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"THE ITALIAN IPO EXPERIENCE: A COMPARISON BETWEEN PRIMARY AND SECONDARY MARKET"

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Firma (signature) ……  ……

Vorrei esprimere un ringraziamento speciale a Gaia, la mia dolce metà,
che per prima mi è stata a fianco e mi ha aiutato a superare gli ostacoli
che questo percorso comporta.
Rivolgo un sentito grazie ai miei genitori, la mia fonte d'ispirazione,
che mi hanno sempre sostenuto ed incoraggiato con entusiasmo.
Ed infine a mia sorella Erika, la mia più grande fan,
alla quale è riservato un posto speciale nel mio cuore.

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Introduction

At the very beginning of their life, most companies start out by raising capital from a single person or a small number of investors. At some point in its timeline, as the business prospers, a company may feel the necessity to fund new projects raising additional capital, which can hardly be guaranteed by a single person. Therefore, companies have the possibility to choose the strategy that best suits their financial need. Raise funds through an equity injection, which could upset the shareholding structure, and borrow money, thus enlarging the debt position, are the most popular choices.

In European reality, the lending provided by financial institutions is still in the first place among sources of financing. However, something has changed. Banks granted loans without the proper caution before the 2007-2008 global financial crisis but, since then, credit institutions have adopted a stringent lending policy. It complicates the companies' access to credit, especially for small enterprises which are prone to higher default probability. Therefore, their high operational and financial risks have resulted in loan refusal and higher lending rates.

One consequence of the deterioration of the bank-business relationship is the broaden of companies' range of action, looking for new alternative sources of financing that, until then, had sparsely been considered. Start to sell stock to diversified investors through the stock exchange listing could be an optimal choice. This process, where a private company first sells shares of stock to the public, is known as initial public offering (IPO). In essence, an IPO demonstrates that a company's ownership is transitioning from private to public. For that reason, the IPO process is sometimes referred to as "going public".

Although IPO is considered a source of funding, it brings several benefits to companies. The status of listed company implies greater visibility, reliability, and prestige. Listing increases brand and managers reputation strengthening the company's bargaining power with customers and suppliers. Listed status helps attract and retain management members thanks to stock-option or equity-based plans and it introduces a new currency; stock deals in M&A activities will be allowed only if the shares of the acquiring firm are publicly traded.

Benefits of going public are certainly not over here. Once the stock is publicly traded, the enhanced liquidity and the improvement of the company and management reputation allow the company to raise capital on more favorable conditions than if it had to compensate lenders and investors for the lack of liquidity typical of a privately owned company. Therefore, this powerful tool must not be considered just as an alternative source of credit, because IPO can also assist the access to capital through traditional lending facilities.

IPOs are extremely important not only for the prosperity of the company which undertake the process but also for the welfare of the economy. The economic growth is strictly correlated with the trend and soundness of equity capital markets. A stable and growing market attracts foreign capital. IPOs allow investors to share and diversify risk, farther reducing information asymmetries among them. They discipline management, mitigating agency conflicts with shareholders. For these reasons staying private could be costly for the country's economic growth.

Therefore, several stock exchanges have been created to offer the listing opportunity at the most possible number of companies. Multilateral Trading Facilities (MTFs) tailored for small and medium-size enterprises (SMEs) started to develop. These self-regulated financial trading venues tried to create a SME friendly market architecture supported by effective institutions, forging links to policies that foster a new class of investable equities. Also known as second-tier stock markets, they are characterized by low listing requirements for the admission and low information standards, consistent with the countries' task of screening promising issuers to include them on the official list.

The European States already recognize the role and importance of SMEs. As we will see later, SMEs are the backbone of European economy, with more than 22 million of enterprises, they represent the 99.8% of businesses. To overcome the delayed establishment of markets dedicated to these companies, the European Union (EU) pursue an IPO incentive campaign for several years.

The first chapter, which will cover the topics mentioned above, will close with an IPO comparison between the Italian market and some leading European markets, bringing to light some intriguing particulars.

Going into the specifics, structural peculiarities of the Italian exchange are described in chapter two. We will discuss how *Borsa Italiana* has established different equity segments with specific tailored features based on the nature of targeted companies. The differences between the segments, with greater emphasis given to primary and secondary markets, will be analyzed. In particular, the focus will be on access requirements, direct costs that companies face according to the chosen market, and rules that companies must comply to maintain the listed status.

Despite the Organizations' ongoing efforts to facilitate market access to SMEs, it could still be tricky. For this reason, a recent phenomenon that has facilitated the listing of several SMEs will be argued: it is talking about special purpose acquisition companies (SPACs). The life cycle, functioning, and contribution these companies made to the Italian market will be examined.

The second chapter closes with an analysis of the phenomenon that usually characterizes IPOs: the underpricing. Its presence is documented across countries and throughout the years, therefore, we will figure out if the Italian market is affected by such circumstance. Subsequently, we will see if and to what extent it appears on the main Italian list compared to the junior segment.

The third chapter investigates the operating performance of IPO companies on the Italian Stock Exchange. In IPO literature is well known that firms gone public exhibit a deterioration in post-IPO operating performance; this also holds true for previous studies on the Italian case.

Financial ratios will be used to measure companies' performance. The matched pairs method will be the approach employed to verify the performance change. It builds on the data collection for the same subject across a certain event, such as IPO. In this way, the data gathered after the event are compared with those before it and the identified change is studied. According to previous studies, it is appropriate to expect a poorer post-IPO performance, inferring that IPO has a negative effect on firms' profitability.

Depending on the results the study will report, we will proceed with the next step: the identification of factors that may have affected the performance change. In doing so, some of the most recurrent motives will be investigated. Therefore, we will inspect the "window dressing" or "timing the issue", the lack of opportunities, the ownership structure, and the company's age and size explanations.

Although several studies are similarly structured, the singularity concerns the distinction between the regulated market and the market dedicated to SMEs. Indeed, the study will first consider the entire Italian market, but then it will explore IPO performance and drivers of these two markets individually, with the purpose of light on their peculiarities.

Chapter 1: The European trading venues

1.1 The birth of the stock exchanges

1.1.1 The primary markets

The origin of the first stock trading market is associated with the speculation of the government stocks and prestigious shares in the *Dutch East India Company*. This large-scale and widely held joint stock venture was open to both locals and foreigners and allowed numerous investors to reap the rewards of foreign trade without requiring them to risk their entire fortune. Thus, at the beginning of the seventeenth century, the Amsterdam Stock Exchange was born. Even though it is believed to be the first trading venue established, Braudel (1983, p. 100) argues that it is not entirely true:

> It is not quite accurate to call [Amsterdam] the first stock market, as people often do. State loan stocks had been negotiable at a very early date in Venice, in Florence before 1328, and in Genoa, where there was an active market in the *luoghi* and *paghe* of the Casa di San Giorgio, not to mention the *Kuxen* shares in the German mines which were quoted as early as the fifteenth century at the Leipzig fairs, the Spanish *juros*, the French *rentes sur l'Hotel de Ville* (municipal stocks) (1522) or the stock market in the Hanseatic towns from the fifteenth century. The statutes of Verona in 1318 confirm the existence of the settlement or forward market (*mercato a termine*). In 1428, the jurist Bartolomeo de Bosco protested against the sale of forward *loca* in Genoa. All this evidence points to the Mediterranean as the cradle of the stock market.

What Amsterdam Bourse introduced as a novelty was the volume traded, the fluidity of the market, the speculative freedom of the transactions and the publicity that it received.
In response, London did not back down. It did look at Amsterdam enviously for a long time. The Royal Exchange began to trade the first public stocks and shares in the Indies and the Bank of England as early as 1695. London coffee houses were the heart of the speculation, and the quarter dedicated to business in which those facilities were stored was known as *Exchange Alley*. After a fire that burned down the whole district, in 1773 a new building was put up and was christened the Stock Exchange.
It was along the *rue Vivienne* which is where the Bourse of Paris was set up in 1724. The exchange site, the *Hotel the Nevers*, was the former office of the *Compagnie des Indes*. However, the Paris Stock exchange took fifty years to allow stock market speculation came into existence. Until that moment it had not seen much activity.
The main goal that urged merchants to establish uniform exchange rates for the first time, making the birth of the Frankfurt exchange in 1585, was the creation of transparency. Non-uniform exchange rates combined with the variety of currencies threatened to cripple the financial system, stimulating fraud and usury. Despite this precocity, it was only in 1778 that

government bonds began to be traded and in 1820 the first common shares listed and sold in the Frankfurt Stock Exchange were recorded. While in other European markets equities were facing increasing popularity, German traders remained skeptical for a long time about these instruments, maintaining their focus on bonds.

Regarding Italian history, the Milan Merchandise Exchange was established by the Napoleonic government in 1808 as a market for securities and commodities. Unlike what had happened in London and Amsterdam, where markets were created spontaneously by financial operators of that period, the Italian one was created by the government. For more than 50 years only government bonds were traded. In 1859 the first shares of a railway enterprise were listed. The name of that company was *Società delle Strade Ferrate Lombardo Veneto*. At the time the Milan Stock Exchange was a local trading venue.

Notwithstanding the listing of 24 other companies, primarily banks but also industrial firms, in 1873, it ranked second for trade volume after Genoa. What caused the Milan Stock Exchange boom was the intense industrialization which increased the number of listed companies from 27 in 1895 to 171 in 1907. It was promoted as Italy's leading stock exchange in 1918. Only in 1998 the ten local stock exchanges in Italy, which were placed in Milan, Rome, Trieste, Venice, Naples, Turin, Genoa, Florence, Bologna, and Palermo, have been closed and merged into a single entity: *Borsa Italiana*.

1.1.2 An opportunity for SMEs: the establishment of secondary markets

Shortly after the establishment of the first modern market in Europe, it was noticed that sophisticated, not to say criminal, procedures were already in place. Brokers, unhampered by the regulations, started playing the exchanges making themselves rich; this happened on the back of uninformed players, who were becoming poorer. Since the newness of the markets, it was necessary to impose rules in the exchanges to create a safer and fairer market. Each country, therefore, undertook the slow and jagged path of establishing regulations with a common ground but different shapes. Among the settled rules introduced were the listing requirements. These provisions aimed to increase assurance on the genuineness of the company issuing the security and of the listed security itself and to provide accurate information for dealers, speculators, and investors. One of the challenges that admission requirements brought was the struggle for SMEs to be eligible for listing. The barriers to listing (i.e., requirements concerning company size, years in operation, history of profits, and minimum number of circulating shares) virtually guaranteed that only established large companies could list shares in Europe.

Soaring oil prices and rising inflation were significant concerns after oil embargo proclaimed by the *Organization of Arab Petroleum Exporting Countries.* The associated recession and the falling market resulted mainly from the rise of interest rates by the Federal Reserve to fight inflation. Because of this, between the second half of the 1970s and the early 1980s, several measures to counter an unfavorable international economic climate were taken.

One of these measures was represented by the creation of new secondary markets, with the exact purpose of expanding the offer of negotiable securities. Almost all these exchanges were dedicated to small and medium-sized companies, allowing them to access the capital market. The established junior stock markets were characterized by simplified listing processes and customized and less demanding information standards in comparison with the rules in force on the main markets.

Posner (2005), describing such exchanges, argued that this market model was previously developed in Wall Street in 1971. The European second-tier markets modeled and copied the *National Association of Securities Dealers Automated Quotation*, better known as NASDAQ, which is also the first electronic trading system for buying and selling securities.

In 1977 the first European second-tier market was launched in France and was called *Compartiment Spécial.* In the same year, Italy established the *Mercato Ristretto*, and Britain introduced the *Unlisted Securities Market* (USM) in 1980. These were initially expected to act as screening devices for promising companies that would eventually graduate to the main segment. Within a few years, the leading European economies possessed a market dedicated to SMEs. Despite this, SMEs showed little interest in the listing in the first years. Closure of the property, lack of a sound financial management culture, desire to maintain high levels of managerial informality, resistance to greater transparency, and information disclosure were some of the main traditional characteristics of these organizations, which could explain the low interest demonstrated.

What was European countries' first trial to introduce a smaller company trading venue had failed. Most of these markets collapsed or were replaced just after a few years of activity.

In 1995 the *Alternative Investment Market* (AIM) was launched by the London Stock Exchange. Companies traded on the *Unlisted Securities Market* were forced to join the newly created AIM, causing USM extinction. AIM is the most successful survivor of the ongoing competition thus far, since it remained the only one of those years that has not been replaced or changed until today. The other junior markets did not have the same fate, eventually, they failed and were replaced.

During 1996-1999 throughout Europe, the "New Markets" were established, with admission allowed only to smaller companies in high-tech sectors. These markets formed a pan-European network named *Euro.NM* featured by a Markets Harmonization Agreement, which established similar regulations among them. The members of *Euro.NM* was the Dutch *Nieuwe Markt NMAX*, the French *Nouveau Marché*, the German *Neuer Markt*, the Italian *Nuovo Mercato*, and *EuroNM Belgium*. Currently, each of these trading venues has been replaced or shut down. Some of these secondary European markets' evolution is subsequently reported.

After the *Compartiment Spécial* extinction, in 1996 the *Nouveau Marché* born in Paris. In 2005 it was absorbed, together with the other two French markets at the time, *Premier Marché* and *Second Marché*, into one single regulated market today known as Euronext Paris. Simultaneously was opened the actual French trading venue for SMEs named Euronext Growth Paris. The Parisian exchange also provides the possibility of listing to those companies which do not meet the criteria for admission to Euronext's regulated market and Euronext Growth; Euronext Access is tailored to the needs of start-ups and fast-growing SMEs that wish to join a stock exchange to finance growth and gain the reputational advantages of quotation.

In 1997 the *Neuer Markt* in Frankfurt was created as a trading segment for small and medium-sized enterprises. As a result of the sharp decline triggered by the Dot-com Bubble, *Deutsche Börse AG* decided to opt for a new re-segmentation of the equity markets, introducing the Prime Standard and the General Standard. The *Neuer Markt* segment was officially closed on 5 June 2003. The Entry Standard was born two years later, in 2005, as substitute of the *Neuer Markt*. This market also ceased to exist because was replaced by the Scale in 2017, which is the actual SME junior market in the Frankfurt Stock Exchange.

The first Italian market dedicated to small businesses lasted until 2004, when *Mercato Ristretto* was replaced by the *Expandi* market. Parallelly, in 2005, was established the MTAX. The market grouped the stock of companies with high growth potential that belonged to the technological sector. It was the substitute for the *Nuovo Mercato*, which was created in 1999. Less than three years since formation date, the MTAX was combined with the main Italian stock exchange, thus decreeing its disappearance. Following the acquisition of *Borsa Italiana* by the London Stock Exchange Group occurred in 2007, the *Alternative Investment Market Italia* (AIM Italia) was established in place of *Expandi* in 2009. In 2012, AIM Italia and the *Mercato alternativo del capitale* (MAC) were merged into a single trading venue, renamed *AIM Italia – Mercato alternativo del capitale*. As a result of the acquisition of Borsa Italiana by Euronext in 2021, this market got the name it still has today: Euronext Growth Milan (EGM).

The background of SME capital markets is considerably more recent than the one developed by leading stock exchanges. Historically, junior European markets had the reputation of being successful in hot periods and collapsing in cold periods. The alternation between economic boom and crisis periods has severely tested their resistance and elasticity. As it can be inferred, the path of most of these smaller exchanges has been exceptionally tangled up to the present day.

1.2 SMEs and their listing perks

1.2.1 The population of European SMEs

We already introduced the word SME, but what exactly are SMEs? It should be known that the SME population comprises three different categories of enterprises, namely: microenterprises, small enterprises, and medium-sized enterprises. Level of employment, turnover, and balance sheet size are the three factors considered by the European Commission to provide an official definition. As shown in *table 1.1*, within the SME category, the microenterprise is defined as an enterprise that employs fewer than ten persons and whose annual turnover and/or annual balance sheet total does not exceed 2 million Euro. A small enterprise is a company that employs at least ten persons, but fewer than 50, and whose annual turnover and/or annual balance sheet total does not exceed 10 million Euro. The medium-sized enterprises' category is made up of companies that employ at least 50 persons, but less than 250, and which have an annual turnover not exceeding 50 million Euro, and/or an annual balance sheet total not exceeding Euro 43 million. With the purpose of cataloging them, the employment data and the financial amounts are those relating to the latest approved accounting period and calculated on an annual basis. When a company has exceeded or fallen below the staff headcount or financial ceilings, it does not immediately lose or acquire the status of medium-sized, small or microenterprise unless those thresholds are exceeded over two consecutive accounting periods. Obviously, enterprises that outweigh the staff headcount and one of the two financial limits proper to the medium-sized category for two consecutive accounting period are termed large enterprises.

