4 for the *Acquisitive* variable might stem from the way the thresholds have been arbitrarily chosen for the definition of the *acquisitiveness paradigm* and/or the assumptions made in the models. Hence, to have a complete overview of the *theoretical framework* with regard to the European context, both acquisitive and super-acquisitive firms will be considered, hereinafter referred to as serial acquirers. The expectation is that Italian serial acquirers - and within them especially super-acquisitive companies - can compete with big European industrial groups, both in terms of stock market dynamics and financial soundness. In the first instance, this finding will allow to consider the currently limited number of Italian serial acquirers as exemplary paradigms to be followed by other

companies. Secondly, this result will serve an admonition to address and potentially eradicate the structural deficiencies in the Italian corporate arena and M&A market, as they were depicted in the *theoretical framework*. Carrying out an acquisitive program for growth, by consolidating smaller firms across fragmented industries and hence building hubs and districts, might be perceived as catalyst for both firm-specific outperformance and country-specific revitalization of the broader industrial landscape, thus paving the way for a level playing field between Italy and more advanced European economies. Furthermore, this cross-country study will allow to factor in whether and the extent to which being a serial acquirer varies based on the industry of operation.

5.1. Cluster Analysis applications

Before delving into the development and investigation of the Cluster Analysis, one point shall be clarified. Generally speaking, such analysis, which is a statistical type of investigation, stems from unlabeled data, meaning data that has not been previously classified. Indeed, its aim is to categorize unknown items according to specific groups, known as “clusters”, based on the extent to which they are similar to each other and dissimilar from the rest (see for instance Romesburg, 2004; Landau et al., 2010). On the contrary, within the context of this research project, the starting figures are already labeled and classified, before performing any study: indeed, some of the variables already specified and utilized at the Italian level in Section 4, i.e. *TR_cum*, *Revenues_CAGR_cum*, *EBITDA_CAGR_cum* and *Avg_ROCE_cum*, will be re-collected and coupled with those at the German and French level. Accordingly, this Cluster Analysis should not be referred to as “statistical exercise” per se, considering that it is just a way to visually organize corporations across different countries and industries of operation as well as corroborate the hypotheses on similarities and differences in terms of stock market and operational performance between Italian serial acquirers and their European counterparts. In summary, the term “Cluster Analysis” exclusively refers to some specific

applications of the model, in the form of both traditional graphic visualizations, i.e. Scatter Plots, and more complex ones, i.e. a Dendrogram.

5.1.1. Database building and descriptive analysis

In a fashion similar to Section 4, the first step consisted in building the database for the consequential analysis. Hence, considering that the aim was to point out the performance of Italian acquisitive and super-acquisitive players, relative to their European counterparts, the following three categories of firms have been factored in:

- Italian serial acquirers: firms that have been previously identified as acquirers and super-acquirers according to the *theoretical framework*.
- German serial acquirers: companies that are publicly listed on the German Stock Exchanges have been categorized according to the *theoretical framework* (based on the same thresholds in terms of volume of transactions as in Section 4) as acquisitive or super-acquisitive or non-acquisitive (focus on organic or mixed growth); consequently, only acquisitive and super-acquisitive players have been considered.
- French serial acquirers: companies that are publicly listed on the French Stock Exchanges have been categorized according to the *theoretical framework* (based on the same thresholds in terms of volume of transactions as in Section 4) as acquisitive or super-acquisitive or non-acquisitive (focused on organic or mixed growth); consequently, only acquisitive and super-acquisitive players have been considered.

The main assumptions and exclusion criteria at the European level resemble those specified in Section 4 for the Italian corporate landscape. Accordingly, banks, insurance companies and other financial institutions have been excluded. The same holds for firms operating in Real Estate. Furthermore, companies belonging to the sports industry were

excluded as well, whereas Industrial Holdings were included. Firms in liquidation were not factored in. Finally, with the aim of avoiding temporal discrepancy for the stock market data and financial metrics collected for each corporation, only firms that have been publicly listed for the whole pre-defined time horizon (2010-2023) have been considered.

Nonetheless, differently from Section 4, German and French corporations have been identified using an alternative approach. Indeed, while for Italy each publicly listed company has been analyzed on a standalone basis, in this context the starting point was to search for the number of deals carried out between 2010 and 2023 by German and French corporations (publicly listed during the period) with the SDC Platinum's M&A tool in LSEG Refinitiv, mainly due to the very high number of German and French publicly listed companies (845[7] in Germany and 869[8] in France), which made unfeasible a standalone valuation of the M&A history for each of them, as well as the more limited familiarity with data and events for non-Italian firms. The selection criteria can be summarized as follows:

- Type of deal: M&A
- Time interval of announcement: 2010-2023
- Deal Status: completed
- Acquirer (or Ultimate Owner) Country of Primary Stock Exchange: Germany and France
- Type of company: Corporate
- Public status: Listed

Following this research criteria for the initial download of the database and all the relevant adjustments based on the abovementioned exclusions and assumptions, a panel of 747 German and French companies, in aggregate, and a cumulated number of 6,218 deals performed by them have been collected. Table 24 provides an overview of the categorization of the selected firms, based on the *theoretical framework*.

[7] Market Screener (n.d.)
[8] Market Screener (n.d.)

Growth strategy	**#**
Purely Organic	438
Mixed	210
Acquisitive	27
Super-acquisitive	72

Table 24. Categorization based on the theoretical framework

Source: own elaboration

When considering the country-specific categorization, Table 25 shows that while Germany and France are home to approximately the same number of "basic" acquirers (13 and 14, respectively), France has significantly more super-acquirers than Germany (46 and 26, respectively).

Growth strategy			
Germany		**France**	
Acquisitive	13	Acquisitive	14

Super-acquisitive	26	Super-acquisitive	46

Table 25. German and French serial acquirers

Source: own elaboration

Generally speaking, by simply considering this first immediate categorization, German and especially French supremacy in terms of acquirers and serial acquirers' volume relative to the Italian landscape (8 acquisitive and 18 super-acquisitive corporations) is blatant. The second step was to isolate German and French acquisitive and super-acquisitive corporations from their non-acquisitive counterparts identified with the mentioned research methodology, considering that the focus of the analysis at the European level exclusively lies on the *acquisitiveness* framework. Before building the definitive panel of firms needed to perform the abovementioned applications of the Cluster Analysis, thus factoring in also the Italian counterparts, some further adjustments have been carried out to guarantee the fairest level of inter-company comparability across country. In particular, a reasoning on the industry of operation and the size (based on the market capitalization of each publicly listed entity) was included in the analysis. Firstly, based on the same sectoral categorization as the one applied at the Italian level, German and French serial acquirers, in aggregation, could be categorized as follows:

GERMANY & FRANCE

Industry	***# of Companies***

Infrastructures & Construction	6
Energy & Utilities	9
Fashion & Luxury	2
Logistics & Transports	2
Entertainment	2
Services	6
Healthcare	7
Chemical, Biotechnology & Pharmaceuticals	12
Industrial Manufacturing & Components	8
Machinery & Engineering	2
Apparel, Footwear, Sportswear & Accessories	0
Furniture, Lighting Equipment & Interior Design	0
Home & Personal Care	3
Automotive	9
Communication	6
TMT	16
Food & Beverage	3
Aerospace & Defense	4
Food Supplements	0
Consumer	0
Packaging	0

Retail chains	2

Table 26. Industry categorization for German and French serial acquirers

Source: own elaboration

Such industry categorization, wherein (i) *Energy & Utilities*, (ii) *Chemical, Biotech and Pharma* and (iii) *TMT* showcase the highest volume, can be compared to the same classification conducted at the Italian level.

ITALY

Industry	***# of Companies***
Infrastructures & Construction	0
Energy & Utilities	10
Fashion & Luxury	0
Logistics & Transports	0
Entertainment	2
Services	2
Healthcare	2

Chemical, Biotechnology & Pharmaceuticals	1
Industrial Manufacturing & Components	1
Machinery & Engineering	0
Apparel, Footwear, Sportswear & Accessories	0
Furniture, Lighting Equipment & Interior Design	0
Home & Personal Care	0
Automotive	1
Communication	0
TMT	3
Food & Beverage	1
Aerospace & Defense	1
Food Supplements	0
Consumer	0
Packaging	0
Retail chains	0

Table 27. Industry categorization for Italian serial acquirers

Source: own elaboration

In the first instance, the number of Italian serial acquirers in the *Energy & Utilities* space (10) is higher than the combined figure for German and French acquisitive and super-acquisitive corporations (9). This finding suggests that Italian M&A activity in this industry is strong, and its players compete with their European peers, at least in terms of volume

of transactions. As for the rest, the dominance (in terms of volume) of the Germany and France across the other industries is blatant. Such categorization has been particularly useful to shortlist corporations to be included in the applications of the Cluster Analysis, by means of excluding, for instance, Italian firms operating in a certain sector for which no European counterpart was available. Accordingly, based on this rationale, companies operating in (a) *Infrastructures & Construction*, (b) *Fashion & Luxury*, (c) *Logistics & Transports*, (d) *Machinery & Engineering*, (e) *Apparel, Footwear, Sportswear & Accessories*, (f) *Furniture, Lighting Equipment & Interior Design*, (g) *Home & Personal Care*, (h) *Communication*, (i) *Food Supplements*, (j) *Consumer*, (k) *Packaging*, and (l) *Retail Chain* have been excluded.

Secondly, when creating the final database of corporations to be compared with each other, few other German and French serial acquirers have been excluded, based on size argumentations.

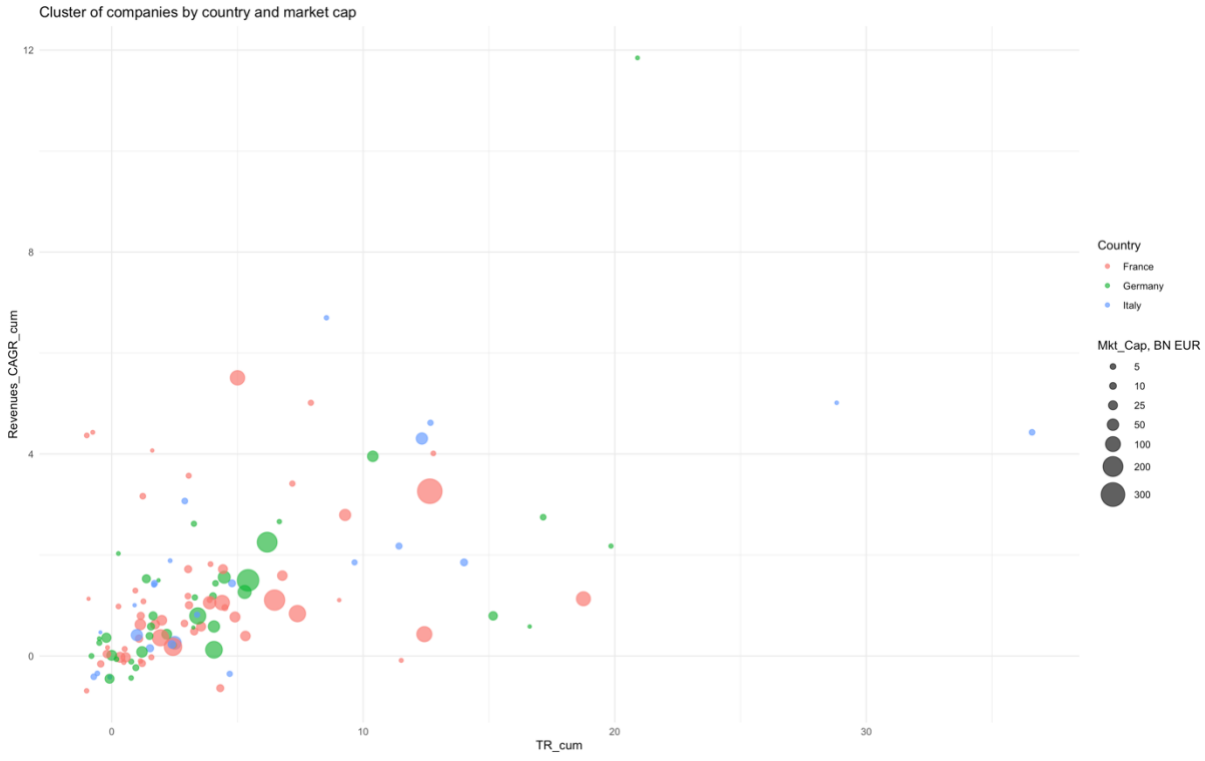


Figure 15. Cluster of companies by country and market cap

Source: own elaboration through R software

Figure 15, which provides a glimpse of the broader set of Scatter Plots that will be presented later, showcases the CAGR of Revenues cumulated over time (y-axis) and the Total Return cumulated over time (y-axis), based on the definition that was provided in Section 4, by country (Italy in blue, France in red and Germany in green). Besides reasoning on these accounting and market-based metrics (which will be discussed in the following Sections), the size of each dot represents the market capitalization of each of the initially screened corporations included in the panel, which serves as a proxy of their size. In order to avoid misjudgments in comparing performance across firms with different sizes, some European firms, including the German SAP SE (with a market cap of c. EUR 242bn[9]) in *TMT*, the French Safran SA (with a market cap of c. EUR 85bn[10]) in *Aerospace & Defense*, and the French Schneider Electric SE (with a market cap of c. EUR 130bn[11]) in *Industrial Manufacturing & Components*, have been deemed as outliers and as such excluded from the analysis for inter-company comparability's sake. Furthermore, besides the market capitalization argument, some European corporations were excluded due to showcasing financial figures and stock returns lying far above the average of their peers and, as such, regarded as outliers. Among these, the German Encavis AG operating in the *Energy & Utilities* industry was eliminated, based on its cumulated CAGR of Revenues (3,518%) and EBITDA (2,282%) over the 2010-23 time span, too high relative to the sample average (147% and 191%, respectively).

Lastly, the final adjustments consisted in excluding some Italian companies, among the acquisitive and super-acquisitive players identified in Section 4, which were deemed to be not comparable with their European counterparts, based on structural differences in the vertical of operation within the broader industry's boundaries, as well as company-

[9] FactSet (n.d.), as of 28/07/2024
[10] FactSet (n.d.), as of 28/07/2024
[11] FactSet (n.d.), as of 28/07/2024

specific key events and features that have affected these corporations during their history to the extent that that they are not suitable for an inter-country comparative exercise:

- Media for Europe (MFE) NV (*Entertainment*): the main reason for its exclusion is that its French counterpart, recognized as a serial acquirer and initially included in the model, namely Vivendi SE, is a current shareholder of the Group[12]. On another note, their German peer, namely DAEG Deutsche Entertainment AG, operates in a completely different vertical, i.e. production and organization of tournees and concerts. On the contrary, MFE's business, which revolves around communication and television, was not deemed to be comparable. Furthermore, there is an additional reason why MFE and, as a consequence, its German and French counterparts have been excluded, which is a company-specific argument. Indeed, starting from 2019, the Group, previously known as Mediaset SpA, went through a reorganization process that started with the proposal of a merger between the parent company and the Spanish subsidiary Mediaset España, with the consequential constitution of Media For Europe NV. However, while Fininvest, the main shareholder (41.49%[13]), supported the decision, Vivendi disagreed and filed a lawsuit. Accordingly, as of August 2020, the Board of Mediaset withdrew the MFE cross-border merger project following a long and time-consuming legal dispute. Nonetheless, in 2021, the main parties involved found an agreement thus settling the ongoing litigation. Later in the same year, the transfer of the corporate headquarters and registered office in the Netherlands was approved, with the consequential change of name and the implementation of a stock split. In 2022, MFE launched a voluntary public purchase and exchange offer (OPAS) for Mediaset España (already owned at 55.7%) with a consequential merger process that was completed only in May 2023. These events, coupled with the death of the historical founder in 2023 as well, caused a 5-year period of volatility and

[12] MediaForEurope (n.d.)
[13] MediaForEurope (n.d.)

uncertainty, which is deemed to have affected both the stock market and operational performance (MediaForEurope, n.d.).

- TIM SpA (*TMT*): first, the company's specific business, which is mainly based on telecommunications, was not deemed comparable to the French and German corporations selected for the Cluster Analysis, since they operate in a different vertical, mainly based on advanced IT and software solutions, which imply higher profitability and ROCE, as per definition. Comparing TIM to more tech-focused and disruption-driven firms would have resulted in inter-company comparability issues. Secondly, a firm-specific argumentation must be considered as in the case of MFE. Indeed, in 2015 the Group initiated a rebranding process, thus abandoning the historical Telecom Italia brand and combining the mobile and fixed telephony under the same umbrella, namely TIM. Simultaneously, a new company division, Infrastrutture Wireless Italiane (INWIT), was created, before being completely sold just recently, in August 2024 (Turi, 2024). Furthermore, the more recent course of events must be factored in, with the delicate matter of the network disposal being finally completed. The complex transaction started in 2023 and culminated with the sale of the TIM's network to the American fund KKR within the context of a deal that amounted to EUR 18.8bn, which could increase up to EUR 22bn (due to the existence of an earn out clause). First, this massive transaction was coupled with stock market problems, such as the collapse of the stock with a -23.79% at the TIM Capital Market Day presentation in March 2024, and the continuous oppositions of Vivendi, the first shareholder of the Group (23.75%[14]), with a legal dispute at the Milan court. While these events culminated in 2024, which lie beyond the time span that was considered throughout this research projects, they originated in 2023 and especially led to the creation of a completely new entity, deprived of what has been the core element of its history and growth strategies based on acquisitions. Currently, without the historical network, the focus is on the consumer business, i.e. the services for families and SMEs, as well as the more

[14] Gruppo TIM (n.d.)

traditional telecommunication assets in Brazil (Gatti, 2024). These events are considered to have fundamentally altered the structure of the Group. Therefore, considering this corporation within a comparison exercise with European countries to highlight the benefits of being a serial acquirer with a long-term and forward-looking perspective was considered unfeasible. The disruptive disposal process was a game changer and does not allow to consider TIM as a pure serial acquirer, which should serve as a paradigmatic example for Italian firms, according to the objective of this research project.

- Arnoldo Mondadori Editore SpA (*Entertainment*): following the same rationale as in the first two circumstances, this company, while operating within a vertical that is comparable to the German counterpart in the same industry, namely DAEG Deutsche Entertainment AG, is defined as "basic" acquisitive, whereas both the German player and French peer (Vivendi SE) are super-acquisitive corporations.
- Servizi Italia SpA (*Services*): the company was excluded mainly based on a size issue, in the form of market capitalization. Indeed, its European counterparts (German and French acquisitive companies), i.e. Ipsos SA (EUR 2.4bn[15]), Bureau Veritas SA (EUR 12.7bn[16]) and Accor SA (EUR 8.09bn[17]) showcase a much higher market capitalization than the Italian firm (EUR 0.06bn[18]).

One last observation concerns Stellantis NV. Based on the same argumentations presented at the Italian level, this player was considered within the subset of the Italian corporations, despite being founded within the context of a 50/50 merger with a French player.

The final database, following this set of adjustments, includes 43 corporations across the three countries, with 19 Italian companies and 24 European players (of which 12 for

[15] FactSet, as of 28/07/2024
[16] FactSet, as of 28/07/2024
[17] FactSet, as of 28/07/2024
[18] FactSet, as of 28/07/2024

Germany and 12 for France). Table 28 shows the final industries that have been selected for the following analysis to be implemented.

ITALY, GERMANY & FRANCE

Industry	***# of Companies***
Energy & Utilities	18
Services	2
Healthcare	3
Chemical, Biotechnology & Pharmaceuticals	3
Industrial Manufacturing & Components	3
Automotive	3
TMT	6
Food & Beverage	2
Aerospace & Defense	3

Table 28. Italian, German and French serial acquirers by industry

Source: own elaboration

After all the relevant adjustments and exclusions, the Italian corporations to be benchmarked against their European counterparts seemed to be more comparable, also when re-considering the size parameter. Indeed, Figure 16 points out the panel of the remaining corporations, taking into account the market capitalization as the size of the dots (as in Figure 15).

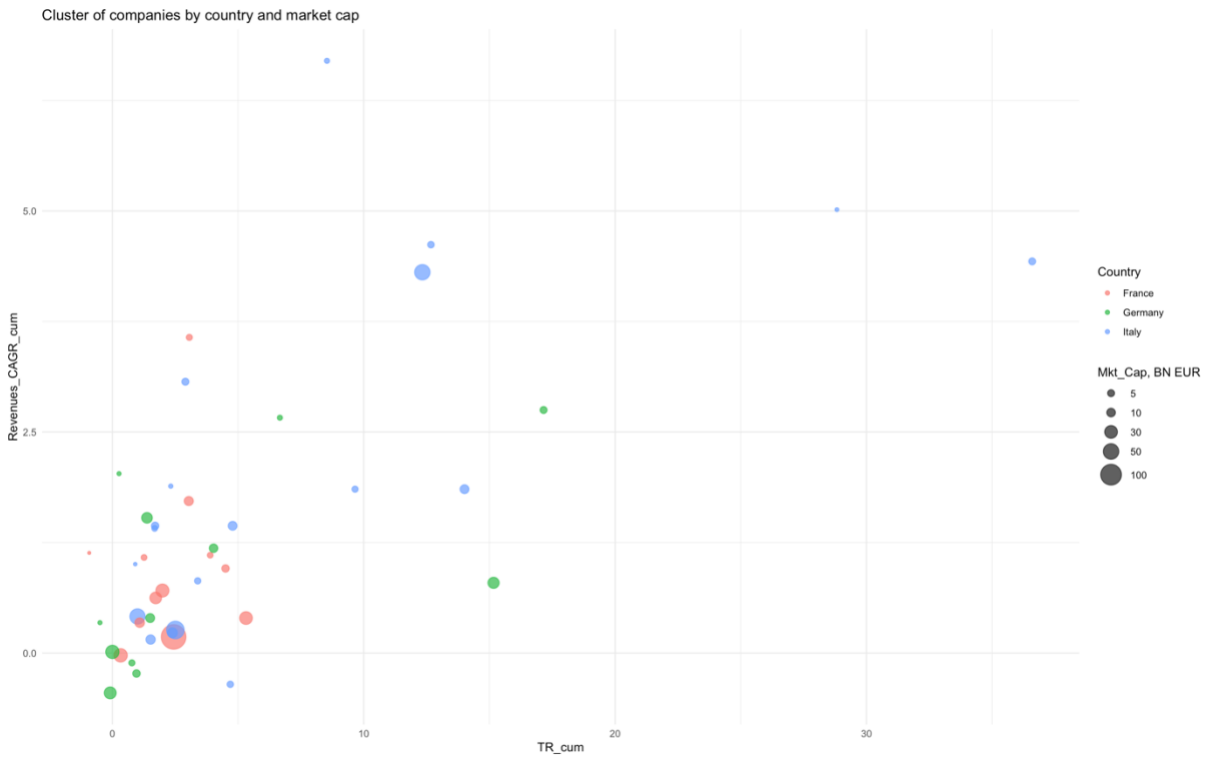


Figure 16. Cluster of companies by country and market cap

Source: own elaboration through R software

Compared to Figure 15, there is much more comparability between the corporations that have been ultimately factored in.

The last step when building the database consisted in collecting the data according to which similarities and differences in performance across country and industry were meant to be analyzed. Consistently with the interpretations applied at the Italian level and based on the results stemming from the empirical analysis investigated in Section 4, the most theoretically relevant and statistically significant variables have been selected for German and French companies, as follows.

- Stock market variables: *TR_CAGR* (and *TR_cum*)
- Operational variables: *Revenues_CAGR* (and *Revenues_CAGR_cum*), *EBITDA_CAGR* (and *EBITDA_CAGR_cum*), *Avg_ROCE* (and *Avg_ROCE_cum*)

This information has been collected with FactSet, LSEG Refinitiv and annual reports. Moreover, the figures were computed based on the same formulas as the ones presented in Section 4. Finally, the choice to focus on cumulated data is consistent with the rationale followed at the Italian level.

5.1.2. Benchmarking analysis across countries

In the following Sections, the applications of the Cluster Analysis in the form of Scatter Plots, as previously anticipated, will follow. The first benchmarking exercise will be focused on the country level, thus comparing Italian serial acquirers with their German and French counterparts. Nonetheless, since M&A strategies do not work the same everywhere, the whole research project should be complemented with an *excursus* on the extent to which belonging to a specific industry as a corporation fundamentally implies being subjected to a higher number of M&A deals (as a buyer or as a target) or a certain impact on performance. This argumentation will be tackled in Section 5.1.3.

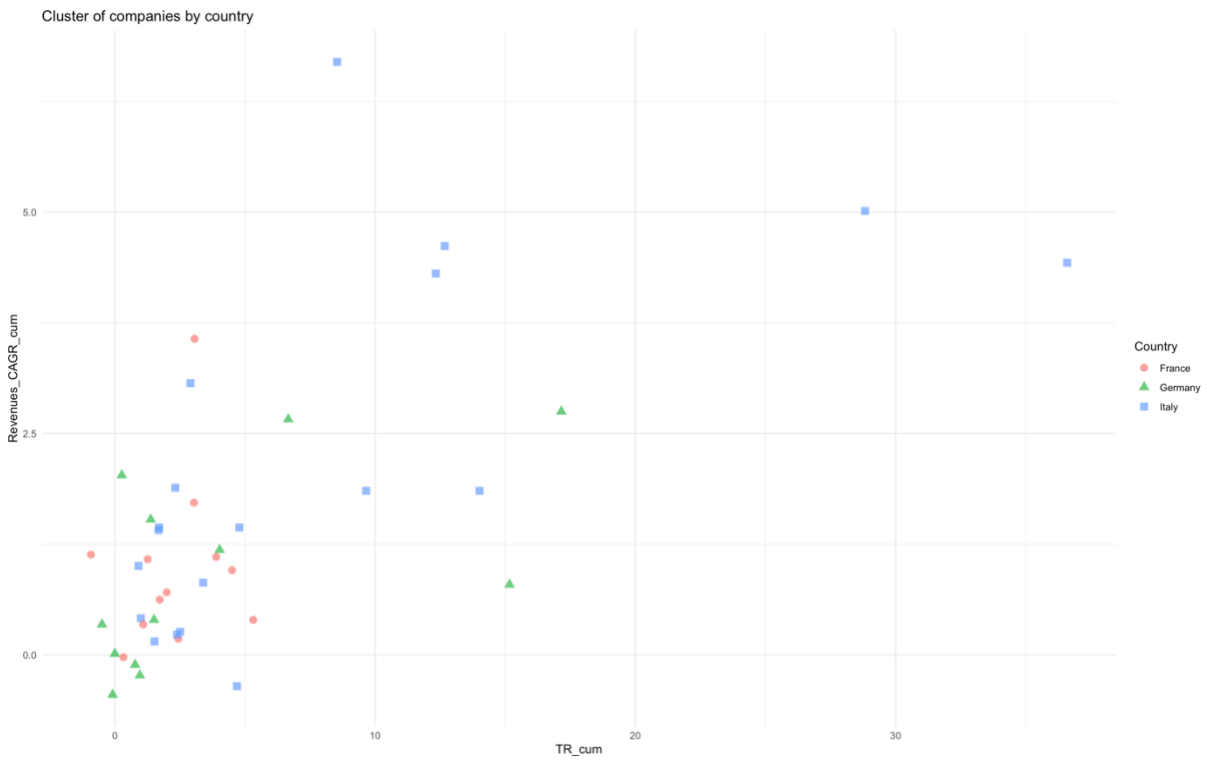


Figure 17. Cluster of companies by country: Revenues_CAGR_cum and TR_cum

Source: own elaboration through R software

The first Scatter Plot is presented in Figure 17. It points out the performance of acquisitive and super-acquisitive corporations across the three countries, based on *TR_cum* (horizontal axis) and *Revenues_CAGR_cum* (vertical axis). While a higher dispersion of values across the y-axis can be noticed, the main message is that a decent number of Italian players seem to outperform their French and German rivals. Among them, two players lie far beyond their peers (see the blue squares in first quadrant on the far right), both in terms of operational and stock market performance. Additionally, there are three other Italian corporations that showcase an outstanding positioning in terms of top line (Revenues). This first "visual" observation per se provides a glimpse of the extent to which the Italian corporations that acted as serial acquirers over a long-term horizon can

compete with and even outperform the big German and French consolidators, obviously within the assumptions of this specific research project and the related relevant choices in terms of data collection and cleaning.

Similar considerations hold when exclusively focusing on financial soundness, by means of factoring in the average Return on Capital Employed on the x-axis, while, at the y-axis level, pointing out the cumulated CAGR of EBITDA, which represents the best Income Statement proxy of the operational cash flow produced by the company (Figure 18), or the CAGR of Revenues cumulated over time (Figure 19).

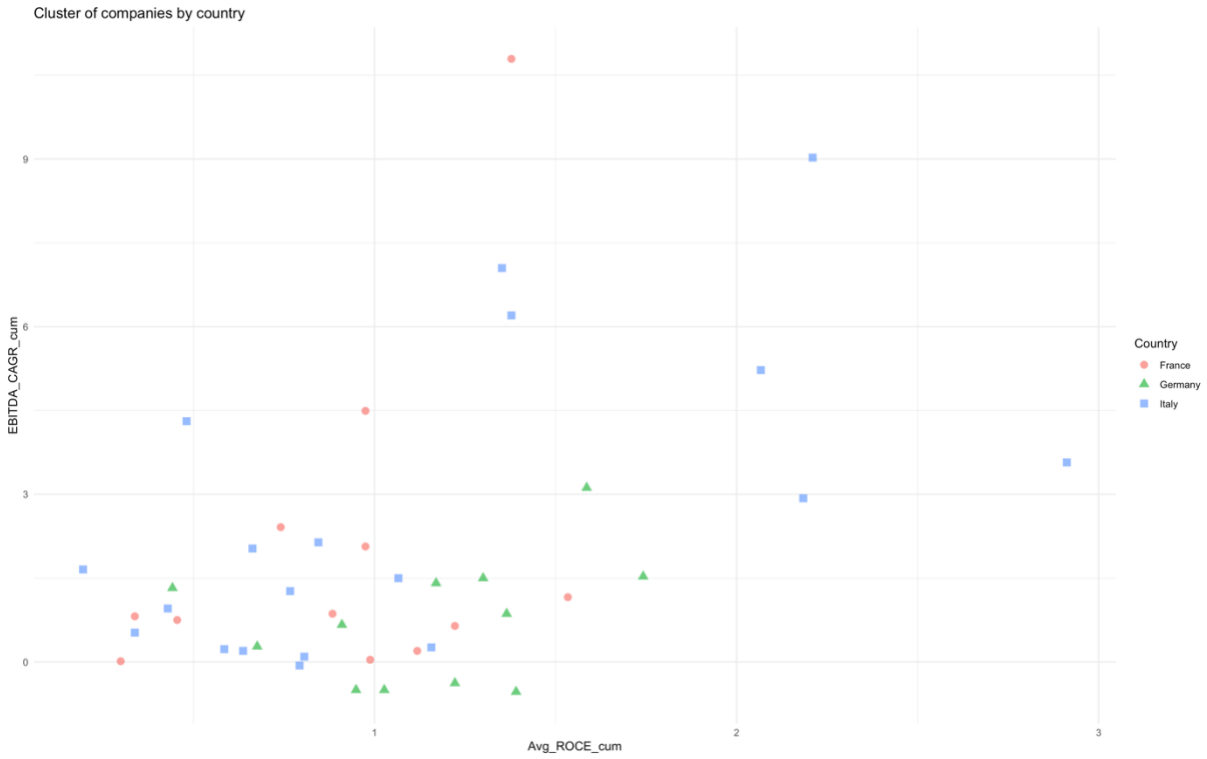


Figure 18. Cluster of companies by country:

EBITDA_CAGR_cum and Avg_ROCE_cum

The main difference (relative to Figure 17) is that companies are quite widely spread across the x-axis, i.e. the average ROCE over the 2010-23 timespan, while being less dispersed and clustered in a lower range in relation to the CAGR of EBITDA cumulated over time, relative to the ROCE. As for the rest, there is a relevant set of Italian companies (six blue squares in the Figure) outperforming their rivals, except for one French company (red circle in the second quadrant) clearly showcasing a very high CAGR of EBITDA.

