BORSA ITALIANA

BIt NOTES

N. 15 - DECEMBER 2005

A comparative study of Initial Public Offerings in Italy and in the United Kingdom

Stefano Paleari
Enrico Pellizzoni
Silvio Vismara

The purpose of BIt Notes series is to diffuse the research realized by Borsa Italiana or presented in internal seminar on issues related to financial markets. Published articles represent the authors' view and are not expression of any Borsa Italiana orientation

Borsa Italiana Spa, Research & Development
Editorial Assistant: Silvana Maccari, Borsa Italiana Spa, Research & Development

A comparative study of Initial Public Offerings in Italy and in the United Kingdom

Stefano Paleari[a], Enrico Pellizzoni[b], Silvio Vismara[c]

December 2005

Abstract

Anglo-Saxon financial systems are very different from those of Continental Europe, where equity markets appear less developed in relation to the scale of the economy. In this perspective, the comparison between Italy and the UK provides one of the most striking contrasts. Although the economies of the two countries are similar in scale, the Italian equity market, managed by Borsa Italiana, is quite small compared to the London Stock Exchange. This paper identifies some of the determinants of the low propensity of Italian firms to go public by comparing the IPOs in Italy and in the UK, both on the Alternative Investment Market (AIM) and on the LSE Main Market. We consider both placings and public offers.

The first part of the study highlights the differences in relation to the offer methodologies (placing are definitely more frequent in the UK), the industrial composition of the sample of IPOs (that reflects the differences in the industrial structure of the economies) and the ownership structure at the IPO (most of the companies going public on the AIM offers only newly issued shares). The second part investigates the aftermarket, analysing the rate of delistings (more common in the UK, in particular due to takeovers) and the evolution of the main financial indicators, whose differences between markets are more limited. The level of profitability changes almost in the same way, with a reduction both in Italy and on the LSE. On the latter, firms use the IPO to rebalance their leverage, while it is used to gain access to additional debt in Italy and on the AIM.

Keywords: Initial Public Offerings (IPOs); ownership structure; delistings; operating performance.
JEL classifications: G32, L25, 016

(a) University of Bergamo, Department of Management and Information Technology; e-mail: stefano.paleari@unibg.it
(b) Borsa Italiana Spa, Research & Development; e-mail: enrico.pellizzoni@borsaitaliana.it
(c) University of Bergamo, Department of Management and Information Technology; e-mail: silvio.vismara@unibg.it
The authors thank Luca Filippa, Paola Fico and Fabrizio Plateroti (Borsa Italiana) for the useful comments and the suggestions on a preliminary version of this paper. The authors are the only responsibles for any possible error and/or inaccuracy.

Le Initial Public Offerings: un'analisi comparativa tra Italia e Regno Unito

Stefano Paleari[a], Enrico Pellizzoni[b], Silvio Vismara[c]

Dicembre 2005

Abstract

I sistemi finanziari del mondo anglosassone presentano profonde differenze rispetto all'Europa Continentale, dove i mercati azionari sono meno sviluppati rispetto alla dimensione del sistema economico. Il paragone tra Italia e Regno Unito rappresenta un caso emblematico. Anche se le due economie sono dimensionalmente simili, il mercato azionario italiano, gestito da Borsa Italiana, è di dimensioni ridotte rispetto al London Stock Exchange. Questo lavoro analizza alcune determinanti della bassa propensione verso la quotazione delle imprese italiane, paragonando le IPOs in Italia e nel Regno Unito, sia sull'Alternative Investment Market (AIM) sia sul mercato principale del London Stock Exchange (LSE). Sono state prese in considerazione le quotazioni successive sia a offerta pubblica sia a collocamenti privati (*placings*).

La prima parte dello studio evidenzia le differenze tra Italia e Regno Unito in relazione alle modalità di collocamento (evidenziando il maggior uso di *placings* nel Regno Unito), alla composizione settoriale delle IPOs (che riflette le differenze nella struttura industriale dei due Paesi) e alla loro struttura proprietaria (gran parte delle IPOs sull'AIM avviene solo con emissione di nuove azioni). La seconda parte analizza le differenze nei comportamenti successivi all'IPO, in termini di frequenza di *delistings* e comportamenti differenziali nelle performance operative. I *delistings* sono più frequenti nel Regno Unito (in particolare a seguito di acquisizioni), mentre le differenze nel cambiamento dei principali indicatori di bilancio sono limitate. I livelli di profittabilità si modificano in modo simile, con una riduzione per Italia e LSE. Sull'LSE le imprese utilizzano l'IPO per ribilanciare la struttura proprietaria, mentre in Italia e sull'AIM l'IPO sembra essere funzionale ad accedere a ulteriore capitale di debito.

Keywords: Initial Public Offerings (IPOs); struttura proprietaria; *delistings*; risultati operativi.
JEL *classifications*: G32, L25, 016

(a) Università di Bergamo, Dipartimento di Ingegneria Gestionale e dell'Informazione; e-mail: stefano.paleari@unibg.it
(b) Borsa Italiana Spa, Research & Development; e-mail: enrico.pellizzoni@borsaitaliana.it
(c) Università di Bergamo, Dipartimento di Ingegneria Gestionale e dell'Informazione; e-mail: silvio.vismara@unibg.it
Si ringraziano Luca Filippa, Paola Fico e Fabrizio Plateroti (Borsa Italiana) per gli utili commenti e i suggerimenti su una versione preliminare del testo. Gli autori restano gli unici responsabili di eventuali errori e/o imprecisioni.

1. Introduction

The important function of Initial Public Offerings (IPOs) in providing finance to companies and an exit route to the original entrepreneurs and investors would be reasons enough to justify research interest (Jenkinson and Ljungqvist, 2001). Some specific features add reasons for seeking a deep understanding of this issue in Italy. The distinguishing trait of the Italian industrial system is its dynamic network of small and medium enterprises, mainly active in traditional industries. A development of the equity market would largely benefit SMEs by providing resources for financing growth and consolidation. At the moment, however, the Italian stock market is quite small relative to the size of its economy and its composition lacks of micro and small companies. As far as economic and financial characteristics are concerned, more than one thousand companies could be listed on the Italian equity market (Franzosi and Pellizzoni, 2003). It is therefore of primary importance to investigate the reasons of the scarce propensity of these companies to go public. To this extent, the comparison of IPOs in Italy and in the UK offers insight into the question.

More generally, it is common knowledge that Anglo-Saxon financial systems are very different from those of the Continental Europe. Both the UK and the US have indeed a well developed equity market that fosters trading, monitors managerial activities, facilitates access to external financing and encourages corporate control activity. On the contrary, equity markets in Continental Europe appear less developed relative to the scale of their economy (Röell, 1996; La Porta et al., 1997). The comparison of Italy and the UK provides one of the most striking contrasts and provides evidence that might be extended to other European markets.

The London Stock Exchange is the largest equity market in Europe. Although Italy and the UK are quite similar in terms of magnitude of the economies (as measured by their GDPs), the size of equity markets is very different. The domestic market capitalization, as at the end of 2004, is almost three times higher in the UK. The "Italian anomaly" cannot be explained only by the well-known small size of Italian firms. For instance, an unbiased (although a bit rough) indicator of the willingness to list is derived by comparing the number of listed companies to the number of firms with at least 50 employees. This ratio is equal to 1.2% in Italy and in Germany, while it is 6.8% in the UK (Pellizzoni, 2002). In this perspective, Italy emphasizes what happens even in the rest of Continental Europe where this ratio is often higher (e.g. 2.6 in France, 2.2 in Spain and 1.8 in the Netherlands). Hence, the small number of companies listed in Italy cannot be exclusively due to the limited size of Italian companies, but also to a lower level in the "propensity" toward listing on the equity market.

On the top of these differences, we consider of great importance to investigate why companies decide to list. Since equity markets can serve for different goals, the ex post performance of the IPOs can shed light on the determinants of the decision to go public. Given the environmental differences between Italy and the UK, the study may suggest possible connections between firms' perception of the role of the equity market and its level of development. Obviously, this issue is very extensive and concerns historical

reasons and supply/demand side differences that are not directly part of this study. Indeed, the probability of a firm deciding to list can be explained by positive externalities from the existence of a well developed and liquid market (Pagano, 1993): the level of development of the equity market is for this reason "path dependent". In this sense, the tradition of London as a major financial marketplace is of course longer and more international than that of Milan. Moreover, historical differences in the evolution of the banking system and governance and transparency regulations surely influence the propensity to list. The low historical presence of Italian banks in merchant banking activities is also connected to the limited dimension of the equity market, even if the cause-effect relationship between the two aspects is not completely clear (Siciliano, 2003).

For what concerns governance rules and transparency, Italy did not develop a strong market for corporate control, for both political and economic reasons. Significant regulatory changes started in the Nineties with insider trading (1991) and takeover bids (1992) rules, the Consolidated Law of Finance and the privatization of Italian financial markets (1998), and stricter rules of corporate governance for listed companies (2000). Following the privatization of Borsa Italiana, the Italian equity market was aligned to international best practices by revising the Exchange rules, introducing new markets and segments to allow listing of high growth and small cap companies, increasing transparency of company information and amending the admission requirements in order to avoid the listing of non-operating companies with a pyramidal structure of control (the so called Chinese boxes). Nevertheless, long periods of time are necessary for the effects of these changes to be evident.

Other important differences exist between Italy and the UK. Italian taxation rules were historically more favourable to debt instruments than in other European countries. From 1997, tax reforms (DIT and super-DIT) aimed to reduce the differences in the marginal cost of equity and debt financing, but in 2003 these tax rules were abandoned. A "premium" for listing remained in 2004 in the form of a 3-year reduction of the corporate tax rate from 33% to 20% and a deduction of listing fees for tax purposes. Except for a small incentive for investments in small cap funds, no demand side incentives are present in Italy, while tax relieves are often mentioned as one of the main reason for the success of the AIM in the UK (LSE, 2004a) and for the development of small caps listings in France (Gandullia, 2004). In any case, Italian tax incentives were blocked by the European Commission in 2005, as they were considered discriminatory practices.

The importance of venture capital and private equity industries, that are deeply interconnected to the IPO market, is also very different in the two countries. Venture capital depends on the existence of a strong and vibrant IPO market as it provides VCs with an efficient exit mechanism, allowing them to redeploy their assets in other high growth private ventures that, in turn, eventually aim to go public (Jain and Kini, 2000). Even if the figures of the VC industry are generally much lower in Europe than in the US, the amount of new funds raised by VCs relative to the GDP is almost 8 times higher in the UK than in Italy. The yearly average between 1998 and 2000 was 0.405% in the UK against 0.054% in Italy (EVCA, 2002).

Strong differences rely as well in the development of the institutional investors

industry: 13.2% of the market capitalization in Italy is held by domestic institutional investors, against 50.8% in the UK (Filippa and Franzosi, 2001). While Italian retail investors' direct participation in equity markets has become an important phenomenon in the second half of the Nineties, their indirect participation via institutionals is still limited compared to Anglo-Saxon countries. This issue involves several aspects as taxation, organisation of asset management industry and its relation with the banking system. To this extent, Röell (1996) finds a negative relationship between the size of the equity market and the proportion of GDP devoted to public pensions. The minor extent of private pension funds in Italy is connected to the greater recourse to the public pension system, reducing funds available for the equity market. Moreover, in Italy there is a lack of institutional investors specialised in SMEs.

Differences in the number and kind of listed companies can also derive from different listing rules and from the availability of markets for different categories of issuers. In this sense, the main event of the last years was the launch of the Alternative Investment Market (AIM) by the London Stock Exchange, dedicated to small and growing companies. With this market, a fast and flexible listing process was offered to small firms through the creation of a specific intermediary, the Nominated Adviser, certifying the quality of the firm (and in part legally responsible toward the market). This market model and its flexible admission process guided the Italian Exchange to set up in December 2003 a new market for SMEs, called Mercato Expandi (even if significant differences exist between the two).

All these (and other) aspects contribute to the differences in size between equity markets. In this paper, we focus on the "demand of listing" or, in other words, on the propensity of firms to use publicly traded forms of equity finance. We believe that an interesting insight in this scenario is represented by the characteristics and behaviour of companies that recently went public in Italy and in the UK. The determinants of the decision to go public are inferred both from the ex ante features and from the ex post consequences of the decision to go public.