Category	Employees	Turnover	Balance sheet total
Micro SME	0 to < 10	< €2 million	< €2 million
Small SME	10 to < 50	< €10 million	< €10 million
Medium-sized SME	50 to <250	< €50 million	< €43 million
Large companies	≥250	≥ €50 million	≥€43 million

Table 1.1: Classification criteria of European entities.
Source: European Commission Recommendation 2003/361/EC.

The latest SME Annual Report released by the European Commission shows that SMEs are the backbone of Europe's economy. As regard the non-financial business sector (NFBS), they represent 99.8% of all businesses in the EU. They employ more than 80 million people, and account for more than half of Europe's value added. In more detail, microenterprises account

for 93.3%, small enterprises for 5.7% and medium-sized for 0.9% of the entire population. Despite microenterprises represents most European companies their value-added contribution is less than a fifth of total value added, however it is still higher than those created by the other two SME category. *Table 1.2* presents these figures.

	Micro SME	Small SME	Medium-sized SME	All SMEs	Large enterprises	All enterprises
Enterprises						
Number	21,044,884	1,282,211	199,362	22,526,457	40,843	22,567,300
%	93.3%	5.7%	0.9%	99.8%	0.2%	100%
Employment						
Number	36,988,539	25,313,006	20,130,548	82,432,093	44,358,284	126,790,377
%	29.2%	20.0%	15.9%	65.0%	35.0%	100%
Value added						
€ million	1,179,476	1,071,196	1,087,613	3,338,286	2,956,544	6,294,829
%	18.7%	17.0%	17.3%	53.0%	47.0%	100%

Table 1.2: Number of enterprises, value added and employment in the EU-27 NFBS by enterprise size class. Source: European commission, Annual Report on European SMEs 2020/2021. Digitalisation of SMEs.

The United Kingdom business population, which is no longer included in this statistic, report percentages that are very similar to the 27 European Member States average. What differ more is the SMEs employment rate which is almost 61% instead of 65%, mainly due to the less contribution from micro companies in obtaining the amount. (BEIS 2021)

Comparing the Italian non-financial business sector to the European average, there is a few noticeable differences. While the percentual distribution is not so different, microenterprises account for 94.8%, small enterprises for 4.5% and medium-sized for 0.6% of the Italian business population, what discord more is the percentage of employment and value added. The employment generated by all SMEs represents the 76.7%, quite above the European average, pushed up by the 43.2% of the Italian microenterprises. As well, the value added generated in Italy by all SMEs is quite higher, being equal to 64.7% compared to the European 53.0%. It is composed of 26.8% by microenterprises, 20.2% by small enterprises and 17.7% by medium-sized enterprises (ISTAT 2021).

1.2.2 The contribution of the European Union

The role played by SMEs in the European territory, especially in Italy, is fundamental. Small and medium-sized enterprises became silent drivers of economic development. They play a crucial role in adding value to every sector of the economy. They are essential to Europe's competitiveness, prosperity, monetary sovereignty, job creation, industrial ecosystems, and resilience to shocks. Economic growth is also strictly related to the soundness of equity capital markets. Listed companies are a crucial motor of growth and job support in the European territory. Indeed, EU capital markets are negatively affected by a market failure which severely limits their ability to be a solid source of finance for SMEs. EU public equity markets provide substantial social benefits, offering an effective way to share and diversify risk and allocating capital efficiently between issuers and public savings. Going public offers an exit route for early-stage investors and enables SMEs to raise funds as they grow, reducing their dependence on credit institutions. For these reasons the European Commission has started a campaign encouraging the listing of these companies.

One of the most important legislative acts in this regard is certainly represented by the Directive 2014/65/EU, also called MiFID II, drawn up with intentions to "facilitate access to capital for smaller and medium-sized enterprises (SMEs) and to facilitate the further development of specialist markets that aim to cater for the needs of smaller and medium-sized issuers". This objective was pursued primarily with the creation of a market category dedicated to SMEs known as SME Growth Markets (SGMs). Therefore, European secondary markets may ask to join this category, which have its own common discipline within the European Union that would encourage competition between different European Multilateral Trading Facilities and ensure protection for investors. Therefore, SME Growth Markets should have gained visibility enlarging the number of investors in SMEs.

The same aim should have been pursued by reducing the administrative burden on SME issuers. This has been mostly handed over to a self-regulation of the market operators subject to scrutiny by the individual Competent National Authorities, while they must maintain a high level of protection for investors. This was the major challenge of the directive. The legislative act's focus was on ensuring investors a high level of protection and information, essential to promote their confidence in those markets. Thus, national market operators have found intricate proceed with a serious simplification of their market discipline on the ground of the legislation that requires them to ensure a high degree of investor information.

The MiFID II was not able to increase SME listings. Figures speak for themselves: from an average of 300 annual SME IPOs generated before the financial crisis, between 2005 and 2007, to 172 SME IPOs in 2016 (European Commission 2017).

A similar gap at IPO stage should have wider consequences on the EU economy. For example, ready access to public market may represent a way out for investments of venture capital and private equity funds which sustain companies at an early stage in their development. With weak capital markets for SMEs, funds are deterred from investing in them. A lower number of SMEs listed also means less companies may graduate one day to the main markets. These are the reasons exploited by the European Commission to engage a public consultation in 2017 entitled "Building a proportionate Regulatory environment to support SME listing". The consultation focused on three main areas: how to refine the MiFID II definition of SME Growth Markets; how to lighten the burden on companies listed on SME Growth Markets; and how to promote the environment surrounding those trading venues.

The emerged reasons for which SMEs decide not to quote themselves can be summarized as follows: the network of SME specialists able to support the IPO process are in trouble in many Member States; equity trading is focusing on large-scale caps, leading to a decline in liquidity of SME shares; regulatory barriers to investment in SMEs, lack of visibility of SMEs, lower investor confidence in this asset class and the lack of adequate tax incentives reduce alertness of institutional and retailer investors; and since a low part of investment is actually channeled into SME shares, SMEs have little incentive to go public.

From these considerations the European Commission has started a path of targeted regulatory changes to revive the access to public markets for SMEs. Delegated Regulation (EU) 2019/1011 sought to facilitate the registration of MTFs as SGMs. Moreover, it required SME Growth Market operators to define, as a requirement for trading admission, a minimum portion of a company's issued share capital that is in the hands of public investors, known as free float. The objective of this requirement is to increase the liquidity of admitted issuers' shares. Subsequently, the SME listing package regulation (EU Regulation 2019/2115) aimed at supporting the development of SGMs, by alleviating the administrative burden for companies listing on such platforms through amendments to the Prospectus Regulation (EU Regulation 2017/1129) and Market Abuse Regulation (MAR) (EU Regulation 596/2014).

Regarding Prospectus Regulation, the novelty is the creation of a lighter transfer prospectus for SME Growth Market issuers listed for at least three years when seeking a graduation to regulated markets.

The SME listing package also imposes the establishment of an expert stakeholder group to monitor and assess the functioning and success of SME growth markets. The European Commission set up a Technical Expert Stakeholder Group (TESG) on SMEs to fulfill this requirement. The TESG had to provide insight and proposals to promote SMEs' access to public market further. In Its 2021 final report is shown that there is still wiggle room for some amendments and alleviations in the requirements laid down by MAR and Prospectus Regulation. Still, there are also many other fields in which the European Commission should act. Creating a pre-listing sandbox for SMEs could help to reduce the lack of pre-IPO support, establishing an EU Champion label to shine a spotlight on the best EU SMEs could improve the visibility of SMEs, and introducing and broadening tax incentives to foster SME listing are just few of the proposals suggested by TESG as a solution to the identified problems.
The burdensome regulatory provisions, the ongoing requirements once listed, and the associated administrative sanctions which act as disincentives for companies to access or remain listed on Member States' markets are still concerns of the European Commission. With this assumption the Commission has issued an action plan titled "An SME Strategy for a sustainable and digital Europe". It shows as two of the three pillars in which the strategy actions should be based on are related to the improvement and simplification of capital market access. One of the key actions is the initiative of issuing a new public-private IPO Fund, which will support SMEs through and beyond the listing process. The Commission Work Programme also include a proposal for a regulation aimed at reducing burden and fostering SME listing called "making public capital markets more attractive for EU companies and facilitating access to capital for SMEs", which has yet to be developed.

1.2.3 The Italian incentives

The plans of the European Commission have however left the individual Member States free to adopt the necessary and useful tools to give the best implementation to them. This was made to consider the different and specific characteristics of each country's system. About the Italian financial market, the legislator has encouraged the listing of SMEs and the intervention in risk capital by institutional investors through some regulatory measures. The first measure introduced with the 2017 Budget Law aims to incentivize long-term investment to small and medium-sized enterprises (L. 11 December 2016, n. 232). The tax initiative, adopted by the legislator, introduced the concept of *Piani Individuali di Risparmio* (PIR). It is an investment format that can be chosen by an investor through different contractual investment tools, for instance a security deposit account, a discretionary account, or a security of a PIR-compliant

mutual fund. PIRs are an alternative way to fund Italian Enterprises, especially SMEs. In this field, individual savers who invest their resources in financial instruments of Italian and European industrial and commercial enterprises rooted in the Italian territory benefit from total tax exemption on the proceeds deriving from such investments. To qualify for this exemption, it is necessary to respect certain investment constraints, which can be summarized as follows: at least 70% of the total value of financial instruments held in the PIR shall be invested in financial instruments, which may be bonds or shares, whether listed or not on regulated markets or MTFs, issued by enterprises resident in Italy, or EU Member States or in States belonging to the European Economic Area (EEA) with a permanent establishment in Italy; the RIP's assets may not be invested in more than 10% of their total value in financial instruments issued by the same issuer or by another company belonging to the same group or in deposits and current accounts; financial instruments must be held for at least five years; the annual investment limit is 30.000 Euro in a PIR each year, and up to Euro 150.000 over five years.

The second measure was included in the 2018 Budget Law granting a tax credit to SMEs listing through an IPO on a regulated market or an MTF (L. 27 December 2017, n. 205). A tax credit of 50% of the consultancy costs incurred by the SME during the IPO process is allowed up to a maximum of Euro 500 thousand.

Going back to the past, a particularly successful initiative undertaken by *Borsa Italiana* in 2012, which was aimed at fostering SME growth through IPO, should be mentioned: the ELITE project. ELITE is an integrated services platform to support, train, and promote SMEs' organizational and managerial development, in which they get in touch with international markets and investors. In the project's first phase, SMEs that show certain quality drivers and are potentially eligible for IPO are selected and trained to align their organization with the development objective they intend to pursue. After the assessment of possible sources of funding, in the second phase, the company is guided in implementing all the changes necessary to better develop its growth project. The accompaniment to the quotation happens through a simulation of IPO thanks also to the activity of tutorship provided by an already listed enterprise. The third phase represents the implementation of the growth plan built up to that time.

The project proposed by *Borsa Italiana* and the laws mentioned above are currently active, even if the tax credit on consultancy costs dropped to 200 thousand Euro (L. 30 December 2021, n. 234). Despite this, they continue their path aimed at fostering the growth of SMEs, trying to enlarge the number of companies that choose to undertake the IPO on national markets.

1.3 A broader view: Italy in the European context

1.3.1 The global framework

Nowadays, almost every country in the world holds its trading venue. Well, some sovereign states, such as Afghanistan, Cuba, and Liechtenstein still do not have it. However, even among countries which possess one, or more, the differences are not minimal. Small and underdeveloped countries tend to have a smaller stock exchange, in terms of the number of participants, market capitalization, and trading volume, even though, this is not always true. Since well-developed stock exchanges support the growth of the economy, attract foreign investors, and represent a reliable source of financing for companies, they can be compared by market capitalization to identify the most efficient. The market capitalization of a company is obtained multiplying the price of a stock by its total number of outstanding shares in a specific point in time. Consequently, adding up the market capitalization of each company that is listed in that moment it is simple to obtain the market capitalization of the entire stock exchange. According to recent research conducted by Statista (2022) the market which takes the first position as the largest in the world is the New York Stock Exchange (NYSE). Located on the popular Wall Street, among the companies which are listed under the NYSE we find world-famous enterprises, such as McDonald's Corporation, Coca-Cola, and Walt Disney Company. The silver medal belongs to the National Association of Securities Dealers Automated Quotations (NASDAQ). It is sighted as the world's first electronically traded stock market and comprises world's tech giants such as Google, Apple, Microsoft, Amazon, and Tesla. The Shanghai Stock Exchange (SSE) is the world's third largest stock exchange and is situated in China. Europe sits in the fourth place with the European New Exchange Technology (Euronext). Euronext born in 2000 when the Amsterdam Stock Exchange, Brussels Stock Exchange, and Paris Bourse decide to merge into a one single exchange. Soon other national bourses became part of the pan-European group which, as of today, include seven different national exchanges operating in seven countries. These are Amsterdam, Brussels, Dublin, Lisbon, Milan, Oslo, and Paris. The following position is held by the Shenzhen Stock Exchange (SZSE) in China and is the second largest stock exchange in the country behind the SSE. In sixth position is the Japan Stock Exchange (JPX), which was formed by the merger of the Tokyo Stock Exchange and Osaka Securities Exchange in 2013. In its market capitalization are included voluminous Japanese companies such as Sony, Toyota, Mitsubishi, Honda, and Suzuki. The Honk Kong Stock Exchange (SEHK) ranked seventh in the world and third among Chinese trading venue. To see the second and last European among the ten world leaders, one

must wait until the eighth place in the ranking which is held by the London Stock Exchange (LSE). At the end, we find the National Stock Exchange (NSE) located in India and the Saudi Stock Exchange in Saudi Arabia as ninth and tenth respectively.

1.3.2 The European framework

Focusing on the European panorama certainly the first two places are held by Euronext and LSE but might be interesting to see which are the other stock exchanges that own the top positions.[1] Euronext has a total domestic market capitalization[2] of almost 6.5 trillion Euro while data on LSE reports that it almost reaches 3.4 trillion Euro. Nasdaq Nordic and Baltic Exchange hold the third European rank. The homonymous American multinational operates securities in Europe's Nordic and Baltic regions. The group employs the Stockholm Stock Exchange, the Copenhagen Stock Exchange, the Helsinki Stock Exchange, and the Iceland Stock Exchange as Nordic and smaller Baltic venues, which are situated in Tallinn, Riga, and Vilnius. The overall Nasdaq Nordic and Baltic market capitalization is Euro 2.3 trillion. At the fourth place is positioned the Deutsche Börse Group with a market capitalization exceeding 2.2 trillion Euro. It operates the Frankfurt Stock Exchange, the largest of the seven exchanges in Germany. The fifth largest European stock exchange is the SIX Swiss Exchange whit a market value that exceeds 2.0 trillion Euro. It was created in 1995 following the merger of Geneva, Basel, and Zurich stock exchanges and is headquartered in Zurich.

This ranking has also been obtained considering groups of exchanges, i.e., Euronext and Nasdaq Nordic and Baltics, that have been created over the years. To allow a proper comparison only data from individual national stock exchanges should be considered. Therefore, if we evaluate these data considering the performance of national markets individually, we will notice a change in the ranking. *Table 1.3* shows the twenty largest national exchange in the European territory ranked by market capitalization. We immediately see how United Kingdom moves to first position thanks to the break-up of the Euronext group. Despite it, Euronext holds the second place being represented by its largest exchange: The Paris Stock Exchange.

[1] The parameters that are reported from here until the end of the chapter are retrievable on FESE website, available at the link: www.fese.eu/statistics/. If missing, they were integrated with the data reported on the official websites of the individual stock exchanges and all refer to the end of December 2021.

[2] From this point, when we talk about market capitalization or value, it must be considered domestic. This parameter of a stock exchange is computed considering only the shares of domestic companies omitting those foreigners. This decision was taken to allow a more accurate comparison regarding the data gathered.

Rank	Country	National Exchange	Market Cap €m	N° of listed companies[3]
1	United Kingdom	London Stock Exchange	3,365,821	2,017
2	France	Euronext Paris	3,216,874	839
3	Germany	Deutsche Borse	2,210,189	493
4	Switzerland	Six Swiss Exchange	2,043,339	232
5	Netherlands	Euronext Amsterdam	1,490,146	142
6	Sweden	Nasdaq Nordics - Stockholm	1,169,665	394
7	Italy	Borsa Italiana	768,812	407
8	Denmark	Nasdaq Nordics - Copenhagen	701,934	132
9	Spain	Bolsas y Mercados Espanoles	684,899	2,585
10	Norway	Euronext Olso	393,386	340
11	Finland	Nasdaq Nordics - Helsinki	365,307	135
12	Belgium	Euronext Brussels	358,129	131
13	Poland	Warsaw Stock Exchange	174,282	810
14	Ireand	Euronext Dublin	155,508	41
15	Austria	Vienna Stock Exchange	143,831	873
16	Portugal	Euronext Lisbon	81,316	54
17	Luxembourg	Luxembourg Stock Exchange	54,034	130
18	Greece	Athens Stock Exchange	52,311	160
19	Czech Republic	Prague Stock Exchange	33,048	55
20	Romania	Bucharest Stock Exchange	28,514	82

Table 1.3: Ranking of the top twenty national European stock exchanges by market capitalization. Source: Fese EU Statistic and stock exchanges websites, Author Elaboration.

