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Silvia Rigamonti[a]
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Abstract

This article examines the evolution of ownership of cash flow rights and control of voting rights of firms that went public in Italy over the period 1985-2005. Italian firms use to go public with high levels of control. At the IPO, the ownership structure does not evolve towards a dispersed one. Even 10 years after the flotation, the initial ultimate shareholder retains the majority of voting rights. Though control is valuable, original owners do not systematically set up structures that dissociate cash flow from voting rights. Beginning with early '90s, the practice to create pyramidal structures or to issue non voting shares is greatly reduced. Family-controlled firms value control most and are less inclined to give up the majority of votes. When that happens, the control stake is sold to another blockholder on a friendly basis. Families that preserve majority control also re-enter the capital market via a seasoned equity offering with less frequency.

Keywords: Initial Public Offerings (IPOs), ultimate shareholder, ownership dynamics, ownership and control, pyramidal structures, dual-class shares
JEL Classification: G32

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Evoluzione della struttura proprietaria delle nuove quotazioni alla Borsa Italiana

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Abstract

L'articolo indaga l'evoluzione della struttura proprietaria delle società italiane che si sono quotate in Borsa a partire dal 1985 sino al 2005. Al momento dell'IPO, le società presentano strutture proprietarie altamente concentrate. Subito dopo la quotazione, l'azionista di maggioranza accetta una diluizione della propria partecipazione, tale comunque da non indebolire il controllo. Anche a distanza di anni dall'IPO, la maggioranza delle società continua ad essere saldamente controllata dall'azionista al vertice. L'azionariato delle nuove quotazioni raramente evolve verso assetti azionari poco concentrati; a ciò si associa una dinamica dei cambiamenti del controllo modesta, specie nelle società familiari, con trasferimenti del controllo prevalentemente di carattere amichevole. Inoltre le società in cui la famiglia tende a preservare nel tempo la maggioranza dei diritti di voto registrano una minor frequenza nel ricorso al mercato azionario attraverso successivi aumenti di capitale.

In questo contesto, l'azionista di maggioranza potrebbe avere interesse ad attuare strategie tese a garantire il controllo dell'impresa evitando di detenerne quote troppo rilevanti, attraverso la creazione di strutture piramidali o l'emissione di azioni prive del diritto di voto. Il lavoro analizza quindi la dinamica della separazione tra proprietà e controllo. L'evidenza segnala un'evoluzione nelle nuove quotazioni. Negli anni Ottanta una IPO su due è costituita da un *carve-out*, inoltre un certo numero di società ricorre all'emissione di azioni prive del diritto di voto. A partire dagli anni Novanta, cessa la creazione di strutture piramidali utilizzate al fine di dissociare *cash flow* e *voting rights*; ha termine altresì l'emissione di azioni prive del diritto di voto utilizzate per gli stessi fini. L'azionista al vertice, pur conservando la maggioranza dei diritti di voto non mira, né al momento dell'IPO né successivamente, a diluire l'investimento necessario a preservare il controllo.

Keywords: Initial Public Offerings (IPOs), azionista di maggioranza, proprietà e controllo, strutture piramidali, azioni prive del diritto di voto
JEL Classification: G32

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1. Introduction

Corporate ownership has been receiving growing attention by researchers. There is now substantial empirical evidence regarding the structure of corporate ownership around the world.

From a comparative perspective, La Porta, Lopez-de-Silanes and Shleifer (1999) were among the first to document that the Anglo-American model of widely held corporation is far from being widespread. Faccio and Lang (2002) report that in Continental Europe the ultimate shareholder controls on average more than 43% of voting rights and in Italy, France, Germany and Austria retains majority control. Concentrated ownership is also pervasive in East Asian Countries. Claessens, Djankov and Lang (2000) find that more than 2/3 of listed companies are controlled by a single large shareholder. Even in the US, Holderness, Kroszner and Sheehan (1999) show that blockholdings are not a rare phenomenon.

These papers share the view of looking at ownership structures of listed companies at a specific point in time, regardless of how such structures arise.

A significant change in the ownership structure is likely to occur when a company goes public. Undoubtedly the IPO represents a major event in the life of a company.

The question how ownership structure evolves is of special interest in Italy, where less firms are listed. The fear of losing control is ranked among the disadvantages of going public and may influence the propensity to list (Roell, 1996). So the original owners may be particularly concerned about the ownership structure.

When the original owners decide to go public, they make important decisions that impact on the ownership structure. By deciding what fraction of shares to sell, at which price and to whom, the original owners consider the effect that the going public decision will have not only on the post-IPO ownership structure, but also the implications for the following years.