As far as pre-listing characteristics are concerned, we investigate offer methodologies, industry composition and other differences in terms of age, size, profitability and ownership at the IPO. At an industry level, the differences between the markets seem to be due both to some differences in the industrial structure of the two countries and to a scarce propensity to go public in some specific industries in Italy. As concerns ownership, the proportion of shares owned by substantial shareholders is typically higher in Italy than in the UK, while the level of change of ownership at the IPO is not different between companies going public in Italy and on the LSE Main Market. On the contrary, firms going public on the AIM are characterized by a high level of equity retention at the IPO. This evidence may be viewed as a sign of commitment of existing shareholders toward the company.

The core of the work is then centred on the period following the IPO, investigating the survival profile and the operating performance of the firms. We find that the survival profile is higher in Italy and lower on the seasoning market AIM. As concerns operating performance, the IPO has a deteriorating effect on the profitability of the companies on

the "traditional" markets (and especially in Italy). On the contrary, evidence of declining operating performance after the IPO is not found for companies going public on the AIM. The admission to this market is indeed seen as a major step in the growth process of the company. The existing shareholders of the firms going public on the AIM do not use the IPO as a divestment opportunity, but as an effective way for accessing further (debt and equity) capital.

The paper is organized as follows. The next section discusses the literature on the topic; section 3 compares the flotation process in the UK and in Italy. Section 4 characterizes the sample of IPOs in terms of size, industry, and ownership structure, while section 5 explains the methodology used for the analysis of the post-issue performance. The results are presented and discussed in section 6. Section 7 concludes.

2. Literature survey

The most important and more frequently cited reason to go public is to finance growth. Firms decide to go public to overcome financial constraints and to use proceedings of the IPO to improve their capital investments or to make acquisitions. Indeed, when internally generated cash flows are not sufficient to fund investments, public capital markets offer the opportunity to get "low cost" direct financing without the costly interposition of a financial intermediary such as a bank or a venture capitalist (Diamond, 1991; Holmström and Tirole, 1993). To this extent, the listing gives a company the opportunity to raise equity finance, both at the time of the Initial Public Offering (IPO) and through further capital-raisings (SEOs). Moreover, firms may view the IPO as the springboard for an internal growth strategy and for implementing valuable new investments. If this happens, capital expenditures are expected to grow after the listing (Jain and Kini, 1994).

At the moment of the issue of new shares, firms decrease their leverage as a consequence of equity capital inflow. Indeed, ceteris paribus, the higher the percentage of equity issued at the offering and the proportion of primary (newly issued) over secondary (on sale from existing shareholders) shares are, the more the leverage decreases. Hence, a drop in leverage for the year of the IPO is generally predicted. Anyway, the reduction of debt exposure may or not be permanent. To this extent, we formulate two hypotheses. First, the capital raised at flotation is used to rebalance firms' capital structure. Accordingly, the IPO should be associated with a permanent drop in leverage. Second, equity markets may as well be seen as a source of capital to which firms recur when other sources are not available or excessively expensive. From this point of view, the decrease of leverage at the IPO should not be permanent, as companies are able to access fresh debt on the base of a more solid financial position after the IPO. This hypothesis is coherent with the pecking order theory (Myers, 1984; Myers and Majluf, 1984). This theory, although not strongly supported by empirical evidence, may help explaining "some aspects of financing decisions" (Fama and French, 2004) such, for instance, that of going public.

Even though the literature predicts firms' growth in assets and investments after the IPO, this is not necessarily accompanied by an improvement in firms' profitability. On the contrary, the tendency of newly public companies is to underperform in the long run. Several theoretical explanations of this IPO anomaly have been proposed. Firms may time their IPO in order to take advantage of "windows of opportunity" (Loughran and Ritter, 1995). These are periods of market buoyancy during which companies have an incentive to issue new shares on the basis of an over valuation of other companies in their industry. Besides, firms may decide to go public when positive growth opportunities are available, thus inducing optimistic valuations. Managers may schedule the flotation to coincide with a period in which the company is performing well, reducing the cost of initial undervaluation and increasing the chances of success of the offer. If the market does not understand that earnings growth tends to revert to their natural mean, the IPO will be over valued and the firm will underperform in the aftermarket (Fama, 1998). In this

perspective, managers may even window-dress their accounting numbers to make the firms look better before public offering, so inducing optimistic valuations (Teoh et al., 1998). Given the relatively limited amount of information about the issuing firms prior to go public, IPO investors rely on information contained in the offering prospectus. This unusually high dependence on (accounting) disclosures, together with firm's desire to go public at the highest possible price, creates incentive to follow aggressive reporting policies (Dechow et al., 1996; Chaney and Lewis, 1998) or, at least, to be less concerned about hiding value from tax authorities (Pagano et al., 1998). Managers have therefore extraordinary incentives to make their firms shine before going public (DeGeorge and Zeckhauser, 1993). The IPO may also increase the agency problems by dispersing ownership and worsening the conflict between managers and shareholders. For instance, perquisite consumption may increase when managers share control with other shareholders.

For the long run underperformance, the focus of the empirical literature has almost always been on the stock price performance with a few exceptions. In the US, Jain and Kini (1994) and Mikkelson et al. (1997) first compare the level of companies' profitability prior and after the IPO. They document that the operating performance of newly listed companies get worse after going public. Similar findings are reported for Japan by Cai and Wei (1997) and Kutsuna et al. (2002), for the UK by Khurshed et al. (2003), for Australia by Balatbat et al. (2004) and for Italy by Pagano et al. (1998) and Franzosi and Pellizzoni (2005). Examining the Thai market, Kim et al. (2004) finds that not only the operating performance, but also the (unscaled) level of capital expenditures appear to decline after the IPO.

3. Going public in Italy and in the UK

When going for an IPO, firms are faced with a decision that has a fundamental impact on the result of the offer, that is how to fix the IPO price. In particular, along with the procedure based on bids (auctions), currently scarcely adopted in Europe, two methods emerge: fixed price offers and variable price offers with book building. Italy is one of the many countries that recently moved towards the use of bookbuilding in IPOs (Cornelli and Goldreich, 2001; Dalle Vedove, Giudici and Randone, 2005). From 1992 for large IPOs (coinciding with the first large privatization program) and from 1994 for almost all IPOs, investment banks are used to start gathering indications of interest from institutional investors, which are not binding orders at different price levels, usually falling inside a not binding price interval indicated by the bank. This collection helps the underwriter to determine the final offer price and a list of potential buyers. While these indications of interest are collected, a prospectus addressed to retail investors is published (subject to Authorities' approval), that specifies only (usually) the not binding price range. After communicating a maximum price for the offer (within 2 days before the beginning of the offer to the public), bids are solicited from retail investors and shares are finally assigned at the price that is fixed at the end of the process. In Italy, it is common to structure the IPO as a hybrid offering, with a private placement for institutional investors (with shares discretionally allocated by underwriters) and an open offer for retail investors.

Since all the markets managed by Borsa Italiana are EU regulated markets (under the definition of the European Directive 93/22/CEE), a prospectus complying the rules of CONSOB (the public Authority responsible for regulating the Italian securities market) must be produced. The prospectus must largely comment on the intended use of newly raised funds and provide detailed information on the firm, its subsidiaries and its controlling shareholders. When the admission to the market comes without a public offer, the prospectus obviously does not include information on it, but all the other required information (that constitutes the largest part of the document) remains unchanged. In any case, CONSOB is in charge to verify the comprehensiveness of the prospectus and the admission to trading of the company is subject to its approval of the document.

Moreover, the admission to listing is subject to a process of business due diligence approved by Borsa Italiana, that is in charge of this decision. An intermediary is selected as "sponsor" of the company and its function is to certify that the issuing firm complies with the listing requirements. Companies can apply for listing on the Mercato Telematico Azionario (MTA, the main market), the Nuovo Mercato (targeting high growth companies, renamed MTAX in September 2005) and the Mercato Expandi (dedicated to small and micro caps). Mid and small companies deciding to list on MTA and MTAX can also decide to apply for the high-requirement segment called STAR, if they respect certain financial indicators, by accepting to follow stricter rules for corporate governance and disclosure of corporate information. The Mercato Expandi, born in December 2003, represents a more flexible way for small companies to go

public, providing a simplified listing process (with limited business due diligence by Borsa Italiana) and a stronger support by the sponsor, here named "listing partner". The rules for the prospectus are the same for MTA, MTAX and Mercato Expandi.

A firm wishing to go public in the UK may choose to raise capital on the LSE Main Market (here following "LSE") or on the Alternative Investment Market ("AIM"). Other UK markets like Virt-X or OFEX had a limited success in attracting new companies. Companies on the LSE come from all sectors of business and their size varies widely. On the other hand, the AIM was launched in 1995 to meet the needs of small growing companies seeking a more flexible environment. Accordingly, the admission process is very different between the two markets (table 1).

Under Part VI of the Financial Markets and Securities Act 2000 ("FMSA 2000"), the Listing Authority (currently the UK Listing Authority, a division of the Financial Services Authority; the London Stock Exchange exercised this power up until 2000) has the power to admit securities to listing, including in the so called Official List all the securities fulfilling certain requirements, among which the admission to trading on a Recognised Investment Exchange ("RIE", as defined in the FMSA 2000; currently the LSE and Virt-X qualify as RIEs for equity securities).

The UKLA has a legal obligation to oversee the listing process, and to ensure that its rules are met. This duty requires the UKLA to review and approve the prospectus or listing particulars for any security admitted to listing (and so included in the Official List). Since the admission to listing requires a security also to be admitted to trading on a RIE (this power pertains to the Exchange itself), admission to listing and trading are jointly announced by the UKLA and the competent Exchange.

On the other hand, the AIM regulatory regime (since it is not a RIE) is less stringent than that on the LSE, allowing firms to experience life as a public company without the full disciplines of the UKLA rules.

On the AIM, neither the UKLA and the LSE are required to approve the prospectus when the listing is not preceded by a public offer of securities (in which cases UKLA approval is required, with limited exceptions, see note 3), relying on the company's Nominated Advisor to ensure compliance[1]. This opportunity, offered by the Public Offer of Securities 1995 ("POS 1995") and the FSMA 2000 regulations, would have been vanished with the introduction of the Prospectus Directive, requiring any issuer admitted to trading on a regulated market to produce an UKLA approved prospectus. To preserve this different regulatory regime (and degree of investor protection), the LSE was forced to change the status of the AIM from regulated market (which it had held since its launch in June 1995) to "Exchange regulated" market (a multilateral trading facility) on October 12, 2004. Due to this status, the majority of admissions and fundraisings on the AIM will fall outside the ambit of the Prospectus Directive[2]. Other important exclusions from the

(1) As compulsorily reported on the front page of the Admission Document of companies listing on the AIM: "The rules of AIM are less demanding that those of the Official List of the UK Listing Authority. It is emphasised that no application is being made for admission of these securities to the Official List of the UK Listing Authority. Further, the London Stock Exchange has not itself approved the contents of this document".

obligations of the new European Directives, aimed at increasing the transparency of European equity markets, will apply to the AIM. The transposition of the Market Abuse Directive was finalised in July 2005. Since the Directive applies only to regulated markets, the additional new obligations (such as insiders' lists) will not apply to AIM and the requirement for the disclosure of price sensitive information will continue to be under the control of the London stock Exchange. Only a domestic criminal insider dealing regime will continue to apply to the AIM. The Transparency Directive will come into force on January 20, 2007. It will requires companies listed on regulated markets to publish not only annual and half-yearly financial reports but also interim management statements and will introduce a series of requirements regarding the information that issuers must communicate to shareholders. AIM companies will not be subject to such provisions. The EU regulation on the application of the International Accounting Standards (IAS) will require companies admitted to trading on regulated markets to apply IAS/IFRS for consolidated financial statements starting from 2005. AIM companies currently have the option to report in UK or US GAAP or to use IAS. Following a public consultation, it has been decided that IAS will be compulsory for AIM companies, but this will be mandatory only for accounting periods starting on or after January 2007.

It is worthwhile considering that an hypothetical Italian unregulated market (AIM-like) could not in any case benefit from the lessening of regulation that apply to the AIM (in terms of market abuse regime, transparency obligations and IAS-compliant financial statements). In fact, pursuant to Italian law, all Italian issuers of financial instruments widely distributed among the public (such as issuers that have more than 200 shareholders, including issuers whose shares are traded on an alternative trading system) have to comply with several disclosure requirements and are subject to a market abuse regime, making the situation very close to that of a regulated market.