The French Bourse has a market value of 3.2 trillion Euro demonstrating that it represents the 50% of the entire Euronext group. Germany and Switzerland occupy the third and fourth place respectively, each climbing one position in the standing. The first national stock exchange that is part of the Nasdaq Nordic and Baltic is the Stockholm National Exchange, the main Swedish market has a market capitalization of Euro 1.2 trillion. It places in sixth position, only after Euronext Amsterdam, which is the second largest market in the Euronext group and reports an amount equal to Euro 1.5 trillion. With a market capitalization equal to 769 billion Euro, the Italian stock exchange headquartered in Milan achieve a humble seventh place and is the first in this standing among countries not reaching the trillion. The Danish stock exchange proves to be the second largest stock exchange in the Nasdaq Nordic and Baltic and gets the eighth position in the table. Spain has the ninth-largest European national stock exchange with a market value equal to Euro 685 billion.

[3] With the aim to optimize the comparison between the national stock exchanges in the light of available information, the number of companies listed in a trading venue includes both domestic and international firms. Companies which shares are suspended are not included. The data refer to the end of December 2021.

Despite its ranking, *Bolsas y Mercados Espanoles* hosts the most significant number of companies compared with the other European trading venue. Therefore, besides the renowned giant multinational Inditex, Iberdrola, and Banco Santander, which are listed in the Spanish market, it is formed primarily by a huge number of small-cap companies. The London Stock Exchange is the second most populated European exchange with 2017 companies, among which stand out groups such as Unilever, AstraZeneca, and GlaxoSmithKline. The third for the business population is the Vienna Stock Exchange hosting 873 enterprises, of which 69 are domestic and 804 foreign. Also, the Paris Bourse has a relevant number of listed companies, almost 43% of the firms listed on Euronext are in the French tranche. Among the multinational in it, must be mentioned Moët Hennessy Louis Vuitton (LVMH) and L'Oréal.

Relatively smaller is the German number. Among firms listed on the Prime Standard of the Frankfurt Stock Exchange should sound familiar multinationals such as Adidas, Volkswagen, Bayer, and Lufthansa. The SIX Swiss Exchange reports the lower number of firms among exchanges with an amount that exceeds Euro 2 trillion. On the Swiss Stock Exchange around 232 different shares are traded, including some of the biggest companies in Switzerland and Europe. Among Swiss giants, there are Nestlé, Novartis, and Credit Suisse. Among the 407 companies listed on the Italian stock exchange, the largest are the energy giants Enel and Eni, the renowned car manufacturers Ferrari and Stellantis, and Intesa Sanpaolo and Unicredit for the financial sector. Suffice it to think that these six companies altogether account for more than 37% of the entire capitalization of the Italian market.

1.3.3 Evidence from markets leading Europe

With the data proposed in the preceding paragraph we can have a broader view of what are the main characteristics of the largest European financial markets. The information that has been analyzed refers to the trading market as whole, without any distinction between primary and secondary stock exchanges.

Since these secondary markets dedicated to small and medium-sized enterprises have been present in the European scene for more than forty years, almost all countries have established a trading venue addressed to SMEs offering the possibility of listing also to them. All the twenty countries previously shown have this peculiarity.

The Romanian stock exchange has the AeRO segment, Czech Republic offers this opportunity through the START market, ENA is the Greek market of the Athens Stock Exchange, the Luxembourg has the Euro MTF, the Wiener Bourse introduced the Direct market, NewConnect is the name of the Warsaw Stock Exchange segment in Poland, while Mercado Alternativo

Bursátil (MAB) is the respective in Spain. The Frankfurt Stock Exchange SME segment is called Scale, the junior market of the Nasdaq Nordics group is known as Nasdaq First North, Euronext group offers this opportunity through the Euronext Growth segment, and finally in London there is the well-known Alternative Investment Market. The most recent addition is the Sparks, which is the SME dedicated secondary-tier market launched by the SIX Swiss Exchange.[4] Ignoring some old, failed attempt, the Swiss group only brought the trading venue to light at the beginning of 2022. But how much do these markets worth?

We answer this question considering Italy and the first three European markets for capitalization. *Table 1.4* presents these figures.

Country	Market Cap €m		N° of listed companies	
	SME market	Total	SME market	Total
United Kingdom	142,313	3,365,821	852	2,017
% on total	*4.23%*		*42.24%*	
France	21,570	3,216,874	267	839
% on total	*0.67%*		*31.82%*	
Germany	10,565	2,210,189	46	493
% on total	*0.48%*		*9.33%*	
Italy	11,519	768,812	172	407
% on total	*1.50%*		*42.26%*	

Table 1.4: A comparison between SME markets and main markets belonging to France, Germany, Italy, and UK. Source: Stock exchanges websites, Author Elaboration.

Regarding the actual Euronext Growth Milan, previously known as AIM Italia, its market capitalization accounts for Euro 11.5 billion. Notwithstanding, out of 407 listed on the Milan Stock Exchange, 172 companies are tradable in this venue, representing 1.5% of the Italian market value as of December 2021. The incidence that the Scale market has on the entire capitalization of the *Deutsche Börse* is lower. With only 46 enterprises in it, out of 493, and a market value of Euro 10.6 billion, Scale accounts for 0.5% of the total. Turn out to be 267 enterprises listed on the Euronext Growth Paris as of December 2021 in respect of the 839 traded on the entire French Bourse. With a market value of 21.6 billion Euro, the second-tier market of Paris accounts for 0.7% of the total. The number of companies listed on the AIM compared to the total tradable equities on the London Stock Exchange is similar to the Italian ratio. To be precise, the firms listed on the AIM are 852 out of 2017. The discrepancy is evident if we compare the British capitalization incidence of this market with the Italian one. With a

[4] Although Sparks and German Scale are markets dedicated to SMEs, they have the status of exchange regulated markets. Therefore, they are closely regulated at sub-segment level in terms of inclusion prerequisites and ongoing obligations. However, requirements are tailorized for SMEs.

market value of Euro 142 billion the London AIM accounts for 4.2% of its domestic stock exchange, nearly three times the Italian incidence. The London junior market appears the one that weighs most on the capitalization of its national stock exchange among the proposed counties.

1.3.4 The European IPOs contest

As we have already seen, European national stock exchanges show different characteristics. The quantity of trading equities available on the market depends on its ability to attract new eligible companies and maintain the already listed firms on the exchange platform. The presence of SME markets has enabled the quotation of several companies to which would have been denied the possibility without their existence. With their less stringent listing requirements and costs, second markets have continued attracting new listings for the stock exchanges. Among the fourth national trading venues previously analyzed, Italy and UK are the countries with a greater incidence of the second-tier segment in terms of the number of listed companies. Both exceed 42%, with a slightly higher value shown by Italy. This value fall in France and especially in Germany, accounting for 31.8% and 9.5% respectively. It is, therefore, of interest to trace the path of the number of companies that decide to go public in the last years through an Initial Public Offering. Keeping as reference these four stock exchanges, we analyze the number of IPOs undertaken between the 2012 and the 2021 on both main and SME markets. The structure evolution and segmentation of the European stock markets considered for the data extrapolation are illustrated and defined in *table 1.5*.

<table>
<tr><th></th><th></th><th>2012</th><th>2013</th><th>2014</th><th>2015</th><th>2016</th><th>2017</th><th>2018</th><th>2019</th><th>2020</th><th>2021</th></tr>
<tr><td rowspan="2">UK</td><td>Main</td><td colspan="10">LSE Official List</td></tr>
<tr><td>Junior</td><td colspan="10">LSE AIM</td></tr>
<tr><td rowspan="2">France</td><td>Main</td><td colspan="10">Euronext Paris</td></tr>
<tr><td>Junior</td><td colspan="10">Euronext Growth Paris</td></tr>
<tr><td rowspan="2">Germany</td><td>Main</td><td colspan="10">Prime Standard & General Standard</td></tr>
<tr><td>Junior</td><td colspan="6">Entry Standard</td><td colspan="4">Scale</td></tr>
<tr><td rowspan="2">Italy</td><td>Main</td><td colspan="9">Mercato Telematico Azionario</td><td>EXM</td></tr>
<tr><td>Junior</td><td colspan="9">AIM Italia - Mercato alternativo del capitale</td><td>EGM</td></tr>
</table>

Table 1.5: Evolution of the structure and segmentation of European stock markets.
Source: Stock exchanges websites, Author Elaboration.

For the UK the Official List (OL) and the AIM segment were used, whereas Euronext Paris and Euronext Growth Paris were the French markets analyzed. Prime Standard and General Standard were considered as main market, while Scale from 1st March 2017 and Entry Standard

for the preceding period as SME markets for Germany' Frankfurt Stock Exchange. The Italian stock exchanges investigated are Euronext Milan (EXM) and Euronext Growth Milan (EGM) for the last year, while Mercato Telematico Italiano (MTA) and AIM Italia – Mercato alternativo del capitale for the period preceding the takeover by Euronext.

Once we understood which segments of the European markets were used as sample in this analysis, we can continue with the next step: the IPOs count. *Table 1.6* categorizes the population of IPOs by stock exchange and market type. During the analyzed period, 1466 IPOs on the four stock exchanges have been undertaken, of which 631 on the main markets and 835 on the secondary markets. The IPOs reported on the London Stock Exchanges as a whole account for more than 54.6% of the total. This could be explained by the fact that LSE is the main European markets to be affected by international presence (Vismara et al. 2012).

		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total
LSE	OL	18	30	47	50	25	46	41	23	23	54	357
	AIM	43	62	80	33	42	50	42	10	16	66	444
	Total	61	92	127	83	67	96	83	33	39	120	801
Euronext Paris	EP	9	15	19	20	7	11	7	4	4	15	111
	EGP	10	11	15	17	9	7	14	12	18	38	151
	Total	19	26	34	37	16	18	21	16	22	53	262
Frankfurt Stock Exchange	Standard	9	9	14	20	11	9	19	5	8	16	120
	Scale	7	1	4	3	2	5	2	0	2	2	28
	Total	16	10	18	23	13	14	21	5	10	18	148
Borsa Italiana	EXM	1	2	5	9	3	8	5	4	1	5	43
	EGM	3	14	21	18	11	23	26	31	21	44	212
	Total	4	16	26	27	14	31	31	35	22	49	255

Table 1.6: Number of IPOs by stock exchange and period on European stock markets. Source: Stock exchanges websites, Author Elaboration.[5]

More precisely, on the total sample, LSE registered 56.6% and 53.2% of IPOs on primary and secondary markets respectively. The average number of IPOs per year on a main market in the sample is 16, but this number varies between 9, recorded in 2019 and 2020, and 25, recorded in 2015. The average number of IPOs per year on a junior market in the sample is 21, with a minimum yearly record of 13, recorded in 2019 and a maximum of 38, recorded in 2021. As regard the single stock exchange, the highest overall markets records are the peak of 54 and 80 reported on the LSE Official List in 2021 and on the LSE AIM in 2014 respectively.

[5] Data on the IPOs were obtained by consulting the official websites of the national stock markets. The number of IPOs includes only those of companies that had never been publicly listed before, on whatever stock exchange. Are excluded admissions with no initial offer, re-admissions, as well as market transfers. IPOs through private placement, are included, although with this procedure shares are not offered to the public at large but are solely to qualified investors. It is largely selected by companies listing on secondary markets.

Conversely, the lowest values were scored by Mercato Telematico Azionario in 2012 and 2020 with only one company that decided to go public through an IPO. Lastly, in 2019 the Scale recorded no IPO quotation.

Figure 1.1 gives a schematic image of the IPOs occurred on the European sample. It reports the total number of IPOs on the primary and secondary trading venue and the incidence of junior market IPOs on the total for each selected year.

Figure 1.1: Number of yearly IPOs on European stock markets and incidence of junior IPOs on total. Source: Stock exchanges websites, Author Elaboration.

The number of IPOs on the primary markets exceeds that of the secondary-tier markets only in 2015, where the incidence is 42%. For all remaining years, the ratio consistently exceeds 50%, with the highest peak in 2012, reaching a value of 63%.

Figure 1.2 shows the ratio between IPOs undertaken on SME markets in respect of all IPOs occurred in that period for each of the four stock exchanges that has been examined.

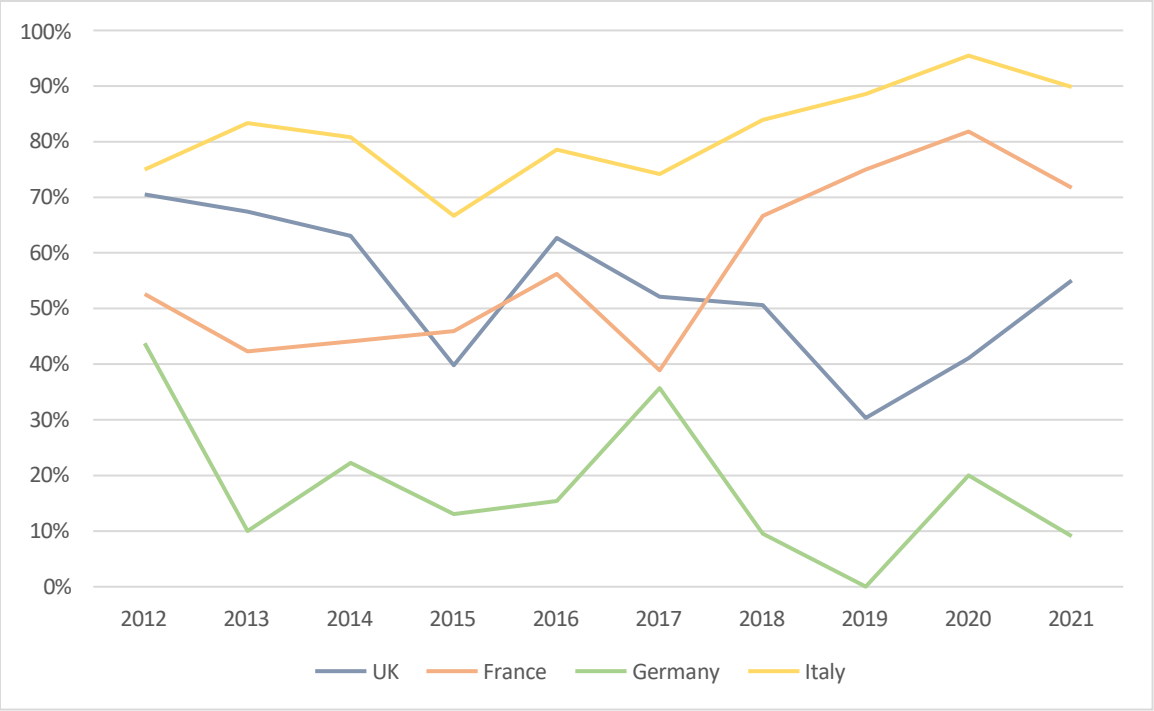

Figure 1.2: Incidence of secondary markets on total IPOs for the European stock markets. Source: Stock exchanges websites, Author Elaboration.

It is noticeable that Italy and Germany represent both extremities. The former always reports the highest ratio of IPOs, executed on the Euronext Growth segment, while the latter always shows the lowest incidence. Furthermore, their trend was pronounced in these years. The Italian SME market incidence appears to have grown slightly, while the German one looks descending, thus increasing the discrepancy between the two countries. Despite some setbacks, the Parisian proportion has increased. Meanwhile, the broken line representing the incidence of AIM IPOs on total LSE IPOs takes a slight downward trajectory.