This study intends to add evidence on the ownership patterns of firms that go public by analysing the changes in ownership that occur at the time of the IPO and in the following years. To this aim, I hand-collected data on firms that went public in Italy from 1985 up to 2005. The dataset contains information on the ownership structure right before the IPO, immediately after going public and up to 10 years after the flotation.

So far, scant evidence exists on the dynamics of ownership. Mikkelson, Partch and Shah (1997) document the dynamics of ownership and performance of companies that went public in the US. Goergen and Renneboog (2003) analyze the evolution of control of IPO firms in Germany and UK. Ehrahdt and Nowak (2003) focus on German family-owned firms; Changyun (2005), Hu and Goergen (2005) on Chinese companies.

A common approach of these studies is to examine the evolution of equity ownership of insiders, blockholders or new shareholders as a whole. I take a different view and analyze the ownership held by the ultimate shareholder. Specifically, I consider ownership of cash flow rights and control of voting rights held by the ultimate shareholder before the IPO and their dynamics after the flotation.

Existing literature reveals that not only does the concentration of shareholdings

differ among countries, but so does the discrepancy between ultimate ownership and control. In countries in which controlling shareholders are common, control is often maintained while retaining less than the majority of cash flow rights.

If the original owners value control, they may try to dilute the investment necessary to hold the majority of votes. In other terms, they may desire to separate cash flow from voting rights. This can be done by the use of pyramidal structures, cross-shareholdings or dual-class shares. Bebchuk (1999) states that the incentive to separate ownership from control may be severe in countries with poor investor protection and large private benefits of control.

It turns out that, when the protection of minority shareholders is weak and private benefits of control are high: i) the original owners, when taking the company public, retain the majority of votes; ii) the ownership structure does not evolve towards a dispersed one; iii) the controlling shareholders have an incentive to separate cash flow from voting rights at the IPO or in the following years.

In this respect, Italy represents an ideal setting to examine the evolution of ownership and control. The discrepancy between cash flow and voting rights is perceived to be substantial among Italian companies. Faccio and Lang (2002) report an average ratio of cash flow to voting rights of 0,743 for Italy, the lowest among Western European corporations after Switzerland. Italy is also ranked among the countries with the poorest investors' protection (La Porta et al., 1998) and the highest level of private benefits (Nenova, 2003; Dyck and Zingales, 2004). For example, Dyck and Zingales (2004) report an average control premium of 37% in Italy, the largest among industrialized countries, suggesting that private benefits account for a significant portion of firm value.

My findings show that the decision to go public is strongly affected by considerations of corporate control. Before the IPO initial ultimate owners control on average more than 70% of voting rights and when they take their company public do not lose control. Even ten years after the flotation initial owners still retain the majority of voting rights. Thus shareholdings are rather stable after the flotation, control is hardly contestable and transfers of control mainly occur on a friendly basis. Only 22% of IPO firms change control and most of them are companies controlled by a venture capitalist. Instead, families seem to value control most as they give up their majority stake with less frequency and when they preserve control in their hands, they also re-enter the capital market via a seasoned equity offering with less frequency.

Contrary to expectations, I also find that initial owners, though they value control, do not try to systematically separate cash flow from voting rights either at the IPO or in subsequent years. However the evidence varies across periods. Up to the late '80s, the IPO market is largely dominated by the flotation of business group-affiliated firms placed at the bottom of pyramidal groups controlled by historical families. State-owned companies and family firms also issue non voting shares at the IPO or in the following years. Beginning with early '90s such phenomenon comes to an end. IPO firms stop issuing non voting shares to dissociate cash flow from voting rights. The practice of listing carve-outs is also greatly reduced. Thus the evidence may reveal that the increased investors' protection has lowered the private benefits of control and thus the incentives to separate

cash flow from voting rights.

The rest of the paper is organized as follows. Section 2 depicts the determinants of the decision to go public and the implications on ownership structure. Section 3 outlines the link between private benefits and the incentive to separate ownership from control. Section 4 describes data and methodology. Section 5 provides descriptive statistics and shows the ownership right before the IPO. Section 6 explores the initial public offering and the evolution of ownership structure immediately after the flotation. Changes of control and the evolution of ownership and control in the years following the IPO are shown in Section 7. Section 8 examines the re-enter of capital markets by IPO firms and its impact on ownership structure. Section 9 concludes.

2. Determinants of IPOs and implications for ownership structure

It is commonly believed that going public is a natural step in the life cycle of the firm. The owner-manager may decide to take the company public in order to raise capital to finance future growth opportunities. However in some countries few companies are listed and even in most developed markets some large companies remain private. So the decision to go public is a complex process and requires to trade off benefits against costs.

Access to new finance is usually the major motive that induces owner-managers to go public. That may be particularly true for high-growth companies, that are often financially constrained since the entrepreneur may not have sufficient personal wealth to finance the business. Once public, firms can easily go back to the public markets to raise more cash.