The admission to the AIM is indeed decided by the London Stock Exchange only. Under the AIM rules, all companies must produce an Admission Document making certain disclosures about matters like their directors' backgrounds, business activities, financial position and promoters.

(2) Quoting LSE (2004b): "The next two years will see the culmination of the Financial Services Action Plan - an initiative to modernize and harmonize financial regulation across the European Union. A number of the FSAP initiatives result in Directives that will apply to Regulated Markets within the EU - including AIM as it currently stands. These Directives would introduce a series of additional obligations on AIM companies. They would result in a more complicated market and regulatory structure that would impact the existing flexible regime specifically designed for small, growing companies. The Prospectus Directive is due to be implemented in the UK by 1 July 2005. It will require UK companies - and non-EU companies that have elected the UK as their home member state - to have their prospectuses approved by the Financial Services Authority (FSA). But by becoming 'exchange regulated', we will retain AIM's more flexible admissions process and the majority of AIM prospectuses will not need to be approved by the FSA".

The content of the Admission Document equals the EU prospectus required by the Prospectus Directive only when listing is preceded by a public offer of securities, while contains a narrower set of information in all the other situations[3]. Once admitted to the AIM, a company has certain ongoing disclosure requirements and needs to retain a Nominated Adviser (Nomad) at all times, taken from the register of such advisers published by the London Stock Exchange. The Nomad is responsible, among other duties, for warranting that a particular company is appropriate for the AIM. This is an important quality control and a responsibility upon the Nomad.

Up until June 2005, once a company had been on the AIM for two years, it had the opportunity to seek admission to the LSE by using a special expedited procedure[4]. For this reason, the AIM was meant to be a "seasoning" market. This opportunity is disappeared starting from July 1, 2005, due to the effects of the Prospectus Directive.

As far as the offer methods are concerned, for many reasons (and in particular for the regulatory differences just described) the UK is different from Italy and from the rest of Europe in that placings are very common. Placings are regarded in the UK as an IPO method, although they would be probably viewed as private placements elsewhere[5]. A placing is indeed a fixed-price offering in which an underwriter acquires shares directly from an issuer, and then sells the shares to institutional investors. Since the offer price is set at the initial announcement, the underwriting risk for a placing in the UK is greater than for a public offering. For instance, while in Italy the offer price is established after the initial announcement, in UK placings the offer price is set at the announcement and the underwriter is then responsible for the sale of shares to its clients.

Issuers access to funds, net of the underwriting spread, in a more rapid and safer way than in book-built offers. Italian underwriters can postpone or withdraw the offer, while UK underwriters are not allowed to do so. In a few words, UK underwriters face a greater potential penalty from mis-valuation, compared to what happens in Italy.

(3) The new Prospectus Directive exempts the company to issue an UKLA approved prospectus for offers to qualified investors, for all public offers under 100,000 euro (in 12 months; EU harmonised prospectus apply for offers over 2.5 million euro), to fewer than 100 legal persons in each member state (other than qualified investors) and for offers with total consideration per investor or denomination per unit over 50,000 euro. These exemptions are quite similar to those reported in the POS 1995 and the FSMA 2000 regulations. For situations where these exemptions apply, starting from July 1, 2005, the schema of the Admission Document for the AIM has been aligned with the Prospectus Directive but with certain carve outs (the so called AIM-PD prospectus), that definitely maintain the previous differences in disclosure between listings with and without public offer of securities and between admissions on regulated markets and multilateral trading facilities.

(4) These companies were able to transfer by way of an exempt listing document instead of a complete prospectus, submitted to the UKLA for review and approval.

(5) For example, quoting Jenkinson and Ljungqvist (2001) "[…] consider UK IPOs conducting via placings. This is one of the most popular methods for taking companies public in the UK, in particular for smaller IPOs. In many countries (although, interestingly not in the UK) such methods would be called private placements, as a key feature is that the issue is sold to a particular set of clients - rather than the public at large - of the investment bank conducting the IPO".

Table 1 - Listing and on going requirements in Italy and the UK (key aspects)

	Borsa Italiana (1)	LSE	AIM
Admission requirements			
Free Float	Minimum 25%	Minimum 25%	No minimum free float
Market cap	At least 40 ML euro	At least £ 700,000	No minimum market cap
Age	3 years tracking record normally required; at least 1 audited account	3 audited accounts normally required	No prior tracking record required
Autonomy	Ability to generate revenues in conditions of management autonomy	Ability to operate as an indipendent entity	Ability to operate as an indipendent entity
Sponsor	Appointment of a sponsor to assist the company in the listing process	Appointment of a sponsor to assist the company in the listing process	Appointment of a Nominated Adviser (Nomad)
Admission documents	Admission documents pre-vetted by the Italian Exchange	Admission documents pre-vetted by the UKLA and the LSE	Admission documents not pre-vetted by Exchange or UKLA, but by Nomad
Prospectus	The company must publish a prospectus which complies with the requirements of CONSOB	The company and its adviser must publish a prospectus which complies with the UKLA Listing Rules	AIM prospectuses do not need approval from the UKLA; certification role is in the hands of the Nomad
On going requirements			
Price sensitive information	Timely dissemination to CONSOB and Borsa Italiana, that distributes it to the public	Notify the market of any new price sensitive information through a Regulatory Info Service Provider	Notify the market of any new price sensitive information through a Regulatory Info Service Provider
Min. free float	No minimum free float	25%	No minimum free float
Financial statements	Produce quarterly reports (within 45 days, with some exc.), half-year reports (within 4 months) and independently audited full-year financial reports (within 6 months from the end of the accounting period)	Produce half-year reports (within 60 days) and independently audited full-year financial reports (within 6 months from the end of the accounting period)	Produce half-year reports (within 3 months) and independently audited full-year financial reports (within 6 months from the end of the accounting period)
Transactions of significant persons	To be communicated	To be communicated	To be communicated
Sponsor	No	No	Companies must retain a Nomad to ensure awareness of continuing obligations

(1) Requirements for the Main Market (MTA). Additional requirements apply for the STAR segment. The sample of Italian IPOs includes 6 firms that went public on the Nuovo Mercato at the end of 1999. The listing prerequisites of this market were different from the MTA in terms of pre-issue profitability, allowing young (only 1 year tracking record required; also start-ups in certain situations) and not yet profitable firms to be listed; lock-up agreements were requested to existing shareholders; IPO offerings were to be made for at least 50% from newly issued shares.

4. Pre-IPO and offer characteristics

4.1 Sample description

The sample is made of all the IPOs from 1995 to 1999 by domestic companies on Borsa Italiana's markets, the LSE and the AIM. According to literature practice and for the frequent use of placings in the UK, both listing following placings and public offers are considered in our definition of IPO. On the contrary, introductions[6] are not considered. Due to the different level of internationality on the UK and Italian equity markets, in order to make the comparison more effective, only domestic listings are considered. Our sample starts from 1995 because the AIM was launched in that year, allowing to a large number of SME to go public in the UK. The AIM constitutes unambiguously the most successful secondary market in Europe in term of new listings, brought forward as an example by many stock exchanges in Continental Europe (Aggarwal and Angel, 1999). In particular, it is mentioned as a reference point for the restructuring of the Mercato Ristretto into Mercato Expandi in Italy in 2003.

Moreover, 1995 was a particular year even for the Italian IPO market. Indeed, after the introduction in 1994 of tax relieves for firms going public (Legge Tremonti), the number of IPOs experienced a noticeable increase and the kind of companies seeking the IPO changed as well toward industrial and independent firms (Giudici and Paleari, 2003)[7].

During the sampling period, 621 UK companies went public through an IPO[8]. The LSE is responsible for the majority of these IPOs, 381 versus 240 for the AIM. Like previous studies, we exclude investment trusts and other financial companies (identified as belonging to FTSE economic group 80), thus our sample consists of 411 IPOs of UK companies. In this case, the predominance of the LSE is less remarkable and the number of IPOs is similar in the two markets, 216 on the LSE and 195 on the AIM. The overall sample coverage relative to the total number of domestic IPOs is indeed higher for the AIM (81.3%) than for the LSE (56.7%), due to the higher representativeness of the financial sector on the second. This is due to the preference for the traditional market of financial companies, investments trusts and banks.

During the same period, 75 domestic companies made an IPO in Italy. Excluding 9 IPOs by financial companies, the Italian sub-sample is made of 66 IPOs on the MTA and 6 on the Nuovo Mercato, a dedicated market for companies with high growth potential launched in the second semester of 1999 (now named MTAX). The sample coverage

(6) Introductions are listings of securities already dispersed among a sufficient number of investors, that for this reason do not need a public offer or a placing to create the necessary free float (i.e. spin-offs from other listed companies).

(7) Note that more companies listed in Italy in 1995 than in the previous 4 years combined, whilst in some countries the number of IPOs even decreased from 1994 to 1995.

(8) The list of UK IPOs was obtained from London Stock Exchange and KPMG New Issue Statistics. Care was taken to exclude introductions, readmissions, transfers, SEOs, dual listings and foreign companies. Readmissions and other possible inaccuracies were cross-checked using the LSPD file (London Share Price Database).

relative to the total number of IPOs is higher in Italy than in the UK (88.0% to 66.2%), mainly due to the scarce relevance of investment trusts and real estate companies in Italy.

Hence, the sample is made of 477 domestic operating and non financial companies that went public on the UK (411) and Italian (66) equity markets during the period 1995-1999. At an industry level, the primary evidence is that there is a great difference in the industry composition between Italian and UK IPOs, while the AIM and the LSE are quite similar in terms of industry structure (table 2)[9].

Table 2 - IPO sample, by industry

FTSE industrial sector (1)	AIM		LSE		UK		Italy (BIt)	
	No.	%	No.	%	No.	%	No.	%
Number of IPOs								
Resources	8	4.1%	9	4.2%	17	4.1%	2	3.0%
Basic Industries	6	3.1%	15	6.9%	21	5.1%	5	7.6%
General Industrials	11	5.6%	19	8.8%	30	7.3%	17	25.8%
Cyclical Consumer	9	4.6%	1	0.5%	10	2.4%	15	22.7%
Non-Cyclical Consumer Goods	11	5.6%	24	11.1%	35	8.5%	7	10.6%
Cyclical Services	104	53.3%	113	52.3%	217	52.8%	10	15.2%
Non-Cyclical Services	9	4.6%	12	5.6%	21	5.1%	-	-
Utilities	1	0.5%	1	0.5%	2	0.5%	5	7.6%
Information Technologies	36	18.5%	22	10.2%	58	14.1%	5	7.6%
Total	**195**	**100.0%**	**216**	**100.0%**	**411**	**100.0%**	**66**	**100.0%**
Market capitalisation at the IPO								
Resources	342	8.5%	7 697	13.1%	8 039	12.8%	22 815	24.6%
Basic Industries	48	1.2%	2 288	3.9%	2 336	3.7%	963	1.0%
General Industrials	252	6.3%	1 329	2.3%	1 581	2.5%	2 148	2.3%
Cyclical Consumer Goods	139	3.5%	20	0.0%	160	0.3%	2 492	2.7%
Non-Cyclical Consumer Goods	375	9.4%	7 790	13.3%	8 166	13.0%	1 013	1.1%
Cyclical Services	1 758	43.9%	18 995	32.4%	20 753	33.2%	6 381	6.9%
Non-Cyclical Services	176	4.4%	11 387	19.4%	11 562	18.5%	-	-
Utilities	16	0.4%	1 750	3.0%	1 767	2.8%	55 888	60.2%
Information Technologies	898	22.4%	7 333	12.5%	8 231	13.1%	1 168	1.3%
Total	**4 004**	**100.0%**	**58 589**	**100.0%**	**62 594**	**100.0%**	**92 868**	**100.0%**

(1) FTSE codes (1-digit FTSE Global Classification System) for each IPO are taken from the LSE for the UK sub-sample and from Datastream for the Italian sub-sample.