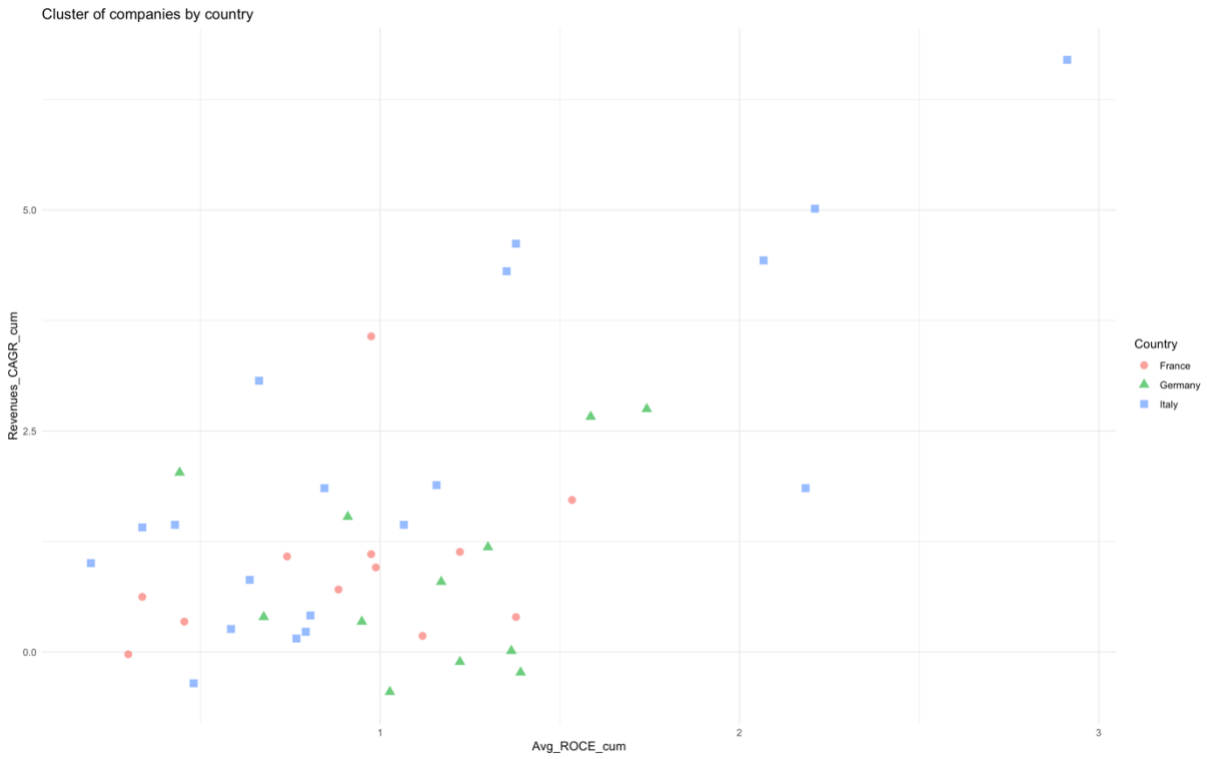


Figure 19. Cluster of companies by country:

Revenues_CAGR_cum and Avg_ROCE_cum

Figure 19 as well points out a higher dispersion across the ROCE figure, relative to the CAGR of Revenues. The other main takeaway is, once again, the presence of six Italian corporations outperforming all the others (see blue squares), with no French corporation

showcasing a high CAGR of Revenues, differently from what happened in Figure 18 with the CAGR of EBITDA. Therefore, the Italian supremacy seems to be even more blatant.

Furthermore, based on both the theoretical and statistical importance of the *Avg_ROCE_cum* as an explanatory variable at the Italian level, when performing the OLS regression (Section 4), isolating the positioning of Italian serial acquirers vs their European counterparts, by means of considering only the average ROCE cumulated over time, was deemed to guarantee a clearer picture.

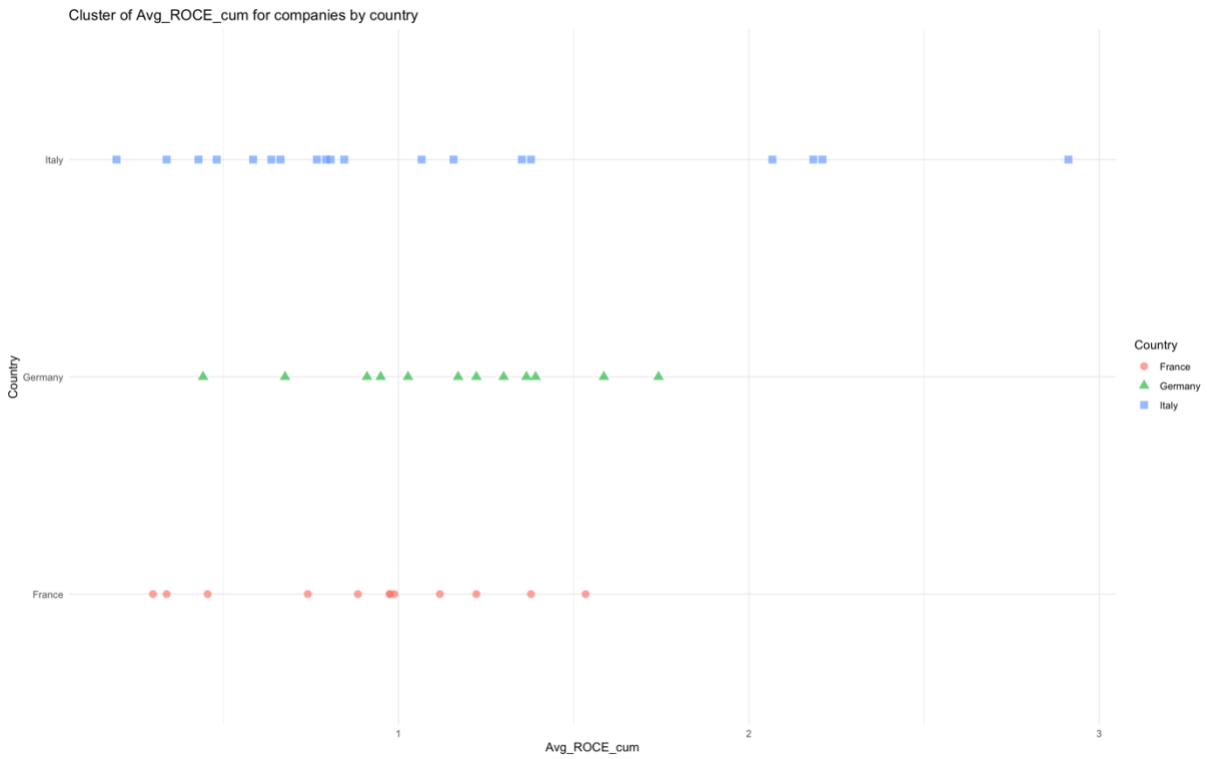


Figure 20. Cluster of companies by country:

Avg_ROCE_cum

Figure 20 seems to confirm previous findings: even though some Italian corporations lie below their European counterparts, four (out of the six previously identified when coupling the average ROCE cumulated with the CAGR of Revenues or EBITDA) Italian super-acquirers perform better (see blue squares on the far right).

Finally, in order to have a more detailed overview, the corporations acting as outperformers across the three countries in Figures 17-20, have been ultimately identified, as follows:

	Ranking			
	TR	***Revenues***	***EBITDA***	***ROCE***
Moltiply	-	1	-	1
Recordati	5	-	-	3
Bechtle	3	-	-	5
Reply	1	4	5	4
Txt E-Sol	2	2	2	2
Interpump	-	3	4	-
Stellantis	-	5	3	-
Thales	-	-	1	-
Rheinmetall	4	-	-	-

Table 29. The best performers across the relevant metrics: country focus

Source: own elaboration

Specifically, out of the 43 corporations included in the database, the five peers with the best performance across each metric and country have been collected. Therefore, in aggregate, nine companies have been presented in Table 29. Consistently with the visual analysis in Figures 17-20, six of them are Italian serial acquirers. Specifically, Moltiply and Recordati are acquisitive companies, whereas Reply, Txt E-Solutions, Interpump and Stellantis are super-acquisitive. With the exception of the CAGR of EBITDA cumulated over time, the company ranking #1 is always Italian, i.e. Moltiply for Revenues and ROCE, and Reply for TR.

In summary, the visualization of this cross-country Scatter Plot assessment suggests a continuity solution with respect to the *theoretical framework*. Indeed, within the boundaries of this research project and its main assumptions, while a high number of Italian companies compete on a level playing field with their German and French counterparts, some of them, especially super-acquisitive corporations, have been outperforming their European peers on a cumulated basis for a long period of time. Therefore, this result might prove stronger evidence for the importance of embracing a programmatic acquisitive activity as a strategy for growth, thus serving as an admonition to the Italian corporate arena. Within a virtuous cycle rationale, besides company-specific benefits, this would indirectly revitalize the Italian M&A market and make the whole system more attractive.

5.1.3. Benchmarking analysis across industries

So far, the analysis carried out at both the Italian and European level has been investigated without factoring in any in-depth consideration on the companies' industry of

operation. As anticipated in Section 5.1.2, an *excursus* on the way belonging to a certain industry interacts with the M&A framework will follow. Indeed, from a theoretical point of view, some sectors, sub-sectors and verticals are known for structurally displaying more or less numerous mergers and acquisitions waves, depending on a variety of reasons. Some industrial environments are characterized by low barriers to entry, which might result in a high number of companies competing in a fragmented landscape. Hence, in such circumstance, M&A plays a fundamental role as a consolidation instrument. It is usually implemented by more mature players, aiming at increasing their market share and protecting their positioning from new competitors. This is for instance what happened during the 1897-1904 time span, known as the first (out of seven) M&A wave in the history, the horizontal consolidation era, when M&A peaked in a certain set of industries, including *Metal*, *Transportation* and *Mining*: big players used to acquire targets in the same industry (and positioning in value chain) to specialize further and consolidate their leadership in the field (see for instance Kolev et al., 2011). Generally speaking, when considering the consolidation component, Yoffie & Kwak (2002) state that each company in each industry goes through an industry consolidation life cycle, which is made of four stages, namely opening, scale, focus, and balance and alliance, where the third one is meant as a phase of megadeals and extensive consolidations efforts. Hence, corporations operating in consolidating industries should think strategically of these steps, by means of scheduling mergers and acquisitions in a way that allows them to become a dominant player in a specific sectoral landscape. Moreover, in certain fields, regardless of the number of transactions (volume) across the consolidation waves, deploying an extensive acquisitive program for strategic growth might contribute to specific (positive or negative) results in terms of performance (for instance, Choi et al., 2020). This argument is even more compelling when considering the cyclicality phenomenon. Indeed, some sectors, including *Infrastructures & Construction*, *Automotive* and *Semiconductor*, as well as *Hotels*, *Restaurants*, *Leisure* and *Airlines*, are more cyclical than others, i.e. *Consumer*, *Healthcare* and *Utilities*, thus being more sensible to systematic risks, such as social, macroeconomic and geopolitical uncertainties. Considering that M&A as a business area is pro-cyclical as well (Komlenovic et al., 2011) – meaning that dealmaking tends to drop within a scenario of economic distress and pick up when recovery starts or

in ‘boom’ periods – its (intrinsic) systematic risk could be exacerbated by or add up to the consequences of an industry structurally being more volatile than others or where M&A plays a more important role, in terms of volume of transactions or impact on performance. Therefore, during periods of uncertainty (for instance, high interest rates set by Central Banks to curb high inflation, or lower consumer spending hitting on corporate profits), cyclical industries tend to suffer more, thus potentially leading to a greater slowdown in M&A activity compared to other contexts, according to a vitious cycle kind of logic. Indeed, Mitchell & Mulherin (1996) observe that a substantial variation in takeover activity across different industries occurred during the third wave (1965-1969, the conglomerate era), which is closely tied to the scale of economic shocks experienced by these industries, suggesting a connection between industry-specific disruptions and cyclicality and the ensuing takeover activity. On top of this, uncertainty in policy making, which is common in periods of economic distress and geopolitical instability, is found out to be negatively related to a firm’s *acquisitiveness* (Nguyen & Phan, 2017). On another note, there are some occasions where M&A carried out in periods of uncertainty within cyclical industries does not necessarily lead to negative results. A study conducted by McKinsey & Co. (Giersberg et al., 2020) shows that corporations that implement programmatic M&A through cycles, which results in strategically scheduling acquisitions during economic downturns, result in being able to acquire at lower valuations and thus increase the upside on a potential investment.

While these few argumentations are just illustrative and do not exhaust the whole set of all possible explanations, they suggest that adjusting the narrative of acquisitive and super-acquisitive corporations for the industry factor is fundamental for completing this analysis.

Within this research project, the industry consideration will be primarily tackled with the focus being on the sectors in which the highest M&A volume has occurred in the 2010-23 time frame (even though this topic has been somewhat already considered with the industries categorizations, as in Table 26, for instance). Additionally, the historical impact on performance across industries will be described, while leaving the study of its statistical significance (for instance by means of OLS regressions) to further studies.

Figures 21-23 re-apply the Scatter Plot assessment by means of benchmarking the whole set of companies by industry.

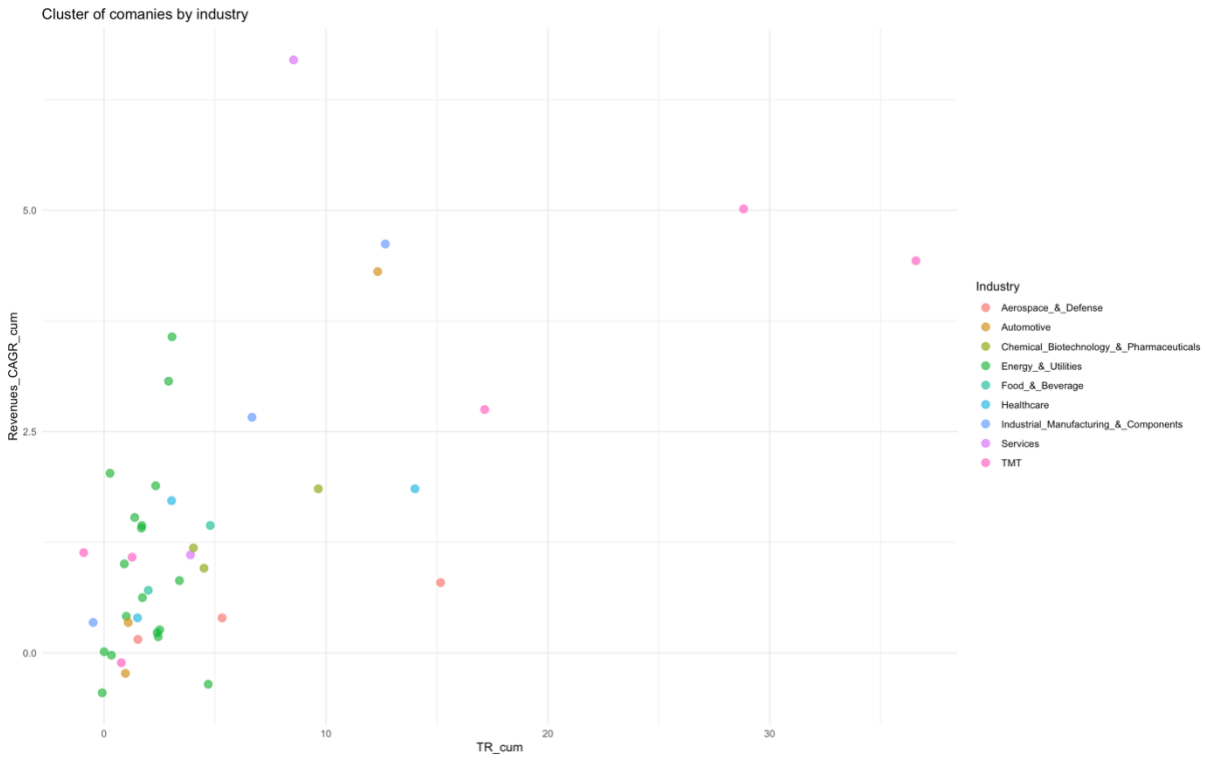


Figure 21. Cluster of companies by industry: Revenues_CAGR_cum and TR_cum

Source: own elaboration

In particular, when considering the CAGR of Revenues (y-axis) and the Total Return (x-axis), both cumulated over time, a blatant outperformance from two companies (which Figure 17 found out to be Italian) operating in the *TMT* space stands out (see the purple dots in the first quadrant, top right, Figure 21), especially in relation to *TR_cum*. Another

TMT corporation (see the purple dot in the middle of Figure 21) has an outstanding performance, relative to other acquisitive and super-acquisitive players, once again with specific regard to *TR_cum*. Moreover, some other industries result to be more relevant, even though with a lower degree of outperformance: (i) *Industrial Manufacturing & Components* (see the blue dots emerging mainly in relation to operational performance): (ii) *Automotive* (see the dot with ochre color, in the second quadrant, top left); (iii) *Services* (see the violet dot on the top left of the Figure, pointing out a massive top line performance).

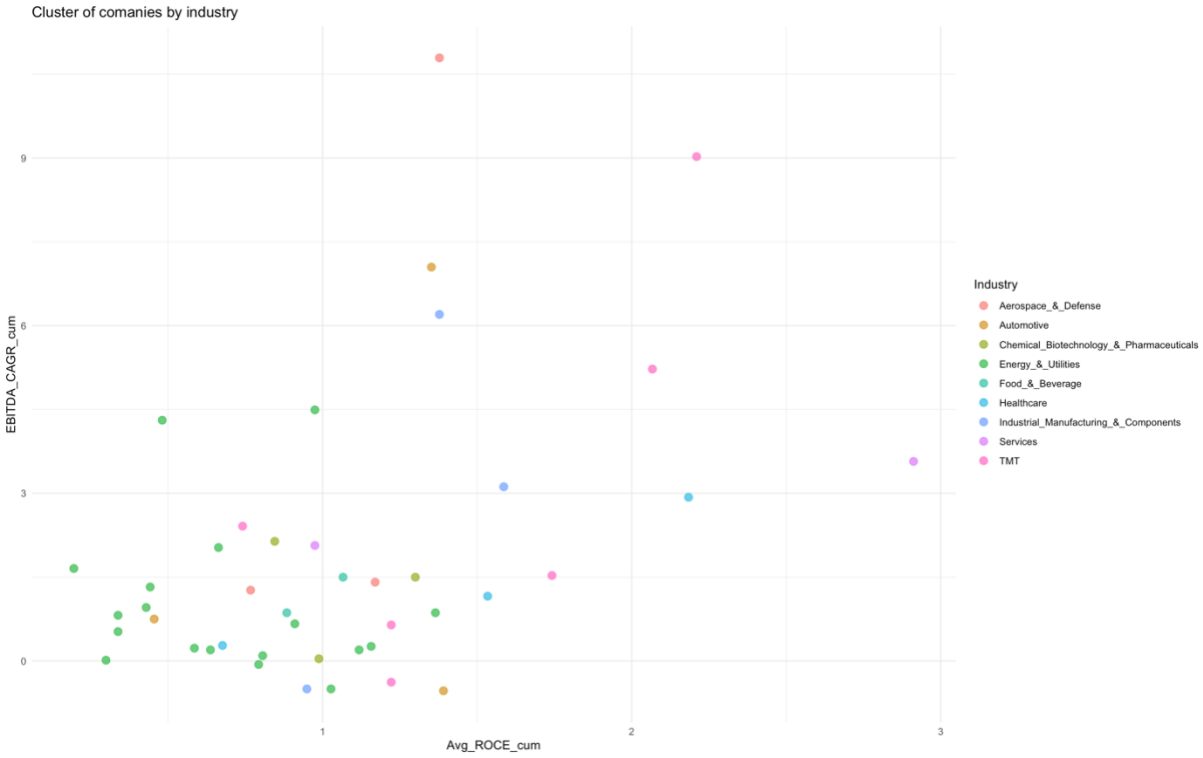


Figure 22. Cluster of companies by industry:

EBITDA_CAGR_cum and Avg_ROCE_cum

The same rationale has been applied to Figure 22, by focusing on two purely operational figures, namely the CAGR of EBITDA (y-axis) cumulated over time and the Average ROCE (x-axis), cumulated over time as well. Approximately, the main takeaway

resembles Figure 21's observations, with some additional comments. Indeed, among the industries depicted, (i) *TMT*, (ii) *Industrial Manufacturing & Components* and (ii) *Automotive* stand out again. Moreover, one company in the *Services* industry stands out as the best with regard to Return on Capital Employed (see the violet dot in the fourth quadrant). It is noteworthy to notice the outperforming company in the *Aerospace & Defense* (see the pink dot on the top of the Figure) at the EBITDA level, which is a synonym for the ability to earn a lot on margins, by means of being costly efficient and flexible. Finally, one company in *Healthcare* stands out especially for a high ROCE figure.

Figure 23. Cluster of companies by industry:

Revenues_CAGR_cum and Avg_ROCE_cum

Finally, this visual understanding of the cross-industry performance has been operated coupling the average ROCE (x-axis) and the CAGR of Revenues (y-axis), both cumulated

over time (Figure 23). Once again, the main findings are overall consistent with Figures 21 and 22. On an additional note, the most striking performance in this case is operated at the *Services* industry level (see the violet dot in the first quadrant, top right, which was found out to be related to an Italian company in Figure 19). In Figure 22, that company emerged as the most outperforming in terms of average ROCE cumulated over time while being well-positioned – even though not brilliantly – at the CAGR of EBITDA level, whereas in this case it is brilliant also from a top line perspective. Therefore, from a purely theoretical perspective, the high ROCE associated with this company, which is computed as EBITDA / Capital Employed, is mainly driven by a modest amount of assets used (lower denominator). Moreover, the company has a very high top line growth while being less efficient in terms of costs, which has an impact on relatively lower EBITDA.

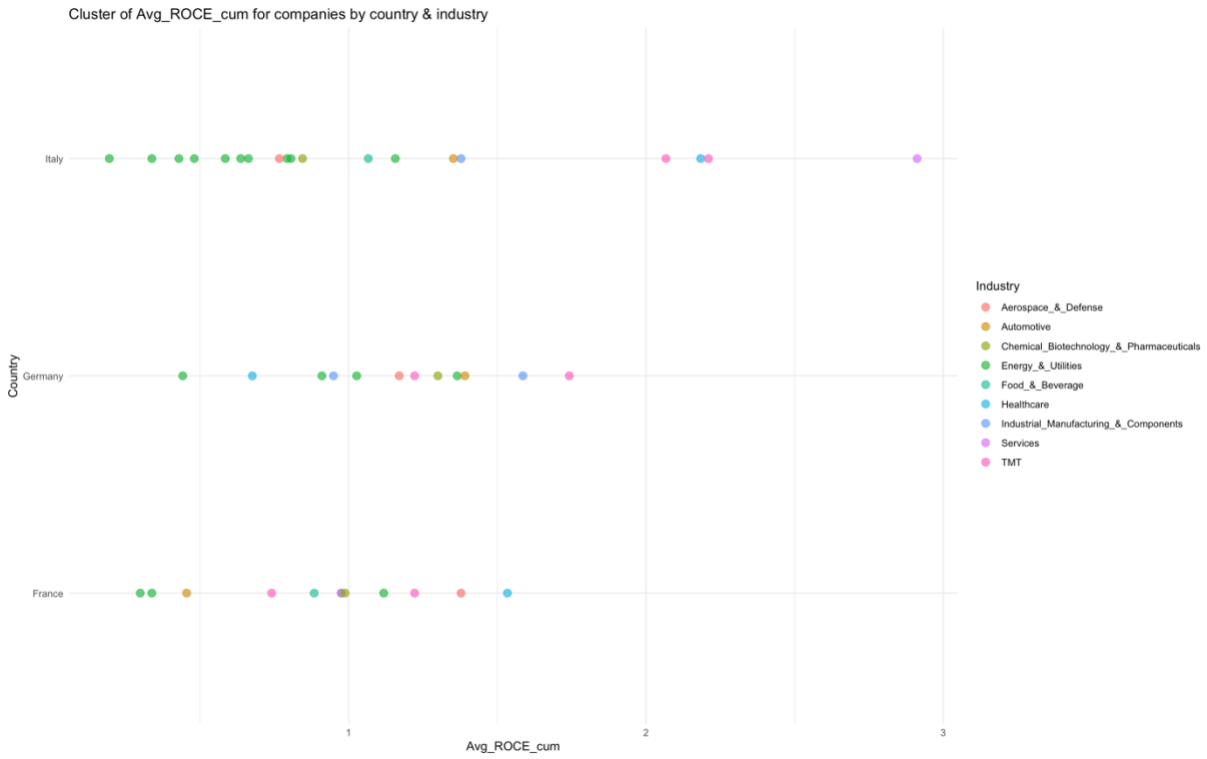


Figure 24. Cluster of companies by country & industry:

Avg_ROCE_cum

Once the main observations on long-term historical performance for serial acquirers at the industry level have been pointed out, the next step consisted in verifying the way the prevalence in terms of performance associated to some industries is allocated across Italy, Germany and France, thus also confirming the Italian leadership, as it was found out in the previous Section.

Accordingly, Figure 24 points out the performance of serial acquirers across the three European countries in terms of average ROCE cumulated over time. In the first instance, consistently with the previous argumentation, the most performing ones operate in *Services*, *TMT*, *Healthcare*, *Industrial Manufacturing & Components* and Automotive. In terms of cross-country allocation, the firms operating in almost all these industries belong to the Italian corporate arena, which all in all outperforms Germany and France. On another note, the only industry wherein Germany performs better is *Industrial Manufacturing & Components*, while being superior to France in *TMT*. As for the rest, there is more overlapping among the three countries in terms of industry performance, with Italy lagging behind in relation to some *Energy & Utilities* companies.

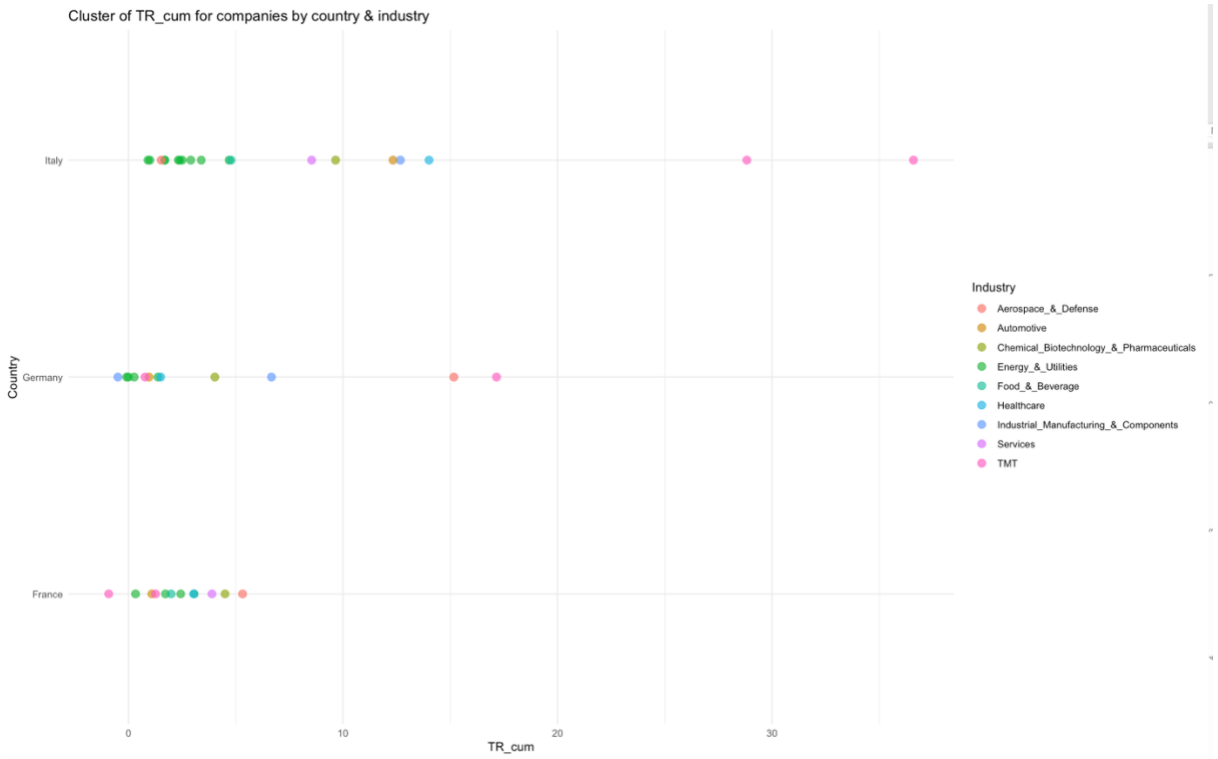


Figure 25. Cluster of companies by country & industry:

TR_cum

When considering the same rationale for stock market performance (Figure 25), in terms of cross-country allocation, the Italian corporate landscape has clearly outperformed in *TMT*, while also being positioned better in *Healthcare*, *Industrial Manufacturing & Components, Automotive, Services* and *Chemical, Biotechnology & Pharmaceuticals*. Germany outperforms Italy only with regard to one company operating in *Aerospace & Defense,* besides being once again superior to France in *TMT*. Overall, with regard to the Total Return cumulated over time, Italian firms seem to outperform their European counterparts.