Conversely, in highly-leveraged firms, the flotation may help rebalance the capital structure. Pagano, Panetta and Zingales (1998) document that the need to unlever the balance sheet has been the determinant of many IPOs that occurred in Italy in the late '80s.

As a by-product, flotation can help access debt capital on more favorable terms. Debt financing offers the bank a privileged source of information on the firm, allowing the intermediary to extract rent positions (Boot, 2000). By going public, the firm releases information to general investors, stimulates the competition among potential lenders, ensures lower cost of debt or larger supply of funds, mitigating potential credit crunch (Rajan, 1992). Pagano, Panetta and Zingales (1998) do document that Italian companies have experienced a reduction in the cost of bank credit after the IPO.

Another reason for listing is liquidity provided by the enlargement of investors' base. Listing on an organized exchange allows to trade shares at a value that reflects all available information. Hence diffuse ownership has the effect to lower the cost of capital of the firm and increase the equilibrium price for the shares offered[1]. Not only is secondary-market liquidity valuable to investors but also to original shareholders, who may desire to dispose additional shares after the IPO (Booth and Chua, 1996). Indeed the IPO offers existing shareholders the chance to diversify their wealth (Pagano, 1993).

Recent literature highlights the importance of ownership structure and control issues in the IPO. In modeling the IPO process, the sale of new shares is designed with the final ownership structure in mind. When taking the company public, original shareholders face the choice of what fraction of shares to sell, at which price and to whom to sell.

In allocating shares, issuing firm can favor small or large investors, according to the target ownership structure original shareholders desire. Small investors own a tiny fraction of shares outstanding. Their objective is to maximize the risk-return profile of their portfolio. They have no power to individually influence management's choices and have no incentive to monitor managers, since they suffer a free rider's problem. So small

(1) The liquidity hypothesis was first formalized by Amihud and Mendelson (1986), that derive asset returns as a concave and increasing function of the bid-ask spread; therefore asset prices include the present value of the expected trading costs (liquidity premium). Closely related is the notion that expected returns are reduced when more investors become aware of the firm's securities. The hypothesis finds its foundations in Merton's (1987) theory of equilibrium pricing with incomplete information. In Merton's words the rate of return depends on the "degree of investor recognition".

investors tend to remain passive investors. Conversely, large investors own a large stake of company's shares and have a greater incentive to play an active role in corporate decisions, since they partially internalize the benefits from their monitoring effort. So most investors will remain relatively small, while others will seek a large block of shares and are prepared to assume an active role in firm's management. Given the objective of the entrepreneur about control after the IPO, the issuing firm will tend to discriminate between large and small investors.

A strand of literature analyzes the impact of IPO on ownership structure conjecturing that original shareholders desire to sell out, relinquishing control. Another set of papers assumes that the owner-manager goes public with the objective to maintain control. In any case, the sale of shares is conceived as a revenue-maximizing strategy for original owners.

2.1 IPOs and loss of control

In Stoughton and Zechner (1998) the maximization of the proceeds from the sale of stocks is achieved by allocating shares to large investors. Institutional investors provide monitoring on managers' activity that raises firm value. In order to induce active investors to buy shares at the IPO, the issuing firm has to generate underpricing. Their prediction does not seem to be supported by empirical evidence. For example, Brennan and Franks (1997) show that original shareholders try to avoid the formation of blockholders at the IPO.

Stoughton and Zechner's (1998) model is consistent with the loss of control of original owners at the IPO. However the IPO can be a first stage in the sale of the company as argued by Zingales (1995) and Mello and Parsons (1998).

If the owner-manager wishes to sell his company, he can: i) directly sell the firm with a direct bargain with a potential buyer; ii) take the company public and liquidate his shares in the IPO; iii) take the company public, sell an initial stake to small shareholders, retain control and then sell the block of shares by directly bargaining with a potential buyer. Zingales (1995) and Mello and Parsons (1998) show that it is best to first sell cash flow rights to small investors in the IPO and then directly negotiate the controlling block, including private benefits, with a large investor. In doing so, the owner-manager maximizes the revenues raised in the aggregate sale of shares[2].

2.2 IPOs and retention of control

Brennan and Franks (1997), Pagano and Roell (1998) and Bebchuk (1999) each provide a model in which the initial owner values control in order to enjoy private benefits. So pre-IPO shareholders when taking the company public will design an

(2) The two models differ since in Mello and Parsons (1998) the seller obtains valuable information from the sale of shares to small investors that is useful in negotiating the terms of a sale to an active investor. Uncertainty about the value added by the active investor and uncertainty about the demand of small investors make the IPO an unavoidable step in the eventual sale of the company. While in Zingales (1995) the IPO stage may not even be optimal when the value of the cash flow rights under the management of a new large investor is less than the value under the initial owner.

ownership structure that preserves control in their hands.