With 21 junior IPOs out of 22 registered in 2020, the Italian Bourse showed the highest incidence with a ratio of 95%. The realization of zero IPOs in 2019 assigns to the *Deutsche Börse* the record for the lowest ratio. Germany certainly shows the most insufficient data in this relation. Each year, the German stock exchange reports figures that are on average twelve and a half times lower compared to the average number of SMEs that decide to undertake the IPOs on secondary markets belonging to the other three European exchanges. The following could be just an inference without proper scientific backing, but it is demonstrated that SME listings tend to decrease as the processing costs and disclosure costs increase (Gao et al. 2013 and Lardon & Deloof 2014 respectively). SMEs typically have a shorter track record of maintaining audited balance sheets and a lower quality of record keeping. Furthermore, the IPO process could be tricky because most SME companies may lack the experience, know-how, and resources needed for the project. Small companies do not frequently target equity markets with

burdensome regulatory provisions, strict ongoing requirements and disclosures, and high processing costs. These were the reasons that led to the establishment of tailored markets for SMEs. Despite this, some European countries gave birth to a miscellaneous market, designed to incentive the SMEs access but, in the meantime, assume the legal status of a regulated market. This is the case of the Swiss Sparks and the German Scale. As regulated market, they demand stricter requirements for the admission and ongoing conditions to be met compared to the other European MTFs. Even though eligible criteria and information disclosure are significantly reduced in relation to their main markets, this could be one of the reasons that explain why the Scale, which among the four markets previously analyzed is the sole regulated exchange, reports the lowest number of IPOs and companies listed on it.

Chapter 2: The Italian Stock Exchange

The European capital market offer is wide. The increasingly evolved markets sought to offer access to all different types of companies without any kind of disparity: neither concerning company size, years of activity, nor the longevity of the accounting history. Going into the specifics, we will see the precise design of the Italian proposal (*table 2.1*). With the explicit purpose of supporting several strains of companies and investment vehicles, *Borsa Italiana* has arranged different equity markets which have specific tailored features based on the nature of aimed companies. The regulated markets proposed by the Milan Stock Exchange are Euronext Milan and Euronext MIV Milan (MIV).

Euronext Milan is the main Italian capital market dedicated to medium- and large-capitalization companies. It is a regulated market, consistent with best international practices, which meet global investors' standards. Within the Euronext Milan market lies a segment dedicated to mid-size companies striving to meet stringent requirements in terms of liquidity, transparency, and corporate governance: the Euronext STAR Milan.

Euronext MIV Milan is the Market for Investment Vehicles. It is dedicated to listing corporate vehicles, mainly closed-end Alternative Investment Funds (AIFs), that invest in real economy instruments. It can host different types of vehicles: either Italian and foreign funds or dedicated to retail and professional investors. Since Euronext MIV Milan is divided into a retail and a professional segment, AIFs can be offered to categories of investors or reserved just for professional financiers.

On the other hand, the MTF is represented by Euronext Growth Milan. Dedicated to dynamic and competitive SMEs with a balanced regulatory approach, it offers an IPO process weighted on SMEs structure and needs. Within EGM, a segment is tailored to SMEs wishing to access the markets gradually, usually, start-up and scale-up, generating sales from less than one year: the Professional Segment. It is defined by regulatory flexibility, minimum bureaucracy, and ease of access, which are furtherly accentuated in relation to the EGM.

Regulated Market dedicated to large companies	Regulated Market dedicated to the listing of Investment Vehicles	Multilateral Trading Facility dedicated to SME
Euronext Milan (EXM) *Euronext STAR Milan (STAR)*	Euronext MIV Milan (MIV)	Euronext Growth Milan (EGM) *Professional Segment*

Table 2.1: The Italian market segmentation.
Source: Borsa Italiana Spa website, Borsa Italiana's Market.

2.1 Listing requirements

It is common knowledge that secondary markets have minor demanding requirements. Companies listed on them are subject to lenient guidelines that dictate the IPO, which translates into considerable benefits. The involvement of fewer subjects, the absence of governance structure requirements and the preparation of fewer and simplified documents lead to considerable savings. The same grounds and the missing preliminary investigation by the National Authority enable SMEs to have faster access to the capital market, accelerating the IPO process. Additionally, the simplified ongoing fulfillments typical of those markets allow SMEs to deal with charges more suited to their structure. Going into the specifics, we will analyze the conditions outlined by *Borsa Italiana* that companies must meet according to the capital market they selected. Moreover, we will differentiate between formal admission requisites and formal ongoing requirements to maintain the status of public company.

2.1.1 Formal access requirements

The purpose of *Borsa Italiana* is to widen the share offering in its markets. The secondary market works as a preliminary list, allowing companies to approach the stock exchange, gradually acclimating to listing status, knowing the logic of investment, increasing their visibility to investors, and finally evaluating the transition to the primary market. Hence, the junior stock market must provide access opportunities to a larger business population. Unlike the main list, Euronext Growth Milan is characterized by a simplified admission process since there are no minimum entry requirements for capitalization, turnover, or corporate governance structure. *Table 2.2* enumerates the formal requirements that will be met during the IPO phase, comparing Euronext Milan and its STAR segment with Euronext Growth Milan and its Professional Segment.

The minimum free float demanded in the ex-AIM Italia is equal to 10%. This requirement shall be met if the shares are allocated to investors. Related parties or employees of the reference company or the group are not included in the free float share. The free float can be constituted in three ways: public offer for subscription, public offer for sale, and public offer for subscription and sale. In the public offer for subscription the board decides to place new shares on the market, thus increasing the share capital. The public offer for sale involves existing shareholders selling some of their claims to the public. The third is a combined use of the two modalities, in which the existing shares intended for sales usually represent only a minority

portion. A further EGM condition is the involvement of at least five institutional investors[6] with a consistent amount relative to the total amount of the placement. The institutional investors' presence at the placement stage serves as a warranty, guaranteeing that the company's initial assessment is fair and based on objective considerations.

Formal requirements at IPO	Euronext Milan	Euronext STAR Milan Segment	Euronext Growth Milan	Professional Segment
Free Float	25%	35%	10% - 5 institutional	10% - 5 investors
Audited financial statements	3	3	1 (if existing)	1 (if existing)
Accounting principles	International	International	Italian or International	Italian or International
Offering	Institutional / Retail	Institutional / Retail	Mainly Institutional	Not mandatory
Other documents	Prospectus / MIS / Business Plan	Prospectus / MIS / Business Plan	Admission document	Admission document
Market Cap (€)	Min € 40 m	Min € 40 m – Max € 1 bn	No formal requirements	No formal requirements
BoD (# independent members)	TUF	Mandatory (# within Issuer Regulation)	B.o.D with one independent member	B.o.D
Internal audit committee	TUF	Mandatory	No formal requirements	No formal requirements
Remuneration committee	TUF	Mandatory	No formal requirements	No formal requirements
Incentives to top management	TUF	Mandatory (related to performance)	No formal requirements	No formal requirements
Investor relations manager	Recommended	Mandatory	Mandatory	Not Mandatory
Website	Mandatory	Mandatory	Mandatory	Mandatory
Main advisor	Listing Agent / Global coordinator	Sponsor / Global coordinator	Euronext Growth Advisor/ Global Coordinator	Euronext Growth Advisor

Table 2.2: IPO formal access requirements.
Source: Borsa Italiana Spa website, Euronext Milan Requirements & Euronext Growth Milan requirements.

[6] Institutional investors are economic operator that makes significant investments in a systematic and cumulative way. They usually are insurance companies, asset management companies, credit institutions or other professional financial operators, collective investment undertakings, such as investment funds or pension funds, local public authorities, or financial holding companies.

Contrarily to what happens in the regulated markets, to be admitted to the EGM, the required document is the admission document. The admission document must contain information relating to the structure of the offer, but also concerning the activity of the company, management, shareholders, economic and financial data, and an overview of the risk factors linked to the company, to the sector in which the issuer operates and to the financial instruments subject to the offer. To go public on the primary market the documentation claimed is much more extensive. It is based on three different documents: the prospectus, the management information system, and the business plan. Their preparation entails more significant efforts, longer times, and higher costs.

Another essential expense difference involves the appointment of a Euronext Growth Advisor. Seen the smaller dimension of the listing plans undertaken by SMEs compared with those on the main markets, this professional figure turns out to be less expensive than the Listing Agent. The presence of the Euronext Growth Advisor, ex NomAd, is fundamental since it assists and supports the SME within the compliance of the IPO process and its permanence on the EGM after the listing. It could be a bank, an investment company, or a network of auditing firms, with appropriate skills and competencies. Its main task is verifying the issuer's compliance with Euronext Growth Milan Regulation, specifically preparing the admission document. It is up to the Euronext Growth Advisor to submit the financial statements to an auditor's opinion, supervise the due diligence process and constantly collate information with the other parties involved in the IPO process. Frequently this figure coincides with the one of the Global Coordinator; thus, the professional figure that mainly organizes the book-building procedure looking for potential investors, setting an offer price range, handling the roadshow, collecting non-binding indication of interests and at last allocating and underwriting the shares.

There are no minimum formal requirements concerning the market capitalization nor the composition of the company bodies in the Growth market. However, since the assessment of the appropriateness is left to the Euronext Growth Advisor, the market, through him, will define the ideal characteristics of the admitted companies and the relative suitability in terms of governance. The company that intends to list on EGM must demonstrate that it can create value in the future also through a series of substantive requirements. These unwritten market rules need companies to present a minimum turnover linked to their business model and minimum governance standards to support the market safeguard. This is reasonably necessary to attract the interest of investors and, therefore, to the IPO operation's success.

2.1.2 IPO direct costs

Fees to be paid to *Borsa Italiana* are the only direct costs of which the entity is precisely known. Specifically, the other direct costs vary according to the plan size and the chosen consultant, while the Italian stock exchange commissions are laid down following standard rules among firms. Companies that go public for the first time must pay a fee based on the market they decide to be listed in. A non-reimbursable advance payment, corresponding to the floor, will be invoiced and due on applying for admission. The Euronext Milan floor equals 35 thousand Euro for companies that do not exceed a billion Euro of capitalization and Euro 100 thousand for those that surpass it. On Euronext Growth Milan, the floor amounts to 15 thousand Euro for enterprises that have a market capitalization of less than 20 million and Euro 25 thousand for companies whose figures exceed this ceiling. Once shares become tradable, the effective fee that should be paid stood at Euro 180 for every million Euros of capitalization. Only if the amount exceeds the floor, the company must complete an integration within 30 days from admission.

On the other hand, a cap applies to both markets, equals to Euro 500.000. This expense, together with all costs incurred by the company to carry out all the preliminary and preparatory phases of the listing, and the listing itself, compose the IPO direct costs. Most are related to the payment of consulting services provided by different professional figures. Among these, there are variable costs, closely tied to the dimension of the plan, and fixed costs.

Variable costs include Global Coordinator fees, usually 2-6% of gross IPO proceeds,[7] and fees to be paid to *Borsa Italiana* on the scale described above.

Consultants' remuneration mainly represents fixed costs, due to the generation and verification of documents on accounting, legal and financial aspects. Since many of these expenses do not increase proportionally with the size of the IPO, they weigh relatively more on small companies. Despite it, being defined as fixed costs, their amount still depends on the company's complexity and the plan's size in such a way that they do not prohibitively burden SMEs.

In the end, smaller IPOs require less effort and lower costs. Total fees and costs coming with the IPO project on the Euronext Milan are more frequently located from 2 to 15 million Euro, even though more isolated IPOs on the main market have demanded sums lower than a million as greater than 100 million Euro.[8] On the other hand, going public on Euronext Growth Milan

[7] Fees to be paid to the Global Coordinator change according to the reference source and it seems difficult to define an exact range. This range is obtained from own processing on the ground of the work presented by Meles (2009).
[8] Own data elaboration considering Meles (2009). For the range computation the 25% of extremities was removed.

typically requires between 500 thousand and 2,8 million Euros (AIM Italia News 2021); a gap that would play a key role in the trading venue selection.

2.1.3 Ongoing requirements

A stock exchange must maintain a certain degree of reliability. To preserve investor confidence in capital markets, companies listed must continue to meet various requirements. With this objective, *Borsa Italiana* provides an array of formal standards, summarized in *table 2.3*, that must be observed by companies listed on the Italian stock exchange. This policy allows firms to hold the listing status. Indeed, if a company fails to meet these ongoing standards, the exchange may remove or suspend the company's share from the market.

Among the first differences between the regulated market and the MTF, there is the need to comply with the Corporate Governance Code. This is effective for firms listed on Euronext Milan and partially in its STAR segment, while it is not mandatory on Euronext Growth Milan.

A further contrast lies in the matter of public tender offers. On the regulated market, this operation is ruled by the *Testo Unico sulla Finanza* (TUF), the consolidated text of financial provisions and the main source of the financial markets law in Italy. As regards companies listed on secondary markets, the instructions regarding public takeover bids are reported on the statute. Article 6-bis of the EGM Regulation provides the obligation for the issuer to include the arrangements for public takeover bids in its statute. Therefore, SMEs may voluntarily decide how to configure the provisions on takeover bids and mandatory exchanges under the provisions mentioned in the EGM Regulation.

A specialist must be appointed for the main market, its segment, and the EGM, even if with a few different facets. However, its presence is not required in the Professional Segment. This operator's main task is to support financial instruments' liquidity once trading has started. This support shall take the form of continuous exposure to the market of purchase and sale proposals about covered instruments. Moreover, the specialist must elaborate at least two research per year concerning the EGM and STAR issuers at the time of the semestral and annual operating results publication. These searches will then be made available on the *Borsa Italiana* website.

All the public companies listed on the Italian exchange are required to public the annual and the semiannual report, while, exclusively in the STAR segment, the quarterly annual is mandatory.

Formal ongoing requirements	Euronext Milan	Euronext STAR Milan Segment	Euronext Growth Milan	Professional Segment
Corporate Governance Code	Comply or explain	Partially mandatory	Not mandatory	Not mandatory
Specialist	Mandatory for companies with a capitalization of less than 1bn for the first 3 years from listing	Mandatory (liquidity provider / 2 annual research / meeting with investors)	Mandatory (liquidity provider / 2 annual research)	Not mandatory
Public takeover	TUF – 30% mandatory 25% non-SMEs (20% - 40% statutory for SMEs), 60% preventive, 90%-95% residual	TUF – 30% mandatory 25% non-SMEs (20% - 40% statutory for SMEs), 60% preventive, 90%-95% residual	Statutory takeover	Statutory takeover
Related parties	Procedures and reporting requirements	Procedures and reporting requirements	Simplified procedures and reporting requirements	Simplified procedures and reporting requirements
Quarterly data	Not mandatory	I-III quarterly report within 45 days from quarte end	Not mandatory	Not mandatory
Half year data	Yes - within 90 days from half year end	Yes - within 75 days from half year end	Yes - within 90 days from half year end	Yes - within 90 days from half year end
Annual data	Yes - within 120 days from year end	Yes – if within 90 days from year end no IV quarterly report	Yes - within 120 days from year end	Yes - within 120 days from year end
Accounting information	TUF and Issuer Regulation	TUF and Issuer Regulation	TUF and Issuer Regulation	TUF and Issuer Regulation

Table 2.3: IPO formal ongoing requirements.
Source: Borsa Italiana Spa website, Euronext Milan Requirements and Euronext Growth Milan requirements.

2.2 SPAC: the alternative way

Since the early 2000s, a new kind of business has started to spread. This type of business is known as Special Purpose Acquisition Company (SPAC). SPACs are shell companies set up by investors with the sole purpose of raising money through an IPO with a view to ultimately fund a future merger or an acquisition of a privately owned operating company, a so-called target.

The first wave of public SPACs started in the late 1980s and early 1990s. At that time, these companies were known under the name of blank check or development stage companies. Mostly unregulated, often engaged in fraud and rather too opaque, they did not perform well through their acquisitions. The introduction of stricter regulations and advanced monitoring tools has enabled the birth of the current generation of SPACs. The first U.S. SPAC that gave rise to the phenomenon went public in 2003. Some years later, in 2005, took place the IPO of the first European SPAC on the AIM segment of the LSE. Although other European countries were already familiar with them, the first IPO of an Italian SPAC occurred in 2011.

Once a SPAC goes public it has a set timeframe, usually 18 to 24 months, to use its funds to merge or acquire a target (de-SPAC), or else return the funds to its investors. Contemporary SPACs exhibit several special properties that make them highly attractive to different investor groups, and since they are an alternative tool for the listing of SMEs, they deserve a room in this dissertation.

For companies not yet listed, SPACs could represent a faster, cheaper, and less stressful path to access the capital market compared with the traditional IPO. The first big difference is the time length: while the IPO is characterized by a very long and complex process, the SPAC, through the business combination, allows the target company to receive an almost immediate quotation. The listing status is obtained by the target when the combination with the SPAC, which is already listed on the market, is finalized. The other fundamental difference is related to costs. All IPO expenses were incurred by the SPAC before the agreement was reached, using the capital deposited by the promoters. Therefore, in the absence of a financial intermediary, fees and commissions paid to promoters are almost nil. Obviously, this ease of access to the market could also be exploited to bring in the listed companies that could not have borne the costs and time required in the traditional IPO.

2.2.1 The Phases of SPAC life

The main phases that compose the general life cycle of a SPAC are:

- The establishment of the company and the realization of the IPO.
- The research of the target company.
- The business combination.