The majority of UK firms operates in services (57.9%, mainly cyclical services as retailers and support services and non-cyclical services as telecoms), while this industry is scarcely representative in the Italian sub-sample (with 10 cyclical services firms and no non-cyclical services firms). On the contrary, more traditional sectors as consumer goods and general industrials represent almost 60% of the Italian IPOs and only 20% in the UK. The IT industry (including computer services companies) is more represented in the UK than in the Italian sub-sample (14.1% vs 7.6%). The utilities industry is not representative in the UK (2 IPOs), while it includes more than 7% of the Italian sub-sample. This is largely due to the different stage in the privatization processes between Italy and the UK.

(9) The industry composition of the sample refers to the Financial Times Stock Exchange (FTSE) Global Classification System, that identifies ten macro-industries (at a 1-digit level) as reported in table 2. Table 2 excludes the sector "Financials" for the reasons explained in the text.

Indeed, while privatizations (or denationalizations) began in the UK in the early Eighties, in Italy the Nineties coincide with the first large privatization program. Last, resources industry is quite representative in the UK (4.1%) due to historical reasons: London is indeed a premier marketplace for the listing of mining companies (often based in the UK and operating abroad).

Although the highlighted differences in the industry structure of Italian and British IPOs can be due to differences between the two economies, a scarce propensity to go public is found particularly relevant in some industries in Italy. Indeed, not all the industries seem to be responsible for the small size of the Italian stock exchange. For instance, the utilities and the cyclical consumer goods (automobiles and textiles) do not show any weakness compared to the UK.

In general terms, industry differences seem to point both to a difference in the industrial structure between the two countries and to a scarce propensity to go public in some specific industries in Italy, in particular in the services sectors. Indeed, the cyclical services amount to almost half of the size of the economy in the UK and one third in Italy, but this macro-sector accounts for half of the IPO in the UK and only for 15% on the Italian stock exchange (table 3).

Table 3 - Industry structure of the Italian and UK economy (year 2002)

FTSE industrial sector Level 1	N° of firms (1)				Turnover (1)				Added value (1)			
	Ita		UK		Ita		UK		Ita		UK	
	All	>20	All	>20	All	>20	All	>20	All	>20	All	>20
- Resources	0.8%	0.8%	0.5%	0.7%	5.5%	6.5%	4.1%	4.7%	1.9%	2.5%	4.0%	4.9%
- Basic Industries	20.6%	29.1%	17.9%	21.2%	18.9%	18.1%	13.6%	13.0%	23.0%	20.9%	15.9%	14.5%
- General Industrials	2.3%	11.5%	2.5%	6.7%	7.0%	9.3%	4.7%	5.4%	8.7%	11.9%	5.5%	6.4%
- Cyclical Consumer Goods	7.7%	17.5%	6.3%	8.9%	13.9%	16.1%	10.0%	10.5%	10.2%	11.2%	6.6%	6.8%
- Non-Cyclical Consumer Goods	2.5%	4.7%	0.7%	3.8%	6.6%	8.9%	5.3%	6.5%	5.7%	7.6%	5.3%	6.8%
- Cyclical Services	58.4%	31.0%	58.5%	52.2%	35.8%	28.5%	49.8%	47.4%	37.8%	30.0%	49.4%	46.9%
- Non-Cyclical Services	5.3%	1.9%	4.8%	3.1%	7.4%	6.2%	7.1%	6.7%	6.5%	7.7%	5.5%	5.8%
- Utilities	0.1%	0.5%	0.0%	0.2%	2.9%	4.3%	2.4%	3.1%	3.1%	4.9%	2.6%	3.3%
- Information Technologies	2.4%	2.9%	8.8%	3.2%	1.9%	2.0%	3.1%	2.8%	3.1%	3.4%	5.3%	4.6%

(1) The columns ">20" refers to firms with more than 20 employees. Data are taken by Eurostat Structural Business Statistics and reaggregated on the basis of the following correspondence (only SIC-1.1 sectors from C to K are considered): Resources: codes 10, 11, 12, 13, 14, 23, 505; Basic Industries: codes 20, 21, 241-3, 246-7, 25, 26, 27, 28, 45; General Industrials: codes 291-6, 31, 32, 332-3, 351-3, 355, 366; Cyclical consumer goods: codes 17, 18, 19, 297, 335, 34, 354, 361-2, 501-4; Non cyclical consumer goods: codes 15, 16, 244-5, 331; Cyclical services: codes 22, 334, 363-5, 37, 511-2, 514-5, 518-9, 521, 524-7, 55, 60, 61, 62, 63, 641, 71, 73-4; Non cyclical services: codes 513, 522-3, 642; Utilities: codes 40, 41; Information technology: codes 30, 72.

4.2 Data sources

Our database is based on individual data from IPO prospectuses (or Admission Documents for the AIM) and annual reports. Most of the information about the offering, the past financial performance and the ownership were hand-collected from the offering prospectuses. Details of external interests (which amounted to at least 3% in the UK and 2% in Italy of issued share capital) are in fact required to be disclosed in prospectuses and annual reports[10]. In contrast to the case of external shareholders, members of the Board of Directors must disclose the total holdings of their shares, regardless of the size of their shareholdings. Hence in the case of directors' shareholdings, every ownership stake is disclosed. To identify venture capitalists among the shareholders reported in the prospectuses, we referred to venture capital and private equity associations (i.e. EVCA, BVCA, AIFI and NVCA) and to Ventureconomics by Thomson Financials. Besides prospectuses and annual reports, we were able to access to several accredited sources, especially for post-issue accounting data (for UK IPOs: Worldscope, Thomson Analytics and OSIRIS by Bureau van Dijk; for Italian IPOs: Centrale dei Bilanci). Monetary data are expressed in euro; the sterling-euro and lira-euro exchange rates are from Datastream[11]. Number and type of delistings are provided by the London Stock Exchange and Borsa Italiana. Since information on delisting causes was not complete, we got further information combining publicly available information, online data sources (like Reuters) and financial newspapers.

4.3 Descriptive statistics

When a company goes public through an IPO, it can decide whether to issue new securities for subscription or to place existing shares owned by shareholders (as well as to mix the two options). The capital raised from newly issued shares goes to the company, while secondary shares are offered by pre-IPO shareholders. There is therefore a relevant difference in the reasons leading to the decision to offer primary rather than secondary shares.

We find that the characteristics of the offer differ in the UK depending on the market (table 4). IPOs on the AIM are definitely different compared to those on the LSE, since all the offering variables are statistically different. Firms going public on the LSE

(10) In the UK, information on ownership interests is determined by the Companies Act 1985, Part VI. In particular, details of interests which amount to 3% or more of issued share capital are required to be disclosed in the prospectus (and annual report). The cut-off ownership level for mandatory disclosure is lower in Italy (2%). This disclosure obligation in Italy is maintained also after the IPO since listed companies must promptly notify ownership changes over/below certain thresholds to CONSOB (as stated in Art.120 of Legislative Decree n°58/98 - the Consolidated Law of Finance - and following Art. 117 of Consob Resolution n°11971/99. CONSOB publishes them daily on its website. According to LSE (art. 2300) and AIM Rules, a similar requirement exists in the UK, since market makers must notify the Exchange within 2 days any holding moving above 3% in the shares in which it makes a market. Only moves through 5% or any higher percentage point, upwards or downwards, are published via the Regulatory News Service, called RNS, for FTSE 250 companies (through 10% or any higher percentage point for companies not in FTSE 250).

(11) The exchange rates used for the offering variables are those at the day of the IPO for each firm, while accounting data refer to the exchange rates at the day of publication of the relative Annual Report.

have a higher market capitalization (IPOMV), raise more capital (OFFSIZE), offer a larger proportion of secondary shares (SECD), and place more capital relative to the size of their offer (EQUISSUE). On the contrary, IPOs on the LSE appear to be more similar to those in Italy. Italian IPOs show higher mean and median values of IPOMV and of OFFSIZE, while the percentage of equity issued at the offering (EQUISSUE) is slightly higher on the LSE (with no statistical significance). Finally, the ratio of secondary shares as a proportion of the total number of shares sold in the offering (SECD) appears to be higher in Italy. Indeed, compared to the LSE, in Italy a larger part of the capital raised at the IPO goes to existing shareholders. If we consider that the sale of secondary shares provides existing shareholders with a divestment opportunity, we can view this finding as an evidence of a difference concerning the reasons that induce firms to go public. Stock markets, in addition to providing the source for new capital, allow investors to divest their stakes when the firm is mature (Giudici and Paleari, 2002).

Even in terms of age and size, firms going public on the AIM appear to be different from those listing on the LSE: they are smaller (in terms total assets and net sales) and younger (years since incorporation to the IPO). In turn, firms going public on the LSE are generally smaller and younger than the Italian counterparts. As far as profitability is concerned, AIM firms are typically less profitable than the rest of the sample, while companies going public in Italy and on the LSE do not differ significantly. Finally, the pre-IPO level of debt ratio, defined as long and short term debt over total assets, is equal to almost two thirds and does not differ among the markets.

Table 4 - IPO sample: descriptive statistics for offer structure and financial indicators (1)

	Borsa Italiana	BIt vs LSE	LSE	LSE vs AIM	AIM	AIM vs BIt
Offer structure						
IPOMV (ML euro)	116.7	***	71.9	***	14.9	***
OFFSIZE (ML euro)	43.6	***	28.3	***	4.2	***
SECD (%)	37.92%	**	34.90%	***	0%	***
EQUISSUE (%)	36.02%		36.97%	***	28.71%	***
AGE (years)	28	**	11	***	7	***
Total Assets (ML euro)	79.44	***	21.47	***	3.86	***
Net Sales (ML euro)	88.68	***	28.18	***	4.82	***
Financial indicators						
ROA (%)	15.64%		16.72%	***	8.6%	***
CFROA (%)	3.98%		7.69%	***	0.23%	**
ROE (%)	13.03%		17.70%	**	10.72%	
ROS (%)	16.07%	***	10.27%	***	4.90%	***
CAPEX (%)	5.20%		7.58%	***	6.34%	
LEVERAGE (%)	63.77%	*	67.68%		66.09%	

(1) The table reports median values for the sample of 477 IPOs. Variables definitions are as follows: IPOMV is the market capitalization at the IPO price; OFFSIZE is the total offer size; SECD is the ratio of secondary shares as a proportion of the total number of shares placed in the offering; EQUISSUE is the percentage of equity placed at the offering; AGE is measured in years since incorporation to the IPO; ROA is EBITDA over total assets (all the accounting figures are relative to the last data published on the offering prospectus); CFROA is cash flow from operating activities over total assets; ROE is earnings over book value of equity; ROS is EBITDA over sales; CAPEX is capital expenditures over total assets; LEVERAGE is book value of short plus long term debt over total assets. All the monetary figures are in millions of euro; the sterling-euro exchange rates used for each IPO date are taken from Datastream. The significance level for the test on the difference in medians between markets is based on the Mann-Whitney U-test (statistical significance at 1% and 5%, and 10% as ***, ** and * respectively).

Table 5 - Characteristics of UK IPOs, by type of offer (1)

	N° of IPOs				IPOMV (aggregate)		OFFSIZE (aggregate)	
	AIM	LSE	UK	%	ML euro	%	ML euro	%
Placings	180	177	357	86.9%	34 418	55.0%	10 310	42.1%
Public Offers	-	5	5	1.2%	4 367	7.0%	3 052	12.4%
Offers for sale	-	2	2	0.5%	1 790	2.9%	972	4.0%
Open Offers	-	1	1	0.2%	3	0.0%	2	0.0%
Offers for Subscription	-	2	2	0.5%	2 575	4.1%	2 078	8.5%
Hybrid	15	18	33	8.0%	4 121	6.6%	2 145	8.8%
Placings & Offers for Sub.	12	5	17	4.1%	1 448	2.3%	891	3.6%
Placings & Open Offer	2	2	4	1.0%	109	0.2%	37	0.2%
Placings & Intermed. Offers	-	11	11	2.7%	2 483	4.0%	1 194	4.9%
Placings & Preferent. Offers	1	-	1	0.2%	80	0.1%	22	0.1%
International Offers	-	16	16	3.9%	19 687	31.5%	9 010	36.8%
Total	195	216	411	..	62 594	..	24 518	..