In Brennan and Franks (1997), firm's management, to retain control, underprices new shares to create excess demand. Oversubscription allows the directors to achieve a more diffuse shareholding by allowing discrimination against large investors. The more dispersed ownership reduces the incentive for outside investors to monitor the management and avoid the possibility of a hostile takeover[3].

Pagano and Roell (1998) also consider the agency costs arising from the separation of ownership and control. The founder, when selling a minority stake in the IPO, will allocate shares to small shareholders in order to avoid the overmonitoring of large investors which may pose too tight constraints on his ability to enjoy private benefits.

Bebchuk (1999) argues that, when private benefits of control are large, the initial owner has no incentive to create dispersed shareholdings since a rival will show up trying to gain control by purchasing a majority of shares in order to enjoy private benefits. So an initial setting of a dispersed ownership structure will not be a stable equilibrium and will not be chosen to begin with. The founder will then keep a lock of control even if that imposes diversification and liquidity costs. The initial owner can lower these costs by separating cash flow from voting rights, through the use of pyramids, dual class shares or cross-shareholdings.

The argument that initial owners wish to retain control and then shape the firm governance accordingly is supported by some evidence also in the US. Field and Karpoff (2002) analyze 1019 IPOs of industrial firms and find that 53% of them adopt takeover defenses when they go public. Though such companies have a dispersed ownership after the IPO, contestability of control is significantly reduced and IPO management is insulated from the discipline of the market for corporate control.

(3) Brennan and Franks (1997) provide evidence that in a sample of 69 UK IPOs, underpricing is used to generate over-subscription and then discriminate against blockholders. Underpricing costs are borne by non-directors, who sell in the IPO. Directors retain their shares in the IPO, but tend to dispose of their shares in subsequent years. Evidence from the US supportive of Brennan and Franks view can be found in Smart and Zutter (2003). The authors analyze firms that go public with dual class shares (DCS). Initial owners use DCS to retain control. With no worry about control, the firm has no need to underprice according to Brennan and Franks theory. Smart and Zutter find that firms issuing shares with restricted voting rights in the IPO tend to be less underpriced than other IPOs and have larger shareholders.

3. Private benefits and conflicts of interests

Empirical literature indicates that, in a global context, concentrated ownership structures are more common than widely held corporations typical of US and UK. That posits a changing nature of the conflicts of interests between owners and controllers.

Starting with Jensen and Meckling (1976), it has long been recognized that agency problems potentially arise when the original owner sells a fraction of the firm to outsiders.

In the typical Anglo-American corporation, the conflict of interest involves management and dispersed shareholders[4]. The former has effective control over corporate decisions, while individual shareholders, who own a tiny fraction of firm's shares, are purely interested in maximizing the value of their stocks. They do not take an active role in the firm, since they have little or no incentive to expend significant resources to monitor managers or seek to influence decision-making within the firm. That leaves room for the management to pursue his own objectives, partially divergent from value maximization.

In a context of concentrated ownership, the controlling shareholder holds a significant portion of outstanding shares and generally takes an active role in running the company, by choosing the management and directly taking executive positions. That provides a greater alignment between management and controlling shareholders.

As a consequence, control is not contestable and transfers of blockholdings only occur on a friendly basis through a direct bargain with a potential acquirer. That creates some concern since it makes it hard to remove inefficient management. Controlling shareholder can easily become entrenched like managers of widely-held companies (Morck, Stangeland and Yeung, 2000).

In closely-held companies, ownership and control are fully coincident in the hands of controlling shareholder. That solves the agency problems of managerial firms. However, the conflict arises between controlling shareholder and minority shareholders, that provide equity capital but take no role in decision-making.

The controlling shareholder can exert a greater power on management to take decisions that maximize share value. These are the shared benefits of control enjoyed by all shareholders in proportion of shares held. However the controlling shareholder can use his control to consume private benefits, that is to extract corporate resources to his own exclusive advantage leading to a reduction in share value[5].

Empirical evidence reveals that the magnitude of private benefits vary substantially across countries (Nenova, 2003; Dyck and Zingales, 2004), and in some countries private

(4) For a comprehensive survey on corporate governance, see Denis (2001) for the US and Denis and Mc Connell (2003) for an international perspective.