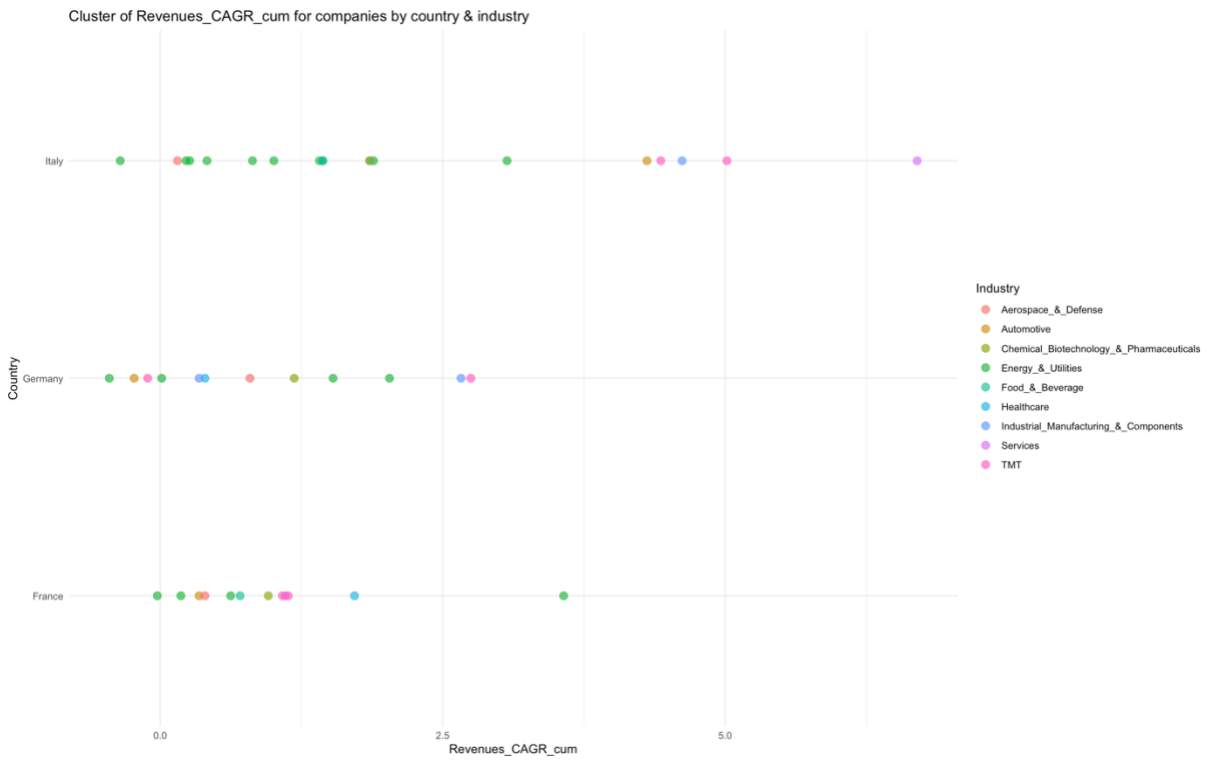


Figure 26. Cluster of companies by country & industry:

Revenues_CAGR_cum

When considering the top line component in the Income Statement (Figure 26), similar findings hold. It is noteworthy to notice that one Italian company belonging to the *Energy & Utilities* arena outperforms all its counterparts in Germany, while being beaten by one French company (see the dark green dots). However, Figure 27 demonstrates that this French outperformance has less strong evidence when considering also the flexibility in the cost structure. Indeed, the CAGR of EBITDA showcases an almost overlapping performance between the two French and Italian corporations in the industry (see the dark green dots in the middle of the Figure). Generally speaking, once again within the boundaries of this analysis and its assumptions, at the EBITDA level the Italian supremacy still applies for the same industries as before, with the exception of *Aerospace & Defense*, where one French corporation performs way better (which was already noted in Figure 22).

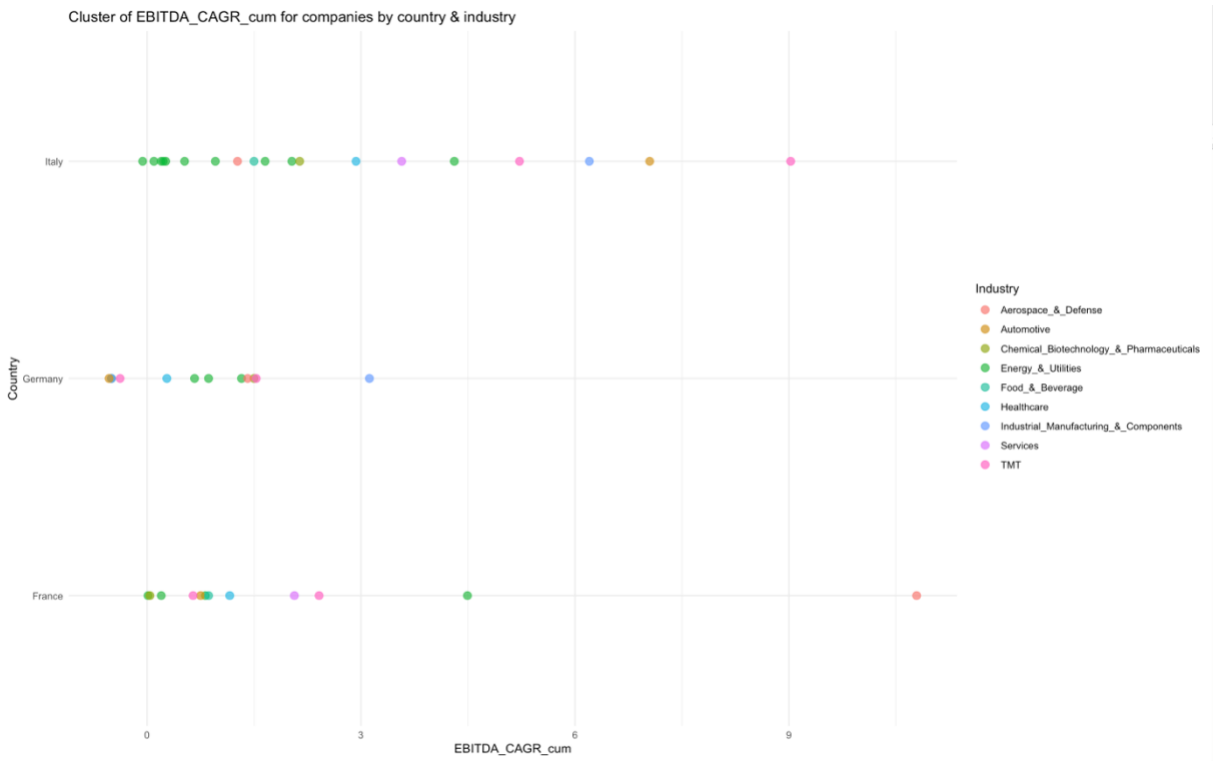


Figure 27. Cluster of companies by country & industry:

EBITDA_CAGR_cum

	Ranking				
	Industry	***TR***	***Revenues***	***EBITDA***	***ROCE***
Moltiply	***Services***	-	1	-	1
Recordati	***Healthcare***	5	-	-	3
Bechtle	***TMT***	3	-	-	5
Reply	***TMT***	1	4	5	4

Txt E-Sol	***TMT***	2	2	2	2
Interpump	***Industrial***	-	3	4	-
Stellantis	***Automotive***	-	5	3	-
Thales	***Aerospace&Defense***	-	-	1	-
Rheinmetall	***Aerospace&Defense***	4	-	-	-

Table 30. The best performers across the relevant metrics: industry Focus

Source: own elaboration

When re-addressing the analysis performed on the ranking of acquisitive and super-acquisitive companies not only at a country level (Table 29), but also across industries (Table 30), it is noteworthy to notice and confirm, according to the research assumptions, the apparent supremacy of *TMT* with Reply and Txt E-Solutions in the Italian corporate arena outperforming the European peers, including the German Bechtle which ranks #3 and #5 in terms of Total Return and ROCE. On another note, the *Services* company, which was found out to stand out when compared to all the others in Revenues and ROCE, is Moltiply. As for the remaining best performing sectors, Recordati shines in the *Healthcare* space, Interpump leads *Industrial Manufacturing & Components*, while Stellantis is the best in *Automotive*. The only field wherein, within this comparison exercise, Italy does not rank #1 is *Aerospace & Defense*. Indeed, Thales and Rheinmentall outperform Leonardo. Nonetheless, the performance of the Italian company in this space is positive, with *TR_cum* = 152.1%, *Revenues_CAGR_cum* = 15.3%, *EBITDA_CAGR_cum* = 126.7% and *Avg_ROCE_cum* = 76.7%.

To sum up, the set of Scatter Plots across countries (in Section 5.1.2) confirms that, *ceteris paribus*, Italian serial acquirers generally showcased an outperformance relative to their French and German counterparts during the 2010-23 time span, obviously within

the assumptions of this research project. Moreover, the same analysis, operated at the industry level, allowed to factor in an understanding of the sectors wherein the M&A framework, indirectly represented by serial acquirers, has been historically conducive to the overall best stock market and operational performance, based on the criteria adopted out in this dissertation.

Finally, another application of the traditional Cluster Analysis, which is the Dendrogram (which will be precisely defined below), has been implemented, with the aim to validate the main findings resulting from the Scatter Plots and verify whether some industry-specific pattern could be identified. With this point in mind, it is important to notice that the *theoretical framework* of this research project, as it was pointed out when building the database for Section 4, does not factor in the industry as an explanatory variable to study the statistical impact on the performance of acquisitive and super-acquisitive corporations. Accordingly, also when building the database at the European level (Section 5), all German and French companies have been defined as serial acquirers following the *acquisitiveness* and *super-acquisitiveness* paradigms, irrespective of their industry of operation. Indeed, just the number of deals (and the type of transaction in Section 4) carried out by each Italian, German and French corporation was taken into account for the OLS regressions at the Italian level and the applications of the Cluster Analysis within the broader European context.

As indicated when introducing this Section, the fact that the industry component had not been considered could be seen as a limit to this analysis. Hence, several avenues have been pursued to overcome this issue.

Firstly, the sectoral consideration has been brought to the table in the context of the Cluster Analysis by means of understanding in which industry acquisitive and super-acquisitive corporations operate the most as well as describing the historical long-term performance for companies operating in such industries.

On another note, understanding whether factoring in the sectoral component as a variable per se would have led to different results from a statistical point of view, a cross-industry final analysis was carried out, as depicted in Figure 28, with a Dendrogram.

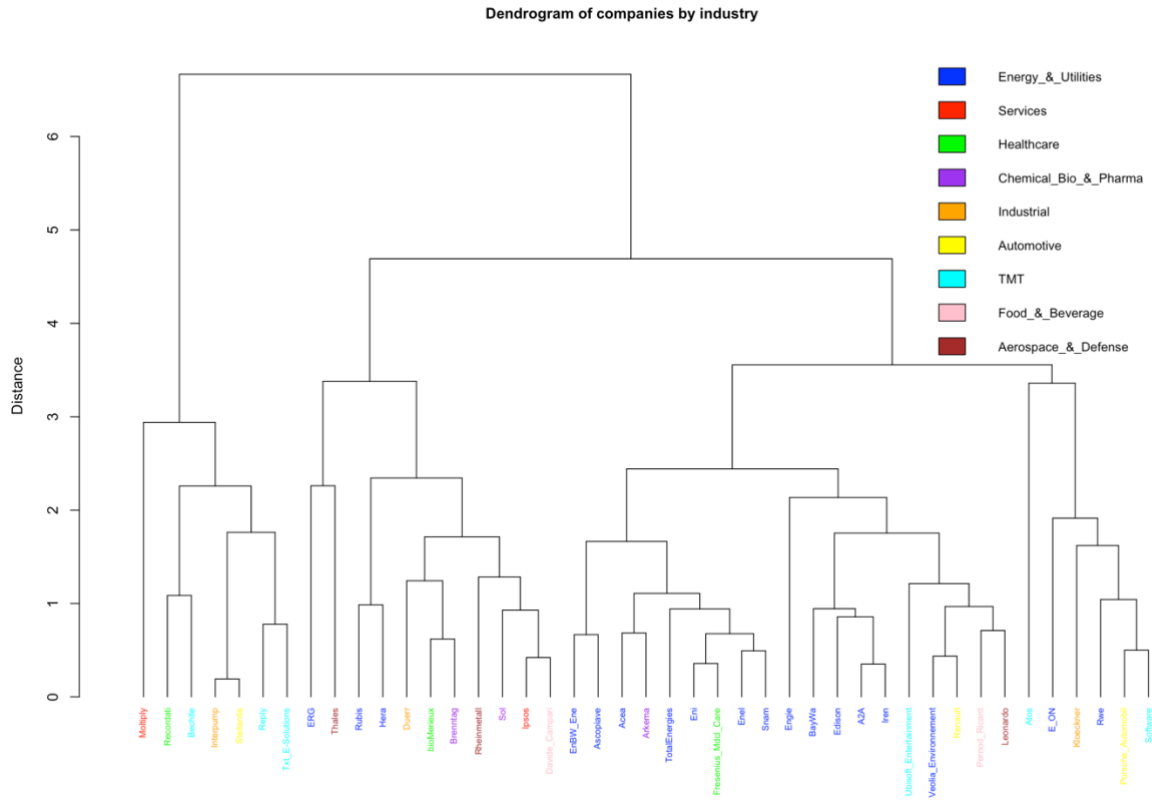


Figure 28. Dendrogram of companies by industry

Source: own elaboration through R software

Before indicating the rationale for introducing this instrument in the analysis, it is fundamental to define a Dendrogram. From a theoretical perspective, a Dendrogram is an application of a specific type of Cluster Analysis, which is Hierarchical Cluster Analysis. First, Hierarchical Cluster Analysis can be categorized according to two different subsets: divisive and agglomerative (Everit et al., 2010). Divisive hierarchical clustering methods start by placing all the figures into one cluster and then sequentially splitting this group until each figure stands alone. Conversely, agglomerative hierarchical methods begin with each data point in its own cluster and progressively merge pairs of clusters until only one remains. Specifically, a Dendrogram, according to Tan et. al (2006), is a graphical representation of Hierarchical clustering, in both its divisive and agglomerative form. The term refers to a plot with a tree-like structure, which identifies the relationships of proximity/similarity across a set of data points. It is made of branches, where each branch

is called “clade”, while the endpoint of each branch is the “leaf” or “node”. Moreover, each clade might be equipped with one unique leaf, which indirectly suggests the existence of an outlier in the data, or several leaves. The way the branches are structured suggests the degree of similarity or dissimilarity between leaves. Indeed, the most important part of a Dendrogram is the height, called “Distance” in Figure 28. It shows how much similar the leaves within a clade are relative to leaves of other clades. The greater the distance, the higher the difference. Consistently with the theoretical definition (divisive vs agglomerative), a Dendrogram can be read according to a top-down or bottom-up approach. The first interpretation methodology is needed when trying to identify large-scale groups, by means of focusing on branch points located at higher levels. Within the context of this analysis, the first chunk, which is separate from the others, indicates that the distribution of the data (*TR_cum*, *Revenues_CAGR_cum*, *EBITDA_CAGR_cum* and *Avg_ROCE_cum*) for companies ranging from Moltiply to Txt E-Solutions is different from the rest of the branches, which can be clustered into other macro-groups. Moreover, in Figure 28, the first macro-branch, including Moltiply and a group of corporations then in turn divided in other branches, shows a higher degree of similarity among its leaves (based on Distance) relative to the second macro-branch which comprises the range of companies from ERG to Davide Campari-Milano. On the contrary, the bottom-up approach is used to primarily identify individual data points or segments (in this case, corporations) that are more similar to each other, thanks to the analysis of the first small branches or clades in the figure below that group together individual leaves or nodes. Figure 28 shows that the highest degree of similarity is for Interpump and Stellantis, which obviously belong to different industries. This can be easily observed with the very low height (Distance) of the branch that collects their nodes. And, by moving up, small branches like this one are grouped with others, thus forming sub-clusters through to the macro-cluster that collects all the companies. In the context of the analysis at the European level, the bottom-up approach is deemed to be the right way of interpreting such Figure, considering that it primarily allows for the visualization of individual firms and their specific industry of operation, enabling them to be paired with companies (and their related industries) that have a similar distribution of data, then gradually leading to the formation of macro-clusters on the top of the graph. If the Dendrogram had grouped

together corporations belonging to the same industry, some sector-specific pattern would have been identified. Hence, in such a case, performing OLS regressions considering the industry as an additional independent variable would have been necessary to statistically explain industry-specific attributes when analyzing the impact on performance. Moreover, including the industry component in the definition of the *acquisitiveness* and *super-acquisitiveness* paradigms would have been reasonable as well. On the contrary, within the boundaries and assumptions of this research projects, all in all no consistent pattern can be identified across industry. Indeed, a high degree of similarity in the distribution of data (*TR_cum*, *Revenues_CAGR_cum*, *EBITDA_CAGR_cum* and *Avg_ROCE_cum*) for corporations operating in the same industry has been found out only with regard to the *Energy & Utilities* industry (with the exception of Reply and Txt E-Solutions for *TMT*): (i) Rubis and Hera; (ii) Ascopiave and EnBW; (iii) Enel , Eni, Snam and Total Energies; (iv) Engie, BayWa, Edison, A2A, Iren and Veolia Entertainment; (v) E.ON and Rwe. These companies operating in the *Energy & Utilities* landscape are grouped together in clusters and sub-clusters, often irrespective of the country of origin, thus revealing the existence of a similarity in the distribution of data for these corporations and consequential industry-specific attributes and patterns that might suggest the need to apply the *theoretical framework* for these corporations separately from all the others. As for the rest of companies, as anticipated, no industry-specific structure could be identified.

To sum up, while recognizing the limits of overlooking the industry variable when addressing the *acquisitiveness* and *super-acquisitiveness* paradigms and performing the OLS regressions, the general absence of industry-specific patterns in the data suggests that throwing all companies into the same pot without considering the industry as a distinguishing parameter in the construction of the databases was a reasonable choice, *ceteris paribus*, obviously within the boundaries and limitations of this thesis.

5.1.4. Deep dive benchmarking on Energy & Utilities

Considering that the number of serial acquirers across the three countries is predominant in *Energy & Utilities* and especially based on the main findings resulting from the Dendrogram, a deep dive benchmarking will be implemented at this industry level. Indeed, the Dendrogram in Section 5.1.3 suggested a similar distribution of data across corporations operating in the industry. Hence, this reveals the potential existence of *Energy & Utilities*-specific patterns, that can be addressed further by means of a Scatter Plots investigation.

Despite of one French corporation, which showcases a massive outperformance, especially in terms of Revenues (see the red dot in the first quadrant, Figure 29), all in all there is a higher number of Italian serial acquirers that, within the boundaries of this research projects, perform better than their German (see the green dots) and French (see the red dots) peers, both in terms of top line (thus financial soundness) and especially market-based performance (*Revenues_CAGR_cum* on the y-axis and *TR_cum* on the x-axis).

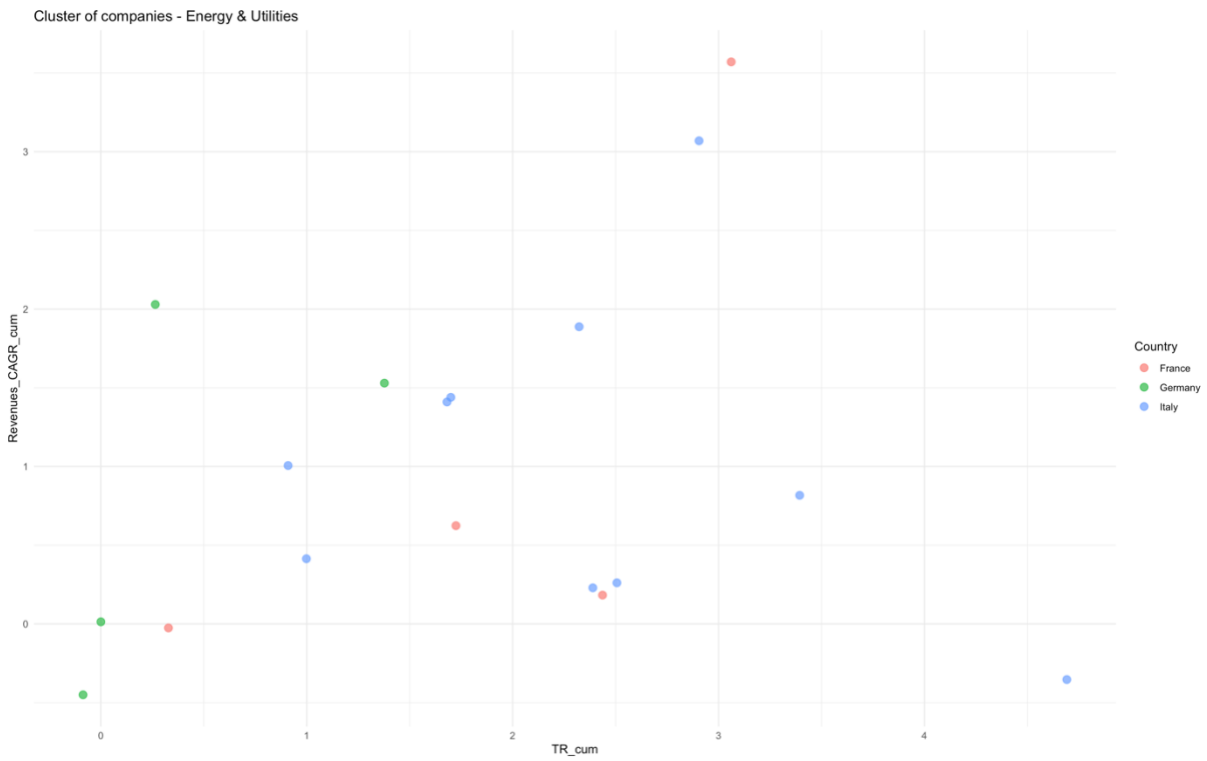


Figure 29. Cluster of companies – Energy & Utilities:

Revenues_CAGR_cum and TR_cum

When factoring in just metrics related to operational performance, in the form of both *EBITDA_CAGR_cum* (y-axis) and *Avg_ROCE_cum* (x-axis) (Figure 30), the Italian supremacy tends to fade away to a certain extent. Indeed, while Italy is home to some high performers in terms of CAGR of EBITDA, the same is not true for the Average ROCE (see the blue dots), which is consistent with the findings resulting from Figure 24 in the previous Section. Hence, the amount of capital Italian firms use (the denominator of the formula) more than compensates the quantity of earnings that they generate, in the form of EBITDA (the numerator of the formula). As for French corporations, despite of a very positive exception (same as Figure 29), they mostly showcase modest growth in EBITDA and lower efficiency in using their capital (see the red dots). On the contrary, German companies point out higher levels of *Avg_ROCE_cum,* however not accompanied by exceptional growth in EBITDA (see the green dots). All in all, compared to Figure 29,

where the better relative performance of the *Energy & Utilities* Italian corporate landscape was more blatant, more cross-country competitiveness takes over when focusing on these other two metrics, with Germany in particularly taking the lead with regard to the average Return on Capital Employed. Similar conclusions are achieved when *Revenues_CAGR_cum* replaces *EBITDA_CAGR_cum* on the y-axis (see Appendix B for further details).

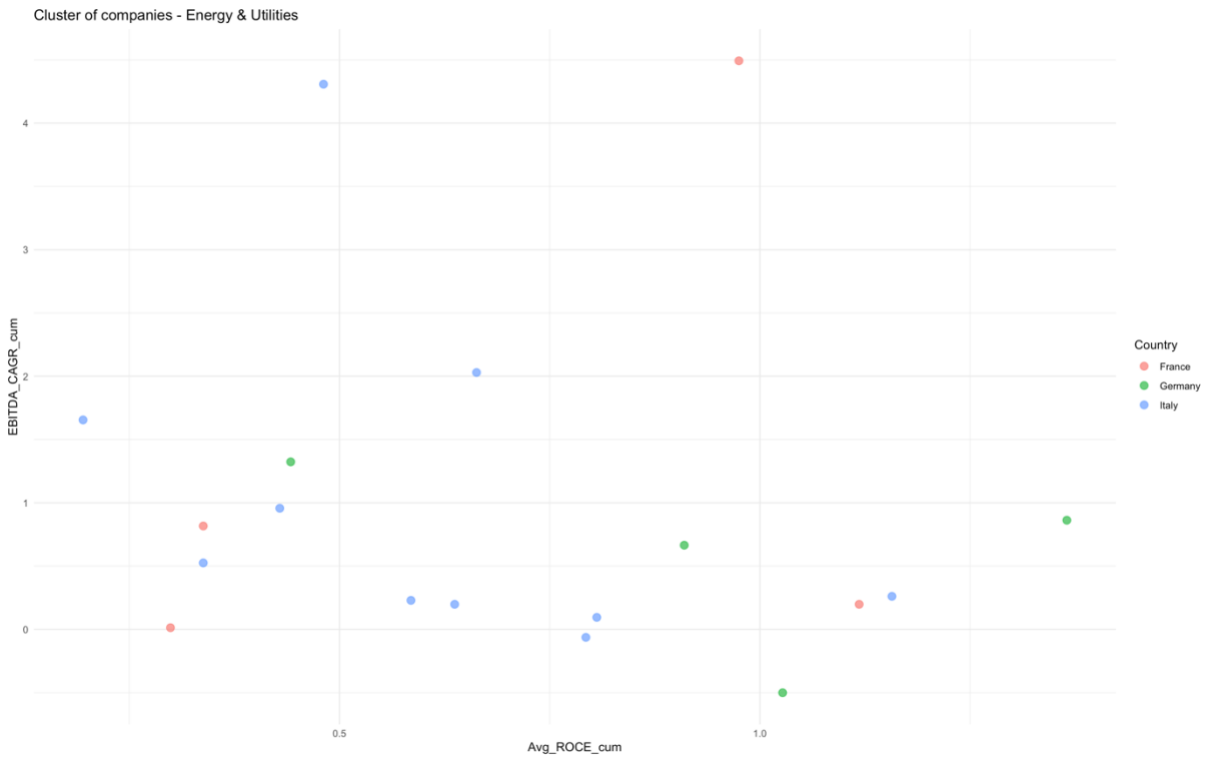


Figure 30. Cluster of companies – Energy & Utilities:

EBITDA_CAGR_cum and Avg_ROCE_cum

To sum up, Table 31 shows the ranking of acquisitive and super-acquisitive companies across countries within the *Energy & Utilities* landscape, in order to precisely identify the

companies that have been pinned (with the green dots) when interpreting the graphs of the Cluster Analysis. For each metric, the best five companies have been highlighted. As for Total Return, four out of the best five peers are Italian companies, namely ERG (#1), Acea (#2), Hera (#4) and Enel (#5), while one of them is French, i.e. Rubis (#3). In terms of Revenues, two out of five are Italian, i.e. Hera (#2) and Ascopiace (#4); one is French, i.e. Rubis (#1), while the remaining two are German, i.e. BayWa (#3) and EnBW Ener (#5). When it comes to EBITDA, three out of five are Italian, namely ERG (#2), Hera (#3) and Edison (#4), while one is once again the French Rubis (#1) and the remaining is the German BayWa (#5). Lastly, in terms of ROCE, as expected, only one Italian company stands out, Ascopiave (#2), while two French peers, i.e. Total Energies (#3) and Rubis (#5), and two German companies, i.e. E.ON (#1) and Rwe (#4), can be noticed.

Therefore, within this industry, Italian peers seem to dominate when it comes to Total Return and thus market performance. On the contrary, when factoring in financial soundness, in the form of CAGR of Revenues and EBITDA, there is a higher level of competitiveness across countries. Finally, at the ROCE level, Italian corporations are outperformed by their French and especially German peers.

	Ranking				
	Country	***TR***	***Revenues***	***EBITDA***	***ROCE***
A2A	Italy	10	6	6	14
Acea	Italy	2	9	13	10
Ascopiave	Italy	8	4	11	2
BayWa	Germany	16	3	5	13
E.ON	Germany	17	15	7	1

Edison	Italy	14	8	4	18
EnBW Ener	Germany	12	5	9	6
Enel	Italy	5	12	12	11
Engie	France	15	16	16	17
Eni	Italy	13	11	15	7
ERG	Italy	1	17	2	12
Hera	Italy	4	2	3	9
Iren	Italy	11	7	10	15
Rubis	France	3	1	1	5
Rwe	Germany	18	18	18	4
Snam	Italy	7	13	17	8
TotalEnergies	France	6	14	13	3
Veolia	France	9	10	8	15

Table 31. The best performers in Energy & Utilities

Source: own elaboration

5.2. Results: programmatic M&A for cross-country level playing field

In this Section, a summary of the main findings of Section 5 are presented:

(i). Section 5.1.2, by factoring in the analysis on acquisitive and super-acquisitive corporations within the broader European context, allows to invigorate the main findings on the importance of using M&A as a strategy for growth. Indeed, within the boundaries and assumptions of this research projects, the corporations that have been identified as Italian serial acquirers outperform their peers in Germany and France when considering both stock market performance and operational soundness. Indeed, the applications of the Cluster Analysis have pointed out that when analyzing the Total Return, the CAGR of Revenues and EBITDA, as well as the Average ROCE, all cumulated throughout a long time span, Italian firms have showcased an overall better positioning than their European counterparts, with only some exceptions. Accordingly, a ranking analysis pointed out Moltiply, Recordati, Interpump, Stellantis, Reply and Txt E-Solutions has the best Italian performers. Table 32 summarizes these findings, by means of showcasing the average performance of serial acquirers in the three countries across the market-based and financial metrics investigated within the Cluster Analysis' applications (where the green color shows the Italian dominance relative to Germany and France, within the boundaries of this research project).

		Average cross-country performance		
Metric	**Description**	**Italy**	**Germany**	**France**
TR_cum	*Total shareholder's return in the pre-defined time horizon on a cumulated basis*	802.3%	394.3%	231.0%
Revenues_CAGR_cum	*Average compound annual growth rate of Revenues over the pre-defined time horizon, on a cumulated basis*	213.4%	90.9%	98.3%
EBITDA_CAGR_cum	*Average compound annual growth rate of EBITDA over the pre-defined time horizon, on a cumulated basis*	258.4%	73.1%	202.0%
Avg_ROCE_cum	*Computed on a cumulated basis throughout 2010-23 as EBITDA/Capital Employed, it helps to understand how well a company is generating profits from its capital*	109.8%	114.8%	90.9%

Table 32. Average cross-country performance over 2010-23

Source: own elaboration

(ii). Moreover, the robustness of the cross-country findings has been empowered by factoring in the cross-industry component. The best performers were found out to be operating in the *TMT* and *Services* fields, with *Industrial Manufacturing & Components*, *Automotive* and *Healthcare* well-positioned as they immediately follow the best two industries. Accordingly, by means of a league table structure, these industries have been associated with the best players operating in them and positioned in a ranking (Table 30),

thus confirming the leadership of the firms identified in (i). Moreover, Table 33 provides a summary of the average performance of serial acquirers across the industries considered in the Scatter Plot Analysis, with a final visual overview of the best-performing sectors.

	Average cross-industry performance			
Industry	***TR***	***Revenues***	***EBITDA***	***ROCE***
Energy & Utilities	181.2%	98.1%	100.4%	69.8%
Services	621.5%	390.3%	281.8%	194.4%
Healthcare	618.4%	132.3%	145.5%	146.5%
Chemical, Biotechnology & Pharmaceuticals	606.1%	133.2%	122.6%	104.4%
Industrial Manufacturing & Components	628.2%	254.2%	293.9%	130.4%
Automotive	479.2%	147.3%	242.2%	106.6%
TMT	1394.7%	238.3%	307.6%	153.4%
Food & Beverage	338.8%	107.3%	118.1%	97.5%
Aerospace & Defense	733.5%	44.8%	448.9%	110.5%

Table 33. Average cross-industry performance over 2010-23

Source: own elaboration

(iii). Thirdly, a different application of the traditional Cluster Analysis, namely the Dendrogram, has been included to validate the significance of Section 5 and thus understand whether an industry-specific pattern could be identified in the distribution of stock market and operational data for companies in the same industry. In such a case, comparing the whole set of companies, regardless of their reference sector, which was the methodology followed in this research project, would have been inappropriate. Hence, a new OLS regression with the industry as an explanatory variable to statistically study the impact on performance would have been reasonable. Moreover, utilizing the industry as an additional component when defining companies according to the *acquisitiveness* and *super-acquisitiveness* paradigms would have been advisable as well. However, the analysis in 5.1.3 showed no pattern in the distribution of data, thus suggesting that no industry-specific phenomenon could potentially affect the effectiveness of the analysis. The only exception was represented by *Energy & Utilities*, where figures were distributed similarly for peers operating in this field, irrespective of the country of origin. As such, in 5.1.4 a separate benchmarking analysis has been operated for companies belonging to this sector, wherein Italy seems to prevail from a stock market perspective, while facing more competitiveness in terms of operational soundness.