	IPOMV (ML euro)		OFFSIZE (ML euro)		SECD (%)		EQUISSUE (%)	
	mean	median	mean	median	mean	median	mean	median
Placings	96.4	28.8	28.9	9.1	24.9%	13.1%	35.4%	32.9%
Public Offers	873.5	529.2	610.4	442.9	47.6%	37.8%	63.3%	66.4%
Hybrid	124.9	65.8	65.0	15.7	14.4%	0.0%	41.7%	35.5%
International Offers	1 230.5	872.1	563.2	308.3	39.3%	46.4%	44.2%	38.5%
Non - placings	521.8	170.1	263.1	55.8	24.8%	1.2%	44.4%	36.3%
Test on the difference (t and z values)	3.701 ***	5.655 ***	3.381 ***	5.566 ***	-0.006	-0.487	2.574 **	2.119 **
Total	152.3	32.1	59.7	10.5	24.9%	12.2%	36.6%	33.3%

(1) As in Ljungqvist and Wilhelm (2002), IPOs are categorized in placings, public offers, hybrids, or international offers. "Non placings" include Public Offers, Hybrid and International Offers. For the definition of the variables refer to table 3. All the monetary figures are in millions of euro, the sterling-euro exchange rates used for each IPO date are taken from Datastream. We indicate two-sided statistical significance at 1% and 5% as *** and ** respectively. The significance level for the median is based on the Wilcoxon test (Mann-Whitney); for the mean it is based on t-statistics.

As concerns issuing methodologies, the primary difference is that it is definitely common to go public through placings in the UK (86.9% of the IPOs were pure placings, and 8.0% hybrids placing, as reported in table 5).

This methodology, rarely used in Italy and in the rest of Continental Europe, consists of a deal in which an underwriter commits to acquire the entire offering on the spot at a fixed price, and cannot subsequently withdraw or postpone the offering, nor alter the terms of the offering. The offering terms are definitive at the initial announcement since a placing is simultaneously priced and contracted. Therefore, underwriters can use only pre-announcement information to determine the method of flotation, the offering price and size, and other characteristics. As a result, issuing firms gain certainty of proceeds, likely at the expense of lower proceeds, while underwriters incur the risk of post-announcement adverse changes in share prices. Therefore, underwriters managing placings face a greater potential penalty from mis-valuing a firm than for a typical

bookbuilding IPO. Underwriter's reputation at establishing the optimal price and issue size are related to its ability to maintain channels from which it can gather relevant information. Clients expect access to placings at a favourable price, and will be reluctant to participate in the offering if they believe shares will be cheaper in the after market. Since the typical underwriter has considerable reputational and financial capital at risk, it is unlikely it will underwrite a placing unless it is confident the offering will be successful. Such differences in the role of underwriters between Italy and the UK point to two important implications: first, a placing provides a greater degree of certification than book built IPOs; second, the reputational effects and the level of risk born by the "architects" of the IPO is higher in UK placings than in the typical IPOs in Italy and the UK.

An AIM placing gives to the company the possibility to raise capital with lower costs. In particular, savings should be present as concerns prospectus costs, including not only printing but also external advice for its preparation, and, more importantly, on selling fees for the coordinators of the IPO, that manage the consortium of banks that are necessary to place the shares to the public. Moreover, underwriters of placings offer greater discretion to choose investors in the company (usually a selected group of institutional investors). On the other hand, the shareholder base involved in a placing is more limited and the obligation of disclosure of information from the company is narrower than in an a public offer, which can cause a low liquidity in the secondary market[12]. This should constitute a major problem for the life of a listed company, especially if the market is to be used to raise new capital.

It is somewhat surprising that, despite this major limitation, English small companies prefer this "cheap and fast" issuing method. It is in fact found to be particularly popular on the AIM, where 180 firms out of 195 adopted the placing, and the rest (15 firms) combined the placing with a public offer (table 5). No "pure" public offers took place on this market, and no IPO was marketed internationally. International offers are quite a recent phenomenon in the IPO scenario. In the last few years the major driving force in the capital markets has been a move towards globalization. The sharp increase in global offerings required banks to develop mechanisms to appeal to a wide range of investor preferences and abide by a similarly wide range of regulatory constraints (Ljungqvist and Wilhelm, 2002). Perhaps because of these constraints, international offerings did not occur on the AIM between 1995 and 1999, but only on the LSE (16 IPOs). Relatively to the sample of UK non-financial IPOs, international offers amount to

(12) As reported by the London Stock Exchange on its website: "A placing usually involves offering your company's shares to a selected base of institutional investors. This allows you to raise capital with lower costs and greater freedom and it gives your company more discretion to choose its investors. The result, however, is a narrower shareholder base and consequently there may be lower liquidity in the shares once your company has been admitted to the markets". An analysis of the liquidity of domestic company listed in the main European equity markets is reported in Demasi (2005). The data collected from Datastream underline that 26.0% of AIM listed companies did not registered trades for at least 50% of the days in 2004, and that the median turnover ratio - value of trades executed on the order book over market cap - is equal to 18.4%. For comparison, in Italy all the mid and small companies listed in the STAR segment registered trades for at least 95% of the days and the median turnover ratio was equal to 40.3%. The median turnover ratio of the other Italian mid and small companies was equal to 26.0%. These data clearly show a higher level of liquidity for Italian mid and small caps than for their UK counterparts on the AIM.

3.9%, but they raised 36.8% of the total capital. These offers seem indeed to be used by companies with a large market capitalization at the IPO (on average 1.2 euro billions).

On the other side, placings are preferred by small and medium companies seeking a relatively inexpensive route to the market. Although placings represent 86.9% of the UK sample of IPOs, they raise less than half of the total capital globally raised at the IPO (42.1%). In order to investigate the characteristics of the IPO via placings, we differentiate the latter from the other issuing methods (i.e. public offers, hybrids and international offers) grouped together in a non-placing category. We find that the market value at the IPO (IPOMV) and the size of the offer (OFFSIZE) are statistically lower in case of placings. The IPO market capitalization of "placing firms" is in median 28.8 euro millions, while it is 170.1 for "non-placing" firms. The capital offered at the IPO is in median 9.1 euro millions for placing IPOs, and 55.8 for non-placing. Furthermore, companies going public through placings raise less capital relative to their dimension (EQUISSUE). Nevertheless, no difference is found in the kind of offered shares (SECD): the choice between primary and secondary shares does not depend on the issuing methodology.

4.4 Ownership structure at the IPO

In table 6, the ownership structure is investigated referring to the percentage of shares held before (PRE) and after the IPO (POST), and to the changes in shareholdings at the IPO (CHANGE is the change in ownership at the IPO relative to pre-IPO stakes). Such variables are investigated for the following categories of shareholders: substantial shareholders, directors and venture capitalists. At a first glance, all the typologies of investors decrease their level of ownership at the moment of the IPO. This is a consequence of two aspects: the offer of secondary shares (SECD) and the dilution effect of the issue of new shares (EQUISSUE).

Table 6 - IPO sample: descriptive statistics for ownership structure (1)

		Borsa Italiana	BIt vs LSE	LSE	LSE vs AIM	AIM	AIM vs BIt
Substantial shareholders	PRE	96.28%	***	75.32%	*	81.83%	***
	POST	57.97%	***	45.37%	***	56.63%	
	CHANGE	31.98%		33.92%	***	27.38%	***
BOARD	PRE	57.57%		31.08%	***	58.65%	
	POST	40.56%		21.32%	***	40.36%	
	CHANGE	24.52%	*	29.24%	*	25.69%	
VC	PRE	26.73%		31.86%		29.72%	
	POST	9.79%		15.93%		19.67%	
	CHANGE	59.31%		41.01%	***	25.93%	***

(1) The table reports median values for the sample of 477 IPOs. Substantial shareholders refers to the 4 major substantial shareholders together; the collective ownership stake of directors is identified as BOARD, while that of venture capitalists as VC. PRE indicates the proportion of shares owned before the IPO; POST indicates the same proportion immediately after the IPO; CHANGE is the change in shareholdings that occur at the IPO relative to the proportion of shares owned at the IPO (i.e. 1-POST/PRE). The median values of CHANGE result statistically positive for each market using a Wilcoxon signed-rank test. The significance level for the test on the difference in medians between markets is based on the Mann-Whitney U-test (statistical significance at 1% and 5%, and 10% as ***, ** and * respectively).

Before the IPO, firms are controlled by substantial stakeholders, that hold more than 50% of the shares. The percentage is particularly high in Italy (96.3%, statistically higher than in the UK) and quite similar on the AIM and the LSE (around 80%). After the IPO, substantial shareholders potentially loose the control of the firm only on the LSE. The proportion of post-IPO shares retained is indeed smaller on this market than that on the AIM and in Italy, and, in particular, it is less than 50%. On the contrary, both in Italy and on the AIM, the effective control is not on average lost with the IPO, as (respectively) 58.0% and 56.6% of the equity ownership remain with pre-IPO substantial shareholders. In Italy, the level of ownership change at the IPO is similar to that on the LSE (CHANGE slightly higher than 30%). However, as the pre-IPO levels of ownership were so high in Italy, this does not affect their control on the companies.

The change of ownership at the IPO is lower for the AIM than on the LSE and in Italy. To some extent, these findings are in line with those presented when comparing the characteristics of the offer along the markets. Firms going public on the LSE and in Italy were indeed found to have offered a larger proportion of secondary shares (SECD), and to have issued more capital relative to the size of their offer (EQUISSUE). Therefore, being smaller the sale of secondary shares (SECD) and the dilution of the capital (EQUISSUE) on the AIM than on the other markets, the level of equity retention by substantial shareholders is predictably higher. Obviously, even on the AIM the floatation of shares and the issue of new shares lead to a decrease in the level of control over the firms, but the IPOs are not generally used as a way to modify substantially the ownership structure and, eventually, to transfer control.

As concerns board ownership, we find that the boards of companies going public on the LSE on average hold fewer shares than those on the AIM, both before and after the IPO. However, board's behaviour at the IPO is not very different among the markets; we just find a slightly higher equity dilution on the LSE (CHANGE is almost 30% on this markets and 25% in Italy and on the AIM). Finally, venture capitalists almost halve their level of ownership at the IPO (passing from 30% to 15%) on the LSE. In this perspective, the IPO provides a first exit for venture investors. The AIM is different from both the LSE and Borsa Italiana as concerns VC behaviour. While CHANGE is around 60% on the LSE and 51% in Italy, it is around 25% on the AIM, indicating less willingness of VCs to divest thier positions with the IPO on the AIM.

5. Methodology

The effect of the IPO on the performance of the companies is evaluated following two methodologies. Using a panel data model, we investigate how the floatation influence the operating performance, the level of investment and the leverage of the companies going public. Then, a survival analysis is used to assess the longevity on the market of the newly public firms.

The structure of our data confers two dimensions upon the variables: they have both a cross-sectional unit of observation (the firm) and a temporal reference. Econometric estimates should therefore utilize both time series and cross section variation in the data. Indeed, the results of the Breusch-Pagan Lagrange Multiplier test clearly indicate that the traditional OLS regression is inappropriate. Thus, in a way similar to Pagano et al. (1998), we estimate the performance proxies before and after the IPO by panel analysis. For each proxy, we use the following specification:

$$y_{i,t} = \alpha + \sum_{j=0}^{3} \beta_j IPO_j + u_i + d_t + \varepsilon_{i,t}$$

Here subscript t is the calendar year between 1992 and 2002, subscript j is the event year between 0 and +3 relative to the year of the listing. The variable $y_{i,t}$ is the performance proxy for firm i in the calendar year t. The variable IPO_j is the dummy variable equal to one if the calendar year t happens to be the event year j and zero otherwise. The variables u_i and d_t are respectively a firm specific and a calendar year specific effect. The error term has two dimensions, one for the firm (i) and one for the time period (t). When the estimated parameter for the variable IPO_j is positive (negative), it means that the performance proxy improves (deteriorates) compared to that prior to the IPO. In other words, we employ a firm before the listing as a control for itself after the listing, by using a fixed effect model[13].