(5) There is no unique definition of private benefits of control. They include perks consumption by top executives (Jensen and Meckling, 1976), managerial shirking, excessive compensation of top managers. According to Dyck and Zingales (2004), "the use of a company's money to pay for perquisites is the most visible but not the most important way in which corporate resources can be used to the sole (or main) advantage of the controlling party". A major source of private benefits are self-dealing transactions. Johnson et al. (2000) call "tunneling" the transfer of assets and profits from a company to his controlling shareholder. Private benefits also include "amenity potential" (Demsetz and Lehn, 1985) like social prestige, political connections, media ownership and consequent influence on public opinion (Djankov et al., 2001). It is worth noting that private benefits are not necessarily bad.

benefits can represent a significant portion of firm value. For example, Dyck and Zingales (2004) document that in Italy block premium is 37%, one of the highest values among developed countries (in France control premium equals 1.7%; in Germany 9.5%; while in the US and UK the value of control amounts respectively to 1.6% and 1.8%).

Though private benefits are not necessarily bad, blockholders can use their control to extract corporate resource expropriating the wealth of minority shareholders.

The consumption of private benefits can be detrimental for outside shareholders when (Belcredi and Caprio, 2004): i) outside investors cannot ex-ante anticipate the effect of private benefits' extraction and protect themselves by discounting the risk of expropriation into the price at which they are willing to hold company shares; ii) investor protection is weak and law enforcement of poor quality.

The assumption that large private benefits and expropriation of minority shareholders are correlated with a lax legal regime is pervasive in the literature (La Porta et al., 1997, 1998; Bebchuk, 1999) and finds some empirical support. Nenova (2003) and Dyck and Zingales (2004) find that weak investors protection is associated with higher private benefits of control.

3.1 Separating ownership and control in closely-held firms

To the extent that control is valuable, the blockholder has an incentive to hold voting rights in excess of cash flow rights. That can be achieved in three basic ways (Bebchuk, Kraakman and Triantis, 2000): issuing differential voting shares, creating pyramidal structure or using cross-shareholdings.

In a dual-class structure (DCS), the controlling shareholder retains shares with voting rights and issues shares with restricted voting (or non voting) rights to outside investors, thus deviating from the one share-one vote rule. So, for example, if a firm has 100 shares outstanding, of which 50 are non voting, the blockholder retains the majority of votes by holding 26 common shares. So cash flow rights are 26% and voting rights 52%.

In a pyramidal structure, a blockholder controls, for example, 51% of shares of firm A, which owns 51% of firm B, which owns 51% of firm C and so on. The blockholder at the top of the pyramid owns the majority of voting rights of all firms across the pyramid, with an increasingly small investment in each firm down the line. In firm B the shareholder owns 26% of cash flow rights (the product of ownership stakes along the line), while in firm C he owns 13.27% of cash flow rights.

Cross-holdings are intended that a company directly or indirectly controls its own stocks.

(5) There is no unique definition of private benefits of control. They include perks consumption by top executives (Jensen and Meckling, 1976), managerial shirking, excessive compensation of top managers. According to Dyck and Zingales (2004), "the use of a company's money to pay for perquisites is the most visible but not the most important way in which corporate resources can be used to the sole (or main) advantage of the controlling party". A major source of private benefits are self-dealing transactions. Johnson et al. (2000) call "tunneling" the transfer of assets and profits from a company to his controlling shareholder. Private benefits also include "amenity potential" (Demsetz and Lehn, 1985) like social prestige, political connections, media ownership and consequent influence on public opinion (Djankov et al., 2001). It is worth noting that private benefits are not necessarily bad.

Separation of ownership from control via DCS, pyramids or cross-holdings is widespread around the world. La Porta, Lopez-de-Silanes and Shleifer (1999) and Faccio and Lang (2002) report that the use of devices separating cash flow from voting rights is common across European countries, though the discrepancy is particularly severe in some, Italy included. Claessens, Djankov and Lang (2000) also find that in East Asian countries, voting rights frequently exceed cash flow rights via pyramids and cross-holdings. In the US, control in excess of cash flow rights is achieved through dual-class shares and dual-class firms represent a significant niche (Smart and Zutter, 2003).

Existing literature indicates that in Italy the high magnitude of private benefits and a lax legal regime make control valuable and provide incentives to controlling shareholders to separate ownership from control. Within this framework, the analysis of ownership structure of Italian IPOs and its evolution can help shed more light on this phenomenon.

It has to be noticed that several changes of the legal regime have taken place in Italy over the sample period analyzed in this paper. The main event is the passage in Italy of a corporate governance reform in 1998, also known as the Draghi reform. The reform established new rights granted to minority shareholders and enlarged the exercise of existing ones, introduced proxy fights, extended powers and duties of the board of auditors[6]. In 1999 Borsa Italiana issued the Code of Corporate Governance (further revised in 2003) aimed at fostering the proper functioning of the board of directors of listed companies (whose compliance is voluntary). Among other things, these reforms intended to strengthen minority shareholders' rights and thus limit the ability of controlling shareholders to extract private benefits. Indeed, Dyck and Zingales (2004) segment their data on Italy into those observations before and after July 1998 and find that before the reform the average value of private benefits was 47% , while after the reform it was reduced to 6% only.