Generally speaking, in Section 5 Italian serial acquirers have been found out to outperform their German and French counterparts. This result invigorates the main findings at the Italian level. Deploying a growth strategy based on M&A seems to be a weapon through which Italy can compete with more advanced European industrial fabrics, within a level playing field perspective. Tables 34-37 visually summarize the Italian leadership found out (within the assumptions and criteria of this research project) across most industries, based on the average performance over 2010-2023 for the whole set of

serial acquirers across the pre-selected variables (once again, the cell in the Tables is green when Italy has the leadership).

TR_cum			
	Italy	***Germany***	***France***
Energy & Utilities	235.0%	38.9%	188.8%
Services	853.8%	n.a.	389.2%
Healthcare	1401.0%	150.4%	303.9%
Chemical, Biotechnology & Pharmaceuticals	965.5%	402.6%	450.2%
Industrial Manufacturing & Components	1267.4%	308.6%	n.a.
Automotive	1233.2%	95.9%	108.6%
TMT	3270.7%	896.5%	16.9%
Food & Beverage	478.4%	n.a.	199.1%
Aerospace & Defense	152.1%	1516.6%	531.7%

Table 34. TR_cum: average cross-country and cross-industry performance over 2010-23

Source: own elaboration

Revenues_CAGR_cum			
	Italy	***Germany***	***France***
Energy & Utilities	101.8%	78.0%	108.8%

Services	669.9%	n.a.	110.7%
Healthcare	185.4%	39.6%	172.0%
Chemical, Biotechnology & Pharmaceuticals	185.4%	118.6%	95.7%
Industrial Manufacturing & Components	461.9%	150.3%	n.a.
Automotive	430.7%	-23.1%	34.4%
TMT	472.3%	131.9%	110.7%
Food & Beverage	143.9%	n.a.	70.7%
Aerospace & Defense	15.3%	79.4%	39.6%

Table 35. Revenues_GAGR_cum: average cross-country and cross-industry performance over 2010-23

Source: own elaboration

EBITDA_CAGR_cum			
	Italy	***Germany***	***France***
Energy & Utilities	114.0%	58.8%	138.0%
Services	357.0%	n.a.	206.6%
Healthcare	292.9%	27.7%	115.9%
Chemical, Biotechnology & Pharmaceuticals	214.0%	149.9%	4.0%
Industrial Manufacturing & Components	620.1%	130.8%	n.a.
Automotive	704.8%	-53.4%	75.0%
TMT	712.4%	57.5%	152.8%
Food & Beverage	149.9%	n.a.	86.2%
Aerospace & Defense	126.7%	141.0%	1079.1%

Table 36. EBITDA_GAGR_cum: average cross-country and cross-industry performance over 2010-23

Source: own elaboration

Avg_ROCE_cum			
	Italy	***Germany***	***France***
Energy & Utilities	60.8%	93.6%	68.3%
Services	291.2%	n.a.	97.5%
Healthcare	218.4%	67.6%	153.4%
Chemical, Biotechnology & Pharmaceuticals	84.5%	130.0%	98.8%
Industrial Manufacturing & Components	137.8%	126.8%	n.a.
Automotive	135.2%	139.1%	45.4%
TMT	213.9%	148.2%	98.2%
Food & Beverage	106.6%	n.a.	88.4%
Aerospace & Defense	76.7%	117.0%	137.8%

Table 37. Avg_ROCE_cum: average cross-country and cross-industry performance over 2010-23

Source: own elaboration

6. Conclusion

The aim of this research project consisted in primarily proving that growing via M&A is conducive to long-term outperformance, both in terms of stock market and operational figures. Such argumentation was initially tackled from a purely Italian perspective and subsequently contextualized within the broader European framework. The whole analysis stems from one structural issue underlying the Italian industrial landscape, i.e. the modest number of big strategic (corporate) players acting as consolidators relative to more advanced European countries. Consequently, a status of drought is consistently found out to negatively affect the competitiveness of the Italian corporate arena and the national M&A market. Therefore, this study aimed to demonstrate that carrying out aggressive acquisitive programs results in better long-term firm-specific performance, which in turn might have a positive spillover effect on country-specific factors, including the creation of an inter-European level playing field. Moreover, the empirical analysis also provided evidence that being more than a “basic” acquirer, which was expressed by the *super-acquisitiveness* paradigm, rises to be the strategy that allows for the best long-term stock market standing and operational soundness, thus suggesting the existence of a learning effect.

After a brief introduction to the main topic and a presentation of the methodology in Section 1, Section 2 pointed out the *theoretical framework*, around which the whole research project is centered. Accordingly, following an overview of the fundamental issues structurally permeating the Italian corporate arena, the *acquisitiveness* paradigm was developed in order to identify the exact definition of a company being acquisitive over a long-time span, purely based on the number of deals (volume) carried out. This definition was useful during the screening process when selecting acquisitive corporations (*Tier 1*) and distinguishing them from non-acquisitive companies, meaning players that base their growth for strategy on purely organic tools or a mix of organic and inorganic levers. Furthermore, a layer of complexity was added when presenting the *super-acquisitiveness* paradigm, which was meant to identify corporations that make programmatic M&A based on multiple acquisitions in quick succession core to their

strategy. Therefore, the threshold for the number of transactions to be considered in this subset (*Tier 2*) was higher than for “basic” acquisitive corporations. The main reason why the *Tier 2* was introduced stems from the importance of a learning effect mechanism. Indeed, according to a theoretical perspective, firms that can originate, carry out and complete a very consistent number of acquisitions in short time frames should be able to develop a certain level of experience and skills when integrating targets with gradually increasing efficiency, which in turn should result in accretive deals and long-term outperformance.

The definition of the *acquisitiveness* and *super-acquisitive* paradigms was complemented with the analysis of the type of M&A deals that buyers can perform when carrying out one or more acquisitions. They were categorized according to three main clusters, as follows: (i) Consolidation, Diversification and Differentiation; (ii) Horizontal and Vertical; (iii) National and Cross-border. The rationale for considering the type of deal in terms of strategic purpose within the *theoretical framework* was consistent with the general aim of this research project. Indeed, the Italian industrial fabric is crawling with a variety of SMEs operating across a variety of industries, thus creating a very high level of fragmentation. Therefore, pointing out whether for instance a strategy based on consolidation from a horizontal perspective with a national scope has been historically more or less significant than others could provide some relevant information on what Italian strategic buyers could consider as the most effective type of deal within the Italian M&A market.

Once the *theoretical framework* was defined, a review of the existing literature on the topic has been investigated in Section 3. Much of the current literature focuses on the short-term effects of M&A activity and often emphasizes the nature and characteristics of individual deals, thereby overlooking the inherent structural attributes of acquisitive companies that exist independently of specific transactions. Additionally, there is a lack of comprehensive studies that thoroughly compare acquisitive and non-acquisitive public corporations, both within the Italian market on a standalone basis and in relation to other European countries.

In Section 4, the empirical analysis at the Italian level was developed and conducted, with the aim to capture the impact of the *acquisitiveness* and *super-acquisitiveness* paradigms on stock market performance and financial soundness. The following research hypotheses have investigated:

H1: In the long run, acquisitive companies can positively influence their stock market performance relative to firms based on purely organic growth and/or a mix of organic and inorganic growth, in terms of Total Shareholder Return (incl. dividends) and Price Change (excl. dividends), both cumulated over a pre-defined time horizon.

H2: In the long run, super-acquisitive companies can positively influence their stock market performance relative to firms based on purely organic growth and/or a mix of organic and inorganic growth, in terms of Total Shareholder Return (incl. dividends) and Price Change (excl. dividends), both cumulated over a pre-defined time horizon**.**

H3: In the long run, acquisitive companies can positively influence their operational performance relative to firms based on purely organic growth and/or a mix of organic and inorganic growth, in terms of CAGR of Revenues and EBITDA, both cumulated over a pre-defined time horizon.

H4: In the long run, super-acquisitive companies can positively influence their operational performance relative to firms based on purely organic growth and/or a mix of organic and inorganic growth, in terms of CAGR of Revenues and EBITDA, both cumulated over a pre-defined time horizon.

H5: In the long run, super-acquisitive companies can positively influence their performance relative to acquisitive firms, both in terms of stock market and operational performance, thus proving the existence of benefits associated with the so-called learning effect.

Initially, the main operating assumptions when building the database for the consequential OLS regressions were pointed out. Accordingly, a database of 88 Italian firms, categorized as non-acquisitive, acquisitive and super-acquisitive has been built, thus collecting all the relevant information needed for the empirical analysis. Hence, the

number of deals carried out over the 2010-23 time frame and their classification into one of the identified types in terms of strategic purpose have been considered. Furthermore, both stock market and operational variables have been collected, as follows:

- Stock market variables: the CAGR of Price Change and the CAGR of Total Return
- Operational variables: the Average EBITDA margin, the CAGR of Revenues, the CAGR of EBITDA, the CAGR of EPS, the Average ROCE, the Average FCF conversion and the Average Net Leverage

Except for EPS and Net Leverage, all this metrics have been then computed on a cumulated basis throughout the overall time horizon, consistently with the aim to point out a compounded long-term performance. After specifying the five Models and all the explanatory and dependent variables, the OLS regressions were finally carried out. Models (1) and (2) are specifically connected to stock market performance, whereas Models (3), (4), and (5) pertain to operational conduct. In summary, although these Models indicate that *H1* concerning acquisitive companies cannot be validated through this methodology, *H2* is indeed supported. Super-acquisitive companies can positively affect their superior stock market performance, as evidenced by Price Change and Total Return, when compared to non-acquisitive companies. Furthermore, a learning effect mechanism for super-acquirers seems to emerge from Model (1) and (2), as “basic” acquirers have been found out not to positively affect performance. Only super-acquirers, when utilizing capital efficiently, develop the ability to integrate target companies with greater agility. Consequently, *H5*, concerning stock market performance, is confirmed. According to the findings of this research, accumulating experience through multiple acquisition programs serves as a catalyst for achieving results that are unattainable by merely being a “basic” acquirer. On a related note, the conclusions on the operational conduct drawn from Models (3), (4), and (5) parallel those obtained from Models (1) and (2) in terms of stock market performance, albeit with less robust evidence. Indeed, *H3* is rejected: over the long term, acquisitive companies do not demonstrate a significant ability in positively affecting their operational performance compared to firms that solely rely on organic growth or a combination of organic and inorganic expansion. Conversely, *H4* and once again *H5* (which regards both stock market and operational performance) are

considered valid. In the long run, super-acquisitive companies, by maintaining a high Return on Capital Employed, can significantly and positively influence their financial stability, outperforming both non-acquisitive and “basic” acquisitive corporations.

Following the investigation of the analysis at the Italian level, in line with the broader picture outlined in the *theoretical framework* (Section 2), the consequential aim was to demonstrate that the Italian serial acquirers, crowned as the best performers from a purely national perspective, can in fact compete also with their European counterparts. Hence, in Section 5, the overall project has been placed within the broader European context (where Germany and France are considered alongside Italy). Indeed, had Italian consolidators proven to be competitive with their German and French peers, this outcome would have enabled the acquisitive national companies to be regarded as paradigmatic models for non-acquisitive or less acquisitive Italian firms, with the ultimate aim of making the Italian market more dynamic and fostering an intra-European level playing field.

In such context, a purely comparison exercise has been conducted, thanks to simple applications of the Cluster Analysis methodology, in the forms of Scatter Plots and a Dendrogram. First, in a fashion similar to Section 4, the panel of German and French serial acquirers has been defined according to the *acquisitiveness* and *super-acquisitiveness* paradigms and completed with the Italian counterparts, as identified in Section 4. The same operating assumptions have been applied as well. It is important to notice that, besides super-acquisitive companies, also acquisitive, though not being statistically relevant at the Italian level, have been included in this comparison exercise. In addition, when it comes to the collection of the stock market and operational data for each corporation, for consistency’s sake, only the metrics that resulted to be as the most significant ones in Section 4, namely Total Return, the CAGR of Revenues and EBITDA, as well as the average ROCE, all of them cumulated over the 2010-23 time span, have been factored in. Following the completion of the database, the comparison exercise between Italian and European serial acquirers has been operated. Firstly, it seems that Italian serial acquirers have outperformed their German and French peers in both stock market performance and operational soundness. Scatter Plots show that Italian companies generally have stronger positions in Total Return, CAGR of Revenues and

EBITDA, as well as Average ROCE over time, with Moltiply, Recordati, Interpump, Stellantis, Reply and Txt E-Solutions identified as top performers. Secondly, applying the benchmarking investigation at the industry level, the best performers are found out to operate primarily in the *TMT* and *Services* sectors, with *Industrial Manufacturing & Components*, *Automotive* and *Healthcare* following closely. A Dendrogram analysis was also conducted to determine if industry-specific patterns influenced stock market and operational data. The analysis found no significant industry-specific effects, except for *Energy & Utilities*, where it seems that Italy excelled in stock market performance but faced more competition in operational soundness. Overall, within the assumptions and boundaries of this analysis, Italian serial acquirers have been shown to outperform their German and French counterparts, confirming that M&A-driven growth strategies represent a powerful tool for Italian companies to compete with more advanced European industries. This result serves as an admonition to address and potentially eradicate the structural deficiencies in the Italian corporate arena and M&A market, as they were depicted in the *theoretical framework*. Carrying out an acquisitive program for growth, by consolidating smaller firms across fragmented industries and hence building flourishing districts might be conducive to a higher Italian competitiveness within the European landscape.

Alongside pointing out the main findings of this research projects, it is still important to recognize its limitations, as well as potential room for improvement for further analyses. Firstly, all the main findings are true only within the boundaries and main assumptions that have been considered for this empirical analysis, starting from the definition of acquisitive and super-acquisitive companies through to the choice of the explanatory and dependent variables and the way they have been collected and computed within a long-term perspective. Hence, it would be interesting to re-implement the overall project by applying a sensitivity analysis aimed at defining different thresholds for being considered as acquisitive and super-acquisitive as well as collecting different types of stock market and operational variables. Furthermore, even though the Dendrogram analysis in Section 5 has proved that no industry-specific pattern could be identified for the data collected for companies across Italy, Germany and France operating in the same sector (with the exception of the *Energy & Utilities* arena), a more detailed industry-specific assessment

could be implemented, for instance by means of considering the industry as an additional explanatory variable, alongside the ones that have been factored in this study in relation to the OLS regressions in Section 4. A potential further investigation could consist in integrating an interaction variable such as "*industry_cycle*#deals_completed*", which would allow to associate the industry phase (consolidation or fragmentation phase, for instance) wherein a firm is sitting with its M&A activity in terms of number of deals carried out (volume of transactions). Consequently, this variable would be considered as an enhancing or detrimental factor to be multiplied by the financial metrics collected in this research project. Finally, at the European level, the comparison exercise has been carried out only between Italian and European serial acquirers, thus implying that also in France and Germany acquisitive and super-acquisitive companies outperform the non-acquisitive ones. For completeness' sake, it would be interesting to replicate the same OLS regressions as they were implemented at the Italian level also for France and Germany on their standalone basis, before implementing any cross-country comparison investigation. Such work would add up to the analysis that Mariani et al. (2015) started to implement in relation to the Italian vs British M&A landscapes.

Once the main limitations and consequential rooms for improvement have been pointed out, it is finally important to recall the significance of the main findings associated with this research project as well as its general scope. Both the Italian- and European-level analyses, by providing evidence of the benefits associated with being a serial acquirer (especially super-acquisitive) in a long-term perspective, serve as a wake-up call for call for Italian firms to consider the adoption of a consolidation-based approach for long-term growth. This could contribute to making the Italian M&A market more dynamic, as well as invigorating its industrial fabric, thanks to the creation of hubs and poles, all in conjunction with a wave of consolidation acquisitions affecting the fragmented world of SMEs, which the Italian corporate landscape is overflowing with.

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8. Appendix

Appendix A: Multicollinearity analysis for Models (3), (4) and (5)

For Models (3) and (4), which consider the CAGR of Revenues and CAGR of EBITDA cumulated over time, the same set of variables as in Models (1) and (2) has been considered. Therefore, the same correlation matrix as the one depicted in Figure 12 for Model (1) and Model (2) is considered. Once the RegSubset framework is implemented and only the best variables for each model are chosen, the following results emerge.

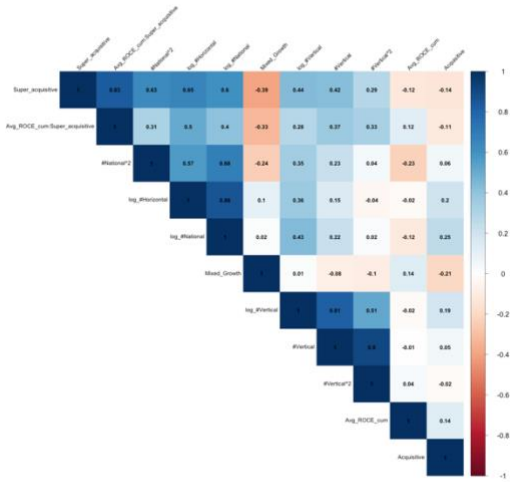


Figure 31. Model (3) – Correlation matrix for the variables following the implementation of RegSubset

Source: analysis carried out through R software

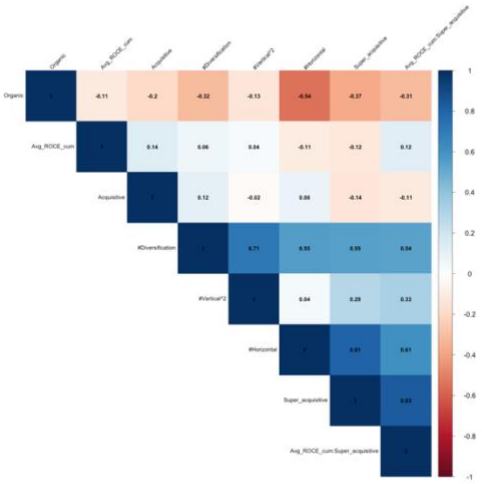


Figure 32. Model (4) – Correlation matrix for the variables following the implementation of RegSubset

Source: analysis carried out through R software

Besides the physiological correlations between the variables for which logarithmic and squared transformations have been applied and the expected high correlation between variables considered on a standalone basis and as part of an interaction term, the remainder of variables show acceptable or minimal levels of correlations, thus suggesting a lack of multicollinearity between them. Moreover, it is still worth it to notice the same kind of moderate or high correlations between variables representing the type of deal, which emerged also for Model (1) and Model (2).

In order to point out in a more comprehensive way the potential correlation between the variables finally utilized in Model (3) and Model (4), the VIF analysis has been performed.

```
> print(vif_values_cleaned)
                                Avg_ROCE_cum                                Mixed_Growth
                                    1.304456                                    3.832141
                            Super_acquisitive                                Acquisitive
                                   16.065055                                    2.970380
                  log(`#Horizontal` + 1)                                `#Vertical`
                                    8.731874                                   52.655347
                         I(`#Vertical`^2)                  log(`#Vertical` + 1)
                                   24.548346                                   14.659487
                         I(`#National`^2)                  log(`#National` + 1)
                                    3.149881                                    5.481941
Avg_ROCE_cum:Super_acquisitive
                                    5.515361
```

Table 38. Model (3) – VIF analysis for the variables following the implementation of RegSubset

Source: analysis carried out through R software

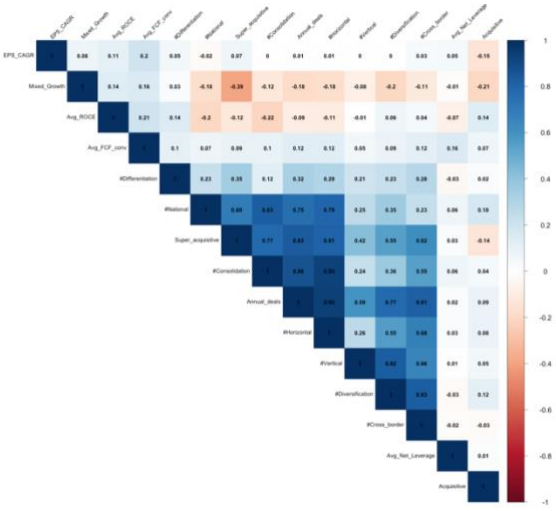
```
> print(vif_values_cleaned)
                Avg_ROCE_cum                Super_acquisitive
                    1.299575                            8.804991
          `#Diversification`                          `#Horizontal`
                    5.857019                            8.663206
         I(`#Vertical`^2)                             Organic
                    4.673138                            1.702808
                Acquisitive Avg_ROCE_cum:Super_acquisitive
                    1.212890                            4.237589
```

Table 39. Model (4) – VIF analysis for the variables following the implementation of RegSubset

Source: analysis carried out through R software

Model (3) presents physiologically high VIF values due to the presence of variables that have been subjected to transformations and other variables both serving as part of interaction terms and considered on a standalone basis (i.e. *Super_acquisitive*), which is not reason for concern, whereas in Model (4) the whole set of explanatory variables showcases a VIF value below 10, thus proving that multicollinearity is not a threat.

As far as Model (5) is concerned, the initial set of variables included in the model is different, considering that the cumulated metrics for financials are replaced by their annual counterparts. Moreover, the variable *Annual_deals* is factored in. This has an impact in terms of multicollinearity analysis.



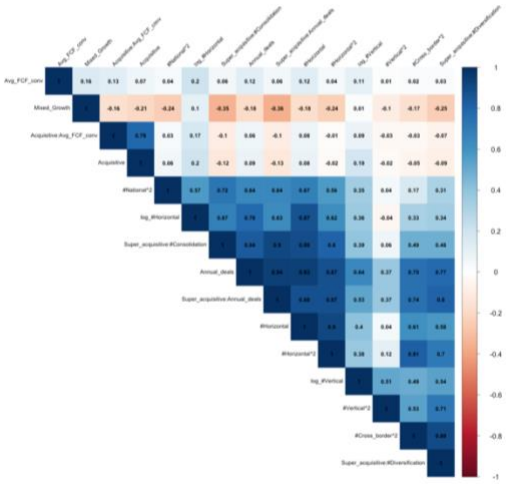


Figure 33. Model (5) – Correlation matrix for the variables in their standard version

Source: analysis carried out through R software

Figure 34. Model (5) – Correlation matrix for the variables following the implementation of RegSubset

Source: analysis carried out through R software

Figure 33, which represents the correlation matrix of the general "annual" model that includes the whole set of potentially appliable explanatory variables, provides similar insights as the ones emerging from the previous four models, which are based on cumulated metrics. Despite of a limited number of high correlations (e.g. between *Annual_deals* and the type of deals), most variables do not point out significant relationships, thus suggesting that they influence the average yearly EBITDA margin, without depending on each other. The same kind of reasoning holds following the adjustments operated at the RegSubset level (Figure 34).

```
> print(vif_values_cleaned)
         EPS_CAGR           Avg_ROCE       Avg_FCF_conv   Avg_Net_Leverage
         1.087166           1.287019           1.198474           1.047999
     Annual_deals            Organic      Mixed_Growth  Super_acquisitive
      119.383719           6.559569           5.052973           5.289870
`#Consolidation` `#Diversification`      `#Horizontal`         `#National`
       35.112831          26.652670          16.556167           3.740152
```

Table 40. Model (5) – VIF analysis for the variables in their standard version

Source: analysis carried out through R software

```
> print(vif_values_cleaned)
                                Avg_FCF_conv                                 Annual_deals
                                    1.098725                                   633.939331
                                `#Horizontal`                          I(`#Horizontal`^2)
                                   638.124697                                   112.968737
                          log(`#Horizontal` + 1)                            I(`#Vertical`^2)
                                   26.063092                                    40.502328
                            log(`#Vertical` + 1)                           I(`#National`^2)
                                   19.748095                                     8.951848
                           I(`#Cross_border`^2)                 `Acquisitive:Avg_FCF_conv`
                                   55.270021                                     2.873660
              `Super_acquisitive:Annual_deals`  `Super_acquisitive:#Consolidation`
                                  253.663744                                    97.554761
`Super_acquisitive:#Diversification`                                      Mixed_Growth
                                   82.684989                                     5.017916
                                Acquisitive
                                    6.897502
```

Table 41. Model (5) – VIF analysis for the variables following the implementation of RegSubset

Source: analysis carried out through R software

In terms of VIF analysis, Table 40, which focuses on the general model, confirms that there are no reasons for concern in terms of multicollinearity, considering that most of the explanatory variables lie below the accepted threshold (10), except for the variables expressing the type of deal and the average annual deals. Interestingly, the *Super_acquisitive* variable, which has been proven to be the most important one for the outcome of the empirical analysis, has a VIF value of ~5.3, thus fully respecting the threshold. Finally, when considering the improved Model (5), Table 41 confirms the same results and once again the high values for interacting and transformed variables (following the implementation of the RegSubset framework) are structural and expected, hence they do not represent a threat.

Appendix B: Deep dive benchmarking on Energy & Utilities

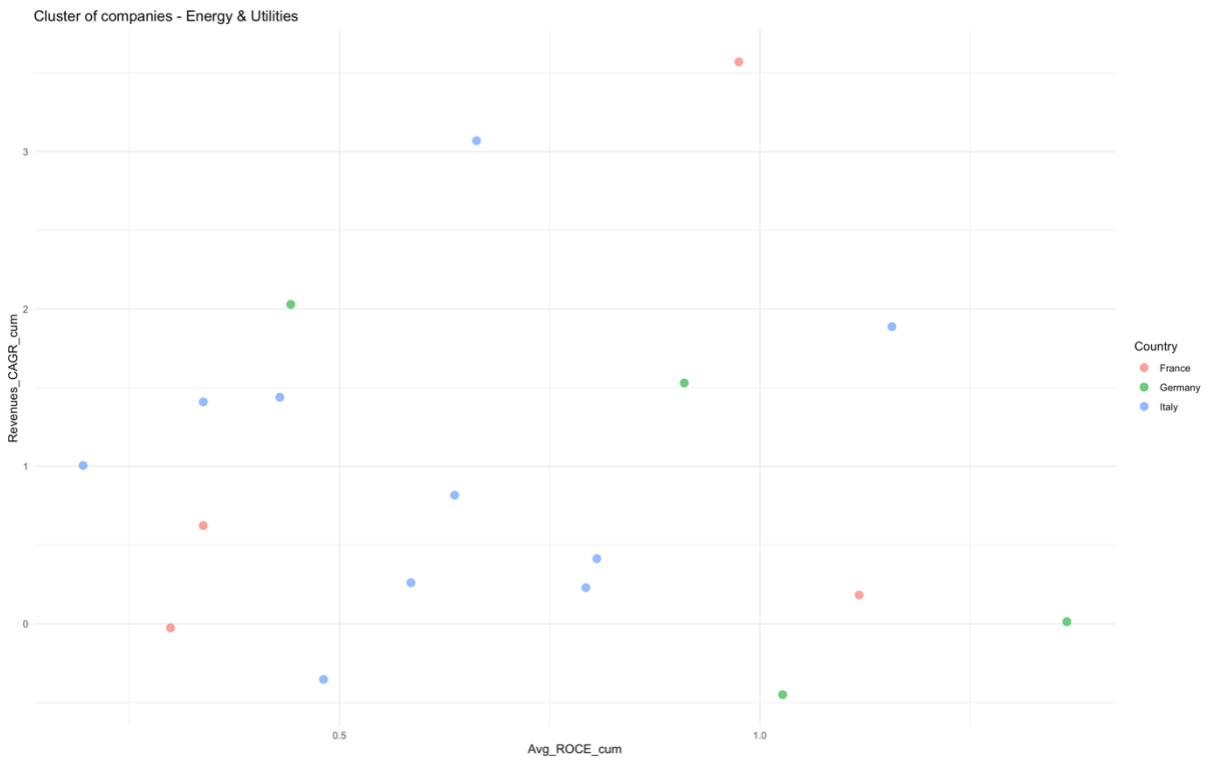


Figure 35. Cluster of companies – Energy & Utilities:

Revenues_CAGR_cum and Avg_ROCE_cum

All in all, the same results as those achieved in Figure 30 can be confirmed. Nonetheless, Italian serial acquirers seem to perform better when it comes to top line CAGR, relative to the CAGR of EBITDA.

PROGRAMMATIC M&A AND LONG-TERM PERFORMANCE IN SWEDEN

THE ROLE OF INDUSTRIAL HOLDING COMPANIES AND THE ROLL-UP MODEL

GIUSEPPE SPIEZIA

Master Thesis - Finance

Stockholm School of Economics

2026

Programmatic M&A and Long-Term Performance in Sweden: The Role of Industrial Holding Companies and The Roll-Up Model

Abstract:

This dissertation investigates whether growth through M&A constitutes a value-enhancing strategy in the long term, focusing on the role of programmatic M&A in shaping positive stock market and operational performance. The analysis is conducted within the Swedish corporate arena and is complemented by a comparative perspective with Italy to highlight institutional and strategic corporate differences. Building on the *theoretical framework* of Sweden's institutional setting, such as deep capital markets, strong investor participation and high financial sophistication, the dissertation argues that these conditions have enabled the rise of industrial holdings and acquisition-driven "compounders" pursuing consolidation-led growth through repeated acquisitions of SMEs within "related" core verticals. The results indicate that acquisitive firms exhibit stronger compounded long-term performance than organic or mixed-growth peers, but that *acquisitiveness* becomes statistically meaningful primarily when paired with a consolidation-oriented M&A strategy. Cross-country empirical evidence further shows that Swedish consolidators present structurally higher cumulative top line (revenue) growth than their Italian counterparts. Nonetheless, this gap appears to reflect country-level and idiosyncratic factors rather than a uniquely stronger premium associated with the "seriality" of the M&A playbook for Swedish hyperscalers. In Sweden, financial soundness appears largely priced in as a variable and is not, on its own, the key differentiator among serial acquirers. In comparison, Italy sits on a lower stage of acquisitive maturity ladder, given that performance is more tightly linked to capital efficiency than to strategic discipline. Overall, the findings support the view that Sweden operates at a more advanced level of the acquisitiveness framework, where institutional support and strategic coherence determine whether programmatic M&A translates into sustained and compounded long-term value.

Keywords:

Serial acquirers, Roll-up strategy, Hyperscalers, Compounders, Stock-market performance, Operational soundness

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Master Thesis
Master Program in Finance
Stockholm School of Economics

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1. Introduction

The following research project aims at analyzing the extent to which being acquisitive as a firm, i.e. relying on M&A activity as a strategy for growth, has a positive and statistically significant impact on long-term performance, both in terms of stock market figures and operational activity (hereinafter, the *core research question*).

The primary focus will be on the Swedish corporate arena and institutional setting, by means of identifying the country's structural peculiarities and the way they interact with the M&A activity of its players. Secondly, the study extends to a broader perspective, based on a comparison with the Italian landscape in terms of number and performance of national strategic (corporate) buyers acting as consolidators. The aim is to better identify and benchmark the strengths and weaknesses of Sweden relative to Italy. The primary expectation is that Swedish public consolidators, those that view programmatic M&A as a foundational part of their business model and as a catalyst for building large industrial groups, outperform companies focused primarily on organic growth, in a fashion similar to the findings observed in Italy. Second, the impact of being a serial acquirer will likely manifest differently (relative to Italy), given the distinct industrial landscape in which Swedish corporations operate. Accordingly, the analysis will both (i) provide evidence of the strong long-term foundations that Sweden has established for its corporate universe and (ii) serve as a wake-up call for Italian firms and policymakers to prioritize consolidation-based strategies as a driver of long-term growth. Sweden can act as a paradigmatic model of excellence for creating an inorganic-growth-friendly environment in which the phenomenon of industrial holdings can fully develop. This could help make the Italian M&A market more dynamic and invigorate the industrial fabric through the creation of hubs and districts, alongside a wave of concentration acquisitions affecting the fragmented SME universe that characterizes the Italian corporate landscape.