It is crucial to say that if the SPAC does not reach an agreement with the identified target company, which is the final purpose of a SPAC, the latter will dissolve without having completed all the stages for which it was established.

The first phase begins with the constitution of the shell company by the promoters of the investment initiative. Persons who undertake this path must have specific legal requirements. Essentially, these subjects are often finance experts or managers experienced in extraordinary business transactions. They assume a fundamental role in all investment projects, as they are the managers who take charge of the IPO process and will identify the target company on the market with which to carry out the aggregation. The credibility of promoters also plays an important role when it is necessary to obtain approval from third-party investors. Therefore, the success of the transaction depends primarily on their capabilities and experience.

Within the first stage, the company goes to collect the financial resources through an IPO, with the aim of supporting the operation of business combination. The equity of the SPAC is offered on the capital market in the form of shares to be subscribed. The capital subscribed by the investors with the IPO is deposited in an escrow account or in a trust. It serves as a guarantee for the investors on the paid-up capital and as a restriction on its use for reasons not related to the combination with the target. SPAC management teams typically target an industry or sector, but not a particular company before IPO. Once the capital is subscribed, the investor must wait to understand which will be the target company identified for the transaction. Investors do not bear any risk as they are guaranteed the right of withdrawal. This is true if the target company is not identified, but even if the target is not considered a sufficiently convincing company by investors. It is important to note that investors may qualify for both paid-in capital and interest accrued during the period of the holding of the capital in the escrow account or trust.

The search for the target company with which to carry out the business combination is the most important aspect of the whole operation. The research phase can be concluded in two ways:

- The failure of the research that turns into the phase of liquidation of the SPAC.
- The success of the research and the start of negotiations for the next phase.

Usually, the research phase lasts between 18 and 24 months. Once the company has been identified and its negotiation phase has been completed, it is possible to sign a letter of intent with the draft of the acquisition transaction. This document must be submitted at the SPAC shareholders' meeting.

In the last stage, the SPAC managers must present the proposal for aggregation with the target company identified. The shareholders are called to express their vote on the execution of the de-SPAC transactions. By voting against it, investors could leave the company and regain possession of all the capital invested. The upper limit of dissenting votes stands around 30%, beyond which it would affect the completion of the transaction. On the other hand, obtaining a qualified majority of votes in favor, the business combination will occur. In this case, the capital previously collected in the escrow account is released, shareholders who have cast a negative vote are liquidated, and the de-SPAC operation is launched.

2.2.2 SPACs in Italy

In Italy, SPACs have the possibility to decide the market in which they list themselves. The selection is made between two markets: Euronext MIV Milan and Euronext Growth Milan. In 2010, within MIV, *Borsa Italiana* established a professional segment dedicated to Special Investment Vehicles (SIV), a class that includes SPACs. The alternative to MIV is represented by EGM; indeed, its Regulation offers the possibility of listing those blank companies.

The motivations that drive the SPACs in the choice of the market are various. One of the main is the amount of capital the promoters intend to raise. We know that the MIV is a regulated market and as such requires greater constraints than Growth segment. One of these is a minimum market capitalization of 40 million Euros. Therefore, if a SPAC does not seek to collect that amount, its only choice remains the junior market. As is shown in *table 2.4*, Italian history faced the listing of thirty SPACs, and only two of them did not reach the level of capitalization required for admission on MIV. Despite it, twenty-five of them opted for the non-regulated market, while the remaining five were listed on MIV.

If the market capitalization issue does not subsist, it is up to the promoter to choose the right market based on size criteria of a potential target. It is usual that the target company the SPAC merges with will be listed on the stock exchange where the SPAC is listed following the de-SPAC transaction. This cannot happen in MIV, being an exchange for vehicles, where target, once transaction has occurred, will be traded directly on the main market or its STAR segment. The five targets identified by Italian SPACs listed on MIV made the transition to the EXM, of which two entered the STAR. The choice of listing in the MIV will allow the future target

company to enter the main list more easily as the Regulation governing these two markets is somewhat similar. As regard SPACs that selected the EGM to list themselves, only two of these have managed to bring their target in the primary market, of which one in the STAR.

A demarcation line between SPACs that choose one market instead of the other is recurrent and this could be linked to the above. Precisely, those listed on the MIV professional segment show an average capitalization of over 245 million Euros, while the SPACs listed on the EGM report an average raised capital of 122 million, thus less than half.

IPO year	SPAC Name	SPAC Market	Raised Capital €m	Target	Target Market
2011	Italy 1 Investment SA	MIV	150	IVS	EXM
2011	Made in Italy 1	EGM	50	SeSa	STAR
2013	Industrial Stars of Italy	EGM	50	LuVe	EGM
2013	Space	MIV	130	Fila	EXM
2013	Greenitaly 1	EGM	35	Zephiro	EGM
2015	Space 2	MIV	300	Avio	STAR
2015	Capital for progress 1	EGM	51	GPI	EGM
2015	Glenalta Food	EGM	80	Orsero	EGM
2016	Industrial Stars of Italy 2	EGM	50.5	SIT	EGM
2016	Innova Italy 1	EGM	100	Fine Food	EGM
2017	Crescita	EGM	130	Cellularline	EGM
2017	Space 3	MIV	153	Aquafil	STAR
2017	Glenalta	EGM	100	CFT	EGM
2017	Sprintitaly	EGM	150	Sicit	EGM
2017	EPS Equita Pep	EGM	150	Industrie Chimiche Forestali	EGM
2017	Capital for progress 2	EGM	65	Identified but not occured	-
2017	SPACTIV	EGM	90	Identified but not occured	-
2017	Industrial Stars of Italy 3	EGM	150	Salcef	EGM
2017	IdeaMi	EGM	250	Identified but not occured	-
2017	Space 4	MIV	500	Guala Closures	EXM
2018	ALP.I	EGM	100	Antares Vision	EGM
2018	SPAXS	EGM	600	Illimity	EXM
2018	VEI 1	EGM	100	Not Identified	-
2018	Life Care Capital	EGM	140	Identified but not occured	-
2018	Gabelli Value For Italy	EGM	110	Not Identified	-
2018	Archimede	EGM	47	Net insurance	EGM
2018	The SPAC	EGM	60	Not Identified	-
2019	Gear 1	EGM	30	Comer Industry	EGM
2021	ReVo	EGM	220	Elba Assicurazioni	EGM
2021	Industrial Stars of Italy 4	EGM	138	Not yet identified	-

Table 2.4: Main information of Italian SPACs.
Source: Borsa Italiana and companies' websites, Author Elaboration.

Leaving out the last SPAC that undertake the IPO in 2021 which is still in the research phase, the success rate of the de-SPAC operation in Italy stands at 76%. The 29 SPACs created have succeeded to bring 22 companies on the market, of which 68% on the SME dedicated market. SPACs offer a less tangled and expensive path to access the capital market compared to traditional IPO. In Italy, as all over the world, they usually seek to SMEs, overcoming timing and costs barriers which may not allow these small companies to be listed on a stock exchange.

2.3 IPO indirect costs: underpricing

The underpricing is one of the phenomena that most characterizes the Initial Public Offering. The presence of an average underpricing is constant across countries and over time (see, e.g., Hopp & Dreher 2007, Gandolfi et al. 2018, among others). It has received considerable attention in the IPO literature, and many explanations, that should illustrate the cause, have been put forward over time.

It would be considered a discount that rewards investors for the disclosure of their information. Indeed, by building the book, the Global Coordinator sought to get information by potential investors to set a fair price range. Investors, that should then purchase shares, have an incentive to understate their true interest in an offering to pull down the IPO price.[9] Therefore, stocks may be offered at a price below its fair value in the market. Subsequently, when trading on the market begins, investor demand will drive the price to the security's fair market value. When a new stock closes its first trading day above the IPO price, the security is considered to have been underpriced.

On the face of it, underpricing can be measured as the percentage difference between the first day closing market price and the offer price. It represents an indirect cost of the IPO which has negative effect on the wealth of pre-issue shareholders, thus, as pointed out by Beatty & Ritter (1986), is frequently referred as "money left on the table".

Several studies shown that the degree of underpricing is larger in the second-tier market rather than in the main market (see, e.g., Vismara et al. 2012, Acedo-Ramirez et al. 2019, among others). At European level, Gajewski & Gresse (2006) found that the average underpricing measured on secondary segments nearly doubles the one observed on main segments. In IPO literature seems to be consistent that issuers in junior markets face larger degree of underpricing. Several academic papers relate this inference to the increased uncertainty linked to companies listed on these markets. Their doubtful future and information asymmetries make valuing their equity difficult, therefore underpricing is a protective mechanism to the complexity of this valuation problem (see, e.g., Benveniste & Spindt 1989, Akyol et al. 2014, among others).

Underpricing is also considered a necessary evil. Falling price on first trade date, i.e., overpricing, is probably the worst thing that could happen. Overpricing is a bad sign both for the book builder and the company. It would damage the investment bank's reputation and would leave a bad taste to the market (Beatty & Ritter 1986).

[9] The terms IPO price, issue price, and offer price are used interchangeably and refer to per-share value at which securities are made available for purchase by the Global Coordinator during an IPO.

2.3.1 Underpricing in Italy

Before analyzing how this phenomenon behaves in the Italian scene, let me make some consideration. The IPO population used in the following analysis comprises all EXM and EGM listings during 2012-2021, according to the same terms already defined in *table 1.6.*[10] The initial return, which according to its trend will then be called underpricing or overpricing, is measured using the conventional method, as follows:

$$IR_{i,t} = \frac{P_{i,1} - P_{i,0}}{P_{i,0}} \quad (2.1)$$

Where $IR_{i,t}$ is the initial return on the first day of trading; $P_{i,0}$ is the IPO price of company i, and $P_{i,1}$ is the closing price at the first trade date.[11]

Despite IPOs undertaken during this time window have been 255, data on 18 of these do not seem to be reliably available, therefore the IPO sample is reduced to 237.

Results in *table 2.5* indicate that in the analyzed period the Milan exchange was constantly affected by underpricing, indeed both mean and median report positive figures. This demonstrate that, on average, companies going public left money on the table.

Year	N° of IPOs	Initial Return (%)				
		Mean	Median	Min	Max	St. dev.
2012	4	12.01	6.79	-15.24	49.68	27.75
2013	13	6.36	1.20	-5.10	42.16	12.70
2014	25	4.77	4.71	-17.92	27.20	12.66
2015	25	5.41	0.50	-11.25	55.33	14.81
2016	10	1.13	0.10	-14.00	11.38	7.61
2017	26	6.71	1.96	-13.04	40.63	13.28
2018	29	6.41	1.89	-24.29	47.22	15.09
2019	35	5.29	0.27	-59.53	74.74	24.08
2020	22	17.19	19.33	-11.00	50.00	18.50
2021	48	18.47	9.37	-23.14	125.26	26.34
Total	237	9.47	2.57	-59.53	125.26	19.96

Table 2.5: Initial return analysis on the Italian stock exchange.
Source: Borsa Italiana, companies' websites and Orbis database, Author Elaboration.

Nevertheless, positive returns are not homogenously distributed over time, ranging from a minimum of 1.1% measured in 2016 to a maximum of 18.5% registered in 2021. The mean

[10] Footnote n.5.
[11] Data on the offer price are extracted from IPO prospectuses or admission documents and *Borsa Italiana* website, while to gather data on the first date closing price the Orbis database was used.

underpricing percentage for the 237 IPOs equals to 9.5%, which is slightly higher than the 6.5% detected in a sample of 129 companies that decided to list on the Italian market from 2001 to 2012 (Dell'Acqua et al. 2014).

Table 2.6 reports some relevant data for the Italian exchange. Gross proceeds were calculated multiplying the number of shares sold[12] by the IPO price. Money left on the table were derived from the difference between the closing price at the first day of listing and the offer price, then multiplied by the shares sold. The proceeds collected from IPOs between 2012 and 2021 are equal to 22 billion Euro. The most fruitful year was 2015, despite not reporting the largest number of IPOs. As regards money left on the table, the indirect costs incurred by pre-issue owners were 884 million Euro and the most expensive year for previous shareholders was 2013. The only year in which initial returns as aggregate amount did not constitute a cost is 2019. During this year some huge deals that were overpriced took place, driving this measure to a negative value. However, the underpricing impact in Euro weighs on average 3.7 million per company in the reference period. Its relevancy should be considered by enterprises dealing with the listing choice.

Year	N° of IPOs	Gross Proceeds €m	Money Left on Table €m
2012	4	389.6	108.1
2013	13	1,043.1	288.9
2014	25	2,836.9	32.5
2015	25	4,993.7	97.1
2016	10	1,188.1	68.7
2017	26	4,044.7	97.5
2018	29	2,015.8	66.5
2019	35	2,585.5	-116.6
2020	22	628.9	134.8
2021	48	2,219.6	106.1
	237	21,946.0	883.6

Table 2.6: Money left on the table analysis on the Italian stock exchange.
Source: Borsa Italiana, companies' websites and Orbis database, Author Elaboration.

[12] This amount includes new issued shares and shares sold by existing shareholders allocated at IPO before the exercise of the greenshoe option, if any.

2.3.2 Underpricing in Italy: main vs junior market

IPOs on secondary markets seem to show larger degree of underpricing compared to the core market, and this is due to higher level of valuation uncertainty and information asymmetries. This gap has also been observed in the Italian panorama. Dell'Acqua et al. (2014) found a significant difference between the Italian segments. Their results suggest that IPOs on the MTA and MTA STAR experienced an average underpricing equal to 4.2% and 4.4% respectively, while such parameter exceeded 16% on the AIM Italia. In *table 2.7* we find out how this phenomenon has behaved in recent years on the two Italian segments, whereas 197 out of the 237 IPOs in the sample took place on the EGM while the other 40 on the EXM.

Year	EXM		EGM	
	N° of IPOs	Average Initial Return (%)	N° of IPOs	Average Initial Return (%)
2012	1	49.68	3	-0.55
2013	2	20.64	11	3.76
2014	5	1.46	20	3.69
2015	8	6.08	17	5.09
2016	3	2.66	7	0.47
2017	6	6.90	20	6.65
2018	5	6.40	24	6.69
2019	4	-1.44	31	6.36
2020	1	21.72	21	17.82
2021	5	4.09	43	20.14
Total	40	6.62	197	9.81

Table 2.7: Initial return analysis on Euronext Milan and Euronext Growth Milan.
Source: Borsa Italiana, companies' websites and Orbis database, Author Elaboration.

Findings show that the average underpricing experienced on the Euronext Growth Milan is larger than the one exhibited on the main market. Even though this standing is consistent with the reasons above mentioned, the gap is much shorter than the one shown by the investigation offered by Dell'Acqua et al. (2014). Specifically, the average return for 2012-2021 equals 6.6% on EXM and 9.8% on EGM. It should be noted, however, that such relationship is not steady each year. In six out of ten years, the average initial return on EXM exceeds the one measured on EGM.

The gross proceeds and money left on the table analysis relative to the Italian segments is proposed in *table 2.8.*

Year	EXM			EGM		
	N° of IPOs	Gross Proceeds €m	Money Left on Table €m	N° of IPOs	Gross Proceeds €m	Money Left on Table €m
2012	1	158.1	78.5	3	231.5	29.6
2013	2	926.0	285.1	11	117.2	3.8
2014	5	2,587.9	33.1	20	249.1	-0.6
2015	8	4,745.5	96.1	17	248.1	1.1
2016	3	1,136.5	68.9	7	51.6	-0.2
2017	6	3,291.9	90.2	20	752.8	7.3
2018	5	839.4	49.3	24	1,176.4	17.2
2019	4	2,357.5	-127.4	31	228.1	10.8
2020	1	497.2	108.0	21	131.8	26.8
2021	5	1,406.9	47.9	43	812.6	58.2
Total	40	17,946.9	729.6	199	3,999.1	153.9
% on the total market	*16.9%*	*81.8%*	*82.6%*	*83.1%*	*18.2%*	*17.4%*

Table 2.8: Money left on the table analysis on Euronext Milan and Euronext Growth Milan. Source: Borsa Italiana, companies' websites and Orbis database, Author Elaboration.

Total proceeds collected by the 199 companies listed on SME segment account for 18.2% on the total proceeds generated during the IPO process in Italy. On EXM the average proceeds per company amount to 449 million Euros, while on the junior market stand at 20 million. Meanwhile, money left on the table on the EGM account for 17.4% of the total amount. This last figure shows an average per company impact exceeding 18 million Euro on the main market and less than one million on EGM. It is a remarkable difference, to say the least, that may affect the market choice in which companies decide to list.