(6) An analysis of the legal changes introduced by the 1998 reform can be find in Bianchi and Enriques (2001). A wider view on the evolution of the legal environment in Italy is taken by Ferrarini (2005) and Aganin and Volpin (2005). The two authors also evaluate the impact of the 1998 reform on the index of shareholder protection developed by La Porta et al. (1998) and find an improvement in shareholder protection from 1 (in 1994 as computed by La Porta et al.) to 5 (6 is the maximum value the index can take).

4. Data and methodology

The dataset includes all companies that for the first time went public in Italy from 1985 to 2005 via an initial public offering. I excluded foreign companies, companies already listed on another market, companies that are spin-offs of other listed companies[7]. Over the sample period, 251 companies went public in Italy.

I hand-collected information about the ownership structure at the initial public offering (i.e. names of shareholders and stakes held) from the IPO prospectuses. Data on the offering (number of shares issued, type of shares, new shares vs. existing shares) were collected from the prospectuses as well as from the website of Borsa Italiana. The ownership structure after the IPO and up to the following 10 years was hand-collected from "*Il taccuino dell'azionista*", an annual publication edited by Il Sole 24 Ore. For most recent years, ownership data are available on the website of Consob (the Italian Stock Exchange regulatory authority).

4.1 Ultimate shareholder holdings of shares and votes

My first aim is to establish who controls the firm going public. Consistent with recent literature (La Porta, Lopez-de-Silanes and Shleifer, 1999; Claessens, Djankov and Lang, 2000; Faccio and Lang, 2002; Claessens, Djankov, Fan and Lang, 2002), I identify the ultimate shareholder of the firm and measure ownership and control in terms of cash flow and voting rights.

In identifying the ultimate shareholder, I consider the mechanisms used to secure voting rights in excess of cash flow rights, that is non voting shares, pyramids[8] and cross-holdings. So the ultimate shareholder is the largest shareholder at the top of the control chain. I use information in the IPO prospectus as well as in the publication "*Il taccuino dell'azionista*" to trace the identity of the ultimate shareholder.

To measure voting rights, I consider direct and indirect stakes in the company, that is stakes usually held through an unlisted company[9]. With respect to previous literature, I improve on the identification of ultimate shareholders. For example, Faccio and Lang (2002), due to their large sample, have some limits in the identification of the ultimate shareholder because they fail to trace the owners of unlisted firms. I overcome this problem, since IPO prospectuses also report shareholders of unlisted firms which own stakes in the company going public. Based on information in the prospectus, I am also able to identify more carefully family members especially the spouse. Stakes held by family members are summed up and the family is considered the largest shareholder.

(7) I also excluded companies that went public on the Mercato Ristretto.

(8) Faccio and Lang (2002) distinguish between pyramids, that is when the ultimate owner controls a firm indirectly through another corporation that it does not wholly control, and multiple chains, that is when the ultimate shareholder controls a firm via a multitude of control chains. In this paper, I do not make such a distinction and consider pyramids all control structures where the ultimate shareholder holds shares in the firm through one or more intermediate entities.

(9) For example, pre-IPO, the shareholders of Tecnodiffusione are Panholding s.a., an unlisted firm, with a stake of 75% and Luciano Panichi with a stake of 22,54%. Since Panholding s.a. is entirely owned by Luciano Panichi, Luciano Panichi is the ultimate shareholder of Tecnodiffusione and controls 97,54% of voting rights.

A further issue attains the measurement of voting rights when the firm going public is part of a pyramidal group. In line with earlier studies, I consider the weakest link along the control chain. For example, if Mr. X owns 40% of firm A, which owns 50% of firm B that goes public, Mr. X (the ultimate shareholder) controls 40% of voting rights of firm B.

Cash flow rights are measured by the product of ownership stakes along the control chain. In the above example, Mr. X owns 20% of cash flow rights (40*50%). So firm B is characterized by separation of ownership from control, since Mr. X controls 40% of voting rights and has the right to 20% of cash flows. I measure the discrepancy between cash flow and voting rights by the ratio of cash flows (O) to voting rights (C), that is:

$$O/C = \frac{\%\ of\ cash\ flow\ rights}{\%\ of\ voting\ rights}$$

The ratio equals 1 when there is no separation between ownership and control. The lower the ratio the higher the discrepancy between cash flow and voting rights. For instance, a ratio of 0.75 indicates that the control of a voting right is secured by investing 75% of cash flows[10].

4.2 Type of ultimate shareholder

In related papers, firms are divided into those that are widely held and those that have a controlling shareholder. A widely held corporation is defined as a corporation that does not have any owner controlling a substantial block of shares. Usually 20% of voting shares is assumed to be sufficient to ensure control. So if no shareholder exceeds the given threshold, then the firm is said to be widely held (Claessens, Djankov and Lang, 2000; Faccio and Lang, 2002).