Section 2 will go over the specifics of the national industrial DNA and M&A market, thus pointing out the *theoretical framework* of this research project. Firstly, it will provide details of the mentioned Swedish structural peculiarities and the main differences with Italy. Secondly, considering that the whole analysis revolves around acquisitive firms, a proper

definition for this kind of corporation will be clarified (hereinafter, the *acquisitiveness* paradigm). In particular, the number of deals (volume) carried out during a pre-defined time horizon will be taken into consideration and will allow to select the set of acquisitive companies (hereinafter, *Tier 1* firms). Secondly, the *super-acquisitiveness* paradigm will be presented, hence the second sample will be identified (hereinafter, *Tier 2*). This concept is mainly related to serial acquirers with a successful track record in performing multiple and consecutive mergers and acquisitions, thus being able to integrate targets with increasing efficiency and flexibility over time, thanks to a learning effect. Pointing out the *theoretical framework* will be instrumental for answering the *core research question* alongside its ramifications. Indeed, it will serve as the basis for the implementation of the statistical analysis aimed at assessing the long-term stock market performance, mainly by means of Total Return for shareholders as well as operational soundness, i.e. the evaluation of the economics and fundamentals resulting from the financial statements of the selected *Tier 1* and *Tier 2* corporations.

In Section 3, the existing literature on this topic will be illustrated, with a focus on three main themes, consistently with the *theoretical framework*: (i) a brief and general overview of the studies on the relationship between M&A activity and value creation, ranging from seminal papers to more recent analyses; (ii) the learning effect, which is conducive to outstanding performance for serial acquirers; (iii) the investigation of the main findings obtained when primarily focusing on M&A activity in Sweden and then when comparing the national acquisitive landscape to other countries (e.g. Italy). Consequently, a potential gap to be filled will emerge. Indeed, while there is a very extensive set of empirical studies on the first theme, most of them analyze short-term effects of M&A activity and often focus on the nature and features of a deal per se, thus overlooking the structural attributes that fundamentally define acquisitive companies, irrespective of the specifics related to a single transaction. Furthermore, only a modest number of comprehensive studies deeply delving into the comparison between acquisitive and non-acquisitive publicly listed firms has been found out.

Section 4 will delve into the empirical analysis and related methodology at the Swedish level. Firstly, the sample of Swedish companies will be presented, according to the

theoretical framework. Firms that fit the definition of *acquisitiveness* (*Tier 1*) and *super-acquisitiveness (Tier 2*) will be included against companies that focus on a purely organic growth strategy or a mix of organic and inorganic levers (*Tier 3*). Moreover, the database will be enriched with the indication of the type of deal of carried out by the buyer, in terms of rationale and strategic purpose expected. Therefore, following the set-up of the full database, OLS regressions will be instrumental in pointing out the impact of the *acquisitiveness* and *super-acquisitiveness* paradigms on both the stock market and operational performance for Swedish corporations. The expectation is that Swedish acquirers will have a positive impact on performance, based on both price movements, and hence shareholders returns, and impact on financial metrics. Additionally, if super-acquisitive players will be found out to have a higher and more significant impact on these figures compared to "basic" acquirers, the benefits of a potential learning effect will emerge. The analysis will highlight that Sweden represents a true powerhouse of large industrial holding groups, which invest in numerous companies over time according to an industrial logic, focused on long-term value creation and industrial development, rather than a primarily profit-driven rationale. Hence, these big corporations, i.e. the "compounders", as well as Sweden in general, could serve as models of best practices to emulate for Italian players, encouraging them to change their strategies and pave the way for the creation of industrial hubs and districts that would be distinctly Italian in origin and culture. This will result in the rejuvenation of the M&A market and ultimately the whole industrial fabric.

Finally, Section 5 extends the empirical investigation to a boarder cross-country setting, in line with the *theoretical framework*, thus directly comparing Swedish and Italian acquisitive and super-acquisitive firms within a unified econometric framework. Building on the standalone analyses, this section aims to isolate whether differences in long-term performance across countries stem from firm-level idiosyncratic *acquisitiveness* per se, or from the broader institutional and strategic settings in which the serial acquirers operate. Accordingly, analyzing both stock market and operational performance, these cross-country empirical models allow for a direct assessment of whether Swedish consolidators structurally outperform their Italian counterparts and through which levers. This comparative assessment is a catalyst for distinguishing learning effects that are firm-

specific and those that are exacerbated (or mitigated) by national institutional settings. Section 5 is meant to provide an empirical evidence on how the same *acquisitiveness*, paradigm (as presented in “Serial acquirers in Italy and Europe: impact on stock market and operational performance”) translates into different performance outcomes across countries, hence enhancing the interpretation of the standalone results.

2. Literature review

Before delving into the *theoretical framework* and empirical analysis, it is fundamental to provide an overview of the main results found out by the literature on this topic. Besides the main arguments and related literature described in “Serial Acquirers in Italy and Europe: impact on stock market and operational performance”, this Section provides an overview of the main body of the literature at Swedish level.

This argument primarily concerns investigations of Swedish acquisitive companies vs Italy and the broader European context. Existent literature on corporate ownership and market development provides a basis for comparing Italy and Sweden’s M&A environments. As anticipated, studies consistently note that Italy’s corporate sector is dominated by families, with fewer institutional or dispersed shareholders (especially among mid-sized firms). Italy exemplifies a model where family owners often wield control through direct stakes or pyramidal group structures. By contrast, Sweden, while also having controlling shareholders, is more “institutionally driven”. An OECD report on the Swedish equity market highlights that the five largest family-controlled holding companies hold significant stakes across many firms, but these act as stewards alongside a large institutional investor base. This blend leads to an active ownership model that, according to the OECD (2025), has been a catalyst for Sweden’s high number of competitive multinationals and dynamic stock market. In Italy, strong family control has sometimes led to entrenchment and fewer public listings. Recent policy papers (e.g. OECD 2020 review of Italian capital markets) underline that Italy has great potential to expand equity

financing, in a context traditionally driven by a bank-centric funding approach. The 2024 reforms aim to emulate aspects of the Swedish model. For instance, Italy's introduction of multiple voting shares and incentives for institutional investors mirrors long-standing Swedish structural peculiarities, given that dual-class shares have been common in Sweden for decades to allow for founder control without sacrificing float and diluting his stake. Early evidence suggests Italy's reforms are geared toward improving IPO activity and attracting risk capital, thus acknowledging the need to pivot from a bank-centric system to a market-centric one.

In addition, several comparative studies have focused on household investment behavior as well. Swedish households and individuals invest over half of their financial assets in equities or equity funds, more than double the euro-area average. Meanwhile, Italian households historically favored fixed-income and bank savings, partly due to a generous public pension system that reduced the urgency to invest privately. The literature links this to cultural and institutional trust factors: high trust in Sweden correlates with willingness to invest in stocks and thus provide equity to SMEs. A 2023 academic paper by Ström et al. finds that Sweden's high SME equity reliance is associated with its top ranking in terms of pursuit of innovation; in addition, societal trust underpins both equity financing and innovation in Sweden. This allows to explain why Swedish companies, including small ones, can finance inorganic growth initiatives (such as M&A) more readily through equity or equity-backed funding, whereas Italian SMEs might shy away due to fear of losing control or lack of investor traction. To sum up, the literature on this topic presents Italy and Sweden as contrasting models: Italy is a traditionally family- and- bank dominated system, although it is true that it is gradually opening to markets; by contract Sweden, while sharing some structural peculiarities, showcases a an environment that is friendly to the equity landscape as a source of funding. This context is crucial, as it suggests that Swedish firms might have both the means and mandate to pursue bold growth strategies such as the serial acquisitions associated with a roll-up model, whereas Italian firms might face capital constraints or conservative shareholder expectations that limit the pursuit of aggressive M&A.

It is fundamental to highlight the way these conditions have manifested in M&A outcomes and strategies in Sweden. A materially growing, even though recent, body of literature (both academic and practitioner-oriented) has emerged around Sweden's serial acquirers, sometimes dubbed "M&A compounders" or "acquisition-driven compounders". These are firms such as Lifco, Indutrade, Atlas Copco, Addtech and Lagercrantz, that have demonstrated long-term growth primarily via serial acquisitions. For instance, Hulmi & Lovato (2023) conducted a comprehensive studies on post-acquisition performance in Sweden, explicitly comparing serial acquirers (firms with 3+ acquisitions) to single-deal acquirers. Over the period 2000–2022, they found that Swedish acquirers on average experienced negative abnormal returns in the long term, with a one-year buy-and-hold abnormal return (BHAR) averaging –20%. This signals considerable value destruction on average, consistent with much international research that most mergers and acquisitions fail to create shareholder value. Notably, Hulmi & Lovato (2023) did not find a statistically significant difference between serial and non-serial acquirers' long-term performance, which means that serial acquirers did not outperform single acquirers in their sample. This result contrasts with some US findings where programmatic acquirers outperform; the authors suggest Sweden's generally concentrated ownership and governance might ensure even single-deal firms are disciplined, thus leveling the field. They assume that Sweden's governance framework, based on dominant owners allowing management to focus on long-term value creation, may mitigate potential agency problems for the whole plethora of acquirers, including less frequent acquirers, potentially explaining why serial acquirers didn't have a competitive edge.

However, other literature and reports highlight that a subset of serial acquirers have generated substantial value, essentially driving the positive narrative around the Swedish roll-up model described with the *theoretical framework*. For example, a report by Hadziefendic et al. (2025) conducted a deep dive exercise into "acquisition-driven compounders" and found that many of the best-performing Nordic stocks over 10-20 years are precisely those serial acquirer companies. In fact, as of 2025, about 13 out of 30 best performing Nordic stocks over the past 20 years are serial acquirers, including names like Indutrade and Addtech, which delivered 5,000-11,000% total returns in two decades. Moreover, over the last 10 years, Lifco stands out with a ~1400% return (i.e. a

17x increase) since its 2014 re-listing. Case studies point out the way they managed to achieve such strong results. For instance, Lifco AB (which spun out of a larger group in 2014) grew its revenue over 2x and earnings per share over 3x in seven years post-IPO, without issuing new equity. By 2021, Lifco had close to 200 subsidiaries worldwide, and its stock had risen more than 15x fold in seven years (Evli, 2021).

What sets these companies apart is detailed in both academic and practitioner literature, in a way that is aligned with the *theoretical framework* in Section 2:

- Strategic focus and criteria: these serial acquirers stick to acquiring profitable, often niche leaders that add to the group's earnings immediately (no speculative turnarounds). They maintain strict criteria (e.g. Lifco consistently buys at ~6–7× EBITA multiples, according to Hansson, K., & Lenholm, I. (2022)) to ensure deals are accretive to their own higher valuation. This discipline results in strong return on invested capital (ROIC / ROCE) even as they scale. Notably, Lifco's average ROIC has been around 14% with an average 22% ROE over the last decade, indicating value is created, not destroyed, by its acquisitions
- Learning and process excellence: literature suggests that these firms develop a repeatable M&A process, which is a core competence in acquisition integration and management. Each successful deal reinforces their credibility. This echoes the learning effect theory: Swedish serial acquirers "practice" M&A continuously, which most one-time acquirers cannot replicate. An Evli Bank analysis (Evli, 2021) explicitly noted that "acquiring small private companies is the core strategy of a large number of Swedish listed companies". Moreover, these firms operate under common principles that avoid the typical value destruction of big mergers.
- Market appreciation and support: the Swedish stock market and investor community have learned to reward this buy-and-build model over time. Multiple sources point out that Swedish serial acquirers trade at premium valuations (high earnings and sales multiples) because investors trust their capital allocation ability. The RollUpEurope report (2023) shows a "Serial Acquirer Index" for Sweden that clearly beats the broader market. Investors provide these companies with the equity capital injection they needed and tolerate short-term earnings dips if they're

making acquisitions, reflecting a long-term trust. In contrast, there is scant evidence of Italian listed companies following a similar serial-acquisition playbook with equal success. Italian industrial players have certainly engaged in M&A, but few could be labeled serial acquirers in the vein of Indutrade or Lifco. One reason might be that Italy's market historically penalized equity issuances (due to dilution fears) and there have been fewer domestic institutional investors to champion, sponsor and support such strategies, based on inorganic growth levers. A 2020 OECD study (OCED, 2020) noted that Sweden's pension funds manage assets over 7x its GDP share in the EU, providing an ample local investor base, whereas Italy's pension assets are much smaller. This ties back to literature and *theoretical framework* presented in relation to capital markets: a deeper institutional base in Sweden can underwrite acquisitive growth strategies by providing capital and patience. Indeed, Indutrade and Lifco's largest shareholders include Swedish institutions and family foundations that have held their stakes long-term, supporting continued acquisitions. Conversely, Italian companies often relied on bank debt or private lending for acquisitions, which can dampen aggressiveness compared to equity. Additionally, cultural factors gleaned from case studies suggest Italian family CEOs might be more internally focused on organic levers or hesitant to acquire other companies.

Once again, it is noteworthy to consider that Sweden's favorable institutional frameworks, including efficient regulations, strong investor protections and an active equity culture – enable M&A to be used as a fundamental growth lever. An OECD comparison (2025) notes that Sweden's regulatory framework is the real catalyst for companies to allow them to raise capital quickly and execute deals smoothly. This is one of the reasons why other European countries (such as Italy) have recently acknowledged the benefits of a leaner and more corporate-friendly framework and have started to implement changes to reduce bureaucracy in capital raising and simplify takeover rules. For example, Italy's recent Capital Markets Law aims to streamline IPO prospectuses and allow English documentation to attract foreign investors. These changes are informed by studies (like the Deutsches Aktieninstitut report (2025) that explicitly cite Sweden as a paradigmatic model for how vibrant capital markets can fuel SME growth and innovation. Accordingly,

the Frankfurt Main Finance (2025) analysis titled “Sweden’s capital market as a role model for Europe”, highlighting its success factors: high equity participation, a strong pension-investor base (alongside the plethora of additional institutional investors), and record IPOs for growth-oriented small and medium sized firms. All these factors are beneficial to M&A as a strategy for growth because they create an environment where companies can pursue acquisitions knowing that capital is available and shareholders are supportive (Cartwright & Schoenberg, 2006).

In conclusion, the literature portrays a picture that aligns with the *theoretical framework*. Sweden leveraged its institutional strengths, i.e. equity culture, investor base sophistication and participation and flexible regulation, to turn what Italy also showcases in its underlying structure, i.e., a wide array SMEs, into a powerful engine for growth through M&A levers. The *theoretical framework* and the empirical studies also show that serial acquisitions require certain building blocks to succeed, such as learning, discipline, supportive owners. Sweden’s ecosystem seems to provide exactly those conditions. The key takeaway from the literature is the conclusion that while general M&A can often disappoint and there are empirical studies confirming that M&A can lead to value destruction, the Swedish experience of programmatic acquisitions offers a peculiar and what appears to be as a positive case. It brings together learning-by-doing dynamics and roll-up strategies within a supportive cultural and financial environment, generating sustained long-term value, a combination that this dissertation seeks to examine more closely through a long-horizon empirical analysis.

3. Theoretical framework

Before delving into the empirical analysis, this section provides a purely theoretical analysis of the Swedish industrial landscape, highlights the main differences relative to the Italian market and develops the conceptual framework that will serve as the reference point for the empirical analysis conducted in this thesis (according to the same *theoretical framework* as presented at Italian level)

2.1. Sweden institutional setting and comparative analysis vs Italy

This section examines the institutional setting of Sweden and provides a comparative analysis with Italy within the logic of framing and contextualizing the empirical investigation of corporate acquisitiveness criteria and approaches. Institutional characteristics, such as ownership structures, corporate governance arrangements, capital market dynamics and the role of controlling shareholders, determine firms' strategies, thus influencing both the frequency and the nature of acquisition activity. While Sweden and Italy differ in terms of financial market sophistication, investor protection and legal and bureaucratic matters, they also share key features, including an array of small and medium-sized enterprises (SMEs) populating the industrial environment, concentrated ownership and the important role played by controlling shareholders. By highlighting both commonalities and structural differences, this theoretical comparative perspective helps isolate how national idiosyncratic institutional contexts condition firms' strategic use of M&A as a tool for growth.

3.1.1. Ownership structure: concentrated family control

A foundational element shaping corporate strategies in Italy and Sweden is the ownership structure. Across continental Europe (including Italy and Sweden), it is common for one large shareholder to control more than half of the voting rights in a company. Sweden's corporate model mirrors this pattern: most Swedish firms have one or two dominant owners, usually Swedish founding families, holding control. Hence, both countries' corporate governance is characterized by powerful controlling shareholders (families and / or founders), with the level of dispersion of shares remains weak and limited. The immediate consequence of such structural peculiarity is stability and long-term vision. However, considering a more negative perspective, this also results in low free floats (small portions of shares trading publicly) given controlling owners manage to retain large stakes (Eklund et al., 2025).

Indeed, in Sweden, the market-capitalization weighted free-float is only ~76%, at the lower end among peer countries (OECD, 2025). This means that just about one-third of Swedish listed stocks have 75%+ of shares available for public trading due to the reasons mentioned above. When considering Italy, the similarity is tangible: many Italian companies also have a limited portion of equity floated, which is a catalyst for illiquidity. The Italian SME exchange (Euronext Growth Milan) is characterized by low trading volumes partly due to limited free float and the strong control exerted by family-run businesses. In a study, Caselli et al. (2021) also demonstrate a massive presence of shareholders with very high voting power. On one side, this primarily results in positive effects for firms, since they benefit from the long-term presence of families and founders that always put the company's well-being first. Moreover, they can offer management a sufficiently forward-looking perspective to execute successful and sustained long-term investment strategies. On the other side, the negative component is represented by a lack of a diversified pool of investors within the ownership structure. Founders' willingness to keep control of their company at all costs and safeguard the authenticity of the business they created and nurtured over decades might hamper the beneficial effects of capital injections from institutional investors. Hence, they could prevent their own companies from having access to that fire power that is necessary for starting and implementing an acquisitive program.

In short, both countries' capitalisms are family-based types of capitalism where founders and / or family control is protected by keeping ownership stakes high and public float low. This serves as a protective shield for incumbents, alongside preventing outside investors from acquiring significant stakes in these companies.

Nonetheless, despite of this similarity in corporate ownership concentration among block holders or (founding) families, Sweden appears to be able to manage this structural peculiarity embedded in its industrial landscape in a more effective way.

Indeed, the impact on growth for corporations differs across Italy and Sweden. In Italy, families and / or founding owners often maintain tight control of companies in a manner that can lead to conservative management and aversion to diluting control, sometimes

constraining growth. Sweden likewise features concentrated ownership, especially through a few powerful family-owned industrial and investment holdings (e.g. the Wallenberg-owned vehicle Investor AB, as well as the Stenbeck family with Kinnevik AB and the Douglas family with Latour AB). However, this “oligarchic” structure has not represented a burden to performance. In fact, Sweden’s model of active and long-term family owners is often aligned with institutional investors’ objectives, thus contributing to the creation of an outsized number of competitive multinationals and big corporations. Hence, concentrated ownership in Sweden might provide more stability, a long-term outlook and alignment between owners and management, creating an environment where growth by means of inorganic levers (i.e. M&A) can be triggered.

On the other side, in Italy, strong family control has historically not been accompanied by an equally supportive institutional framework, hence potentially limiting firms’ consolidation and expansion strategies.

To sum up, while both countries share a tradition of family capitalism, Sweden’s corporate governance framework has ensured that family ownership functions as a catalyst for growth rather than a constraint on it (Sinaj & Uka, 2023).

3.1.2. Capital markets: depth, performance and R&D opportunities

Despite similar ownership structures as well as firm size, Sweden’s capital markets have managed to develop into a far more vibrant, liquid and deeper ecosystem than Italy’s. Sweden’s stock market is considered “the envy of Europe”, as it showcases a comprehensive pool of retail and institutional investors that has helped Stockholm defy the general gloom in Europe’s capital markets (Asgari, 2024). Over the past decade, the country experienced additional 500+ companies go public, thus exceeding the *combined* number of IPOs in France, Germany, the Netherlands, and Spain (Nasdaq Stockholm, 2024), which is a fundamental proof of the perceived growth associated with the Swedish stock market. This might be indicative of a more robust equity culture and financial acumen across individuals. Indeed, it is worth to note that Swedish households invest directly in stocks at the highest rates in Europe. In addition, domestic institutions (e.g.

insurers and pension funds) hold material equity stakes. The result is a high supply of equity injection and, as such, risk capital for companies.

Besides the level of financial sophistication associated with retail landscape and the continuous capital injections of institutional investors, stock performance represents another clear sign of structural capital market superiority, relative to other countries in Europe, including Italy. Indeed, Swedish stocks have outperformed other markets: the main index rose ~85% in the last ten years, thus clearly beating the Euro Stoxx 600 (+49%) and London's FTSE 100 (+17%), as reported by the Nasdaq Stockholm (2023). Such performance further reinforces investor confidence.

On the other side, Italy's stock market has historically been thinner and more bank-centric, which naturally resulted in lower growth trajectory over time. Fewer Italian firms tap into equity markets. Exiting through IPOs is also a rarity in Italy, especially for smaller firms, given that the Italian exchange (especially the growth segment) is often described as low-liquidity and more of a stepping stone, with most entrepreneurs still preferring trade sales or private equity exits (Corno et al., 2025). Moreover, Italy's culture of financing arrangements strongly skews towards debt and relationship banking, in accordance with traditional and outdated frameworks. Even today, Italian entrepreneurs often favor bank loans or private credit over public equity to avoid ownership dilution.

A blatant consequence is visible in market size and innovation investments carried out by companies: on one side, Sweden's market capitalization, against GDP, and fundraising capacity outstrip Italy's, and Sweden consistently invests more in R&D, i.e. ~3.4% of GDP in R&D projects vs approximately 1.3-1.5% in Italy (Stavlöt & Svensson, 2022; ISTAT, 2023). Higher R&D spending in Sweden is conducive to a more innovative, growth-oriented corporate sector, which in turn attracts capital market injections.

In practice, Sweden has managed to turn what could be a weakness (high ownership concentration) into a workable and effective framework for growth: indeed, families provide stable and mature governance structures, while regulations (e.g. a favorable listing environment) enhance wide public participation in the portion that is floated. This provides the amount of capital that industry leaders need to facilitate the investments in

innovation, which in turn boost the overall economy. Italy, conversely, has the downsides of low free float and concentrated ownership, without the same upsides. Hence, Italian markets and industry leaders have not achieved the virtuous cycle of high participation and performance seen in Sweden.

These arguments pave the way for factoring in considerations on the health status of the Swedish vs Italian stock market, given the relationship between stock market cycles and M&A activity and considering that the deployment of corporate M&A programs is influenced by the extent to which the underlying national financial market is dynamic (Cartwright & Schoenberg, 2006). Indeed, the buyer could secure that budgetary and investor support that is deemed to be fundamental for such complex transactions (Mariani et al., 2015). Accordingly, one way of looking at the current conditions of the Italian stock market is to focus on the ferment around the IPO activity. Hence, Italy has not developed as deep a retail investor base or IPO pipeline as Sweden. Hence, the development of capital markets and the prevailing financial culture dramatically influence firms' growth trajectories.

3.1.3. The SME factor: preponderance of small firms

Both Italy and Sweden have economies with a strong presence of small and medium-sized enterprises (SMEs) and family businesses. Italy is well-known for its SME-based industrial fabric: ~4.3 million SMEs (95% of which are micro-enterprises) account for ~80% of employment and ~70% of value added in Italy (European Investment Bank, 2021; Salesforce, 2020). This "nation of small firms" leads to relatively few home-grown large corporations. Sweden, though a smaller country, also has a dynamic SME sector, with 99.8% of Swedish businesses being SMEs, providing ~57% of employment (European Commission, 2022). In both countries, family-owned small and medium sized firms constitute the backbone of the economy. The lack of a broad base of giant corporations means fewer national champions relative to economies like France or Germany.

However, the directions these SMEs take toward growth or consolidation differs in each context. Italy's industrial landscape is famous for its networks of SMEs, often clustered in industrial districts and frequently family-run across generations. These firms are leaders in niche manufacturing and craftsmanship, but relatively few scale up to become large multinationals. Structural factors such as limited external financing, bureaucracy and a historical reluctance to relinquish family control, contribute to Italian SMEs often remaining small. By contrast, in Sweden, SMEs are likewise abundant, but there exists a more fluid ecosystem for these firms to either grow or be acquired into larger groups, thus nurturing the growth levels of the hyper-scalers that populate the Swedish landscape, i.e. the Industrial holdings. A fundamental underlying feature of Sweden is the presence of serial acquirers that actively integrate smaller firms as a growth strategy. Swedish conglomerates and mid-cap "acquisition entrepreneurs" offer a path for SME founders to sell their firm and / or roll-over a portion of their equity stake, in order to see the company continue to grow under a larger umbrella. For example, companies like Lifco, Indutrade and Addtech are known for continuously acquiring small, profitable niche businesses (often family-owned), thus guarantying a "permanent home" in a larger group (Evli, 2021). This provides an attractive exit or growth opportunity for SME owners: unlike selling to a competitor (which might integrate and erase the company) or to a traditional PE or investment platform (which might lack the industrial engagement, while being solely focused on IRR minimization), selling to a Swedish holding company ensures that the business remains operationally independent and founder legacies are preserved.

Thus, Sweden has cultivated an M&A ecosystem where SMEs feed into larger platforms, fueling those platforms' growth and allowing entrepreneurs to monetize and scale their businesses. In Italy, while some serial acquirers populate the industrial landscape, a comparable domestic ecosystem has been weaker. Indeed, Italian SMEs have more often remained independent or, in many cases, ended up acquired by foreign multinationals and / or Private Equity firms, rather than domestic serial acquirers. The differing industrial consolidation patterns illustrate how Sweden managed to convert a fragmented SME base into consolidated, globally competitive firms via M&A, whereas Italy's SME base remains more fragmented.

Besides the presence of powerful conglomerates and holdcos acquiring smaller firm, a key difference is also represented by the way capital markets support smaller companies. Nasdaq Stockholm, through its First North Growth Market, actively caters to SMEs, setting the ground for the creation of an ecosystem for them to list and raise risk capital early in their growth, that can be deployed for a variety of projects. By giving even micro- and small-cap firms access to public investors, Sweden helps these companies obtain funding for expansion that bank loans and / or private capital alone might not provide. As a Nasdaq Stockholm official noted (2024), many other exchanges “backed away” from SMEs as too risky or not profitable, but Sweden chose to support them, integrating SMEs into the financing ecosystem and nurturing them into larger companies. This has paid off in an SME IPO boom and created a pipeline of growing firms.

3.1.4. Strategic buyers populating the industrial landscape

A critical consequence of the above differences is the presence (or absence) of domestic strategic buyers – i.e. established companies that actively acquire other firms as part of their growth strategy. One might expect that a country dominated by SMEs, alongside a limited number of big corporations, would have fewer strategic acquirers. Indeed, Italy has often been seen as having a reduced number of large strategic buyers (Morpurgo, 2023). With fewer huge companies and many firms run by founders, the pool of Italian companies able and willing to execute frequent acquisitions is limited. In practice, many Italian mid-caps choose to sell out to private equity or foreign multinationals rather than become consolidators themselves (Chambers and Partners, 2025). This dynamic contributes to Italy’s pattern of frequent delistings, with successful midsize firms often get bought and taken private by larger players or buyout funds, instead of remaining independent acquirers on the public market. Accordingly, in Italy, between 1995 and 2018, there have been 395 new listings and 394 delistings, with a net effect of only one additional company in the Italian Stock Exchange. The end result is a kind of leakage of potential Italian champions.

Sweden, on the other hand, manages to punch above its weight in producing strategic buyers. Despite a modest population (c.10m), Sweden consistently ranks alongside much larger economies in M&A activity. For example, in early 2025 (EY, 2025) Sweden was among the top four acquirer nations for deals in Central / Eastern Europe, while being surpassed only by the UK and Germany. Hence, Swedish companies are very active in cross-border acquisitions, as well as at domestic level, on par with those from France or Germany. This reflects the crawling array of of multiple sizeable Swedish multinationals and investment firms that pursue acquisitions aggressively. Crucially, the number of Swedish strategic buyers is not lower than in bigger countries, with Sweden boasting several globally acquisitive firms across a variety of industries, including Technology, Industrials, Life Sciences, Engineering, and a thriving private equity sector, with the likes of EQT and Nordic Capital, acting as global powerhouses. Moreover, an ecosystem of serial-acquiring industrial holding companies has emerged in Sweden (often stock-listed themselves) which continuously buy smaller firms as a growth model, as already anticipated.

A further element concerns mindset and policy support. In Sweden, the institutional framework tends to make M&A more straightforward: takeover rules and minority-shareholder safeguards are relatively well-defined, while consolidation is generally viewed as a legitimate route to scale and competitiveness. The OECD, for example, points to Sweden's consistently high level of takeover activity, which is partly supported by its regulatory set-up, with c.20-28 public-company takeovers per year on average in the late 2010s (OECD, 2025).

In Italy, despite a recent pick-up in transaction volumes, deal execution can still be slowed by more burdensome administrative and bureaucratic processes and by the defensive posture of many controlling shareholders, often family owners, who may be reluctant to dilute control or pursue mergers unless there is a clear necessity. Overall, M&A in Sweden is more routinely used as a strategic instrument for growth, both at home and abroad, whereas in Italy it has historically played a more episodic and constrained role.

3.1.5. M&A performance: Swedish vs Italian serial acquirers

One of the clearest indications of Sweden's virtuous cycle in industrial growth is the track record of its serial acquirers, i.e. firms that treat programmatic M&A not as an occasional option, but as the backbone of their strategy. A large set of Sweden's best-performing listed companies fits this profile: many of the names most often cited by investors and practitioners have scaled precisely by repeating the same acquisition playbook over time. Companies such as Indutrade, Lifco, Atlas Copco and Addnode (which will all populate the database for the empirical analysis) have compounded growth through frequent bolt-on deals, typically targeting small, specialized businesses that add product variety, niche know-how as well as international reach, within the logic of a buy-and-build strategy. Lifco is a blatant paradigmatic model: following its 2014 re-listing, it has reported strong earnings compounding over time, often associated with a disciplined approach of acquiring a high number of small firms and integrating them within a decentralized and heterogeneous model (RollUp Europe, 2025).

Besides the growth itself, it is important to highlight the mechanism behind it. In Sweden, the market has tended to reward "acquisition machines" with robust valuations, which lowers their cost of capital and makes the next round of deals easier to finance, whether by means of equity issuance, stock-for-stock transactions. The result is a self-reinforcing virtuous mechanism: credible strategy execution attracts investor support; investor support enables further acquisitions; repeated acquisitions sustain the growth narrative.