The question of survival becomes especially important following events that cause fundamental transformations within the companies. IPOs are one of the most important events of this kind. IPOs represent often a shift for several aspects of the firms (e.g. strategy, organization, structure, control process) and this shift can be destabilizing to the firm and threaten its survival. For the purposes of the survival analysis, our sample is divided in two categories based on the survivor or not-survivor nature of the firm at year t after the IPO[14]. Survivors are defined as firms that continue to operate independently as public corporations. On the contrary, firms that are delisted are classified as "failed". This classification of delisted company as failures is consistent with the literature (see, for

(13) The cross-section dimension of the panel is definitely large compared to the limited time series exposure (T=7 << N=477), pointing to an inconsistency with the random effect specification. Econometrically, the fixed effects specification is preferred to the random effects since the high values of Hausman Chi-Square indicated inconsistency with the random-effect models for each proxy used. For the estimation, we use OLS analysis with dummy variables and with firm specific and time specific (two-way) fixed effect. It can indeed be shown that the fixed effects model is equivalent to applying OLS regression to the data transformed by subtracting the firm specific means from the original data.

(14) For the survival profile of IPOs, time is considered for each firm relative to its IPO date.

instance, Hensler et al., 1997; Jain and Kini, 2000). However, we recognize that delistings are caused by a variety of reasons, thus they should be interpreted as a proxy for failure rather than actual failure (Espenlaub, 1999). According to our definition, even acquired firms are excluded from the survivor category. This hypothesis is related to our focus on firms that continue to operate as independent public companies, and is consistent with previous studies (Jain and Kini, 2000). At a second level, the "failed" category is divided in three sub-categories: acquired, requested delistings, and imposed delistings. The "requested delistings" class includes firms delisted upon their own request. The reason of this kind of delistings are various, for instance voluntary liquidation, voluntary agreement, in receivership, in administration, under scheme of restructuring, under scheme of arrangement. The "imposed delistings" class groups companies delisted following the suspension of the issuer imposed by the competent authority (the UKLA and the LSE in the UK and Borsa Italiana in Italy).

The survival profile of IPO issuers is analyzed by evaluating the survival and hazard functions estimated using the Kaplan-Meier method. The survival function indicates the likelihood that IPO firms will survive longer than a specified period of time, while the hazard function describes the conditional probability that an IPO issuer will fail in the future given that it has survived up to the current time. Analytically, the probability for being delisted within an interval *(0,t)* is given by the distribution function $F(t)=Pr(T<t)$ where T is a non-negative random variable representing the failure time of an individual from a homogenous population. In this study, $F(t)$ describes the duration of life on the equity market. The corresponding density function (derivation) is $f(t)=dF(t)/dt$. The complement of the distribution function $F(t)$ is called survivor function $S(t)=1-F(t)=Pr(T=t)$ and indicates the probability that the random variable T will equal or exceed the value t (i.e. staying on the stock market at t). Another particularly useful function for duration analysis is the hazard function, defined as the conditional probability for being delisted from the market within the interval $t+h$ given that the firm has been on the market at t. In other words, the hazard function specifies the instantaneous rate at which failures occur for items that are survived at time t.

$$\lambda(t) = \lim_{h \to 0^+} \frac{\Pr(t \le T < t+h \mid t \le T)}{h} = \frac{f(t)}{1-F(t)} = \frac{f(t)}{S(t)}$$

6. Results

6.1 Post-issue operating performance

For the reasons exposed in the literature review (windows of opportunity, earnings management and agency problems), we expect profitability to decline after the IPO. The empirical results of our analysis confirm the post-issue operating underperformance for firms going public in Italy as well as on the LSE. Indeed, the profitability (ROA) of Italian and LSE companies declines after the IPO and the effect steadily increases from year 0 to year +3 (table 7). For these markets, the drop in ROA seems therefore to be permanent. On the AIM, on the contrary, we find a slightly positive (significant at 10%) increase in ROA for the year 0, but no statistical significance thereafter.

Table 7 - Panel data model on the post-issue operating performance (1)

	Market	Year relative to the IPO				F-tests
	N° obs.	0	+1	+2	+3	p-values
ROA (%)	Borsa Italiana	-0.0356 ***	-0.0559 ***	-0.0700 ***	-0.0864 ***	0.000
	416	(0.0117)	(0.0171)	(0.0231)	(0.0297)	(0.108)
	LSE	-0.0148	-0.0454 **	-0.0608 **	-0.0855 **	0.008
	1 257	(0.0148)	(0.0223)	(0.0304)	(0.0399)	(0.000)
	AIM	0.0723 *	0.0389	0.0476	0.0875	0.014
	1 043	(0.0387)	(0.0603)	(0.0826)	(0.1065)	(0.036)
CFROA (%)	Borsa Italiana	-0.0053	-0.0308	-0.0270	-0.0426	0.216
	422	(0.0219)	(0.0307)	(0.0403)	(0.0522)	(0.001)
	LSE	0.0060	0.0245	0.0625	0.0903 *	0.000
	1 273	(0.0223)	(0.0304)	(0.0408)	(0.0517)	(0.009)
	AIM	0.0401	0.0183	0.0846	0.1489	0.028
	1 037	(0.0429)	(0.0637)	(0.0853)	(0.1093)	(0.000)
ROS (%)	Borsa Italiana	-0.0245 *	-0.0473 **	-0.0528 *	-0.0630 *	0.001
	415	(0.0144)	(0.0221)	(0.0294)	(0.0377)	(0.000)
	LSE	-0.0530	-0.0948	-0.0934	-0.0063	0.671
	1 270	(0.0585)	(0.0836)	(0.1129)	(0.1356)	(0.000)
	AIM	-0.0254	-0.0664	-0.0410	0.0024	0.205
	1 044	(0.0799)	(0.1115)	(0.1542)	(0.1999)	(0.318)

(1) ROA is EBITDA over total assets; CFROA is cash flow from operating activities over total assets; ROS is EBITDA over sales. The number of observations for each regression is reported under the name of the market. We excluded outliers, defined as values falling outside the lowest and the highest 2.5% percentile (4% as lowest percentile for ROS on the AIM, due to the high number of negative observations). Heteroskedasticity robust standard errors are reported in parenthesis. We indicate statistical significance at 1%, 5%, and 10% as ***, **, and * respectively. The last column reports the p-values of F-tests of the hypothesis that (1) the coefficients of all the IPO dummies are equal to zero, and (2) the coefficients of the calendar year dummies are equal to zero (in brackets).

If the profitability is measured in terms of cash flow return on assets (CFROA), the post-issue decline is not as significant as with the analysis of return on assets. Instead, UK sub-samples show a slight (non significant) rise in cash flow profitability, with statistical significance for the LSE three years after the issue. Performance decline seems to be confirmed (even if not significantly) for Italy. We can interpret these findings from two perspectives. First, we have to acknowledge that the test statistics for cash flow measures are less powerful than those for the accrual-based measures (Barber and Lyon, 1996). Hence, a low statistical significance is to some extent connatural to cash flow measures. Second, theoretical explanations of the post-issue underperformance like the window dressing hypothesis do not apply to cash flows. Indeed, using a cash flow based measure of operating income overcomes the potential earnings manipulation problem associated with accrual-based measures. Since cash flows allow the identification of patterns that are masked by earnings manipulation, the absence of a fall in cash flow profitability (CFROA, together with evidence of underperformance of ROA) may be viewed as an empirical validation of the existence of window dressing before the IPO.

ROA and CFROA are all measure of profitability. The denominator of these ratios is a figure of the balance sheet and it is consequently directly affected by the IPO (as far as it is not made only of secondary shares). On the contrary, return on sales (ROS) is a measure of operating performance "strictu sensu" and it is not directly influenced by the issue of new shares. Moreover, ROS is less exposed to window dressing. Accordingly, we would expect this measure to change more slowly and more slightly than the previous ones. Consistently, we find a declining operating performance both in Italy and the UK, though the latter is not significant. Findings on ROS may be interpreted as a signal of adverse selection in the decision to go public. Indeed, being this ratio unaffected from the capital inflow at the IPO, the evidence of a deteriorating effect of the IPO may be a consequence of the asymmetric information between new and incumbent shareholders. The original shareholders possess a substantial informational advantage over new investors and knowingly decide to take their company public at the top of their performance. Results regarding ROS confirm this hypothesis for Italy and, partially, for the UK.

6.2 Investments and leverage

We find that the pattern of leverage around the IPO is different on the three markets (table 8). The post-issue decline in leverage is significant in Italy and on the LSE, but not on the AIM. On the LSE, the significance is permanent from year 0 to year +3, while in Italy the reduction of debt exposure does not seem to constitute a permanent drop, as the coefficient for year t+3 is not significant (even if the coefficient continues to be negative). On the AIM, surprisingly, the leverage does not drop and, on the contrary, it seems to increase (even not significantly) starting from 2 years after the issue. We argue that firms going public on the LSE rebalance their capital structure with the proceedings of the IPO. For these companies the post-issue drop in leverage is indeed permanent (first hypothesis).

On the contrary, in Italy firms tend to go public and then access to further debt capital[15]. The IPO de-leverages the companies, but the drop does not endure in the long-run (second hypothesis) as they access to further debt after the IPO. AIM firms push to the extreme these considerations: the IPO may be viewed as a way to improve their access to debt, a sort of fly-wheel for the growth of the company. If we recall that firms going public on the AIM were characterized by a high level of equity retention at the IPO, both by substantial shareholders and by venture capitalists, we may relate the findings relative to ownership changes and post-issue leverage. It may be argued that existing shareholders of companies going public on the AIM do not use the IPO as a divestment opportunity, but as a strong effective mean for financing growth and for access to further capital. The IPO seems to represent, even more than in Italy, a step in the growth process of the company.

Table 8 - Panel data model on investments and leverage (1)

	Market	Year relative to the IPO				F-tests
	N° obs.	0	+1	+2	+3	p-values
LEVERAGE	Borsa Italiana	-0.1302 ***	-0.1034 ***	-0.0688 *	-0.0703	0.000
	416	(0.0202)	(0.0277)	(0.0365)	(0.0463)	(0.000)
	LSE	-0.0967 ***	-0.1490 ***	-0.1181 **	-0.1064 *	0.000
	1 271	(0.0251)	(0.0365)	(0.0495)	(0.0623)	(0.002)
	AIM	-0.0749	-0.0171	0.1514	0.2699	0.000 **
	1 090	(0.0458)	(0.0673)	(0.0937)	(0.1198)	(0.000)
CAPEX (%)	Borsa Italiana	0.0090	-0.0115	-0.0254	-0.0567 **	0.000
	416	(0.0127)	(0.0174)	(0.0216)	(0.0270)	(0.000)
	LSE	-0.0149 *	-0.0185	-0.0357 **	-0.0389 *	0.093
	1 271	(0.0090)	(0.0132)	(0.0177)	(0.0229)	(0.000)
	AIM	0.0067	0.0243	0.0231	0.0382	0.003
	1 032	(0.0143)	(0.0220)	(0.0307)	(0.0398)	(0.067)

(1) LEVERAGE is book value of short plus long term debt over total assets; CAPEX is capital expenditures over total assets. The number of observations for each regression is reported in parenthesis under the name of the market. Heteroskedasticity robust standard errors are reported in parenthesis. We indicate statistical significance at 1%, 5%, and 10% as ***, **, and * respectively. The last column reports the p-values of F-tests of the hypothesis that (1) the coefficients of all the IPO dummies are equal to zero, and (2) the coefficients of the calendar year dummies are equal to zero (in brackets).

As for capital expenditures, the empirical findings do not support theoretical suggestions concerning capital expenditures. The capital expenditures relative to total assets do not vary during the first two years, but show negative coefficients and start decreasing respectively 2 and 3 years after the IPO on the LSE and in Italy[16]. These findings are consistent with those of Pagano et al. (1998) for a sample of firms going

(15) To this extent, Pagano et al (1998) found that independent firms deleveraged permanently. In general, it is worth to consider that the reported evidence could also have been favored by the low level of interest rates that characterized the period of analysis.

(16) We acknowledge that a more proper relative measure of capital expenditure should be scaled by property plant and equipment. However, we can at least conclude that, after the IPO, capital expenditures do not grow faster than total assets.

public in Italy during the period 1982-1992. On the contrary, Franzosi and Pellizzoni (2005) find evidence of an increase in capital expenditures over tangible plus intangible assets for IPOs in Italy between 1995 and 2001. Firms going public on the AIM do not register any significant variation, even if the coefficients are positive, differently from the other two markets.

6.3 Survival profile

Table 9 describes the survival profile of our IPOs, while figure 1 graphs the survival functions and the hazard curves for the three sub-samples. The survival function (hazard curve) for Italy is constantly above (below) those of the British markets. The survival function for the AIM is the steepest, falling to about 65% in 4 years time. In particular, during the first 4 years after the IPO (for which data were available for the whole sample), only 7 Italian companies were acquired (10.6% of the Italian sub-sample of IPOs) and no one was delisted for other reasons.