Chapter 3: Study on the operating performance of Italian IPOs

This third chapter investigates the operating performance of Italian companies that performed an IPO after 2012. This year has been chosen to make the study as reliable as possible. Indeed, since the merger of AIM Italia and *Mercato Alternativo del Capitale* happened that year, the Italian stock exchange took the shape it still has, with a single market for SMEs.

In IPO literature is well known that firms that have gone public exhibit a decline in operating performance in the post-IPO period. Several academics across the world studied this phenomenon, and similar results were obtained: for the USA, the event was investigated by Jain & Kini (1994) and Mikkelson et al. (1997); for Japan by Cai & Wei (1997) and Kutsuna et al. (2002); for China by Wang (2005) and Long et al. (2021); Kurshed et al. (2003) and Coakley et al. (2007) for the UK; Alvarez & Gonzalez (2005) for Spain; Bessler & Kurth (2003) for Germany; Pagano et al. (1998), Bonardo et al. (2007), and Scribano (2015) for Italy. Based on most of the findings, a similar outcome should be expected for Italian IPOs included in the sample of the proposed research, even if it is based on a more recent reference period.

The cited authors sought relationships with some typical business factors that could explain the performance decline. Some of these factors seem to have played an essential role in previous listings, and for this reason are often replicated in more recent analysis that apply similar study models. Therefore, once we understand how these companies performed before and after the listing, we will investigate what factors may have influenced the performance trend. To do this, some determinants, that often significantly affected profitability, have been selected and studied.

Generally, these papers use as sample companies that undertake the IPO during a time window in a specific market or a pool of similar markets. Sometimes only the primary market is used as a reference. Still, most of the time, scholars made no distinctions between main and junior markets considering all IPOs occurred in the predetermined exchanges for the reference period. Although this method has been widely used over the years, what is quite weak in IPO literature is the collation between the operating performance collected by companies on the main market and those obtained on the junior market. One of the few studies which applied this approach is provided by Khurshed et al. (2003) analyzing the London Stock Exchange. He shows that companies go public on the official list tend to worsen their operating performance; however, coefficients result to be slightly positive on the secondary market, although no statistical significance has been found.

Since the scarcity of works that compare main and secondary-tier list performance through financial ratios, this dissertation aims to introduce something more than previous studies: it will investigate if significant performance alteration exists in Euronext Milan and Euronext Growth Milan markets. Finally, it will try to discern the main drivers affecting performance in the two Italian exchanges.

3.1 Methodology

3.1.1 Operating performance measures

In IPO literature, several ratios have been used as performance meters. The parameter that appears in almost every IPO study evaluating performance through accounting measures is the return on assets (ROA) (see, e.g., Mikkelson et al. 1997, Pagano et al. 1998, Balatbat et al. 2004, Wang 2005, among others). This ratio determines how efficiently a company uses its assets to generate income. A greater ratio after the IPO is considered an indicator of superior performance. In comparison, a lower ratio after the listing event implies that ability to generate profit from the asset invested worsen. ROA can be computed using the following equation:

$$ROA_{i,t} = \frac{Net\ Profit_{i,t}}{Average\ \ (Total\ \ Assets_{i,t};Total\ \ Assets_{i,t-1})} * 100 \qquad (3.1)$$

The second ratio used to survey the performance of companies in this dissertation is the EBITDA margin. It is a measure of operating profit as a percentage of revenues. The choice of this ratio is bolstered by the fact that non-operating measures are not involved in this computation. Indeed, it excludes the impact of depreciation and amortization, interest payments on debt, and taxes. Moreover, IPO firms usually show an immediate increase in assets which could affect ROA, but this aspect does not directly affect EBITDA margin. The equation of this ratio is presented as follows:

$$EBITDA\ margin_{i,t} = \frac{EBITDA_{i,t}}{Net\ Sales_{i,t}} * 100 \qquad (3.2)$$

Lastly, asset turnover (AT) was also included in this analysis. It indicates how efficiently a firm uses its assets to generate revenues. The higher the ratio, the better the company's performance. It can be calculated through the following equation:

$$AT_{i,t} = \frac{Net\ Sales_{i,t}}{Average\ \ (Total\ \ Assets_{i,t};Total\ \ Assets_{i,t-1})} * 100 \qquad (3.3)$$

The approach used to verify the performance change before and after the event is the matched pairs method. This is definitively the most widely used method when the performance of IPO firms is analyzed through accounting indicators. The matched pair approach compares the change in performance of companies that decide to go public between two periods, before and after the IPO event. The year of the IPO is excluded from this calculus because it presents mixed ownership; therefore, accounting measures of that year do not fall within the scope of either pre- or post-IPO period. As regards the time window to consider with this approach,

there is no uniformity among studies. Some academic papers have considered one year before the IPO (see, e.g., Jain & Kini 1994, Mikkelson et al. 1997, among others), other studies have considered two years before the IPO (see, e.g., Chi & Padgett 2006, Pastusiak et al. 2016, among others), and others also three before the listing event (see, e.g., Wang 2005, Cai & Wei 1997, among others). Evidently, the more the years considered before the event, the more the sample of companies shrinks. The more one goes back in time, the more complicated it is to find information about companies, specifically SMEs.

The analysis relies on comparing the average ratios obtained for three fiscal years before the IPO with the same ratios obtained for three fiscal years after the IPO. In such a way, the previous period, which is not influenced by the IPO event, and the following period, which is affected by the listing status, are defined.

Once the data have been compared, if the measures in the post-IPO period turn out to be better, it is reasonable to think that IPO has improved performance. On the contrary, if post-IPO performance is poorer, it is appropriate to infer that IPO has a negative effect on firms' performance.

The median change analysis will investigate the change between the two periods. Financial variables may be lopsided, and mean values are peculiarly sensitive to outliers. Therefore, the use of this analysis enables the attainment of more robust results. To examine if the difference in variables is significant, the Wilcoxon signed rank test would be used. This non-parametric test is commonly used to assess differences between two probability distributions. This test compares the probability distribution of performance measures on two different subsamples and determines if there are changes in the median values. It is applied to test whether the difference between the IPO preceding and following periods is significantly different from zero.

3.1.2 Theoretical framework

Nearly all previous studies documented a downfall in the post-issue financial ratios. Build on these findings, it is expected that companies listed on the Italian market in recent years exhibit the same decline. Thus, the first hypothesis has been set as follows:

Hypothesis 1: The operating performance decreases after the IPO.

There are many theories developed to explain the post-IPO period performance deterioration. Among them, two explanations, that are driven by different causes, appear in a very similar way. These explications are known as “timing the issue” and “window dressing”. When the owners of an enterprise set the issue date to coincide with superior performance that could be difficult to sustain in the future, we will refer to “timing the issue”. However, when companies alter their financial statements intending to show themselves in a better light to potential investors before IPO, we will refer to “window dressing”. This latter aspect must not necessarily be associated with fraud; postponing payments and finding ways to book forthcoming revenues earlier are examples of accounting methods to obtain better results. In either case, the year preceding the IPO exhibits better performance compared to the others. Cai & Wei (1997) noticed that most companies in their research sample tend to show excellent performance in the year preceding IPO. Pastusiak et al. (2016) confirmed the “window dressing” incidence in the Warsaw Stock Exchange, while Dritsakis et al. (2004) suggested that this phenomenon is unpopular among Greek IPO. The choice of using three years before the IPO, instead of one, is closely linked to this theory. This way, the “window dressing” or “timing the issue” effect should be narrowed but not avoided. This the reason why it has been examined whether these phenomena affect the Italian scene. In doing this, the median of the performance variables in the year preceding the IPO event (Y-1) has been compared with one of the other preceding years, i.e., two (Y-2) and three years (Y-3) before the IPO, and with the median of the IPO year (Y) and of the year after the listing (Y+1). The sole comparison with Y-2 and Y-3 would not be sufficient because it may present a growing condition. However, if the median of Y-1 is also larger than Y and Y+1, the “window dressing” or “timing the issue” phenomena could partially explain the possible deterioration. Therefore, the second hypothesis has been presented as follows:

Hypothesis 2: The one-year pre-IPO performance shows better results.

As argued by Jain & Kini (1994), the lack of opportunities theory could explain the performance deterioration after the issue. This notion would be supported if a decline in sales and capital expenditures were recorded. Despite it, they found that IPO companies increased sales and capital expenditures after the event. Thus, they concluded that the lack of opportunity could not explain declining post-IPO performance. The compounded annual growth rate has been used to determine if sales and capital expenditures change between the two periods. It has been calculated for the three years pre- and post-IPO and the difference between the two data obtained has been used to apply the Wilcoxon signed rank test. The sales and capital

expenditures growth for the three-years preceding and following periods have been measured respectively as follows:

$$SalesG_{i,t} = [\sqrt[2]{(\frac{Net\ Sales_{i,t}}{Net\ Sales_{i,t-2}})} - 1] * 100 \quad (3.4)$$

$$CapExG_{i,t} = [\sqrt[2]{(\frac{CapEx_{i,t}}{CapEx_{i,t-2}})} - 1] * 100 \quad (3.5)$$

Finally, considering what was stated by Jain & Kini (1994), the third hypothesis has been defined:

Hypothesis 3: Performance change is not associated with the lack of opportunities theory.

Moreover, the debt ratio has been investigated. It illustrates the financial soundness of companies, the lower the ratio the better the financial position of the company. The test on this aspect exhibits if IPO had a positive effect on the debt position of firms and has been implemented using the three-years average pre- and post-IPO. The debt ratio can be calculated through the following equation:

$$DebtR_{i,t} = \frac{Financial\ Liabilities_{i,t}}{Total\ Assets_{i,t}} * 100 \quad (3.6)$$

Another popular explanation is related to the agency theory argued by Jensen & Meckling (1976). Scholars decided to apply it to IPO, verifying if performance deterioration is associated with a owners and managers failure to maintain the same level of the pre-IPO. They inquired if the change in the ownership structure could affect this decline. The shareholders' changes may lead to internal conflict, resulting in agency costs. Jain & Kini (1994) provided evidence suggesting a positive relationship between ownership retention and IPO performance. On the contrary, Mikkelson et al. (1997) found no relation between ownership structure change and a decline in performance among American IPOs. Cai & Wei (1997) also got no linear relations between the two variables in the Chinese panorama, while Kutsuna et al. (2002) found it. In the Italian panorama Bonardo et al. (2007) showed that firms characterized by higher equity retention at IPO date do not perform substantially better than companies with lower levels of equity retention. Scribano (2015) found that, before going public, an expansion in ownership by the top shareholders increases the operating performance, even if, as regards the change between the period before and after the IPO, no significant relationship has been identified.
The application of the different methods by the various authors can partially explain the odds of the results depicted. The proposed investigation in this analysis has considered the portion of shares retained by original owners at IPO date as variable, where original owners mean all

shareholders who held shares in a company for at least three years before the IPO year. Because ownership structure changes close to the IPO date might translate in internal conflicts which would not be detected if this definition of original owners would not be used, thus disturbing the results. In the light of this, the fourth hypothesis has been formed:

Hypothesis 4: Performance change is associated with new ownership structure.

Furthermore, age and size of a company at IPO date could present possible explanations of the performance trend and deserve to be analyzed in this paper. A recent study shows that IPO of smaller US companies underperforms more than those of larger US companies (Siev & Qadan 2021). Balatbat et al. (2004) found that the length of the prior operating history of Australian firms appears to be the only robust explanatory variable for performance change. Pagano et al. (1998) demonstrated that large Italian companies facing IPOs show less severe performance decline than newer and smaller enterprises. This means that IPO firms with an established operating history usually demonstrate better operating performance than young and smaller firms. Computing size as the natural logarithm of the total assets at IPO date and age as the difference between the IPO year and the establishment year, the fifth and last hypothesis has been defined:

Hypothesis 5: Performance change is associated with age and size of IPO firms.

All the hypotheses have been studied for the general Italian market, distinguishing the main one from the secondary one.

3.1.3 Regression Analysis

While hypotheses one, two and three have been tested through the Wilcoxon model, hypotheses four and five must be tested with a different approach. The regression analysis is the most appropriate for this case. To further investigate the relationship between change in performance and IPO firms' characteristics, i.e., ownership retention rate, age, and size, the following model has been proposed:

$$\Delta Performance = \beta_0 + \beta_1 Ownership + \beta_2\, Age + \beta_3 Size + \varepsilon \qquad (3.7)$$

The dependent variable can be the change in the ROA, the EBITDA margin, or the asset turnover. It has been represented as the difference between the average of the three years before the IPO and the average of the three years after the listing. The ownership independent variable depicts the portion of shares retained by original owners at IPO date. Age represents the years

of enterprise life at IPO date. Size is measured as the natural logarithm of the total asset reported at the IPO year.

A subsequent analysis, along the lines of the one presented by Kim et al. (2004), has been proposed:

$$\Delta Performance = \beta_0 + \beta_1 Ownership + \beta_2\, Age + \beta_3 Size + \beta_4\, SalesGC + \beta_5 CapExGC + \beta_6 DebtRC + \varepsilon \quad (3.8)$$

This regression equation presents all the variables of the first one (3.7), but it has been added independent variables to check if the change in sales and capital expenditures growth, and the effect that IPO has on leverage, can explain the change in performance. The approach proposed now is the backward stepwise regression. A stepwise regression begins with a saturated model, the one introduced in equation 3.8, and gradually eliminates variables from the regression equation to find the model that best explains the performance change. This approach is useful because it reduces the multicollinearity problem and represents one of the methods to solve overfitting. It starts from the full model, at each step the independent variable with largest p-value that must be also higher than 0,05, i.e., the chosen alpha level, is being removed. The backward elimination process stops only when all the remaining variables exhibit a p-value lower than the alpha value, thus reporting a significant relation.

3.2 IPO Data

3.2.1 The sample

Companies went public between 2012 and 2021 on EXM and EGM are 255. In accordance with the criteria chosen for the analysis, companies which have not already completed three years on the market, have been excluded from the study sample. Therefore, 106 firms listed between 2019 and 2021 have not been considered. The reference period thus becomes from 2012 to 2018. We already know that 21 have been the SPACs listed in the EGM during this period. Lack of accounting history pre- and post-issue suggests an inevitable exclusion of such companies. Among the remaining, 13 firms belong to the financial sector. Since financial and accounting structures of banks differ from companies belonging to other sectors, these companies have been excluded. Furthermore, the sample composition is severely constrained by limitation of the data. Some companies did not provide accounting data for all three years before the IPO and others did not maintain the listing status for the following three years; thus, the final study sample was reduced to 44 IPOs, of which 25 on EGM and 19 on EXM.

3.2.2 Data sources

For the implementation of this study multiple sources have been used. The main source is the Refinitiv Eikon database, which provides almost all the accounting data for the computation of the performance measures and the other parameters. Orbis is the database from which data on the ownership structure and establishment date has been collected. It has also been exploited as an inspection tool on Eikon data, and in few cases, it has added missing information. As regards data on the type of IPO offer, the issue prices, and the companies' sectors, have been inspected IPO prospectuses or admission documents, *Borsa Italiana* website and Orbis database. IPO prospectuses and admission documents have been fundamental in confirming or defining the ownership structures in the three years before IPOs.

3.2.3 Descriptive statistics

The companies in the reference sample operate in different sectors. According to *Borsa Italiana*, the sample is diversified as follows: 16 firms operate in the consumer discretionary sector; 14 companies compete in the industrial segment; five companies deal with telecommunication; four are in the health care industry; two firms operate in the technology branch; two companies lie in consumer staples sector; and one firm competes in the energy industry.

Companies can decide what kind of offer to present at IPO. The choice is between selling outstanding shares or issuing new shares, but also a mixed solution combining the two methods could be envisaged. Within the sample, eight companies sold merely existing shares, 16 firms chose the sole subscription of newly issued shares, and 20 remaining IPOs combined the two modalities. The mere public subscription offer does not seem much in vogue among listed companies in the main Italian market, counting only one company that chose it. On the contrary, all the eight public offer for sale took place on the EXM, while not even one on the secondary market. The mixed option was split equally between the two market since it registered ten IPOs on EGM and ten IPOs on EXM. The rate of shares issued in relation to the total shares offered averages about 68% on the whole sample. This meter varies widely between the two markets, averaging more than 91% on EGM and less than 37% on EXM.

The offer price varies between a minimum of 78 cents and a maximum of 23 Euro, with an average value of 6.45 Euro. The average value registered on EXM equals 7.08 Euro while the one recorded on EGM reaches 5.97 Euro.

The retention rate, measured at the IPO date as the percentage of shares held by the owners who have held shares for at least three years before the event, exhibits an average value of 64%. Such a parameter varies slightly between the primary and secondary markets, averaging 61% and 67% respectively.