On the other side, Italy looks markedly different. While it is true to a certain extent that Italian firms carry out M&A strategies, they usually adopt a reactive or episodic approach, neglecting or being unable to execute long-run acquisition programs, with a few exceptions. The above-mentioned structural features embedded in the Italian industrial arena play a role: controlling shareholders, frequently families, may be reluctant to dilute control or increase leverage materially to fund deal pipelines, while parts of the investor base remain cautious given past experiences in which mergers failed to deliver the expected integration benefits. There are, of course, exceptions: some groups in energy, infrastructure, and selected industrial niches have completed multiple acquisitions

successfully. Still, it is less common to see Italian mid-caps consistently outperform on the back of repeated, systematized M&A in the way Swedish serial acquirers often do.

This divergence is visible in how the two equity markets price the strategy. In Sweden, the buy-and-build roll-up model is widely appreciated and, in many cases, explicitly priced in: several mid-caps trade at premiums because investors expect them to keep buying growth. Italian firms rarely receive a comparable intrinsic mark-up to their multiples simply for being acquisitive; acquisitions need to be justified deal by deal, and the market response is not always positive.

To sum up, Sweden's cycle can be summarized as a combination of a supportive capital market and a deep base of innovation-oriented SMEs, with a variety of investments supporting growth and M&A execution. Firms are able to go public earlier in their life profile, raise funding and use equity as acquisition currency; scaling through consolidation then becomes a repeatable path rather than an exception. Sweden's unusually large population of listed companies provides a broad platform for continual deal activity (thanks to its higher relative liquidity), including stock swaps and small-cap financed roll-ups. Italy, with a thinner listed mid-market and a larger share of firms that remain private and family-controlled, has historically offered less of that platform. As a result, many Italian SMEs remain sub-scale for longer, or become targets for larger foreign acquirers, rather than evolving into serial acquirers themselves.

Overall, Swedish serial acquirers have tended to deliver stronger compounding, whether measured through market performance, or operational conduct, than their Italian counterparts. The contrast suggests that Italy has not yet leveraged M&A as systematically as Sweden as a mid-market growth instrument, which aligns with the broader institutional differences discussed earlier (i.e. depth of capital markets, financing culture, governance structures) and with the broader *theoretical framework* of this dissertation.

Considering a further layer of discussion within the roll-up and buy-and-build framework, in corporate growth theory, mergers and acquisitions are often presented as a double-edged instrument. Indeed, classic contributions in economics, business and finance

emphasize motives such as synergy potential, the expansion of market power, as well as (with a negative connotation) managerial overconfidence. Many large, headline deals, typical of the US market and of European incumbents, are presented as transformative transactions designed to deliver cost savings or strategic repositioning. Nonetheless, a material body of empirical evidence shows that mega-mergers frequently disappoint shareholders, largely because of execution risk, cultural frictions and the tendency to overpay in competitive processes.

As a consequence, alongside this traditional view, a different acquisition logic has become increasingly relevant: programmatic, serial acquisitions of smaller targets as a repeatable growth model, rather than the pursuit of transformative deals. Often described as a roll-up or buy-and-build strategy, this approach relies on acquiring many small firms in fragmented industries and building a broader group, a full-fledged industrial hub. The basic intuition is that consolidation can be achieved without the disruption associated with a single mega deal. In fact, repeated and serial deal-making allows an acquirer to improve through experience. As organizational learning theory would predict, firms that undertake acquisitions systematically can develop routines and capabilities in target screening, negotiation and post-deal governance and integration. Over time, this learning effect can reduce mistakes and improve execution, at least until organizational complexity becomes a constraint. In this sense, acquisitions are not treated as occasional opportunities, but as an ongoing process supported by discipline, governance and a consistent operating framework.

Accordingly, Swedish holdcos, i.e. Sweden's acquisition-driven compounders and hyper-scalers, are a clear illustration of this logic. Their playbook differs from conventional M&A along several dimensions:

i. Emphasis on small private targets: groups such as Lifco and Indutrade typically acquire profitable, specialized and niche businesses, often founder- or family-owned, rather than distressed turnarounds. These companies are usually stable and cash-generative, but may lack the resources to scale internationally on their

own. Hence, joining a larger group offers a pathway to growth capital and long-term continuity.

ii. Financing largely through cash generation: instead of relying primarily on high leverage or frequent equity issuance, many serial acquirers fund deals through the steady cash flows generated by their existing portfolio of subsidiaries. This allows to support a more conservative capital structure and reinforces the focus on transactions that are accretive over time, while guarantying balance sheets soundness

iii. Valuation discipline and “multiple arbitrage”: a recurring feature is the ability to buy businesses at lower multiples than the acquirer’s own trading multiple. In practice, targets are often acquired at moderate EBITA multiples, while the listed acquirer trades at a premium valuation. Once the target is brought into the group, its lower valuation multiple effectively re-rates toward the group’s higher multiple, thereby making the multiple-arbitrage effect a particularly efficient value-accretion mechanism

iv. Decentralized operating model: rather than pursuing heavy integration, acquired firms typically retain substantial autonomy, keeping their management teams, brands and day-to-day processes. The parent company provides governance, capital allocation and selective support, while avoiding the integration drag and cultural clashes that often undermine large mergers. The logic is that preserving entrepreneurial incentives matters more than forcing uniformity.

v. A long-term “permanent” ownership horizon**:** unlike traditional private equity and investment firms’ criteria, the intent is generally not to buy, restructure and sell in order to maximize profits. These groups position themselves as permanent owners, which can be attractive to founders seeking succession solutions while preserving their company’s identity.

Accordingly, the roll-up model creates value by aggregating many small streams of profit within a broader platform, combining scale and capital-market access with the efficiency of small, specialized operating units. It also benefits from a supportive investor base: when equity markets understand and reward the strategy with premium valuations, the cost of capital falls and the platform gains an additional advantage in funding further

acquisitions at low cost. In Sweden, where equity investors and institutional capital have historically been receptive to this model, this dynamic can become self-reinforcing, thus helping explain the persistence and success of serial acquirers in the Swedish listed universe. The theoretical framework associated with Swedish holding companies (the "Industrial Holdings") will become clear from a practical perspective when collecting the set of market- and operational-based metrics for the subsequent empirical analysis.

3.1.6. Learning effects and value creation in multiple acquisitions

The academic literature offers mixed perspectives on whether engaging in multiple acquisitions yields superior performance over the long-term. Some scholars argue that serial acquirers develop acquisition skills that one-time acquirers lack. For example, studies in the US by Rovit et al. (2003) and by Laamanen & Keil (2008) found that frequent acquirers in the 1990s outperformed less acquisitive firms, suggesting that success leads to further success. The logic is that managers learn from each deal, refining their criteria and integration methods, thus creating a learning curve that manifests as better cumulative performance. Serial acquirers can also build a reputation that helps in negotiating future deals on favorable terms. However, other research highlights diminishing or negative returns to serial acquisitions if not managed carefully. Ismail (2008) found evidence of diminishing returns, firms that had very successful first acquisitions often saw lower gains or even losses in subsequent ones. Similarly, recent studies report that cumulative abnormal returns tend to decline from deal to deal in an acquisition program, possibly due to overconfidence. One study showed that single-acquisition firms can outperform serial acquirers, especially if serial acquirers engage in deals too quickly or pay with equity when overvalued.

Accordingly, some variables, i.e. timing and pace of deals, can help mitigate these different views, alongside the similarity of acquisitions, as well as the way experience is accumulated. Acquisition pace is critical: if a a string of deals is too rapid, it can easily overwhelm an organization, whereas a steady but well-spaced sequence allows lessons learned to be absorbed. There is evidence that high variability in the rate of acquisitions

and an overly high rate are both negatively related to performance. Another discussion component is target selection: serial acquirers carrying out “related” acquisitions (in similar industries or geographies) may leverage experience better, whereas diversifying into unfamiliar areas dampens the learning curve. Some findings also point to deal type: serial acquirers fare better when buying private firms (often smaller, simpler deals) but underperform when they attempt large public acquisitions more akin to conglomerate mergers. This aligns with the roll-up philosophy discussed above.

In summary, the theoretical expectation is that serial acquisition strategies can create value under certain conditions, especially when firms acquire frequently but methodically, focus on quality niche targets in their circle of competence (related acquisitions), integrate loosely to preserve what made the target successful and maintain financial discipline.

The Swedish serial acquirers appear to embody many of these best practices.

The framework of programmatic M&A – which McKinsey (2023) and others advocate as the least risky M&A approach, is essentially a codification of this strategy. It contrasts with occasional “big bet” acquisitions (which concentrate risk in one transaction) by spreading bets across many deals and iteratively learning, within a diversification-driven kind of logic. This theoretical backdrop sets the stage for examining how these concepts play out empirically in the Swedish vs Italian context, which we turn to in the literature review.

4. Empirical analysis: a comparative analysis of Swedish consolidators and non-acquirers

4.1. Research Hypothesis

Based on the *theoretical framework* described in “Serial Acquirers in Italy and Europe: impact on stock market and operational performance”, and current state of literature on

the topic, the next step consisted in carrying out the empirical analysis at Swedish level, in line with the main objective of this research project.

The same *core research question* as presented in the previous thesis will be analyzed and applied to the Swedish context.

H1: In the long run, acquisitive companies can positively influence their stock market performance relative to firms based on purely organic growth and/or a mix of organic and inorganic growth, in terms of Total Shareholder Return (incl. dividends) and Price Change (excl. dividends), both cumulated over a pre-defined time horizon.

H2: In the long run, super-acquisitive companies can positively influence their stock market performance relative to firms based on purely organic growth and/or a mix of organic and inorganic growth, in terms of Total Shareholder Return (incl. dividends) and Price Change (excl. dividends), both cumulated over a pre-defined time horizon**.**

H3: In the long run, acquisitive companies can positively influence their operational performance relative to firms based on purely organic growth and/or a mix of organic and inorganic growth, in terms of CAGR of Revenues and EBITDA, both cumulated over a pre-defined time horizon.

H4: In the long run, super-acquisitive companies can positively influence their operational performance relative to firms based on purely organic growth and/or a mix of organic and inorganic growth, in terms of CAGR of Revenues and EBITDA, both cumulated over a pre-defined time horizon.

H5: In the long run, super-acquisitive companies can positively influence their performance relative to acquisitive firms, both in terms of stock market and operational performance, thus proving the existence of benefits associated with the so-called learning effect. of benefits associated with the so-called learning effect.

Table 4 provides a quick overview of the 5 hypotheses that will be tested.

#	*Hypotheses*
H1	In the long run, acquisitive companies can positively influence stock market performance relative to firms based on purely organic growth and/or a mix of organic and inorganic growth
H2	In the long run, super-acquisitive companies can positively influence market performance relative to firms based on purely organic growth and/or a mix of organic and inorganic growth
H3	In the long run, acquisitive companies can positively influence operational performance relative to firms based on purely organic growth and/or a mix of organic and inorganic growth
H4	the long run, super-acquisitive companies can positively influence operational performance relative to firms based on purely organic growth and/or a mix of organic and inorganic growth
H5	In the long run, super-acquisitive companies can positively influence performance relative to acquisitive firms, both in terms of stock market and operational performance

Table 4. Overview of the research hypotheses

Source: Own elaboration

4.2. Methodology

This section will delve into the set up and consequent implementation of the empirical analysis aimed at providing an answer to the identified research hypotheses.

4.2.1. Database building and descriptive analysis

The first step consisted in collecting data to build the database utilized for the empirical analysis, based on some relevant assumptions. Firstly, only publicly listed companies have been considered, across the two main Sweden Stock Exchanges, i.e. Nasdaq Stockholm and Nordic Growth Market (NGM). The decision to exclude from the operating database private companies stems from inaccuracies in terms of key financial and accounting metrics, as well as limited information related to their M&A transactions since they are not always included in national and international databases. Moreover, obviously no market perspective, by means of stock price movements and thus returns, could be factored in, if non-public companies were to be considered.

In particular, it encompasses periods of significant macroeconomic uncertainty and fluctuations, including the Sovereign Debt Crisis of 2010–11, the wars in Ukraine and the Middle East (2022–2023), and the escalation of geopolitical tensions in the Taiwan Strait and the Red Sea region. It also captures the resurgence of great-power competition, marked by the intensification of US-China strategic rivalry, restrictions on technology transfers and semiconductors, alongside the reconfiguration of global supply chains toward near-shoring and friend-shoring strategies.

Moreover, the period includes the aftermath of the COVID-19 pandemic, which generated unprecedented fiscal stimulus, supply-chain disruptions, and labor market distortions, followed by a sharp inflationary surge across advanced economies. This was accompanied by banking sector stress episodes in 2023, including the failures of several US regional banks and the forced takeover of Credit Suisse, which renewed concerns over financial stability. The time horizon further incorporates the nomination of Donald Trump as the US President in 2024, renewed political polarization, growing protectionist measures and tariff threats between major trading blocs and increasing global economic fragmentation. Additionally, it reflects heightened uncertainty related to energy markets and commodity prices, climate-related shocks affecting production and logistics and the gradual withdrawal of fiscal support measures across Europe and the US. Finally, the period captures phases of economic expansion, zero- or low-interest rate environments (2014–2021), and subsequent tightening monetary policies (2022–2023) aimed at curbing inflation, followed by more uncertain and data-dependent central bank guidance during 2024–2025, amid concerns over soft-landing scenarios, slowing growth, and persistent geopolitical risk premia.

Accordingly, a database has been built and managed to analyze companies that satisfied the pre-identified criteria, by counting the number of deals during the 2010-2025 time frame, in which each of them acted as a buyer, both directly and indirectly, thanks to their national and international subsidiaries serving as consolidators.

Furthermore, specific exclusions have been considered when selecting acquirers. No banks, insurance companies and other financial institutions, including Asset Management Companies, Investment platforms, Private Equity firms and Family Offices, have been considered in the analysis, due to the uniqueness of their business based on completely different metrics and fundamentals, which could hamper potential comparisons in terms of operational performance. Accordingly, the same applied for companies belonging to the sports industry and for Real Estate firms, in light of the distinctive financials that are used to evaluate these companies. On the other side, besides traditional corporations, the panel also includes Industrial Holdings. Indeed, they precisely align with the core premise and *theoretical framework* of this thesis, which focuses on firms serving as

consolidators with the broader and ambitious aim to establish industrial hubs in the Swedish arena. Indeed, differently from Investment Holdings, they consider a longer time horizon and give much more credit to the industrial scope of their acquisitions, rather than just focusing on profit maximization and return on investment. In this regard, it is important to emphasize that industrial holding companies, as already noted in the previous sections, represent a distinctive and unique feature of the Swedish industrial landscape compared with other major European markets. Finally, companies in liquidation were excluded.

One obvious assumption when building the panel of companies to be compared with the consequent statistical analysis was to consider only corporations that have been publicly listed during the whole pre-selected 2010-2025 timeframe. Nonetheless, differently from the analysis of Cools & Van de Laar, as explained by Ronneboog (2006), two different datasets have been initially created: the first one also includes firms that went public in the years following 2010, with the aim of performing the analysis of the a*cquisitiveness* framework in the context of a larger dataset. Indeed, relative to the US, the Swedish stock market is much smaller and only a limited subset of companies would have been considered if only firms listed throughout the whole period were considered. Obviously, this choice had some consequences when collecting data, given the lower number of years in which they were listed and thus a lower number of stock prices on which to compute returns, as well as the lack of financial metrics in the years prior to the IPO. In order not to distort the statistical analysis and negatively affect the inter-company comparability, this first dataset has not been considered when executing OLS regressions. On the other side, the second panel reflects Cools & Van de Laar's decision to consider only companies listed throughout the whole period. This second approach is aimed at making the comparison as coherent as possible, thus pointing out the different results across Swedish companies with the same number of years of data available, too.

A partial exception to this strict selection criterion was made for Lifco AB. Despite having been publicly listed only since 2014, Lifco AB represents one of the most prominent and structurally relevant industrial holding companies within the Swedish context. Excluding Lifco AB solely on the basis of its shorter listing history would have resulted in the omission of a key benchmark in the analysis of acquisitive behavior, particularly given its

well-established buy-and-build strategy and long-standing operational history prior to the IPO. Moreover, notwithstanding the four-year shorter observation window, Lifco AB displays stock market and operating performance dynamics that are fully comparable to those of the most successful Swedish serial acquirers included in the sample. This suggests that the firm's acquisitive capabilities and value-creation mechanisms are not driven by short-term listing effects, but rather by a mature and well-institutionalized acquisition model. Therefore, Lifco AB was retained in the database as a representative industrial holding, with the awareness of its shorter time series, but under the assumption that its inclusion enhances the economic representativeness of the sample without materially biasing the empirical results.

Furthermore, it is worth noting one additional simplification when performing such analysis. Each industry has its own intrinsic dynamics in terms of consolidation trends. Therefore, some industries are renowned for structurally or intrinsically showcasing a more active M&A activity, based on their cycle, and as such players operating within them engage in a higher number of acquisitions. When comparing companies, this industry-specific component should be considered.

According to this assumption, 78 companies have been factored in, across the following industries:

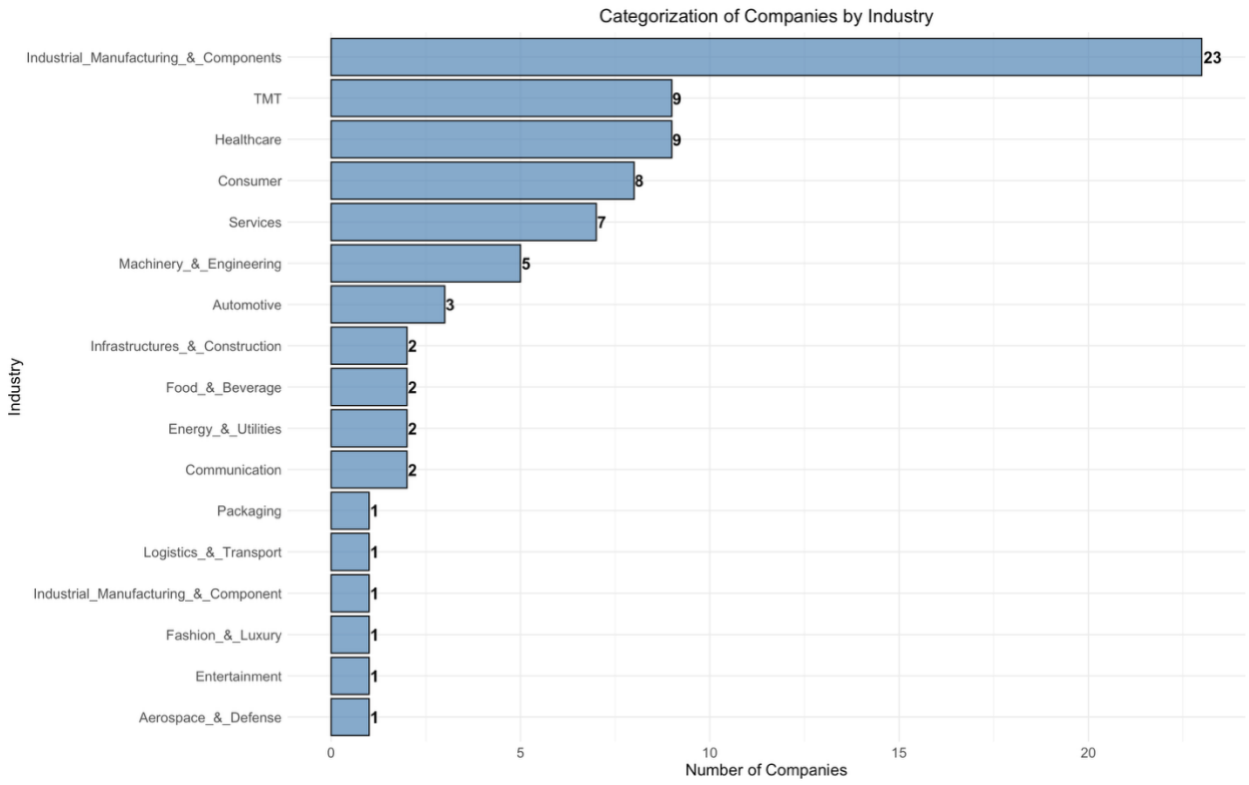

Figure 1. Summary of industry categorization

Source: own elaboration trough R software

Based on the definitions provided in the analysis carried out at Italian level, a distinction between Italian acquirers and super-acquirers was considered. For completeness's sake, companies have been categorized also based on two additional variables, considering that they grew organically (almost purely) or by means of a mix of organic and inorganic strategies (*Tier 3*). The final set of definitions concerning the *theoretical framework* is summarized in Table 5.

Theoretical framework	***Definition***
Purely Organic	Companies engaging in n deals such that n < 3 throughout a pre-defined long-term horizon
Mixed Growth	Companies engaging in n deals such that 3 < n ≤ 15 throughout a pre-defined long-term horizon
Acquisitive	Companies engaging in n deals such that 15 < n ≤ 20 throughout a pre-defined long-term horizon
Super-acquisitive	Companies engaging in n > 20 deals throughout a pre-defined long-term horizon

Table 5. Final overview of the theoretical framework

Source: own elaboration

As a result, the following categorization emerged:

Growth strategy	**#**
Purely Organic	6
Mixed Growth	32
Acquisitive	11
Super-acquisitive	29

Table 6. Categorization based on the theoretical framework

Source: own elaboration

Out of the 700+ firms listed on the Sweden Stock Exchange, across all its segments, the total number has been cut down to 78, according to the exclusions mentioned in the previous paragraph. In addition, firms for which the retrieval process for some financial figures was not possible were excluded as well. The total number of deals executed by the identified companies equals 2,323, a number that is way higher than the Italian context (1,035 over 2010-2023 for 88 companies).

After counting the number of deals per company, the next step was to analyze the type of acquisitions each firm executed in terms of purpose, to capture the specific rationale for the M&A strategy, according to the three categorizations discussed in Section 2.1. These additional data are instrumental in understanding not only how much the number of deals has an impact in terms of stock market and operational performance, but also whether consolidating, diversifying, differentiating, horizontally or vertically, nationally or on a cross-border perspective, contribute more or less to market- and accounting-based results in the long haul. The following table summarizes the number of total deals identified for each type of deal across the three categorizations

Category 1		***Category 2***		***Category 3***	
#Consolidation	1,102	#Horizontal	2,143	#National	756
#Diversification	714	#Vertical	180	#Cross-border	1,567
#Differentiation	507				

Table 7. Division by strategic purpose

Source: own elaboration

Finally, for the two databases, figures referring to stock market performance and operational conduct have been collected, via LSEG Refinitiv, FactSet and annual reports, as well as other publicly available information.

As for the variables used for the consequential empirical analysis, the same metrics as in “Serial Acquirers in Italy and Europe: impact on stock market and operational performance”.

Based on the *theoretical framework*, before going through the empirical analysis, it is noteworthy to point out the first main findings, following the simple data collection process. When focusing on long-term historical performance, Figures 2–6 provide a concise overview of the market-based and accounting-based positioning of the selected Swedish companies across the different growth clusters.

From a stock market perspective (Figures 2–3), both cumulative Price Change and cumulative Total Return indicate a clear outperformance of super-acquisitive and acquisitive firms relative to mixed growth and organic growth companies. In particular, the acquisitive cluster exhibits the highest average values, suggesting that acquisition-driven growth strategies have been more strongly rewarded by the Swedish equity market over the long run. By contrast, mixed and organic growth firms display materially weaker and broadly comparable performance.

These findings are largely confirmed by operating performance metrics (Figures 4–6). In terms of cumulative Revenue CAGR, super-acquisitive firms emerge as the strongest performers, followed by acquisitive companies, while organic and mixed growth firms record significantly lower growth rates. In terms of cumulative EBITDA CAGR, the only dimension acquisitive firms outperform their super-acquisitive counterparts. In any case, both types of consolidators, both “basic” and “super”, outperformed non-acquirers. Finally, when considering the average annual (non-cumulated) EBITDA margin, these results are confirmed.

An important additional insight concerns data dispersion, as captured by the Interquartile Range (IQR) bars. Across all metrics, and especially within the acquisitive cluster, the

wide IQR suggests substantial intra-cluster heterogeneity. This indicates that acquisition-driven strategies can lead to very different outcomes, with some firms achieving exceptional returns and growth, while others experience significantly weaker performance, both in market-based and accounting-based measures.

Consistent with this observation, the high overall standard deviation (approximately 252%) computed across the full set of dependent and independent variables confirms the presence of pronounced variability in the cumulative data. However, when the same variables are analyzed on a non-cumulated basis, the standard deviation drops substantially to around 24.5%. This discrepancy reflects an intrinsic property of compounded measures: even relatively small year-to-year fluctuations may accumulate over time, resulting in large divergences in long-term cumulative outcomes.

Given that the empirical analysis primarily relies on cumulated metrics, such variability can be considered structurally reasonable and consistent with the long-term horizon adopted. Nevertheless, in order to enhance the robustness of the empirical results, model diagnostics and variable transformations aimed at mitigating heteroskedasticity and the influence of extreme observations will be addressed in Section 4.3.

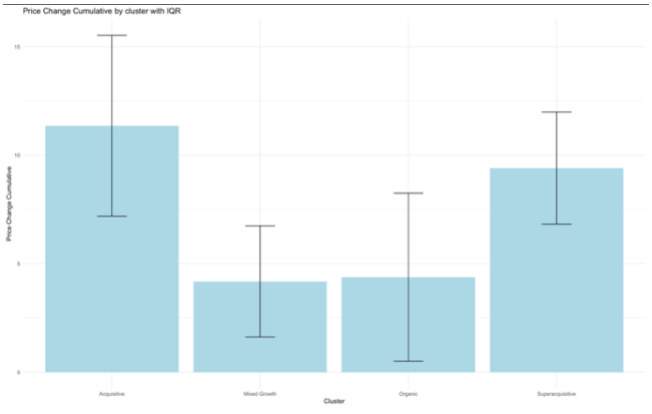

Figure 2. Price Change cumulative with IQR
Source: own elaboration trough R software

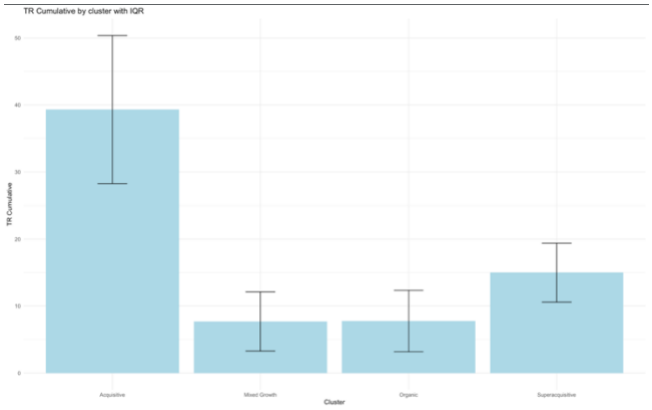

Figure 3. TR cumulative with IQR
Source: own elaboration trough R software

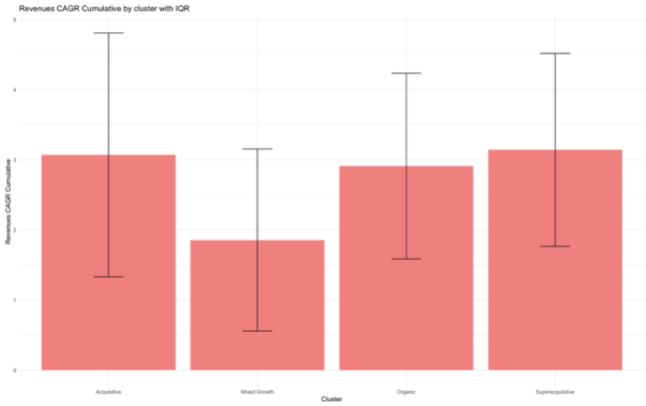

Figure 4. Revenues CAGR cumulative with IQR
Source: own elaboration trough R software

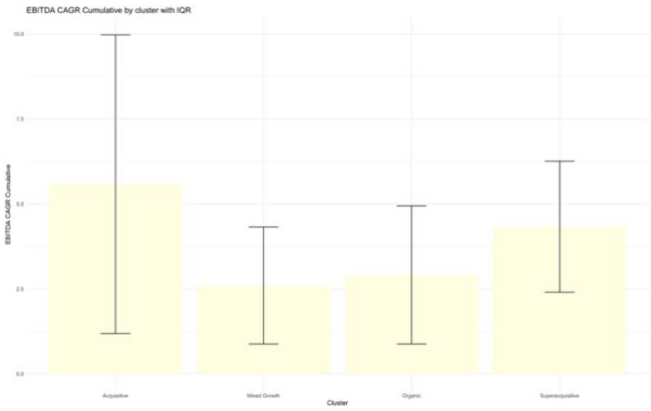

Figure 5. EBITDA CAGR cumulative with IQR
Source: own elaboration trough R software

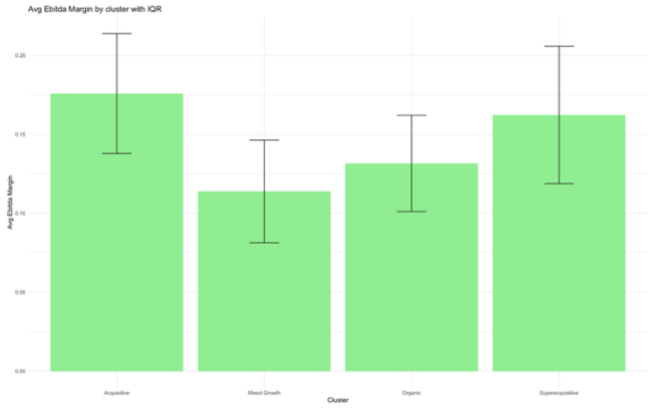

Figure 6. Avg EBITDA margin with IQR
Source: own elaboration trough R software

4.2.2. Model specification

Based on this data collection process and once the main assumptions in building the complete databases have been clarified, the research questions will be discussed by means of an empirical analysis.

To test the hypotheses outlined in Section 4.1, an econometric analysis has been used. The model implemented mirrors the framework discussed at Italian level, with the only difference being the time frame, i.e. 2010-2025 (vs 2010-2013).

4.3. Results

In this Section, an overview of the main findings for each model will be provided in order to answer the research hypotheses and discuss the potential existence of a statistically significant relationship between the dependent variables, i.e. the Price Change, the Total Return for shareholders, the CAGR of Revenues, the CAGR of EBITDA and the Average EBITDA margin, and the *acquisitiveness* framework, from which the explanatory variables that are deemed to be more relevant have been extracted.