In this study, the aim is to identify the ultimate shareholder and the portion of voting rights he controls, without posing any threshold level. So I classify ultimate owners into the following types:

- *Family*: a family or an individual;
- *Financial intermediary*: a widely-held financial institution, a foundation or a cooperative;
- *Widely-held company*: a non financial firm whose largest shareholder does not hold more than 2% of voting rights;
- *Foreign company*: a foreign company for which I am unable to trace the control chain;
- *State*: a national government, local authority, or government agency;
- *Venture capitalist (VC)*: either a venture capital fund or a merchant bank acting as a private equity investor.

(10) The ratio O/C is used in previous studies (Claessens, Djankov and Lang, 2000; Faccio and Lang, 2002; Claessens, Djankov, Fan and Lang, 2002). The discrepancy between cash flow and voting rights can be measured also using the wedge, that is the difference between voting and cash flow rights (Barontini and Caprio, 2006; Villalonga and Amit, 2006). The two measures, under some circumstances, cannot give an unequivocal representation of the divergence between ownership and control. For example, if the ultimate shareholder of firm X owns 5% of voting rights and 1% of cash flow rights, the wedge is 4%, while the ratio O/C equals 20%. If the ultimate shareholder of firm Y owns 50% of voting rights and 10% of cash flow rights, O/C is still 20% but wedge is 40%. A greater difference than before. In my sample, using the O/C ratio or wedge does not lead to major differences in the results, since most companies are tightly held at the IPO, as will be shown below.

5. Descriptive statistics and ownership structure pre-IPO

5.1 Summary statistics

Over the period 1985-2005, 251 firms went public in Italy through an IPO. The IPOs had a pike in 1986 and in 2000, corresponding to the two most bullish years, as shown in Figure 1. IPOs in 1986 represent 13% of all new listings, while IPOs over the internet bubble period of 1999-2000 account for 27% of all sample firms.

Figure 1 - Italian IPOs distribution and MIB Index
The figure reports, for the sample period 1985-2005, the number of IPOs for each year and the MIB Index level (end year).

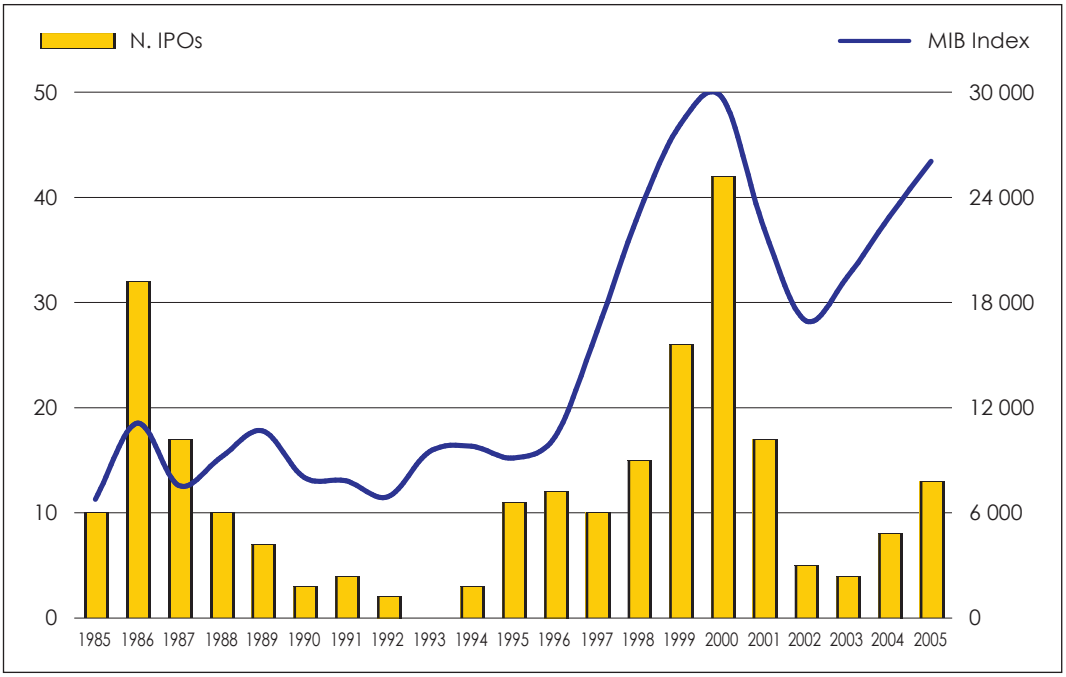

Table 1 reports some descriptive statistics. 13% of IPOs are financial firms, that is either banks or insurance companies or securities houses, while the remaining are non financial companies.