Table 9 - Survival profile of IPO-firms for Italy and the UK (1)

Year relative to the IPO	Complete sample (2)					Sub sample (2)				
	0	1	2	3	4	5	6	7	8	Total
Borsa Italiana										
Survivors	66	66	64	63	59	37	23	16	9	-
Takeovers		-	2	1	4	-	1	1	-	9
Requested delistings		-	-	-	-	-	-	-	-	-
Imposed delistings		-	-	-	-	-	-	-	-	-
Failed		-	2	1	4	-	1	1	-	9
% failed (cumul.)	..	-	3.0%	4.5%	10.6%	..	..	..	..	..
LSE										
Survivors	216	211	191	174	159	128	99	54	18	-
Takeovers		5	17	16	12	9	5	6	2	72
Requested delistings		-	3	-	2	3	6	2	-	16
Imposed delistings		-	-	1	1	2	1	1	1	7
Failed		5	20	17	15	14	12	9	3	95
% failed (cumul.)	..	2.3%	11.6%	19.4%	26.4%	..	..	..	..	..
AIM										
Survivors	195	183	169	151	127	99	73	39	3	-
Takeovers		11	7	8	16	6	1	3	-	52
Requested delistings		1	4	9	7	4	2	3	-	30
Imposed delistings		-	3	1	1	6	5	-	-	16
Failed		12	14	18	24	16	8	6	-	98
% failed (cumul.)	..	6.2%	13.3%	22.6%	34.9%	..	..	..	..	..

(1) The sample is divided in two categories based on the survivor or not-survivor nature of the firm at year t after the IPO. "Survivors" are defined as firms that continue to operate independently as public corporations. Firms that are delisted are classified as "failed" (accordingly, even acquired firms are excluded from the survivor category). At a second level, the "failed" category is divided in three sub-categories: takover, requested delistings, and imposed delistings. "Takovers" includes acquired companies; "requested delistings" includes firms delisted upon their own request; "imposed delistings" groups companies delisted following the suspension of the issuer imposed by the competent Authority.

(2) The IPO survival is tracked up to the end of 2003. As a consequence, data from year 0 to year +4 includes all the IPOs, while subsequent years (+5 to +8) refer only to a part of the sample of IPOs (for the year +8, only the IPOs in 1995 are considered).

The number of delistings up to year +4 amounts to 57 on the LSE (26.4%) and to 68 on the AIM (34.9%). If we pass from relative-time to calendar-time and analyze the firms surviving at the end of 2003, we find that 9 Italian companies (13.6%) were acquired and no other kind of delisting took place yet. The percentage of companies on the market at that time was noticeably inferior in the UK. The LSE registered 72 takeover (33.3%), 16 requested delisting (7.4%), and 7 imposed delisting (3.2%). Globally, 95 companies (44.0%) among the IPOs on the LSE were delisted at the end of 2003. Even more dynamic, the AIM had a greater number of delistings. In the period under study, 52 companies (26.7%) were acquired, 30 (15.4%) were delisted upon request of the company and 16 (8.2%) upon imposition from the market Authority. In addition, 20 companies (10.3%) moved from the AIM to the LSE. Globally, the majority of the AIM company (98 versus 97 still public, whatever on the AIM or transferred to the LSE) were delisted at the end of 2003.

In a few words, we find that delistings are definitely more common in the UK, in particular on the AIM. Such findings confirm the perception of the AIM as a seasoning market. Delistings are not necessarily associated with a poor performance or a low quality of the firm. On the contrary, most of them are due to takeovers, and may therefore represent a signal of market undervaluation rather than bad quality. In this perspective, a higher rate of delistings may be related to a more efficient market for corporate control. However, reality is much more complicated than what these considerations may suggest and the higher survival profile of Italian IPOs may be viewed as a consequence of several factors.

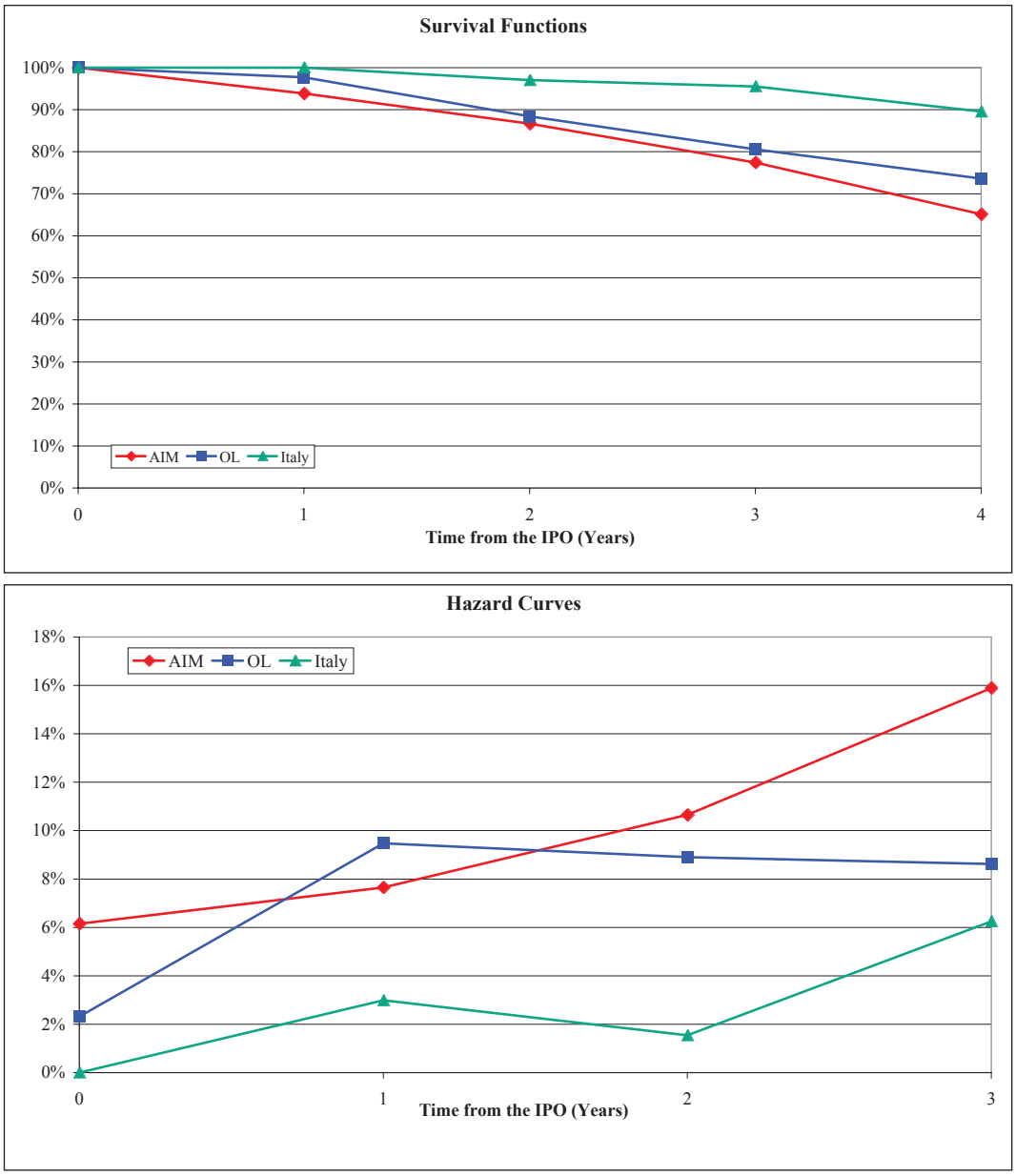
For instance, the nature of the companies that went public is probably less fragile in Italy where the admission process is more selective and the companies are typically bigger and older (table 4). In addition, existing shareholders of Italian companies usually do not lose the control of the firm at the IPO, contrary to what happens on the LSE (table 5). Last but not least, the difference in the rate of delisting between Italy and the UK must be considered also under the perspective of regulatory differences[17].

First, Authorities powers to delist are slightly higher in the UK, even if similar in the two countries. Both FSA and Borsa Italiana can delist in presence of conditions that preclude the smooth operation of the market, to protect investors or after a long period of suspension; nevertheless, the rules of Borsa Italiana state precisely the reasons that should be considered in the delisting decisions, while FSA Listing Rules contain only some example of such circumstances, explicitly stating that the decisions of the FSA "are not limited" to them. Second, delisting on request of the issuer is allowed by the FSA (in presence of a resolution of delisting from a majority of not less than 75% of the shareholders), while this is not possible in Italy (unless the company is listed in another EU Regulated market - art. 133 TUF). In Italy this aim can be reached only through a takover bid by controlling shareholders. The idea is that, by imposing an offer to purchase, minority shareholders of firms going private are to some extent more protected from "leaving all the money on the table", since they can at least recoup the residual value of

(17) See Title 2.5 of Borsa Italiana Rules and Point 5.2 of FSA Listing Rules.

the company. In this perspective, when the stock price performance of a company is poor but its economic value is not compromised, there could be a real incentive for controlling shareholders to make an offer for taking it private. On the contrary, when even the profitability is irremediably scarce, existing major shareholders may prefer not to take private the company. In this sense, the company is not delisted but it is left on the market. This situation allows at least some (even if probably minimum) level of liquidity and could eventually transform in a takover by new potential controlling shareholders, at the benefit of minorities.

Figure 1 - Survival functions and hazard curves (1)



(1) The survival function indicates the likelihood that IPO firms will survive longer than a specified period of time, while the hazard function describes the conditional probability that an IPO issuer will fail at year t, given that it has survived up to that time.

7 Conclusions

Anglo-Saxon financial systems are very different from those of Continental Europe, where the equity markets appear less developed relative to the scale of the economy. In this framework, the comparison of Italy and the UK provides one of the most striking contrasts. The small number of companies listed in Italy cannot be exclusively due to structural differences within the two economies as the limited size of Italian companies. The issue under investigation involves several aspects, spanning from historical reasons to differences in the "demand" of shares. However, an important piece of the jigsaw is in the "supply" of shares. Our comparison between the IPOs in Italy and the UK infers some of the determinants of the decision to go public by examining the ex ante characteristics of the IPO-firms and the ex post consequences of the decision to list. The ex ante analysis yield insights on three main issues: the industry composition, the ownership structure and the offering methodologies.

The industrial structure of British IPOs (as that of the entire equity market) is very different from Italy. For instance, the majority of UK IPOs in our sample (57.9%) are services firms, while these industries are scarcely representative in the Italian sub-sample (15.2%). In a few words, industry differences in the IPOs are certainly due to differences in the industrial structure of the two economies (think for example to the advanced tertiary or to the biotechnologies), and to traditional historical differences (for instance, London is the international market for diamonds and other minerals extractors). Nevertheless, it seems that a scarce propensity to go public is also undermining the development of the Italian equity market. There are indeed sectors where the companies listed in Italy are not representative, even though such sectors are more important for the Italian economy compared to the UK (for instance, the food industry or machinery).

Second, we find that in Italy and on the AIM, the issue of new shares at the IPO leads to a decrease in the level of control over the firms, but the listing is not generally used as a vehicle to transfer control. In particular, existing shareholders of firms going public on the AIM are found not to divest at the IPO. Such evidence may be interpreted as a signal of commitment toward the firm that is being listed for financing its growth.

Analysing the aftermarket, we find that delistings are definitely more common in the UK (especially and predictably on the AIM) than in Italy. However, the higher survival profile of Italian IPOs is not reflected in better operating performances. We analyze the operating performance in terms of return on assets, cash flow return on assets and return on sales. Generally, we find a significant post-issue underperformance on the Main Market of the LSE and, remarkably, in Italy. For these markets, the drop in profitability seems therefore to be permanent. On the AIM, on the contrary, we do not find any evidence of poor operating performance. A part from the operating performance, the IPO may (or should) have an effect even on other firm specific variables. For instance, if the companies go public to finance their (internal or external) growth, we would expect the post-IPO capital expenditures to increase. Accordingly, firms may decide to go public in order to overcome financial constraints and use the proceeding of the IPO to improve their capital investments. To this extent, the IPO may serve as a springboard for a strategy of internal growth and for implementing valuable new investments. If this happens, we expect capital

expenditures to naturally grow after the floatation. Unfortunately, empirical findings do not support theoretical suggestions. The capital expenditures do not vary during the first two years, but three years after the IPO they decrease in Italy and on the Main Market of the LSE. On the other hand, firms going public on the AIM do not register any significant variation as far as capital expenditures are concerned.