4.3.1. H1 and H2: impact of *acquisitiveness* on stock market performance

As pointed out in Section 4.2., Model (1) aims at analyzing the potential impact of being acquisitive or super-acquisitive on the Price Change cumulated over the pre-defined time horizon, i.e. 2010-2025. Model (2) addresses the same kind of effect on the Total Return cumulated as well, thus factoring in the reinvestment of dividends. Tables 14 and 15 provide an overview of the regression models, following the improvements implemented thanks to the RegSubset package in R. Therefore, for both models, a subset of all the potential explanatory variables, as depicted in Section 4.2, has been considered.

```
Residuals:
    Min      1Q  Median      3Q     Max
-16.934  -4.652  -1.929   3.952  48.771

Coefficients:
                                 Estimate Std. Error t value Pr(>|t|)
(Intercept)                      -8.295769  10.286624  -0.806  0.42296
Avg_ROCE_cum                      0.413672   0.312390   1.324  0.19014
log(`#Consolidation` + 1)       -12.833065   4.197462  -3.057  0.00326 **
`#Diversification`                0.898662   0.304803   2.948  0.00446 **
I(`#Horizontal`^2)               -0.003272   0.001981  -1.652  0.10346
log(`#Horizontal` + 1)           17.478934   6.818122   2.564  0.01272 *
`#Vertical`                       8.785473   2.620614   3.352  0.00135 **
log(`#Vertical` + 1)            -23.079205   7.604153  -3.035  0.00347 **
I(`#National`^2)                 -0.017488   0.009303  -1.880  0.06468 .
`#Cross_border`                  -0.837709   0.393233  -2.130  0.03700 *
Organic                           4.041578   7.158419   0.565  0.57433
Acquisitive                       0.946316   7.161028   0.132  0.89528
Avg_ROCE_cum:Acquisitive          2.652693   2.374635   1.117  0.26813
Super_acquisitive:`#Consolidation`  0.711442   0.249654   2.850  0.00588 **
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 10.54 on 64 degrees of freedom
Multiple R-squared:  0.3507,    Adjusted R-squared:  0.2188
F-statistic: 2.659 on 13 and 64 DF,  p-value: 0.004889
```

Table 11. Model (1) - PriceChange_cum

Source: analysis carried out through R software

```
Residuals:
     Min       1Q   Median       3Q      Max
-113.290   -8.937   -0.292    7.657  150.316

Coefficients:
                                 Estimate Std. Error t value Pr(>|t|)
(Intercept)                     1.653e+00  1.281e+01   0.129  0.89771
Acquisitive                    -1.075e+02  2.821e+01  -3.810  0.00031 ***
log(`#Consolidation` + 1)      -3.004e+01  9.846e+00  -3.051  0.00330 **
`#Differentiation`             -1.021e+00  7.193e-01  -1.420  0.16044
I(`#Horizontal`^2)             -6.791e-03  3.144e-03  -2.160  0.03450 *
`#Vertical`                     1.681e+01  7.333e+00   2.292  0.02517 *
log(`#Vertical` + 1)           -5.197e+01  2.130e+01  -2.440  0.01743 *
log(`#National` + 1)            2.498e+01  7.879e+00   3.171  0.00232 **
log(`#Cross_border` + 1)        1.855e+01  8.148e+00   2.276  0.02614 *
Organic                         5.287e+00  1.486e+01   0.356  0.72318
Acquisitive:Avg_ROCE_cum        7.974e+00  6.516e+00   1.224  0.22545
Avg_ROCE_cum:Super_acquisitive  2.128e+00  1.816e+00   1.172  0.24553
Acquisitive:`#Consolidation`    1.670e+01  2.587e+00   6.456 1.57e-08 ***
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 29.26 on 65 degrees of freedom
Multiple R-squared:  0.4972,    Adjusted R-squared:  0.4044
F-statistic: 5.356 on 12 and 65 DF,  p-value: 3.284e-06
```

Table 12. Model (2) - TR_cum

Source: analysis carried out through R software

As far as Model (1) for the Swedish sample is concerned (Table 11), it can explain approximately 35.1% (R^2) of the variability in the dependent variable (*PriceChange_cum*). The Adjusted R^2, which accounts for the number of predictors included in the model and thus corrects for potential overestimation, decreases to approximately 21.9%**,** suggesting a moderate explanatory power. The F-statistic (2.66) with a p-value of 0.0049 indicates that the model is statistically significant overall, thus providing strong evidence against the null hypothesis that all coefficients are jointly equal to zero. Overall, this fit can be considered acceptable given the intrinsic volatility of stock market performance and the heterogeneity of firms included in the Swedish dataset.

Turning to the statistical significance of individual regressors, several insights emerge. The *Organic* variable displays a positive coefficient (approximately +4.04), but it is not statistically significant (p-value ≈ 0.57). Consequently, similarly to what was observed for Italy, firms relying primarily on organic growth do not appear to systematically influence their long-term stock market performance, measured in terms of cumulated price changes. The same conclusion applies to the *Acquisitive* variable. Although its coefficient is slightly positive (approximately +0.95), it is far from statistically significant (p-value ≈ 0.90). This result suggests that being a “basic” acquisitive firm, i.e. engaging in M&A

activity without reaching a high degree of seriality, does not generate a measurable impact on stock market performance in the Swedish context. Unlike the Italian case, the *Super_acquisitive* variable does not enter the model as a statistically significant standalone regressor. This indicates that, in Sweden, being a super-acquisitive firm per se is neither rewarded nor penalized by the stock market. In other words, the market does not interpret acquisition seriality as an intrinsically value-destroying signal, nor as a source of value creation. However, a highly relevant result emerges once interaction effects are considered. The interaction term *Super_acquisitive*#Consolidation* exhibits a positive and statistically significant coefficient (approximately +0.71, p-value ≈ 0.0059). This suggests that super-acquisitive firms can achieve superior long-term stock price performance when their acquisition activity is predominantly oriented toward consolidation strategies. From a theoretical perspective, this result indicates that, in the Swedish market, value creation from serial M&A is conditional on strategic intent rather than financial performance alone. In addition, this result is aligned with the underlying components of the *theoretical framework,* based on the positive impact of carrying out "related" acquisitions in the core industry in which a company operates. Unlike the Italian case, where the interaction between *Super_acquisitive* and *Avg_ROCE_cum* played a central role in reversing the negative standalone effect of super-acquisitiveness, the Swedish evidence suggests that the stock market primarily rewards industrial logic and strategic coherence, whereas being operationally sounds (for instance, companies may be implicitly assumed to deliver a high return on capital employed). This result appears to be consistent with the high number of industrial holdings populating the Swedish industrial arena. Consistently with this interpretation, the *Avg_ROCE_cum* variable is not statistically significant, nor does its interaction with acquisitiveness yield meaningful results. This suggests that high capital efficiency is largely perceived as a baseline requirement, rather than a differentiating factor capable of magnifying the market impact of an aggressive acquisition strategy. Overall, the Swedish results indicate that super-acquisitiveness is not sufficient as a standalone variable in shaping long-term stock market performance. Instead, the market rewards super-acquisitive firms only when their M&A activity carried out under the umbrella of a clear consolidation strategy, thus

highlighting the importance of strategic focus over diversified “unrelated” acquisition intensity. Hence, *H1* can be only partially considered as reasonable.

As far as the Swedish version of Model (2) is concerned (Table 12), the regression shows a solid overall explanatory power level. The model explains approximately 49.7% of the variability in Total Return cumulated, as indicated by the R^2. Once adjusting for the number of regressors included in the specification, the Adjusted R^2 decreases to about 40.4%, thus suggesting a reasonable fit. The F-statistic (5.36) with a p-value of 3.28e-06 clearly indicates that the model is statistically significant overall, thus providing strong evidence against the null hypothesis that all coefficients are jointly equal to zero. Starting from the variables that directly relate to the *acquisitiveness* paradigm, several interesting patterns emerge. The *Organic* dummy exhibits a positive coefficient (≈ +5.29), but it is not statistically significant (p-value ≈ 0.72). Hence, similarly to what observed in the Italian case, firms relying primarily on organic growth do not seem to systematically outperform their peers in terms of impact on long-term Total Return. The *Acquisitive* variable, however, shows a matetially different behavior compared to Italy. Its coefficient is negative and statistically significant (≈ −107.5, p-value < 0.001). This result suggests that, in the Swedish context, being a “basic” acquirer is associated with a destruction of shareholder value when Total Return is considered. Unlike Italy, where acquisitive firms were mostly indistinguishable from non-acquisitive ones (same results as *Organic*), Swedish acquisitive companies appear to be penalized by the market when dividends are reinvested, and performance is evaluated over the long run. When considering *Super-acquisitiveness*, the standalone effect is not directly estimated in this specification under the RegSubset framework; however, the interaction terms provide key insights into the underlying economic mechanism. Contrary to the Italian evidence, the interaction between *Super_acquisitive* and *Avg_ROCE_cum* is once again not statistically significant (p-value ≈ 0.25). This implies that, for Swedish firms, high capital efficiency based on return on capital employed does not systematically offset the risks associated with super-acquisitive strategies in terms of Total Return. In other words, the learning-effect mechanism that was clearly documented in Italy appears to be weaker or absent when focusing on Swedish stock market performance. On the other hand, a highly relevant and statistically robust result emerges from the interaction between *Acquisitive* and

#Consolidation. The coefficient of this interaction term is strongly positive and highly significant (≈ +167.0, p-value ≈ 1.6e-08). This suggests that acquisitive firms in Sweden can generate substantial shareholder value only when acquisitions are explicitly oriented toward consolidation strategies. From a theoretical perspective, this might indicate that not all acquisition programs are equally rewarded by the market. In the Swedish institutional and industrial setting, acquisitions aimed at consolidating fragmented segments appear to be create and enhance value, whereas generic acquisitive behavior is penalized. This is once again coherent with the structural logic of industrial holdings embedded in the roots of the Swedish industrial arena, where the “compunders” and hyper-scalers dominate.

Several control variables related to deal typology seem to further reinforce this interpretation. Consolidation-oriented deals *(log(#Consolidation + 1))* show a negative and significant coefficient, suggesting diminishing marginal returns as the number of consolidation deals increases. Conversely, national and cross-border deals display positive and statistically significant coefficients, indicating that both domestic scale effects and international expansion might contribute positively to Total Return in Sweden.

Overall, the Swedish results for Total Return cumulated partially diverge from the Italian evidence. While Italy showed a clear confirmation of *H2*, with super-acquisitive firms benefiting from a strong learning effect when coupled with high ROCE, the Swedish case suggests a more selective and strategy-dependent mechanism, where operational soundness seems to be disregarded or treated as a “given” variable. The learning-effect channel tied to ROCE is much weaker in Sweden. Acquisitions aimed at consolidation appear to be key in preventing the value erosion often associated with acquiring just for the sake of acquiring, effectively turning acquisitive behavior into a contributor to higher Total Return. More broadly, the evidence points to a meaningful institutional difference. In Italy, markets seem to place greater weight on the build-up of experience and disciplined capital allocation among serial acquirers. In Sweden, by contrast, investors appear less impressed by acquisition volume per se and more responsive to strategic coherence, especially when M&A is clearly geared toward consolidation (in related industries) rather than mere deal frequency.

Before proceeding to the analysis of *H3* and *H4*, it is useful to perform preliminary robustness checks aimed at assessing the potential presence of multicollinearity, namely the existence of strong linear relationships among the independent variables. The absence of severe multicollinearity represents a key assumption underlying the validity of OLS regression models. Accordingly, as a first step, this issue is investigated through the construction of a correlation matrix. The initial objective of this analysis is to examine the degree of correlation among the explanatory variables in their standard (untransformed) version, prior to any transformation or variable selection carried out through the RegSubset procedure. All variables included in this first correlation matrix are therefore linear and correspond to the full set of potential explanatory variables considered for the Swedish sample.

Figure 7 reports the correlation matrix for the variables in their standard form. Overall, the matrix suggests that there is no critical evidence of multicollinearity, despite the presence of some relatively high correlations among variables describing the strategic characteristics of M&A activity, which are economically intuitive and structurally expected.

In particular, variables related to the type of deal, such as *#Diversification*, *#National*, *#Vertical*, *#Horizontal*, *#Cross_border*, and *#Consolidation*, exhibit moderate to high positive correlations with one another. For instance, strong correlations are observed between *#Horizontal* and *#Cross_border* (0.96), *#Vertical* and *#Cross_border* (0.93), and *#Diversification* and *#National* (0.84). These patterns reflect the fact that firms pursuing acquisition-led growth strategies in the Swedish market often engage simultaneously in multiple, closely related deal types, rather than following mutually exclusive strategic paths.

The *Super_acquisitive* cluster dummy is positively correlated with several deal-type variables, including *#Horizontal* (0.72), *#Consolidation* (0.70), and *#Cross_border* (0.64), consistently with its definition as a group of firms characterized by intense and diversified acquisition activity. At the same time, it shows a strong negative correlation with *Mixed_Growth* (-0.64) and a moderate negative correlation with *Organic* (-0.22), confirming a clear separation between growth models within the Swedish sample.

By contrast, the *Acquisitive* dummy displays very low correlations with most other explanatory variables, including deal-type indicators and performance measures (e.g. –0.09 with *Avg_ROCE_cum*). This suggests that belonging to the acquisitive cluster does not mechanically overlap with specific strategic deal features or long-term profitability, thereby reducing concerns of collinearity for this variable.

Similarly, operational soundness-related variables, such as *Avg_ROCE_cum*, exhibit very low correlations with the majority of strategic and deal-related variables. The only notable relationship is a modest positive correlation with *the Organic* cluster (0.31), suggesting that firms pursuing organic growth strategies in Sweden tend to be associated with relatively higher long-term operating returns.

Finally, the *Mixed_Growth* and *Organic* cluster dummies are negatively correlated with most acquisition-related variables, reflecting their structural opposition to acquisition-intensive growth strategies. These correlations are moderate in magnitude and do not raise multicollinearity concerns.

In summary, although high pairwise correlations are present among variables describing the strategic nature of M&A activity, these relationships appear to be theoretically grounded and confined to a reasonable subset of explanatory variables. Correlations between cluster dummies, deal characteristics and performance measures are generally low to moderate, indicating that severe multicollinearity is unlikely to affect the regression estimates. Consequently, the correlation matrix for the Swedish sample supports the suitability of the full set of explanatory variables for further empirical analysis, subject to subsequent robustness checks.

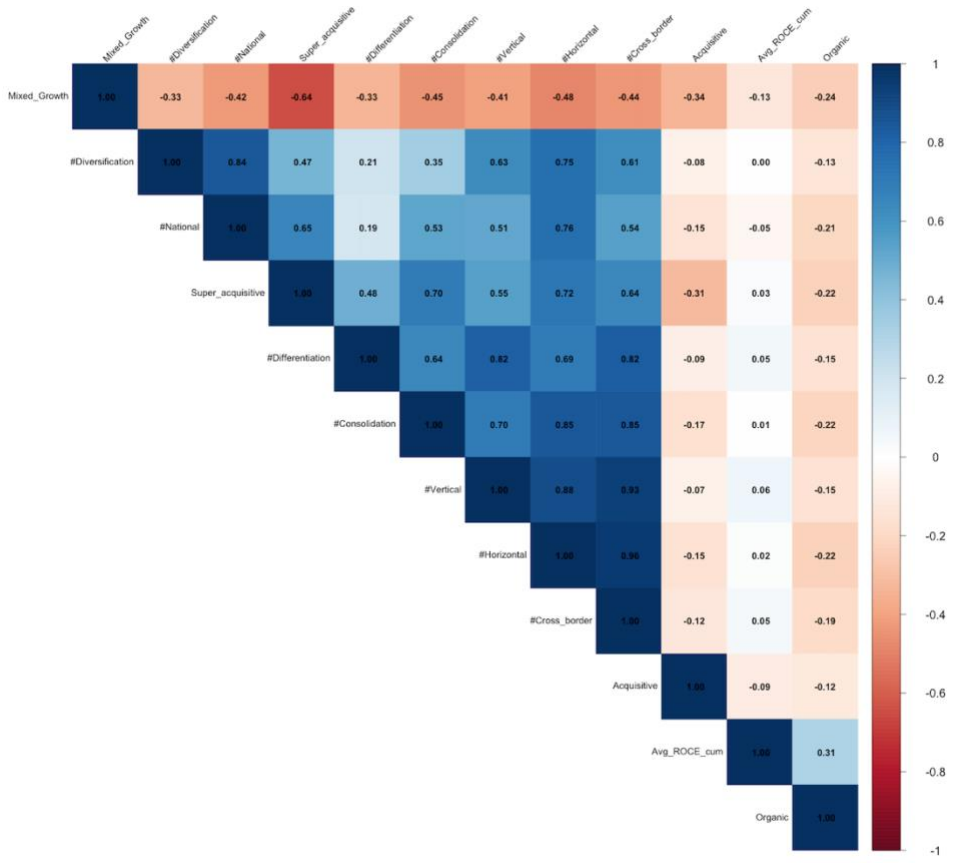

Figure 7. Correlation matrix for the variables in their standard version

Source: analysis carried out through R software

Following the preliminary analysis based on the full set of explanatory variables, Figures 8 and 9 report the correlation matrices for Model (1) and Model (2), respectively, including only the variables retained after the application of the RegSubset procedure. This step allows for a more focused assessment of multicollinearity within the final model specifications adopted for the Swedish sample.

Overall, the post-selection correlation matrices confirm the conclusions drawn from the general model: no critical multicollinearity issues emerge, once the structure and nature of the included variables are properly accounted for. In both models, high correlations are observed between variables and their polynomial transformations, such as *#National* and

#National², #Diversification and *#Diversification²*, as well as *#Cross_border* and *#Cross_border².* These correlations are physiological and expected, as squared terms necessarily retain a large portion of the information contained in their original variables. Their inclusion is motivated by the need to capture non-linear effects of M&A deal characteristics on firm performance, in line with established econometric practice (Aiken & West, 1991). As such, the presence of high correlations within these pairs does not represent a source of concern. Similarly, interaction terms display strong correlations with the variables from which they are constructed. For instance, in Model (1), the interaction *Avg_ROCE_cum*Super_acquisitive* is highly correlated with *Super_acquisitive*, while in Model (2) the interaction *Acquisitive*#Consolidation* shows a strong correlation with *Acquisitive*. These relationships are structural by construction and therefore do not indicate problematic multicollinearity, as interaction terms are intentionally designed to capture conditional effects rather than independent sources of variation. With respect to the core explanatory variables, correlations remain generally low to moderate. In particular, the Acquisitive dummy continues to exhibit weak correlations with most other regressors, including performance-related variables such as *Avg_ROCE_cum*, thus confirming that this cluster variable does not mechanically overlap with operating profitability measures. Variables capturing deal characteristics, such as cross-border activity, consolidation, and diversification, remain moderately correlated with each other, reflecting the empirical reality that acquisition strategies often combine multiple strategic dimensions. However, these correlations are contained within a theoretically coherent subset of variables and do not extend broadly across the model.

In summary, despite the persistence of high correlations arising from polynomial terms and interaction effects, the correlation matrices for Model (1) and Model (2) indicate that multicollinearity is not a substantive concern. The observed correlation patterns are either theoretically justified or mechanically induced by variable construction. Consequently, the post–RegSubset specifications appear econometrically reasonable and suitable for subsequent regression analysis, a conclusion that is further corroborated by the Variance Inflation Factor (VIF) analysis discussed in the following section.

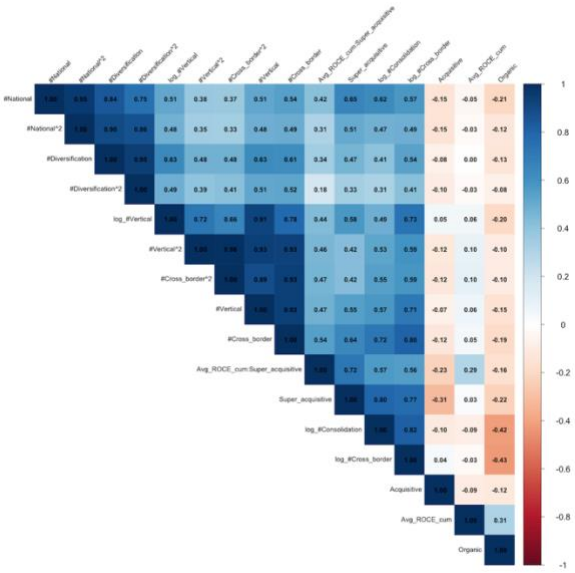

Figure 8. Model (1) - Correlation matrix for the variables following the implementation of RegSubset
Source: analysis carried out through R software

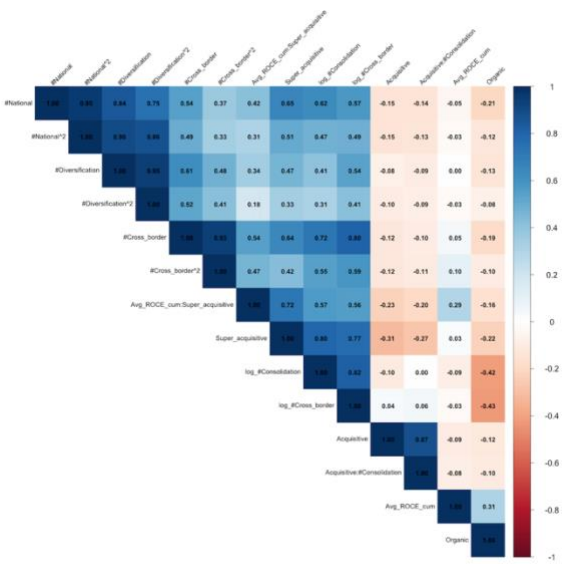

Figure 9. Model (2) - Correlation matrix for the variables following the implementation of RegSubset
Source: analysis carried out through R software

Finally, given that correlation matrices alone do not fully capture the presence of multicollinearity, a Variance Inflation Factor (VIF) analysis is also conducted for the Swedish sample. Following Maulud and Abdulazeez (2020) and James et al. (2013), VIF values equal to or greater than 10 are commonly interpreted as indicative of problematic multicollinearity. Accordingly, a conservative threshold of VIF ≤ 10 is adopted. Consistent with the approach used for Model (1) and Model (2), the VIF analysis is initially performed on the full set of explanatory variables included in the Swedish database, prior to the application of the RegSubset procedure.

```
> print(vif_values_cleaned)
         EPS_CAGR           Avg_ROCE       Avg_FCF_conv   Avg_Net_Leverage
         1.087166           1.287019           1.198474           1.047999
     Annual_deals            Organic       Mixed_Growth  Super_acquisitive
       119.383719           6.559569           5.052973           5.289870
`#Consolidation` `#Diversification`      `#Horizontal`        `#National`
       35.112831          26.652670          16.556167           3.740152
```

Table 13. VIF Analysis for the variables in their standard version

Source: analysis carried out through R software

Table 13 reports the VIF values for the explanatory variables in their standard (non-transformed) specification. Overall, the results indicate that most variables lie comfortably below the chosen threshold, suggesting that multicollinearity does not represent a major concern in the baseline Swedish models. Nevertheless, variables related to the type of deal, such as *#Consolidation* and *#Horizontal*, exhibit relatively higher VIF values. This outcome is consistent with the correlation patterns observed earlier and reflects the inherent overlap among deal-characteristic variables.

It is also worth noting that, in Table 13, some variables initially included in the broader set of regressors (as described in Section 4.2) are not reported. These variables were removed following the identification of aliased coefficients through the *alias* and *setdiff* functions in R. Aliased coefficients arise when perfect or near-perfect multicollinearity is present, meaning that certain regressors can be expressed as linear combinations of others, thus preventing reliable coefficient estimation.

```
> print(vif_values_cleaned)
                 Avg_ROCE_cum              Super_acquisitive
                     1.446305                      12.529288
  log(`#Consolidation` + 1)                `#Diversification`
                     9.515153                      40.971653
   I(`#Diversification`^2)                       `#Vertical`
                    47.334907                    1156.159884
          I(`#Vertical`^2)               log(`#Vertical` + 1)
                  1310.747861                     170.941793
                `#National`                  I(`#National`^2)
                    44.918727                      53.634795
           `#Cross_border`               I(`#Cross_border`^2)
                   210.781943                     626.315080
  log(`#Cross_border` + 1)                         Organic
                    17.943562                      1.950417
               Acquisitive Avg_ROCE_cum:Super_acquisitive
                     2.015656                      3.958442
```

Table 14. Model (1) - VIF analysis for the variables following the implementation of RegSubset
Source: analysis carried out through R software

```
> print(vif_values_cleaned)
                 Avg_ROCE_cum              Super_acquisitive
                     1.446305                      12.529288
  log(`#Consolidation` + 1)                `#Diversification`
                     9.515153                      40.971653
   I(`#Diversification`^2)                       `#Vertical`
                    47.334907                    1156.159884
          I(`#Vertical`^2)               log(`#Vertical` + 1)
                  1310.747861                     170.941793
                `#National`                  I(`#National`^2)
                    44.918727                      53.634795
           `#Cross_border`               I(`#Cross_border`^2)
                   210.781943                     626.315080
  log(`#Cross_border` + 1)                         Organic
                    17.943562                      1.950417
               Acquisitive Avg_ROCE_cum:Super_acquisitive
                     2.015656                      3.958442
```

Table 15. Model (2) - VIF analysis for the variables following the implementation of RegSubset
Source: analysis carried out through R software

Tables 14 and 15 further confirm the evidence obtained from the correlation matrix and the initial VIF inspection. In particular, variables capturing deal typology and geographical scope display elevated VIF values that exceed the threshold. This is largely attributable to the inclusion of multiple transformations of the same underlying variables (e.g. squared and logarithmic terms), as well as to the simultaneous presence of stand-alone variables and their interaction terms. As discussed previously, such inflation in VIF values is expected in models that explicitly test non-linear effects and interaction mechanisms.

Importantly, the variables most closely linked to the *theoretical framework*, namely those capturing operational performance, capital efficiency, and acquisitive orientation, exhibit low to moderate VIF values, supporting the robustness of the core empirical specification. Finally, the *Super_acquisitive* variable shows higher VIF values in the Swedish models compared to the baseline specification, reflecting its interaction with *Avg_ROCE_cum*. This increase is structural in nature and does not indicate a misspecification issue, but rather the mechanical consequence of modeling interaction effects.

Overall, the VIF analysis for the Swedish sample corroborates the absence of severe multicollinearity concerns and confirms that the regression results can be interpreted with confidence

4.3.2. H3 and H4: impact of acquisitiveness on operational performance

```
Residuals:
    Min      1Q  Median      3Q     Max
-3.0395 -0.7686  0.1841  0.7024  5.2831

Coefficients:
                                  Estimate Std. Error t value Pr(>|t|)
(Intercept)                     -4.614e-01  1.109e+00  -0.416 0.678760
Avg_ROCE_cum                     1.580e-01  4.691e-02   3.368 0.001316 **
Avg_FCF_conv_cum                -1.147e-04  9.624e-05  -1.191 0.238093
Mixed_Growth                    -2.216e+00  1.080e+00  -2.052 0.044444 *
Super_acquisitive               -3.609e+00  2.221e+00  -1.625 0.109311
Acquisitive                      5.876e+00  2.365e+00   2.485 0.015728 *
`#Consolidation`                -4.625e-01  1.351e-01  -3.425 0.001106 **
I(`#Diversification`^2)          -4.964e-04  2.607e-04  -1.904 0.061646 .
`#Differentiation`               2.047e-01  7.766e-02   2.635 0.010643 *
I(`#Differentiation`^2)          -5.174e-03  1.278e-03  -4.048 0.000148 ***
log(`#Horizontal` + 1)           3.311e+00  9.537e-01   3.472 0.000956 ***
`#Vertical`                      1.475e+00  3.913e-01   3.768 0.000373 ***
log(`#Vertical` + 1)            -6.461e+00  1.228e+00  -5.260 1.96e-06 ***
Avg_FCF_conv_cum:Acquisitive    -6.572e-03  2.328e-03  -2.822 0.006428 **
Acquisitive:`#Consolidation`    -5.992e-01  1.901e-01  -3.153 0.002508 **
Super_acquisitive:`#Consolidation`  2.997e-01  1.210e-01   2.477 0.016045 *
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 1.586 on 61 degrees of freedom
  (1 observation deleted due to missingness)
Multiple R-squared:  0.5816,    Adjusted R-squared:  0.4787
F-statistic: 5.653 on 15 and 61 DF,  p-value: 4.952e-07
```

Table 16. Model (3) - Revenues_CAGR_cum

Source: analysis carried out through R software

```
Residuals:
    Min      1Q  Median      3Q     Max
-7.6918 -2.2539 -0.4503  2.3087 10.7075

Coefficients:
                                  Estimate Std. Error t value Pr(>|t|)
(Intercept)                     -1.936324   3.119782  -0.621  0.53714
Avg_ROCE_cum                     0.183767   0.115000   1.598  0.11522
Mixed_Growth                    -3.559460   2.971221  -1.198  0.23556
Super_acquisitive              -10.253928   4.654677  -2.203  0.03139 *
I(`#Consolidation`^2)           -0.005477   0.002193  -2.497  0.01524 *
log(`#Consolidation` + 1)       -8.154949   2.525779  -3.229  0.00200 **
`#Diversification`               0.202554   0.207285   0.977  0.33234
I(`#Diversification`^2)          0.002164   0.001923   1.125  0.26486
`#Differentiation`               0.934984   0.367578   2.544  0.01352 *
I(`#Differentiation`^2)         -0.017147   0.005592  -3.066  0.00323 **
log(`#Differentiation` + 1)     -3.643519   2.071810  -1.759  0.08366 .
I(`#Horizontal`^2)              -0.004861   0.001941  -2.504  0.01498 *
log(`#Horizontal` + 1)          11.058507   4.471495   2.473  0.01620 *
`#Vertical`                     -3.355275   1.017588  -3.297  0.00163 **
I(`#Vertical`^2)                 0.450371   0.131397   3.428  0.00110 **
Acquisitive                     -1.433288   3.980529  -0.360  0.72003
Super_acquisitive:`#Consolidation`  0.624401   0.180097   3.467  0.00097 ***
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 3.769 on 61 degrees of freedom
Multiple R-squared:  0.4542,    Adjusted R-squared:  0.3111
F-statistic: 3.173 on 16 and 61 DF,  p-value: 0.0005803
```

Table 17. Model (4) - EBITDA_CAGR_cum

Source: analysis carried out through R software

As far as the Swedish model on Revenues CAGR cumulated is concerned (Table 16), it explains approximately 58.2% of the variability in the dependent variable (Multiple R-squared ≈ 0.582). Once accounting for the relatively high number of explanatory variables included in the specification, the Adjusted R-squared decreases to ~47.9%, still indicating a solid explanatory power. These figures are broadly consistent with the empirical literature on operational performance, which often reports moderate goodness-of-fit levels for revenue growth regressions.

The F-statistic (≈ 5.65) with a p-value of 4.95e-07 confirms that the overall model is statistically significant, thus allowing rejection of the null hypothesis that all coefficients are jointly equal to zero. Hence, the model provides a statistically reliable framework for interpreting the impact of different growth strategies on cumulative revenue growth.

Turning to the interpretation of the coefficients, several insights emerge that are directly relevant for *H3*. From a financial performance standpoint, *Avg_ROCE_cum* exhibits a

positive and highly statistically significant coefficient (estimate ≈ 0.158, p ≈ 0.0013). This result suggests that, in Sweden, firms characterized by higher capital efficiency are able to translate such efficiency into superior long-term revenue growth. This finding is fully aligned with the theoretical view that sustained operational expansion requires disciplined capital allocation and value-accretive reinvestment strategies.

Conversely, *Avg_FCF_conv_cum* does not appear to be statistically significant, indicating that free cash flow generation per se is not a decisive driver of cumulative revenue growth, once other strategic variables are controlled for.

With respect to growth paradigms, the *Mixed Growth* component provides mixed evidence. The *Mixed_Growth* variable displays a negative and weakly significant coefficient (p ≈ 0.044), thus suggesting that hybrid growth strategies combining organic expansion and acquisitions may generate coordination frictions or dilution effects that negatively affect long-term revenue growth in the Swedish context. The analysis of *acquisitiveness* yields particularly insightful results. The *Acquisitive* dummy shows a positive and statistically significant coefficient (estimate ≈ 5.88, p ≈ 0.016), indicating that, unlike purely organic strategies, firms engaging in acquisition activity tend to experience higher cumulative revenue growth. This suggests that, in Sweden, acquisitions can effectively act as a revenue-expanding mechanism when compared to non-acquisitive firms.

On the other hand, the *Super_acquisitive* variable, when considered on a standalone basis, is negative but not statistically significant. This implies that pursuing a very intensive acquisition strategy does not automatically translate into superior revenue growth and may entail costs and integration challenges that offset potential scale benefits.