Firms' age is quite different between the two markets. The average length of time of operating history of secondary market listings is almost 27 years[13], while it is greater than 39 years on EXM. The average age of the whole sample amounted to 32 years, with a lower value of 5 years and a maximum of 113 years of activity.

Total assets indicate the size of companies. The average total assets reported amounted to 691 million Euro. On the EGM this average figure stood at 66 million, while 1.5 billion on EXM. The medians calculated for the assets are very different from the relative averages, this means that outliers played a significant role in the determination of the arithmetic average.

Panel A, B and C of *table 3.1* show descriptive statistic for the whole sample, EXM and EGM respectively.

[13] It should be remembered that this figure refers to the sample companies, because if the sample would be composed by all the 120 companies that went public between 2012 and 2018 the average age does not even meet 19 years. Probably companies whose accounting data are missing, therefore excluded from the analysis, are also those with less years of activity.

Panel A: Whole Sample					
	Mean	Median	Min	Max	St.dev.
Newly shares issued (%)	67.80	85.62	0.00	100.00	37.10
Issue price (€)	6.45	4.85	0.78	23.00	4.35
Ownership (%)	64.38	68.74	0.00	89.90	20.94
Age (years)	32.36	29.00	5.00	113.00	24.63
Total assets (€m)	691.28	114.67	4.81	12,733.91	2.071.89

Panel B: Euronext Milan					
	Mean	Median	Min	Max	St.dev.
Newly shares issued (%)	36.52	46.27	0.00	100.00	35.17
Issue price (€)	7.08	6.60	0.78	23.00	4.84
Ownership (%)	61.43	63.99	11.25	77.71	13.74
Age (years)	39.49	38.00	5.00	113.00	26.76
Total assets (€m)	1,514.09	389.39	92.51	12,733.91	2,998.13

Panel C: Euronext Growth Milan					
	Mean	Median	Min	Max	St.dev.
Newly shares issued (%)	91.57	100.00	57.63	100.00	13.23
Issue price (€)	5.97	4.00	1.80	15.50	3.97
Ownership (%)	66.63	74.84	0.00	89.90	25.14
Age (years)	26.95	25.00	5.00	96.00	21.88
Total assets (€m)	65.95	38.40	4.81	316.11	79.13

Table 3.1: Descriptive statistic for the study sample.
Source: Eikon database, Borsa Italiana,website, and Orbis database, Author Elaboration.

3.3 Empirical results

3.3.1 Operating performance

Accounting profitability ratios are reported in *table 3.2*, for the whole sample in panel A, EXM in panel B and EGM in panel C. The mean ROA obtained for the entire sample of 44 IPOs falls from 3.6% to 2.4%, while the median ROA change indicates an improvement in profitability after the IPO. Neither the EBITDA margin does not behave as well as can be expected. Both mean and median improve after the IPO. Although these results suggest an improvement, no statistical significance has been found. The AT is the only ratio that reports statistical significance. Its mean and median drop drastically after the IPO. The significant median change shows a decline of 17.4 percentage points once companies went public.

These results are not entirely aligned with what was found for the Italian market by Bonardo et al. (2007) and Scribano (2015). The former study depicts a sharp decline in ROA. It reports a median change of 26.5% between the year before and the third year after the IPO. Scribano (2015) showed that the average ROA has been reduced by 1.8 percentage points. At the same time the average EBITDA margin decreased by 6.4 percentage points.

By analyzing the two markets separately, substantial differences come to light. In Panel B of *table 3.2* referring to the main market, it is noticeable how the medians of all three performance meters show an improvement after the event. EBITDA margin and asset turnover document a significant post-IPO improvement. Instead, what happens in the market dedicated to SMEs is observable in panel C of the same table. All three ratios demonstrate a significant deterioration of the performance after the IPO. What has been found this time is in line with most previous studies' findings.

One may figure out that the performance trend of companies which decide to list could change according to the market in which they choose to enter. From 2012 to 2018, the median analysis suggests that companies that went public on the regulated market experienced a performance increase, while firms that selected the EGM reported a decline in accounting measures after the IPO. The contrasting data of the two markets created a miscellany of results which may not escalate in statistical significance in the overall sample. Asset turnover nevertheless reported significance also in the whole case, which means that the deterioration of SMEs performance may have greater relevance on the results.

Panel A: Whole Sample								
Variable	N	Mean before	Mean after	Mean change	Median before	Median after	Median change	*z*-Stat
ROA	44	3.62	2.40	-1.22	2.75	3.19	0.44	0.86
EBITDA margin	44	8.44	13.11	4.67	12.88	13.64	0.76	0.03
AT	44	107.15	88.73	-18.42	95.76	78.40	-17.36	3.67***

Panel B: Euronext Milan								
Variable	N	Mean before	Mean after	Mean change	Median before	Median after	Median change	*z*-Stat
ROA	19	3.68	5.18	1.51	2.20	5.47	3.27	1.19
EBITDA margin	19	14.63	18.92	4.29	13.49	15.60	2.11	2.15**
AT	19	103.39	93.61	-9.79	85.16	88.72	3.56	1.39*

Panel C: Euronext Growth Milan								
Variable	N	Mean before	Mean after	Mean change	Median before	Median after	Median change	*z*-Stat
ROA	25	3.57	0.29	-3.28	3.77	2.43	-1.34	1.91**
EBITDA margin	25	3.74	8.69	4.96	12.50	12.45	-0.05	1.75**
AT	25	110.00	85.02	-24.98	96.62	75.95	-20.67	3.63***

***, **, * significant at the 1, 5, and 10 per cent levels, respectively

Table 3.2: Operating performance results.
Source: Eikon database, Author Elaboration.

3.3.2 The "window dressing" or "timing the issue" explanation

The second hypothesis investigates whether "window dressing" or "timing the issue" phenomena affect the Italian stock exchange. Since the proposed approach also operates with new data, i.e., ratios of the IPO year, all the ratios used in the previous analysis, instead of just those resulted significant, will be presented. Therefore, it has been investigated if their presence is constant for all scenarios. Moreover, the averages of the previous and following years are no longer involved, but the data of the single years are now considered.

The comparison of Y-1 with years Y-2 and Y-3 serves to notice if the year before the IPO shows abnormal results. Even if this is the case, it could simply mean a growing scenario in terms of company performance. For this reason, comparisons of Y-1 with the following two years have been introduced. If these are also minor, it could be assumed the presence of these phenomena. If they turn out to be greater, they could support the hypothesis of a growth situation for the listed companies.

Table 3.3 reports the medians of the performance meters, their difference with the year preceding the IPO and the test results[14] for the whole sample of 44 companies.

Panel A: ROA					
	Y+1	Y0	Y-1	Y-2	Y-3
Median	4.22	4.06	4.08	3.37	2.39
Median difference with Y-1	-0.14	0.02		0.70	1.68
z-Stat	1.00	0.31		0.95	1.55*

Panel B: EBITDA margin					
	Y+1	Y0	Y-1	Y-2	Y-3
Median	14.13	14.25	14.46	12.61	12.81
Median difference with Y-1	0.33	0.21		1.86	1.65
z-Stat	0.36	0.65		1.30*	1.41*

Panel C: AT					
	Y+1	Y0	Y-1	Y-2	Y-3
Median	80.72	83.54	98.02	94.55	96.67
Median difference with Y-1	17.29	14.48		3.47	1.35
z-Stat	3.38 ***	3.16***		0.05	1.34*

***, **, * significant at the 1, 5, and 10 per cent levels, respectively

Table 3.3: The "window dressing" or "timing the issue" investigation on the whole sample. Source: Eikon database, Author Elaboration.

[14] The test has been designed to show the extent of the gap, it does not play a significant role in the conclusions drawn, for which the median differences are sufficient.

The gray color underlines the median values that exceed the one in Y-1. In this way it is easy to notice that most of the medians of all ratios are lower than the median recorded in Y-1. Despite this, only the AT shows that gaps significantly differ from zero in almost all year considered.

In the light of findings displayed, it appears that these phenomena affect the Italian panorama, which is in line with what was found by Cai & Wei (1997) and Pastusiak et al. (2016), who studied the Chinese and the Polish market respectively.

Therefore, the choice in the use of the IPO three previous years' average instead of just one year in the operating performance analysis appears more appropriate. In this way the abnormality of Y-1 is attenuated, which could lead to a lower decline of the analysis results shown in the previous paragraph.

Table 3.4 addresses the study just for EXM. In this comparison, the previously rejected assumption of a growth situation cannot be disregarded. Indeed, the median ROA of Y-1 is significantly higher than the previous two, but it is lower than the following two. The EBITDA margin reports data of more difficult interpretation, since the Y0 and Y+1 parameters are not so different from Y-1. On the other side, the AT shows the presence of these phenomena even if it does not highlight any significance.

Panel A: ROA					
	Y+1	Y0	Y-1	Y-2	Y-3
Median	4.37	4.55	2.61	1.86	2.30
Median difference with Y-1	-1.76	-1.94		0.75	0.31
z-Stat	0.10	0.66		2.96***	3.20***

Panel B: EBITDA margin					
	Y+1	Y0	Y-1	Y-2	Y-3
Median	16.48	16.76	16.50	12.55	13.20
Median difference with Y-1	0.01	-0.27		3.95	3.30
z-Stat	-0.02	0.22		2.68***	2.92***

Panel C: AT					
	Y+1	Y0	Y-1	Y-2	Y-3
Median	79.21	84.84	99.24	82.14	76.62
Median difference with Y-1	20.03	14.40		17.11	22.63
z-Stat	1.03	0.70		0.22	0.95

***, **, * significant at the 1, 5, and 10 per cent levels, respectively

Table 3.4: The "window dressing" or "timing the issue" investigation on Euronext Milan. Source: Eikon database, Author Elaboration.

Table 3.5 exhibits the results of the study considering only the secondary market. Also in this case, the results are slightly difficult to interpret, as the "window dressing" or "timing the

issue" effect can be found in ROA and AT. However, EBITDA margin shows an opposite scenario in which the year preceding the IPO has the lowest median.

Panel A: ROA					
	Y+1	Y0	Y-1	Y-2	Y-3
Median	3.78	4.00	4.69	4.22	3.02
Median difference with Y-1	0.91	0.69		0.47	1.67
z-Stat	1.40*	0.05		1.05	0.13

Panel B: EBITDA margin					
	Y+1	Y0	Y-1	Y-2	Y-3
Median	12.68	13.48	12.15	12.66	12.49
Median difference with Y-1	-0.53	-1.33		-0.52	-0.34
z-Stat	0.46	1.05		0.48	0.22

Panel C: AT					
	Y+1	Y0	Y-1	Y-2	Y-3
Median	82.24	83.21	97.59	94.74	97.52
Median difference with Y-1	15.35	14.38		2.85	0.08
z-Stat	3.50***	3.26***		0.22	0.89

***, **, * significant at the 1, 5, and 10 per cent levels, respectively

Table 3.5: The "window dressing" or "timing the issue" investigation on Euronext Growth Milan. Source: Eikon database, Author Elaboration.

3.3.3 The lack of opportunities explanation

Table 3.6 reports the results linked to the lack of opportunities theory. The third hypothesis on the whole sample is confirmed by the sales growth, but is not supported by the capital expenditures growth, of which rise has been reduced after the IPO event. Indeed, panel A shows an insignificant decline in the growth of sales and a significant deterioration in the capital expenditures growth in the post-IPO period compared to the growth rate during the pre-IPO period. The median capital expenditures growth after the listing has fallen to a negative value. So far, this could mean that the significant decline in the AT on the total sample could partially be explained by the lack of opportunities theory. Despite this, the data regarding Euronext Milan reported in panel B must be well observed. Results are in line with what was found on the total sample. The difference is that for EXM no performance decline was found. Thus, these results should alarm us that this analysis could present a methodological issue or could not be correlated with the study on the profitability change. Finally, panel C shows findings that would support the lack of opportunities explanation.

By the way, it is noticeable as the debt ratio improves significantly after the IPO in all three scenarios. It can be assumed that capital enhancement and a plausible debt relief with IPO proceeds led to this result.

Panel A: Whole Sample								
Variable	N	Mean before	Mean after	Mean change	Median before	Median after	Median change	*z*-Stat
SalesG	44	19.32	16.12	-3.20	10.39	8.65	-1.74	0.38
CapExG	44	25.36	5.27	-20.09	7.14	-4.16	-11.30	1.69**
DebtR	44	46.32	39.18	-7.14	47.93	40.22	-7.71	3.56***

Panel B: Euronext Milan								
Variable	N	Mean before	Mean after	Mean change	Median before	Median after	Median change	*z*-Stat
SalesG	19	7.61	6.73	-0.87	8.31	6.60	-1.71	0.30
CapExG	19	38.66	1.70	-36.97	10.24	-3.97	-14.21	2.11**
DebtR	19	42.56	36.57	-5.99	44.71	37.25	-7.46	2.78***

Panel C: Euronext Growth Milan								
Variable	N	Mean before	Mean after	Mean change	Median before	Median after	Median change	*z*-Stat
SalesG	25	28.22	23.25	-4.97	13.14	8.84	-4.30	0.43
CapExG	25	15.25	7.99	-7.26	3.37	-4.34	-7.71	0.46
DebtR	25	53.93	48.26	-5.67	55.39	51.19	-4.20	2.68***

***, **, * significant at the 1, 5, and 10 per cent levels, respectively

Table 3.6: The lack of opportunities investigation.
Source: Eikon database, Author Elaboration.

3.3.4 Ownership, age, and size explanation

The following regression analysis indicates whether the ownership, age and size provide some explanation for the performance change. The dependent variable has been selected according to what emerged by the study on performance. Therefore, only the significantly changed ratios have been picked as dependent variables (*see table 3.2*). When dealing with multiple regression the first thing to do is check for multicollinearity between independent variables. If two or more of these variables report a higher correlation coefficient it could be problematic since multiple regression should not include two strongly correlated variables. In this case, one of the two variables should be eliminated. Fortunately, the multicollinearity problem has not occurred in any regression models that will be presented later.

Table 3.7 shows the estimates of both regression equations presented above, considering the sample of 44 companies. The asset turnover is the only ratio that resulted eligible as dependent variable for this analysis.

		AT		
Variable	Univariate	Model 3.7	Model 3.8	Best model
Intercept		-180.64	-193.29	-155.81
t-Stat		-3.71***	-3.92***	-3.39***
Ownership	0.56	0.64	0.67	0.61
t-Stat	2.82***	3.37***	3.56***	3.18***
Age	0.00	-0.25	-0.26	
t-Stat	0.00	-1.41	-1.45*	
Size	4.52	6.93	7.18	5.27
t-Stat	1.79*	2.71***	2.80***	2.29**
SalesGC	-0.08		-0.03	
t-Stat	-0.39		-0.15	
CapExGC	-0.04		-0.03	
t-Stat	-0.93		-0.77	
DebtRC	-0.53		-0.89	
t-Stat	-1.39		-1.91**	
f-Stat		5.45***	3.49***	7.02***
Adj R^2		0.24	0.26	0.22

***, **, * significant at the 1, 5, and 10 per cent levels, respectively

Table 3.7: Regression analyses on the whole sample.
Source: Eikon database, Author Elaboration.

Notably, a linear association exists between an IPO performance change and a change in ownership composition. As hypothesized, the ownership structure affects IPO performance. This positive relation indicates that a higher retention rate by original owners translates into a less severe performance deterioration.

According to what found by Pagano et al. (1998), company's size positively impacts the performance changes. Findings suggest that smaller companies face a stricter decline in performance.

These variables are the only two that have been remained significant during the backward elimination process and are therefore the best predictors for the change in performance through the AT ratio. Age appears to be negatively correlated with performance, but its significance arises only in the full model, i.e., model 3.7. Neither in the univariate analysis nor the other two models, age shows significant explanatory power.

For the study on Euronext Milan, the EBITDA margin and AT has been considered dependent variables. It is useful to remember that IPO was found to have a performance improvement effect on the main market. *Table 3.8* shows the estimates of the regression equations.

The results illustrate that none of the variables has sufficient explanatory power to elucidate the performance improvement on both the dependent variables considered, since they do not meet the criteria required to be admitted into the best model through the backward regression. The age data in the full model of AT is significant, indicating that younger companies faced a greater increase in performance. However, its significance stops there and cannot be considered as a good predictor.