At the moment of the issue of new shares, firms decrease their leverage as a consequence of equity capital inflow. However, the reduction of debt exposure may or not be permanent. For instance, if the capital raised at flotation is used to rebalance the capital structure of the firm, the drop in leverage at the IPO will be permanent. Otherwise, the equity markets may as well be seen as a source of capital to which firms recur when other sources are not available or too expensive. In this perspective, going public provides the companies with means for gaining access to further debt capital and their leverage, after decreasing at the IPO, will recoup afterwards. Our findings point to a significant decline in leverage in Italy and on the Main Market of the LSE, but not on the AIM. The IPO does not appear indeed to have an immediate effect on the leverage of the companies on the AIM. On this market, surprisingly, the leverage increases three years after the issue. We argue that firms going public on the traditional main markets, especially on the LSE, tend to rebalance their capital structure with the proceeding of the IPO. Contrarily, existing shareholders of companies going public on the AIM use the IPO as an effective mean for financing growth and for access to further capital. The IPO would represent just a first step in a growth process. The certificating role of the underwriter is particularly beneficial to small companies such as those going public on the AIM.

Concerning issuing methodologies, the primary difference is that in the UK is definitely common to go "public" through a placing. With this methodology, practically not used in Continental Europe, underwriters face a greater potential penalty from mis-valuing a firm than for a bookbuilding IPO in Italy. Since the typical underwriter has considerable reputational and financial capital at risk, it is unlikely to underwrite a placing unless it is confident the offering will be successful. Such differences in the role of underwriters between Italy and the UK point to the implication that a placing in the UK provides a greater degree of certification of issuing firm value than book built Italian IPOs.

In any case, it is important to stress that the different use of placings comes both from differences in regulations and demand of shares in the two countries. In fact, even if also in Italy it is currently possible to list following a placing reserved to institutional investors (think for example to the recent case of Monti Ascensori on Mercato Expandi), the real opportunity to do that without an Authority approved prospectus (as on the AIM) would require the admission on an unregulated market (while the market managed by Borsa Italiana are regulated). More importantly, firm's propensity to list with a placing depends on the availability of a large and developed demand from professional investors willing to invest in poorly liquid shares traded on such an unregulated market, and of intermediaries supporting offers with a very limited size. This issue is worth to be further investigated.

References

Aggarwal, R. and J.J. Angel (1999), "The rise and fall of the Amex Emerging Company Marketplace", *Journal of Financial Economics*, 52, pp. 257-289

Balatbat, M.C.A., S.L. Taylor and T.S. Walter (2004), "Corporate governance, insider ownership and operating performance of Australian initial public offerings", *Accounting and Finance*, 44, pp. 299-328

Barber, B.M. and J. Lyon (1996), "Detecting abnormal operating performance: the empirical power and specification of test statistics", *Journal of Financial Economics*, 41, pp. 359-399

Cai, J. and C.J. Wei (1997), "The investment and operating performance of Japanese initial public offerings", *Pacific-Basin Finance Journal*, 5, pp. 389-417

Chaney, P.K. and C.M. Lewis (1998), "Income smoothing and underperformance in initial public offerings", *Journal of Corporate Finance*, 4, pp. 1-29

Cornelli, F. and D. Goldreich (2001), "Bookbuilding and strategic allocation", *Journal of Finance*, 56, pp. 2337-2369

Dalle Vedove, F., G. Giudici and P.A. Randone (2005), "L'evoluzione delle offerte pubbliche iniziali in Italia", *BItNotes*, 14, Borsa Italiana, www.borsaitaliana.it

Dechow, P.M., R.G. Sloan and A.P. Sweeney (1996), "Causes and consequences of earnings manipulation: an analysis of firms subject to enforcement actions by the SEC", *Contemporary Accounting Research*, 13, pp. 1-36

Degeorge, F. and R. Zeckhauser (1993), "The reverse LBO decision and firm performance: theory and evidence", *Journal of Finance*, 48, pp. 1323-1348

Demasi, M. (2005), "Confronto sulla liquidità dei principali mercati azionari europei", mimeo

Diamond, D.W. (1991), "Debt maturity structure and liquidity risk", *Quarterly Journal of economics*, 439, pp. 1027-1054

Espenlaub, S. (1999), "Discussion of the life cycle of Initial Public Offering firms", *Journal of Business Finance & Accounting*, 6, 1309-17

EVCA (2002), "Survey of the social and economic impact of Venture Capital in Europe", *Research Paper*, www.evca.com

Fama, E.F. (1998), "Market efficiency, long-term returns, and behavioral finance", *Journal of Financial Economics*, 49, pp. 283-306

Fama, E.F. and K. French (2004), "New lists: fundamentals and survival rates", *Journal of Financial Economics*, 73, pp. 229-269

Filippa, L. and A. Franzosi (2001), "Capitalizzazione di Borsa, settori istituzionali e portafoglio retail. Analisi dell'evoluzione recente", *BItNotes*, 2, Borsa Italiana, www.borsaitaliana.it

Franzosi, A. and E. Pellizzoni (2003), "La quotazione in Borsa: attitudine e comportamenti delle imprese italiane", *BItNotes*, 7, Borsa Italiana, www.borsaitaliana.it

Franzosi, A. and E. Pellizzoni (2005), "Gli effetti della quotazione: evidenza dalle mid & small caps italiane", *BItNotes*, 13, Borsa Italiana, www.borsaitaliana.it

Gandullia, L. (2004), "Tassazione e sviluppo del mercato dell'equity per le PMI", *BItNotes*, 10, Borsa Italiana, www.borsaitaliana.it

Giudici, G. and S. Paleari (2002), "R&D Financing and stock markets", in Calderini, M., P. Garrone and M. Sobrero (eds.), "Corporate governance, market structure and innovation", Edward Edgar Publishing, Cheltenham Glos., UK

Giudici, G. and S. Paleari (2003), "Should firms going public enjoy tax benefits? An analysis of the Italian experience in the 1990s", *European Financial Management*, 9, pp. 513-534

Hensler, D.A., R.C. Rutherford and T.M. Springer (1997), "The survival of Initial Public Offerings in the aftermarket", *Journal of Financial Research*, 20, pp. 93-110

Holmström, B. and J. Tirole (1993), "Market liquidity and performance monitoring", *Journal of Political Economy*, 101, pp. 678-709

Jain, B.A. and O. Kini (1994), "The post-issue operating performance of IPO firms", *Journal of Finance*, 49, pp. 1699-1726

Jain, B.A. and O. Kini (2000), "Does the presence of venture capitalists improve the survival profile of IPO firms?", *Journal of Business Finance and Accounting*, 27, pp. 1139-1176

Jenkinson, T. and A. Ljungqvist (2001), "Going public. The theory and evidence on how companies raise equity finance", Oxford University Press, Oxford, UK

Khurshed, A., S. Paleari and S. Vismara (2003), "The operating performance of Initial Public Offerings: the UK experience", working paper, University of Bergamo and Manchester Business School

Kim, K.A., P. Kitsabunnarat and J.R. Nofsinger (2004), "Ownership and operating performance in an emerging market: evidence from Thai IPO firms", *Journal of Corporate Finance*, 10, pp. 355-381

Kutsuna, K., H. Okamura and M. Cowling (2002), "Ownership structure pre- and post-IPO and the operating performance of JASDAQ companies", *Pacific-Basin Finance Journal*, 10, pp. 163-181

La Porta, R., F. Lopez-de-Silanes, A. Shleifer and R.W. Vishny (1997), "Legal determinants of external finance", *Journal of Finance*, 52, pp. 1131-1150

Ljungqvist, A. and W.J. Wilhelm (2002), "IPO allocations: discriminatory or discretionary?", *Journal of Financial Economics* 65, 167-201

Loughran, T. and J.R. Ritter (1995), "The new issues puzzle", *Journal of Finance*, 50, pp. 23-51

LSE - London Stock Exchange (2004a), "Annual Report 2004", London Stock Exchange, www.londonstockexchange.com

LSE - London Stock Exchange (2004b), "New status, same AIM", London Stock Exchange, www.londonstockexchange.com

Mikkelson, W.H., M.M. Partch and K. Shah (1997), "Ownership and operating performance of companies that go public", *Journal of Financial Economics*, 44, pp. 281-307

Myers, S.C. (1984), "The capital structure puzzle", *Journal of Finance*, 39, pp. 575-592

Myers, S.C. and N. Majluf (1984), "Corporate financing and investment decisions when firms have information that investors do not", *Journal of Financial Economics*, 13, pp. 187-221

Pagano, M. (1993), "The quotation of companies on the stock market: a coordination failure model", *European Economic Review*, 37, pp. 1101-1125

Pagano, M., A. Panetta and L. Zingales (1998), "Why do companies go public? An empirical analysis", *Journal of Finance*, 53, pp. 27-64

Pellizzoni, E. (2002) "Le potenzialità di crescita del numero di società quotate in Borsa", *BItNotes*, 6, Borsa Italiana, www.borsaitaliana.it

Röell, A. (1996), "The decision to go public: an overview", *European Economic Review*, 40, pp. 1071-1081

Siciliano, G. (2003), "Cento anni di Borsa in Italia", Il Mulino, Bologna, Italy

Teoh, S.H., I. Welch and T.J. Wong (1998), "Earnings management and the long-run market performance of initial public offerings", *Journal of Finance*, 53, pp. 1935-1974

Published papers

N. 1 "Il settore alimentare e la Borsa: opportunità e prospettive", A. Franzosi and E. Pellizzoni (October 2001)

N. 2 "Capitalizzazione di Borsa, settori istituzionali e portafoglio retail. Analisi dell'evoluzione recente", L. Filippa and A. Franzosi (November 2001)

N. 3 "Investitori retail e Borsa. Risultati di un'indagine presso i risparmiatori italiani", L. Filippa and A. Franzosi (November 2001)

N. 4 "Il settore delle macchine utensili in Italia: caratteri strutturali e potenzialità di sviluppo", A. Franzosi and E. Pellizzoni (October 2002)

N. 5 "Nuove quotazioni e clausole di lock-up", F. Bertoni, G. Giudici, P. A. Randone, C. Rochira and P. Zanoni (December 2002)

N. 6 "Le potenzialità di crescita del numero di società quotate in Borsa", E. Pellizzoni (December 2002)

N. 7 "La quotazione in Borsa: attitudini e comportamenti delle imprese italiane", A. Franzosi and E. Pellizzoni (February 2003)

N. 8 "Are euro area small caps an asset class? Evidence from mean-variance spanning tests", G. Petrella (May 2003)

N. 9 "Il settore legno-arredamento in Italia: evoluzione e rapporto con il mercato azionario", A. Franzosi, L. Negro and E. Pellizzoni (July 2003)

N. 10 "Tassazione e sviluppo del mercato dell'equity per le Pmi. Ruolo e disegno delle agevolazioni fiscali", L. Gandullia (February 2004)

N. 11 "Profili e comportamenti dei traders online. Primo rapporto sul mercato italiano" A. Franzosi and E. Pellizzoni (May 2004)

N. 12 "Investitori retail e Borsa. Secondo rapporto sullo shareholding in Italia" A. Franzosi, E. Grasso and E. Pellizzoni (November 2004)

N. 13 "The Evolution of Initial Public Offerings in Italy", F. Dalle Vedove, G. Giudici and P. A. Randone (April 2005)

N. 14 "Gli effetti della quotazione. Evidenza per le mid & small caps italiane", A. Franzosi and E. Pellizzoni (June 2005)

N. 15 "A comparative study of Initial Public Offerings in Italy and in the United Kingdom", S. Paleari, E. Pellizzoni and S. Vismara (December 2005)

Papers are freely available on our website:
www.borsaitaliana.it/en/markets/homepage/publications/bitnotes/

BORSA ITALIANA

Research & Development
Piazza degli Affari, 6 - 20123 - Milano
Tel (02) 72426.478 - Fax (02) 86464323
e-mail: research@borsaitaliana.it

www.borsaitaliana.it