However, this interpretation changes once interactions are introduced. In particular, the interaction *Super_acquisitive*#Consolidation* exhibits a positive and statistically significant coefficient (p ≈ 0.016). This indicates that super-acquisitive firms are able to generate superior cumulative revenue growth when their acquisition activity is predominantly consolidation-oriented. From a theoretical perspective, this supports the idea that learning effects, integration capabilities, and economies of scale become

operationally valuable only when acquisitions are strategically coherent and focused on strengthening the firm's core business (related acquisitions). By contrast, the interaction *Acquisitive*#Consolidation* is negative and statistically significant, suggesting that "basic acquirers" may struggle to extract revenue synergies from consolidation deals, possibly due to insufficient experience or lack of organizational routines.

Overall, the Swedish evidence on Revenues CAGR cumulated suggests that *H3* is only partially supported. Acquisitions can foster long-term revenue growth, but only when they are systematic, frequent and embedded in a consolidation-driven strategy. Super-acquisitiveness per se is not sufficient; rather, it must be accompanied by strategic focus and operational learning to translate M&A activity into sustained top-line expansion.

As far as EBITDA CAGR cumulated is concerned based on Model (4) and presented in Table 17, the Swedish Model explains a moderate but economically meaningful share of the variability in long-term operational performance. The R^2 of ~45.4% indicates that almost half of the variance in EBITDA compound annual growth can be attributed to the selected explanatory variables. When accounting for the number of regressors, the Adjusted R^2 decreases to ~31.1%. The F-statistic (3.17) with a p-value of 0.00058 confirms that the model is overall statistically significant, allowing rejection of the null hypothesis that all coefficients are jointly equal to zero. Hence, the model provides a valid framework to assess the operational implications of acquisitiveness in the Swedish context.

Turning to the key variables of interest, results partially diverge from those observed for stock market performance and reveal important nuances.

Mixed_Growth growth is not statistically significant, suggesting that, in Sweden, firms primarily relying on organic expansion do not experience systematically higher EBITDA CAGR over the long run. This aligns with the idea that organic growth alone may be insufficient to materially alter cost structures in mature, highly competitive industrial environments.

The *Acquisitive* dummy is also not statistically significant, indicating that engaging in M&A activity per se does not guarantee superior operational performance in terms of EBITDA growth. The *Super_acquisitive* variable, however, yields a negative and statistically significant coefficient (estimate ≈ –10.25, $p \approx 0.031$). This suggests that, on a standalone basis, firms pursuing very intensive acquisition strategies tend to experience lower EBITDA growth, plausibly due to integration costs, organizational complexity, and short-term inefficiencies. Differently from what is observed in the Italian case, the interaction between *Super_acquisitive* and *Avg_ROCE_cum* is not statistically significant in the Swedish model. Although the sign of the interaction term is positive, its lack of statistical significance implies that high ROCE does not systematically offset the negative operational impact of being super-acquisitive in Sweden. From a theoretical standpoint, this result is particularly relevant. It suggests that, while financial discipline is necessary, it may not be sufficient in the Swedish context to fully neutralize the operational frictions associated with aggressive acquisition programs.

Interestingly, several deal-related variables show strong explanatory power. Horizontal and vertical transactions (and their transformations) are statistically significant, highlighting the importance of deal type rather than deal intensity. The interaction between *Super_acquisitive* and *#Consolidation* is positive and highly significant, indicating that super-acquisitive strategies focused on consolidation deals are more likely to translate into positive EBITDA growth outcomes.

This suggests that what firms acquire matters more than how much they acquire, especially from an operational efficiency perspective. Overall, the Swedish evidence provides partial support for *H3* and *H4*. While aggressive acquisition strategies tend to harm operational performance on a standalone basis, targeted consolidation strategies can mitigate these effects. However, unlike Italy, high ROCE alone is not sufficient to transform super-acquisitiveness into superior EBITDA growth.

From a broader theoretical perspective, this suggests that institutional context matters: Italy rewards financially disciplined serial acquirers more strongly in operational terms. Conversely, Sweden requires not only financial soundness, but also highly selective and

strategically coherent acquisition programs to achieve sustained EBITDA growth cumulated over time.

```
Residuals:
      Min        1Q    Median        3Q       Max
-0.145907 -0.050723 -0.000991  0.028943  0.208929

Coefficients:
                                  Estimate Std. Error t value Pr(>|t|)
(Intercept)                     -5.766e-02  6.467e-02  -0.892  0.37668
Avg_ROCE                         1.175e+00  2.092e-01   5.617 7.31e-07 ***
Avg_FCF_conv                    -1.063e-01  3.078e-02  -3.454  0.00109 **
Mixed_Growth                    -6.810e-02  3.604e-02  -1.890  0.06427 .
Acquisitive                     -2.099e-01  8.897e-02  -2.360  0.02201 *
log(`#Consolidation` + 1)       -8.441e-02  3.645e-02  -2.316  0.02448 *
I(`#Diversification`^2)         -5.570e-05  2.036e-05  -2.736  0.00845 **
log(`#Horizontal` + 1)           3.231e-01  9.182e-02   3.518  0.00090 ***
I(`#National`^2)                -2.754e-04  5.839e-05  -4.717 1.78e-05 ***
log(`#National` + 1)            -9.814e-02  4.156e-02  -2.361  0.02192 *
`#Cross_border`                 -3.355e-03  1.202e-03  -2.791  0.00729 **
log(`#Cross_border` + 1)        -1.181e-01  4.652e-02  -2.538  0.01413 *
`Acquisitive:Avg_FCF_conv`       2.140e-01  1.162e-01   1.841  0.07119 .
`Super_acquisitive:Avg_ROCE`    -1.794e+00  4.124e-01  -4.349 6.24e-05 ***
`Acquisitive:Avg_Net_Leverage`   2.601e-02  2.175e-02   1.196  0.23696
`Super_acquisitive:#Consolidation`  4.048e-03  1.880e-03   2.153  0.03588 *
`Super_acquisitive:#Diversification`  1.313e-02  2.700e-03   4.861 1.08e-05 ***
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.07349 on 53 degrees of freedom
  (8 observations deleted due to missingness)
Multiple R-squared:  0.6283,    Adjusted R-squared:  0.5161
F-statistic: 5.599 on 16 and 53 DF,  p-value: 8.853e-07
```

Table 18. Model (5) - Avg_EBITDA_margin

Source: analysis carried out through R software

Model (5) focuses on the average EBITDA margin over the 2010–2025 period (Table 18), thus shifting the attention from cumulative growth dynamics to structural profitability and post-M&A integration outcomes, by means of direct impact on top line and cost structure. The model explains approximately 62.8% of the variance in the dependent variable, while the Adjusted R^2 stands at about 51.6. The F-statistic (5.599) and the associated p-value (8.853e-07) confirm that the model is globally statistically significant. From a regressors' perspective, the Swedish results provide clear and theoretically consistent evidence on the mechanisms through which acquisitiveness affects operating margins. First, standalone growth strategy dummies do not generate superior profitability. *Mixed_Growth* and *Acquisitive* are either statistically insignificant or associated with weak and unstable effects. This suggests that as standalone variables, neither organic expansion nor "basic" acquisitive behavior is sufficient to materially influence long-run EBITDA margins. This

finding is coherent with the idea that margins depend more on execution quality than on growth mode per se. However, the interesting insights emerge once interaction terms are considered.

The interaction between *Super_acquisitive* and *#Consolidation* displays a positive and statistically significant coefficient (≈ +0.0040, p-value ≈ 0.036). This suggests that serial acquirers are able to extract margin improvements when acquisitions are oriented toward consolidation strategies. From a theoretical perspective, this result can reflect once again the realization of scale economies, purchasing power, cost rationalization and operational standardization, mechanisms that are particularly effective in mature and concentrated industrial environments such as Sweden. Similarly, the interaction *Super_acquisitive*#Diversification* is positive and highly statistically significant, with a coefficient of approximately +0.013 and a p-value close to 1.08e-05. This result indicates that experienced acquirers are capable of managing diversification strategies without destroying margins. Taken together, these results imply that super-acquisitive firms in Sweden do not benefit from *acquisitiveness* per se, but rather from the learning effect associated with repeated and strategically coherent acquisition programs. Margin improvements arise only when experience is leveraged in a disciplined and focused manner, and not merely through deal frequency.

Hence, once again the contrast with results achieved at Italian level is particularly striking. In the Italian Model (5), EBITDA margin improvements were primarily driven by deal frequency (*Annual_deals*), suggesting that Italian firms benefit from *doing more deals*, especially in a fragmented industrial context where even relatively simple integrations generate efficiency gains. *Super_acquisitiveness* mattered mainly through interaction terms, but the learning effect appeared more volume-driven. In Sweden, instead, deal quantity is not sufficient. Margin improvements stem from how acquisitions are executed and combined with specific strategic purposes. This result might highlight a more advanced stage of the learning curve: Swedish firms no longer gain from “doing more”, but from doing better, in terms of strategic rationale. As a consequence, while both

countries boast learning effects, the nature of learning differs. In Italy, learning appears to appen through repetition and scaling, alongside operational soundness by means of high return on capital employed. By contrast, in Sweden, the learning mechanism happens through specialization and execution excellence.

4.3.3. H5: the benefits of a *learning effect* mechanism

The fifth research hypothesis (*H5*) concerns the existence of a learning effect associated with repeated acquisition activity. This hypothesis can be assessed by jointly interpreting the results of Models (1)-(5), spanning both stock-market and operational performance.

In both Italy and Sweden, super-acquisitive firms are able to outperform non-acquisitive and "basic" acquisitive firms in terms of Price Change and Total Return, provided that certain conditions are met. In Italy, financial efficiency (by means of ROCE) is the key factor, while in Sweden market performance reacts more strongly to the deal strategic focus, while operational soundness does not appear to matter. Generally, in neither country do "basic" acquisitive firms generate statistically significant outperformance. This asymmetry provides the first piece of evidence in favor of a learning effect: experience matters, and it matters non-linearly. When moving to operational performance, the learning effect becomes more nuanced. In both countries, super-acquisitive firms face an initial performance penalty in terms of Revenues and EBITDA growth, reflecting the costs and risks of serial M&A programs (as the standalone variables demonstrate). However, these negative effects are progressively mitigated (when certain variables interact). In Italy high ROCE allows firms to absorb integration costs and offsets the risks of company acting as a super-acquirer on a standalone basis. On the other side, in Sweden, strategic coherence, particularly consolidation-driven acquisitions, matter Learning with acquisitions does not eliminate risks; however, it enables firms to manage them more effectively over time**.** Model (5) provides a cleaner evidence of a learning effect, especially in Sweden. Margin improvements are realized only by super-acquisitive firms, and only when experience is combined with specific acquisition strategies. This confirms that learning materializes most clearly at the level of cost control, integration efficiency, and

organizational, rather than long-term compounding. Overall, *H5* can be considered as supported by the empirical evidence. Super-acquisitive firms consistently outperform non-acquirers in terms of impact on performance. Such outperformance does not stem from acquisitiveness alone, but from the accumulation of experience, routines and integration capabilities, which allow firms to convert repeated M&A activity into sustainable competitive advantages.

5. Empirical analysis: a comparative analysis of Swedish and Italian consolidators

Once the standalone empirical analysis of Swedish firms has been completed, mirroring the approach adopted for Italy, the final step is to carry out a comparative empirical assessment between Swedish hyperscalers and Italian consolidators. The aim is to delineate performance differences within the cross-country category that emerged as the "winner" in the earlier analysis, i.e. firms that pursue long-term growth primarily through inorganic expansion

5.1. Research Hypothesis

Within this context, the *core research question* can be classified according to the following hypotheses:

H1: In the long run, Swedish acquisitive and super-acquisitive companies can positively influence their stock market performance relative to Italian acquisitive and super-acquisitive companies, in terms of Total Shareholder Return (incl. dividends), cumulated over a pre-defined time horizon.

H2: In the long run, Swedish acquisitive and super-acquisitive companies can positively influence their operational performance relative to Italian acquisitive and super-acquisitive companies, in terms of CAGR of Revenues, cumulated over a pre-defined time horizon.

Hence, the objective is to isolate those variables that are most closely associated with long-term compounding effects, from both a market perspective - using Total Return (TR) including dividend reinvestment, which inherently embeds compounding through the reinvestment mechanism - and an operational perspective, focusing on cumulated Revenue CAGR. The latter helps abstract from cost structures, which can vary substantially across firms and industries due to both idiosyncratic and external factors, thereby allowing the analysis to concentrate primarily on top-line expansion.

5.2. Database building, descriptive analysis and model specification

Hence, the immediate next step consisted of building a database including both Swedish hyperscalers and Italian consolidators (i.e., both “basic” acquisitive firms and super-acquisitive firms), following exclusion criteria that are consistent with those applied in the standalone Italian and Swedish analyses. The final sample includes 76 companies in total, of which 52 are Swedish and 24 are Italian. This is a particularly informative insight, as the database captures those firms that, across countries, emerged as the most acquisition-intensive in the respective country-level standalone analyses. In turn, this evidence supports the idea that the number of domestic consolidators within the Italian industrial fabric remains limited compared to Sweden (and, more broadly, to other European markets). From an industrial standpoint, the Swedish firms in the sample can be classified as follows:

Industry	***# of Companies***
Industrial_Manufacturing_&_Components	26
Aerospace_&_Defense	1
Automotive	3
Entertainment	2
Healthcare	4
Services	7
TMT	9

Table 19. Summary of industry categorization

Source: own elaboration

As for the Italian firms, they are categorized as follows:

Industry	***# of Companies***
Energy_&_Utilities	10
Aerospace_&_Defense	1
Automotive	1
Chemical_Biotechnology_&_Pharmaceuticals	1
Entertainment	2
Food_&_Beverage	1
Healthcare	2
Industrial_Manufacturing_&_Components	1
Services	2
TMT	3

Table 20. Summary of industry categorization
Source: own elaboration

It is also worth noting that there is a degree of cross-country heterogeneity in terms of industry composition. The Swedish corporate arena is largely dominated by Industrials, Services and TMT companies, whereas in Italy, consistently with what emerged in the standalone analysis, Energy & Utilities firms represent the most prominent group. This divergence also reflects a broader difference in the development trajectories of the two industrial systems: Sweden appears more skewed toward innovation-driven sectors, while Italy remains more anchored to traditional industries. This evidence is coherent with the *theoretical framework* discussed above.

That said, industry is not explicitly controlled for in the empirical specifications, which represents a limitation of the analysis and a natural avenue for further research.

As anticipated, the final sample includes only acquisitive and super-acquisitive companies, classified as follows:

Growth strategy	**#**
Acquisitive	22
Super-acquisitive	54

Table 21. Categorization based on the theoretical framework

Source: own elaboration

The total number of deals included in the sample amounts to 2,980, and they are classified as follows according to strategic rationale:

Category 1		***Category 2***		***Category 3***	
#Consolidation	2,196	#Horizontal	2,513	#National	932
#Diversification	445	#Vertical	467	#Cross-border	2,048
#Differentiation	339				

Table 22. Division by strategic purpose

Source: own elaboration

With regard to the variables employed, they are consistent with those previously used in the standalone empirical analyses for Italy and Sweden. In addition, a set of variables specific to this comparative analysis has been introduced in order to properly distinguish between the two countries.

These include a country dummy variable, which takes the value of 1 for Swedish firms and 0 for Italian firms. Moreover, interaction terms between the country dummy and the indicators identifying acquisitive and super-acquisitive firms are included, all specified as dummy variables.

The reference time period, in order to ensure consistency with the temporal framework adopted in the Italian analysis, spans from 2010 to 2023.

Finally, the model specification follows the same framework adopted in the standalone Italian and Swedish analyses.

5.3. Results

In this section, the main findings from the two models are discussed, with the aim of addressing the research hypotheses and assessing whether being acquisitive or super-acquisitive is statistically associated with long-term performance across countries, as well as the implications that follow from these results.

```
Residuals:
    Min      1Q  Median      3Q     Max
-30.494  -9.679  -2.536   5.161  75.980

Coefficients:
                              Estimate Std. Error t value Pr(>|t|)
(Intercept)                  -47.0471    16.3325  -2.881 0.005395 **
Super_acquisitive             33.5868    15.2881   2.197 0.031653 *
Avg_ROCE_cum                  14.2338     3.7525   3.793 0.000332 ***
Consolidation                  2.0251     1.3306   1.522 0.132955
Diversification               -0.2997     0.3048  -0.983 0.329191
Horizontal                     0.8057     0.2973   2.710 0.008629 **
National                       0.4271     0.2049   2.084 0.041136 *
Country_dummy                  5.6401    10.2387   0.551 0.583649
Super_acquisitive:Country_dummy  -0.9276    11.2391  -0.083 0.934480
Super_acquisitive:Consolidation  -2.8648     1.3742  -2.085 0.041083 *
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 17.12 on 64 degrees of freedom
  (2 observations deleted due to missingness)
Multiple R-squared:  0.336,     Adjusted R-squared:  0.2426
F-statistic: 3.598 on 9 and 64 DF,  p-value: 0.001126
```

Table 23. Model (6) - TR_cum

Source: analysis carried out through R software

As far as Model (6) is concerned, it explains ~33.6% (R^2) of the variability in the dependent variable (*TR_cum*). The Adjusted R^2 (~24.3%), which accounts for the number of predictors included in the model, suggests a moderate explanatory power, which is reasonable given the intrinsic volatility of shareholder returns and the heterogeneity of firms in a cross-country sample. The F-statistic is 3.598 with a p-value of 0.001126, indicating that the overall model is statistically significant and that the null hypothesis that all coefficients are jointly equal to zero can be rejected.

As for the variables associated with the *acquisitiveness* paradigm, *Super_acquisitive* enters with a positive and statistically significant coefficient (≈ +33.59, p ≈ 0.0317). Considering the meaning of the dummy variable (*Country_dummy* = 0 for Italy, 1 for Sweden), this suggests that this represents the baseline super-acquisitive effect in Italy, i.e. ceteris paribus, serial compounders in Italy are associated with a higher *TR_cum*. Nonetheless, the interaction variable *Super_acquisitive*Country_dummy* has a negative coefficient (≈ -0.93) but is not statistically significant (p ≈ 0.934). This highlights an interesting result: the incremental “Sweden effect” on being a super-acquirer as a firm has no statistical significance. Hyperscalers in Sweden appear to earn as similar TR over time to Italian compounders. Such outcome resonates with the results achieved at standalone level. Indeed, the pooled model related to stock market performance does not provide evidence that Swedish super-acquirers have a greater impact on performance than their Italian counterparties.

On a different note, it is relevant to highlight that *Avg_ROCE_cum* is positive and statistically significant, with a coefficient of +14.23 and a p-value of 0.000332, thus proposing the idea that return on capital employed is associated with higher TR cumulated over time. Such concept appears to be true at the Italian level, where the main argumentation is that being able to generate high ROCE is the key to turn a programmatic M&A playbook into outperformance. However, on the other side, it is also true that Super_*acquisitive*ROCE* does not appear in Model (6), following the implementation of

the RegSubset framework. Hence, Model (6) is highlighting that, at a pooled level (Sweden and Italy combined), having capital efficiency has a positive effect in general, but does not reverse the negative effect of being a super-acquirer on a standalone basis, which is the main output obtained at Italian level.

As for the variables representing the type of deal in terms of strategic choice, *Horizontal* is positive and significant (≈ +0.81, p ≈ 0.00863), suggesting that deal strategies with a stronger horizontal component are associated with higher *TR_cum* when considering the combined environment of Italian and Swedish companies. National is positive and significant (≈ +0.43, p ≈ 0.0411), indicating that being focused on the national consolidation is associated with positive total return. These results are in line with the *theoretical framework,* where focusing on national consolidation within the industry of operations is conducive to higher results. The most interesting result is probably associated with the interaction term *Super_acquisitive*Consolidation,* which is negative and statistically significant (≈ −2.86, p ≈ 0.0411). This result suggests that, within the pooled cross-country sample, programmatic M&A based on consolidation leads to lower creation of value for super-acquirers. In addition, this provides a further layer of analysis relative to the standalone Swedish evidence, where the interaction variable *Acquisitive*Consolidation* is positive and statistically significant (thus showing that a consolidation-based approach is the winning weapon for “basic” acquirers). By contrast, in the pooled model, as for the finding related to super-acquirers, the coefficient shows that marginally enhancing a consolidation-based M&A playbook is not per se conducive to higher stock market performance in terms of total return cumulated. The reasons are consistent with the observations conducted at Swedish level, i.e. the market is already pricing in a certain “saturation” effect as well as potentially diminishing marginal synergies.

Finally, *Country_dummy* is not statistically significant (≈ +5.64, p ≈ 0.584), thus highlighting that there is no statistical evidence of cross-country difference in *TR_cum* for the group of acquisitive and super-acquisitive companies. This reinforces the idea that the difference might be associated with the strategy and the channels rather than the

volumes when considering serial acquirers' cross-country performance. Hence, *H1* does not appear to be supported.

```
Residuals:
      Min        1Q    Median        3Q       Max
-0.145476 -0.036556 -0.005986  0.035683  0.221733

Coefficients:
                                  Estimate Std. Error t value Pr(>|t|)
(Intercept)                     -0.0313666  0.0442593  -0.709  0.48112
Super_acquisitive               -0.0243776  0.0431508  -0.565  0.57412
Avg_ROCE_cum                     0.0498640  0.0248049   2.010  0.04869 *
Consolidation                   -0.0004818  0.0010760  -0.448  0.65583
Diversification                 -0.0012936  0.0011220  -1.153  0.25327
Horizontal                       0.0007088  0.0010714   0.662  0.51065
National                         0.0012909  0.0007612   1.696  0.09486 .
Country_dummy                    0.1627426  0.0485653   3.351  0.00136 **
Super_acquisitive:Country_dummy -0.0952559  0.0370026  -2.574  0.01241 *
Avg_ROCE_cum:Country_dummy      -0.0779252  0.0276519  -2.818  0.00645 **
Super_acquisitive:Avg_ROCE_cum   0.0651178  0.0266225   2.446  0.01725 *
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.06257 on 63 degrees of freedom
  (2 observations deleted due to missingness)
Multiple R-squared:  0.3405,    Adjusted R-squared:  0.2358
F-statistic: 3.252 on 10 and 63 DF,  p-value: 0.00194
```

Table 24. Model (7) - Revenues_CAGR_cum

Source: analysis carried out through R software

Model (7) investigates the cumulated CAGR of Revenues over the 2010–2023 period as a proxy for long-term operational outperformance. The model displays a moderate explanatory power, with an R^2 of approximately 34.0% and an Adjusted R^2 of about 23.6%. These values can be considered consistent with the empirical literature on long-term revenue growth determinants. The F-statistic equal to 3.252, with a p-value of 0.00194, indicates that the model is globally statistically significant, allowing rejection of the null hypothesis that all regressors are jointly irrelevant.

Differently from the previous model, the *Country_dummy* (Sweden = 1) enters the regression with a positive (≈ +0.163) coefficient, with high statistical significance ($p \approx 0.00136$). This result suggests that, ceteris paribus, companies operating in Sweden as hyperscalers have a greater impact on the cumulated top line CAGR than their Italian counterparties, in a way that is more consistent with the *theoretical framework* of this dissertation: Sweden exhibits a more advanced institutional setting, which is conducive to a greater scalability of the business model, hence boosting financial performance.

When considering the variables belonging to the *acquisitiveness* paradigm, *Super_acquisitive*, considered on a standalone basis, showcases a negative (≈ −0.024) but statistically insignificant coefficient (p ≈ 0.57). This indicates that, on average, being super-acquisitive does not automatically translate into superior long-term revenue growth cumulated over time in a cross-country setting, consistently with the standalone regressions for both Italy and Sweden. Nonetheless, the key interpretation stems from the interaction effects. Indeed, the interaction *Super_acquisitive*Country_dummy* is negative and statistically significant. Once again, the marginal effect of being a hyperscaler in Sweden is lower than in Italy. Hence, Italy appears to represent the environment where being a super-acquirer is the benchmark (the paradigmatic model) to achieve a higher cumulated top line growth over time. On the other side, consistently with the results observed at Swedish level, volumes per se is not enough to generate a revenue "premium". The variable *Avg_ROCE*, both as standalone, as well as combined with *Super_acquisitive,* confirms the results achieved in Italy at a standalone level.

To sum up, Sweden showcases structurally higher revenue growth cumulated over time, regardless of the marginal incremental impact of being a super-acquirer. On the other side, in Italy, the *super-acquisitiveness* displays a greater importance, especially when combined with high ROCE and the ability to absorb as many acquisitions as possible (the "volume" component). Hence, *H2* is only partially supported.

6. Conclusion

The primary objective of this research was to assess whether growth through mergers and acquisitions contributes to long-term outperformance, both in stock market returns and in operational performance. This question was first examined from a purely Swedish perspective and subsequently addressed through a comparative analysis between Sweden and Italy.

From a theoretical standpoint, Sweden and Italy share several structural characteristics in their corporate landscapes, including the prevalence of family ownership, an economic

fabric dominated by small and medium-sized enterprises and relatively concentrated ownership structures. Despite these similarities, Sweden appears to have successfully transformed features that are often perceived as structural constraints into sources of competitive advantage. This outcome is largely attributable to a more advanced institutional environment, characterized by a deep and liquid capital market, sustained investment in R&D, a high level of financial and business sophistication among economic agents as well as households, and strong participation by institutional investors. Over time, these elements have fostered a virtuous cycle, enabling firms to access capital markets and pursue growth strategies heavily centered on M&A. This environment has given rise to a distinctive group of companies, the Industrial Holdings, hyperscalers, and acquisition-driven compounders, that have developed a highly programmatic M&A model. Their strategy typically relies on consolidation through the acquisition of small and medium-sized firms operating within a clearly defined industrial core, with the objective of building integrated industrial platforms rather than pursuing opportunistic or transformational deals. In contrast, Italy, where domestic acquirers are fewer and the use of M&A as a scaling mechanism remains more cautious, has largely failed to activate a similar cycle. As a result, many Italian firms either remain sub-scale for extended periods or are ultimately absorbed by foreign consolidators or Private Equity firms.

The empirical results are overall consistent with this *theoretical framework*. Beyond the descriptive evidence showing that acquisitive and super-acquisitive firms achieve superior long-term compounded performance relative to purely organic or mixed-growth firms, the regression analysis highlights a more nuanced mechanism. In Sweden, *acquisitiveness* becomes a statistically significant driver of long-term performance only when it is paired with a consolidation-oriented M&A strategy. In this context, operational soundness appears largely priced in by the market and does not, on its own, explain differences in performance among serial acquirers. By contrast, the Italian case displays a different pattern. The interaction between being super-acquisitive and maintaining high operational efficiency, proxied by ROCE, emerges as economically and statistically significant. This suggests that, at Italy's current stage, markets still primarily reward capital efficiency, while the strategic dimension of M&A and the broader institutional setting play a more limited role. In other words, Italy appears to operate at a lower

"*acquisitiveness* equilibrium" where the market has not yet fully internalized or rewarded programmatic acquisition strategies per se.

By contrast, Sweden "sits on a higher rung of the *acquisitiveness* ladder", i.e. represents a more advanced stage of acquisitive maturity. In the Swedish market, operational soundness is effectively a prerequisite rather than a differentiating factor, while value creation hinges on strategic discipline, focus and consolidation logic. *Acquisitiveness* in itself is not rewarded unless embedded in a coherent M&A framework aligned with the institutional environment. This distinction helps explain why Swedish serial acquirers can scale aggressively without being penalized by the market, whereas Italian firms face tighter constraints and more skepticism when attempting similar strategies.

These results are further reinforced by the cross-country evidence presented in Section 5. In particular, when focusing on cumulative revenue growth, Swedish firms exhibit structurally higher and faster growth on average than their Italian counterparts. However, this gap does not appear to be driven by Swedish hyperscalers benefiting disproportionately from the "seriality" of their acquisitions, but rather by broader country-level and strategic factors. As such, the cross-country comparative empirical evidence further enhances the results achieved at standalone level. Differences in performance are not based on the *acquisitiveness* paradigm per se, but depend on the mechanism and the levers through which the programmatic M&A playbook is translated into value creation cumulated over time. While it is true that Swedish compounders showcase, on average, higher long-term revenue growth cumulated over time, the pooled empirical analysis shows that this competitive "financial" advantage does not stem from a learning effect associated with being a super-acquirer. This means that Swedish super-acquisitive corporations, the holdcos, do not outperform their Italian counterparts just because of the volume component, i.e. the fact that they acquire more frequently. On the contrary, their superiority, the Swedish premium, which then is reflected in the stock market performance as well, appears to be associated with the broader institutional setting and strategic context in which firms operate. In such environment, consolidation-oriented acquisitions and execution discipline are already embedded as a baseline. Once these factors are controlled for, the marginal impact of *super-acquisitiveness* does not differ significantly

across countries. This finding reinforces the interpretation that Sweden represents a more mature stage of the programmatic M&A development, where learning effects have been largely internalized and are no longer a source of marginal competitive differentiation. On the contrary, in Italy, the paradigm according to which learning via M&A is conducive to marginal superior incremental performance still manifests in a clear way, through capital efficiency (high ROCE) and deal repetition (the volume component).

Taken together, these findings position Sweden as a structural benchmark for Italy in the evolution toward a higher level of acquisitive sophistication. However, replicating this model requires more than firm-level imitation; it necessitates changes in the surrounding ecosystem. Material lessons include the development of capital markets that are accessible to smaller firms, stronger incentives for innovation and equity investment, as well as a cultural shift in which founders view M&A and public listing not as threats to control, but as tools to amplify their firm's long-term reach.

By aligning these elements, Sweden has turned characteristics that Italy often struggles with, i.e. family control and a predominance of mid-sized firms, into drivers of success in the M&A arena. Ultimately, the Swedish experience demonstrates that, given the right institutional support and strategic mindset, even economies without large traditional conglomerates can generate world-class champions through disciplined use of capital markets and programmatic acquisitions. Italy's experience, by contrast, highlights the opportunity cost of underutilizing these tools, which represents a gap that future reforms may seek to narrow by drawing inspiration from the Swedish model.

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8. Appendix

Appendix A: Artificial Intelligence disclosure

Artificial intelligence played a limited yet supportive role in the preparation of both (SSE and Bocconi) theses. The tool employed was ChatGPT. The LLM was primarily used to improve wording and academic style, correct grammatical errors, and rephrase selected takeaways across sections in order to enhance clarity and better convey the key messages.

In addition, the tool was used to support the identification of potentially relevant academic articles and prior empirical research, both within the Italian context (for the Bocconi thesis) and the Swedish context (for the SSE thesis), by facilitating navigation of the existing literature and providing preliminary references and research directions. This contributed to more efficient time management and helped locate strands of the literature that would otherwise have required more extensive individual research efforts.

Finally, the tool was used in a strictly supportive capacity with respect to the econometric code developed for the analyses in both theses, to help identify potential coding issues and errors (e.g., bugs, inconsistencies, or unintended syntax/logic problems).

While the use of the LLM provided the benefits outlined above, it is also important to acknowledge the associated risks, as AI-generated outputs may contain inaccuracies or imprecise information. For this reason, all suggestions were carefully reviewed, critically assessed, and independently verified prior to inclusion, in order to ensure accuracy, objectivity, and the absence of unintended bias. Importantly, the tool was used exclusively as a refinement and error-correction aid, and not as a source of theoretical or empirical insights.