Panel A: EBITDA margin				
Variable	Univariate	Model 3.7	Model 3.8	Best model
Intercept		10.83	9.49	-
t-Stat		0.24	0.17	-
Ownership	-0.12	-0.12	-0.11	
t-Stat	-0.69	-0.69	-0.50	
Age	-0.07	-0.07	-0.07	
t-Stat	-0.76	-0.70	-0.63	
Size	-0.44	0.20	0.21	
t-Stat	-0.24	0.09	0.08	
SalesGC	0.15		0.16	
t-Stat	0.85		0.74	
CapExGC	0.00		-0.01	
t-Stat	0.03		-0.32	
DebtRC	-0.03		-0.02	
t-Stat	-0.12		-0.05	
f-Stat		0.34	0.24	-
Adj R^2		-0.12	-0.34	-

Panel B: AT				
Variable	Univariate	Model 3.7	Model 3.8	Best model
Intercept		-164.50	-259.86	-
t-Stat		-1.23	-1.83*	-
Ownership	0.16	0.19	0.57	
t-Stat	0.30	0.37	1.01	
Age	-0.32	-0.51	-0.54	
t-Stat	-1.21	-1.64	-1.83*	
Size	2.43	8.08	11.15	
t-Stat	0.42	1.24	1.71	
SalesGC	0.67		0.89	
t-Stat	1.24		1.65	
CapExGC	-0.05		-0.10	
t-Stat	-0.68		-1.21	
DebtRC	-0.49		-1.02	
t-Stat	-0.87		-1.59	
f-Stat		1.01	1.39	-
Adj R^2		0.00	0.12	-

***, **, * significant at the 1, 5, and 10 per cent levels, respectively

Table 3.8: Regression analyses on Euronext Milan.
Source: Eikon database, Author Elaboration.

The results of the opening study reveal that companies listed on the EGM report a significant deterioration in all ratios considered. *Table 3.9* shows the variables that better explain the decline in performance.

Panel A: ROA				
Variable	Univariate	Model 3.7	Model 3.8	Best model
Intercept		1.42	-6.97	-3.89
t-Stat		0.05	-0.23	-2.52**
Ownership	0.07	0.08	0.07	
t-Stat	1.04	1.14	1.14	
Age	-0.05	-0.06	-0.08	
t-Stat	-0.64	-0.71	-1.01	
Size	-0.79	-0.48	-0.06	
t-Stat	-0.46	-0.27	-0.04	
SalesGC	-0.12		-0.11	-0.12
t-Stat	-2.20**		-1.87*	-2.20**
CapExGC	-0.01		-0.01	
t-Stat	-0.47		-0.36	
DebtRC	-0.25		-0.15	
t-Stat	-1.84*		-1.43	
f-Stat		0.59	1.56	4.86**
Adj R^2		-0.05	0.12	0.14

Panel B: EBITDA margin				
Variable	Univariate	Model 3.7	Model 3.8	Best model
Intercept		35.84	81.73	0.13
t-Stat		0.17	0.43	0.01
Ownership	0.16	0.13	0.15	
t-Stat	0.36	0.28	0.36	
Age	0.19	0.20	-0.07	
t-Stat	0.39	0.36	-0.13	
Size	-1.11	-2.56	-4.62	
t-Stat	-0.10	-0.21	-0.42	
SalesGC	-0.97		-1.10	-0.97
t-Stat	-2.91***		-2.87**	-2.91***
CapExGC	-0.03		0.04	
t-Stat	-0.37		0.41	
DebtRC	0.54		1.03	
t-Stat	0.56		1.12	
f-Stat		0.09	1.51	8.49***
Adj R^2		-0.13	0.11	0.24

Panel C: AT				
Variable	Univariate	Model 3.7	Model 3.8	Best model
Intercept		-117.75	-133.80	-72.88
t-Stat		-1.43	-1.53	-5.92***
Ownership	0.72	0.72	0.70	0.72
t-Stat	4.15***	3.91***	3.76***	4.15***
Age	0.18	-0.01	-0.03	
t-Stat	0.18	-0.03	-0.14	
Size	3.26	2.59	3.39	
t-Stat	0.57	0.54	0.68	
SalesGC	-0.24		-0.19	
t-Stat	-1.19		-1.06	
CapExGC	-0.02		-0.00	
t-Stat	-0.39		-0.03	
DebtRC	-0.57		-0.42	
t-Stat	-0.92		-0.85	
f-Stat		5.42***	2.97**	17.22***
Adj R^2		0.36	0.33	0.40

***, **, * significant at the 1, 5, and 10 per cent levels, respectively

Table 3.9: Regression analyses on Euronext Growth Milan.
Source: Eikon database, Author Elaboration.

Findings suggest that performance, using as meter the ROA and the EBIDA margin as well, is unrelated to any of the predictors exposed in the fourth and fifth hypotheses. However, the change in sales growth is the control variable that better explain these profitability change when considering these ratios. Surprisingly, the negative relationship explains that any improvement

in sales CAGR after IPO compared to the growth of preceding period corresponds with a more pronounced decline in company's performance.

On the other hand, ownership is the only variable which features explanatory power in the study in which performance is measured by AT ratio. Even in this case as for the backward regression on the total sample, the positive relation indicates that companies in which original owners held more stakes face a lighter fall after IPO.

It may be argued that ownership is the only worthy predictor connected with performance (AT) for the analysis which has exploited Euronext Growth Milan as object of investigation.

3.4 Consideration and future research

Findings are not as explicit as shown in previous studies on the Italian market. The AT is the only statistically significant ratio, and it reports a deterioration in the post-IPO period. Considering separately the main Italian market and the junior Italian market, some discrepancies has been found. Contrary to what found for the English market by Kurshed et al. (2003), this study shows that on the main market there has been an improvement in operating performance after the listing, while the IPOs on the SME-dedicated market exhibit a decline in performance, significant in all parameters exploited.

It has been demonstrated that frequently the year before the IPO shows better results. Such an outcome could be represented by two phenomena known as "window dressing" and "timing the issue", usually exploited by owners to obtain a higher demand and attract new investors.

As already seen, the attempt to associate the profitability decline with the lack of opportunity theory has given conflicting results more inclined to deny the relationship. The study proposed could present a methodological issue resulting from the inclusion of Euronext Milan which does not report a decline. Instead, these findings could empower the "window dressing" or "timing the issue" explanation.

Additionally, it has been found that the change in ownership composition resulting from the listing and the company's size at IPO date have a positive impact on performance decline, caught through the AT ratio on the whole sample. Therefore, larger companies and firms in which the original owner maintains more stakes report a less severe performance deterioration. Also, with the secondary market's sample, the analysis regarding the AT decline has signaled the same relationship with the corporate ownership structure but not with other predictors.

In conclusion, unlike previous literature in this field, IPO on the main Italian market provides an improvement in performance, while a deterioration appears clear on the secondary market. It has been concluded that profitability decline is a function of various determinants, for which there is not a single theory that may provide a satisfactory explanation, but in which owners, that might be involved in "window dressing" or "timing the issue" and which formulate their retention rate, could play a fundamental role in the performance trend forecast of companies that decide to list themselves on the Italian market.

Finally, a little upgrade for future research is suggested. Firstly, the study does not consider the reasons that propel companies to go public due to data limitations. This information could help to better explain the "window dressing" or "timing the issue" and the extent of the retention rate, which are the main performance drivers this study founded on the Italian market.

Secondly, although it does not appear in IPO literature, the return on invested capital (ROIC)[15] may be more accurate in showing performance of IPO companies compared to indicators used. Again, the lack of Italian companies' data obstructed the use of this financial ratio in this dissertation.

As a last point, it is recommended that future researchers explore models that better scrutinize the lack of opportunities hypothesis on the Italian market, since the application used has not reached satisfactory results.

[15] A simple definition of ROIC is after-tax operating profit divided by invested capital, where invested capital is calculated as the sum of working capital and fixed assets.

Summary and conclusion

The dissertation focuses mainly on detecting the differences between the primary and the secondary stock market. In particular, the work takes as a reference the Italian stock exchange. The initial public offering is the benchmark used to investigate the gap between the two segments.

Initially, the birth of the main Italian market, renamed Euronext Milan in 2021, is illustrated. Its establishment took place decades later than other leading European markets, which already traded shares. However, Italy was one of the fastest European countries to establish a secondary SME dedicated market. Since their introduction, junior markets have faced challenging tasks, but today many of them seem to enjoy good health.

Investor confidence in these markets is crucial to ensure a sound SMEs' development path, but also for the country's own economy health. These reasons have pushed and still push IPO incentive policies pursued by the European Union. Following the European instructions, Italy introduced two legislative measures linked to this purpose. The first one consists of individual savers' tax exemption on the proceeds deriving from financial instruments issued by Italian SMEs. The second measure grants a tax credit on consultancy costs for SMEs going public.

The Italian market, largely represented by its main market (98.5%), ranks only seventh for market capitalization compared to the European countries. However, measuring the incidence of the first European countries' junior markets on their total market capitalization, we note that Euronext Growth Milan is the second, preceded only by the London AIM.

In the IPO contest of last decade, the London Stock Exchange shows a listing amount larger than other European countries included in the study, while the German exchange reports the lowest quantity. The Italian IPO amount is very close to the French one, the difference is represented by their allocation. While in France and United Kingdom, the main and secondary market split almost equally the number of IPOs, the German framework shows a scarce number of junior IPOs. On the contrary, Italian IPOs took places predominantly on the junior market, reporting the lowest number of IPOs on the primary market.

The second chapter of the dissertation examines the Italian situation in a more detailed way. Firstly, we see the equity markets arrangement proposed by *Borsa Italiana*. We find that within the Euronext Milan there is a segment called STAR, while the sub-fund in Euronext Growth Milan is known as Professional Segment. Moreover, there is a regulated market allowing investment vehicles listing: the Euronext MIV Milan.

Companies that decide to list must meet certain formal requirements to be admitted to the capital market. The Euronext Growth Milan access is characterized by a simplified admission

process and less stringent requirements. Compared to Euronext Milan, the minimum free float is lower, an audited financial report may not be required, and the entrance is via only a simplified admission document, instead of documents set. Additionally, there are no minimum requirements for capitalization, turnover, or corporate governance structure, unlike the main list.

Significant costs arise with IPO. Companies face variable costs, closely tied with success and size of the plan. They are mainly represented by *Borsa Italiana* and Global Coordinator fees. Secondly, the fixed costs are associated with consultants' bills upon to the generation and verification of documents on accounting, legal and financial aspects. Although they are defined fixed costs, their amount is still associated with plan complexity, in such a way SME listings are not impeded, even if for small companies they are more challenging to bear.

To maintain the listed status, companies must comply with the enforced ongoing requirements. If they did not, their shares will be removed or suspended from the Italian exchange. This is necessary to preserve investor confidence maintaining a fair degree of reliability. Also in this field, the secondary market's rules give companies greater flexibility than the one allowed in the main market.

A way around the listing admission requirements exists and is provided by Special Purpose Acquisition Companies. Through these vehicles, SMEs may pursue a faster and cheaper path to access the market. When a SPAC, which is already listed, identify a target company and the business combination occur, the firm earns an almost immediate quotation. Moreover, the IPO related costs have already been borne by the SPAC, freeing up the target company from this burden. SPAC presence in Italy comes with some years of delay compared to other American and European countries. Until 2021, the SPACs born in Italy have been 30, allowing 22 companies to access the market via this route.

Besides direct costs faced by IPO companies, they deal with an indirect cost that usually characterizes listings: underpricing. It can be quantified as the percentage difference between the first day closing market price and the IPO price of shares sold to the public.

The underpricing presence is constant across countries and over time (see, e.g., Benveniste & Spindt 1989, Hopp & Dreher 2007, Gandolfi et al. 2018, among others) and it has been demonstrated that it is accentuated in secondary markets (see, e.g., Gajewski & Gresse 2006, Vismara et al. 2012, Acedo-Ramirez et al. 2019, among others).

The study shows that underpricing affects the Italian stock exchange. From 2012 to 2021 its mean value is equal to 9.5%, which corresponds to an average per company cost of 3.7 million Euro (884 million total) incurred by pre-issue owners. As previous studies had already demonstrated, also the Italian secondary exchange presents a higher rate than Euronext Milan.

Indeed, IPOs on the Euronext Milan and Euronext Growth Milan experienced an average underpricing equal to 9.8% and 6.6% respectively. Despite this and the 83% of IPOs occurred in the secondary market, the total money left on the table corresponds to Euro 730 million on the main market and Euro 154 million on the junior exchange. With an average per company value equals to 18 million and less than one on EXM and EGM respectively.

The third and last chapter includes a study on the performance of Italian IPO companies. World over, several academic papers denote that IPO companies exhibit a decline in operating performance after the listing (see, e.g., Jain & Kini 1994, Wang 2005, Coakley et al. 2007, among others). The Italian IPOs also shows similar outcome (see, e.g., Pagano et al. 1998, Bonardo et al. 2007, and Scribano 2015, among others).

The proposed analysis investigates the change in operating performance of 44 companies that undertook the IPO on the Italian stock exchange between 2012 and 2018. The companies' profitability has been analyzed using three performance indicators: the ROA, the EBITDA margin, and the asset turnover (AT) ratios. Moreover, on the line of what already presented by Kurshed et al. (2003), it has been introduced a distinction between Euronext Milan and Euronext Growth Milan, performing an analogous study on the two Italian markets separately. Considering the entire Italian market, findings show one indicator (AT) out of three that changed significantly. It reports a median decline of 17.4 percentage points once companies went public.

The unusual result is depicted by the 19 companies listed on Euronext Milan, which faced a significant post-IPO profitability improvement found in the EBITDA margin and asset turnover, equaled 2.1% and 3.6% respectively.

The finding of the study on Euronext Growth Milan is instead in line with the previous IPO literature. The 25 companies listed on it experienced a significant performance deterioration in all the ratios considered: ROA median change equals to 1.3%; EBITDA margin median decline amounts to 0.1%; and asset turnover median deterioration equals to 20.7%.

Afterward, some of the reasons that are often related to the profitability change in IPO literature have been selected and studied.

The first reason that try to explain the performance decline is known as "window dressing" or "timing the issue". The "window dressing" is the manipulation of accounting data by IPO companies to show themselves in a better light to the potential investors before the issue, while "timing the issue" refers to when managers make the IPO data coincide with superior performance obtained by the company which could be difficult to sustain in the long run. In either case, the year preceding the IPO exhibits better performance indicators compared to surrounding years. Cai & Wei (1997), Dritsakis et al. (2004), Pastusiak et al. (2016), among

others, studied this phenomenon. This investigation outlines that the year preceding IPO tend to show better ratios, concluding that such phenomenon mostly affects the Italian market.

The lack of opportunity theory could be another reason that explain companies' performance deterioration. Implementing the analysis on the line of what Jain & Kini (1994) submitted, no relation to sales and capital expenditures growth has been found.

Another popular explanation is associated to the agency theory argued by Jensen & Meckling (1976). The ownership structure change may lead to internal conflict, meaning agency costs arise. Several previous publications investigated if performance deterioration is associated with a owners and managers failure to maintain the same pre-IPO profitability level (see, e.g., Mikkelson et al. 1997, Kutsuna et al. 2002, Scribano 2015, among others).

Usually included in the same test model of the last explanation, two other possible predictors are often proposed: companies' age and size at IPO date. It has often been shown that at least one of these two factors is associated with IPO companies' performance (see, e.g., Pagano et al. 1998, Balatbat et al. 2004, Siev & Qadan 2021, among others), therefore they have been included in the study.

Considering the whole sample, a linear association has been found. Companies' performance is positively and significantly related to firms' ownership and size. Wherefore, larger enterprises in which the original owner maintains a greater number of corporate shares face a less severe performance deterioration.

As concerns Euronext Milan, no model could explain the improved performance reported by companies listed on it.

On the other hand, the ownership structure is the only worthy performance predictor, when performance is measured through asset turnover, for the analysis that sees Euronext Growth Milan as object of investigation. Even in this case, the positive relationship suggests that companies in which the original owners held more stakes face a lighter performance fall in the post-IPO period.

In conclusion, what emerges from the study is that performance deterioration is not so pronounced as in most previous IPO works. Companies performing IPO on the main Italian market report an average performance improvement, while IPO firms which targeted the secondary-tier market show a significant decline.

The examination of factors that can explain these results is intricate and still very jagged in the IPO literature. Certainly, the performance trend is a function of plenty of determinants, thus, it is not possible to surely affirm the unambiguousness of the results. Indeed, company dimension is figured out a significant determinant in the whole sample, but not in the single analyses.

This could be explained by the fact that on the main market, where listed companies are undoubtedly larger, an improvement in performance has been found, while, on SME dedicated market, companies underperform after IPO. Thus, larger companies succeed in increasing performance, or containing its decline, after the listing event. Moreover, evidence highlight the ownership central role in this research. Both “window dressing” or “timing the issue” and the number of stakes to held at IPO date, which are the variables that showed more influence in the results, are choices that mainly belong to owners.

Thanks to the structure of the study, which aims to highlight the differences between the two Italian markets, we can identify some details that would not have been brought to light if the Italian market had been studied as a single exchange.

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