On average, the Italian IPOs were founded 36 years before going public. This figure is roughly in line with other continental markets. For instance, Holmén and Högfeldt (2004) report an average age of 33 years for firms that listed on the Swedish Stock Exchange over the period 1979-1997. Goergen and Renneboog (2003) of 49 years for firms that went public in Germany from 1981 to 1988. Conversely, Anglo-American firms choose the flotation at an earlier stage of their life. Field and Karpoff (2002) report an average age of 18 years for their sample of US IPOs from 1988 to 1992, while Goergen and Renneboog (2003) document that UK firms on average were founded 12 years prior to flotation.

Financial firms are older than non financial ones[11] (38 vs. 22 years in median) and larger in size. The significant discrepancy between mean and median size is partly attributable to the presence of privatized firms in the IPO sample.

In 1992, the Italian government started a massive privatization program of state-owned companies, reverting a long-time process that made the State pervasive in the economy also through the control of large profit-oriented companies. In this study, I define a privatization an IPO of a State-controlled firm with the declared intention to relinquish control. It differs from the flotation of other State-owned companies, where it is absent any declared intention to sell the company[12]. When privatizations are excluded, non financial firms have an average size of 385 million euro, though the median company is smaller (172 million euro). Goergen and Renneboog (2003) report an average size (measured by the market capitalization at the end of the first day of listing) of 166 million euro for German IPOs and 83 million euro for UK new listings, though they look at firms that went public over the 1981-1988 period.

Table 1 - Descriptive statistics

The table reports the number of IPOs, the age and the size of the firm at the IPO. Size is measured by the value of equity at the IPO, that is the product between shares outstanding immediately after the IPO and offer price. Figures are corrected for inflation and expressed in millions of 2005 euros. The sample consists of 251 companies that went public in Italy over the period 1985-2005. Financial firms are either banks or insurance companies or securities houses.

	Total sample	Financial	Non financial
N. of IPOs	251	33	218
Age			
Mean	36	83	29
Median	24	38	22
Size (eur m)			
Mean	877	1 231	823
Median	206	492	194
Size all except privatizations (eur m)			
Mean	436	796	385
Median	199	388	172

New listings over the sample period occurred in waves. Besides privatizations, I identify two other categories of IPOs (Table 2): equity carve-outs or business group-affiliated firms (or equity carve-out), and high-tech firms[13].

The first State-owned company to be privatized through a public offering is the bank Istituto Bancario S. Paolo di Torino in 1992. Most privatizations via an initial public offering occur in the period 1992-1995. Privatized firms are larger in size than other IPOs. For example, the median privatized company is 30 times larger than the median non-

(11) The high mean for financial firms largely depends on the presence of some old banks that were founded more than a century before going public. If such banks are excluded, the average (median) age of financial firms is 37 (29), not significantly divergent from non financial ones.

(12) Shares offered in privatizations represent 55% of all offerings in the sample. Privatizations also mark a change with the past for what concerns the flotation method. Up to 1992, all IPOs consisted in a fixed-price offering. Beginning with privatizations, Italian firms comply with the best practice and adopt a book-building method for their flotation (Dalle Vedove et al., 2005). So 1992 represents a cut-off year and further on I will distinguish between IPOs ante and post 1992.

(13) High-tech companies are identified according to the macro definition provided by Thomson Financial.

privatizated firm. 3 out of 8 privatizations are banks or insurance companies.

I define a business group-affiliated firm an IPO of a firm for which there exists another firm of the same group (usually the holding company) already listed. Clearly the flotation of subsidiaries is closely related to the diffusion of business groups in the Italian economy (Brioschi, Buzzacchi and Colombo, 1990; Barca et al., 1994; Aganin and Volpin, 2005). Surprisingly, the flotation of affiliated companies is a phenomenon that strongly characterizes the Italian stock market up to the early '90s. Over the period 1985-1992 one out of two IPOs is an equity carve-out, the incidence drops to a mere 8% from 1993 on.

High-tech companies account for 12% of all IPOs and represent a recent phenomenon as 27 out of 30 firms went public over the period 1998-2005. For a wider view, the table also reports the incidence of non financial independent firms, that include all non financial, non high-tech and non business group-affiliated firms. Up to the early '90s, due to the large proportion of carve-outs, non financial independent companies account for only 36% of new listings. The percentage is reversed from '93 on as they represent almost 2/3 of all IPOs.

Table 2 - The distribution of IPO categories over the period 1985-2005

The table presents the incidence over the sample period of four types of firms that went public: privatizations, equity carve-outs, high-tech companies and non financial (non high-tech) independent firms. In column 1 the number of IPOs for each category; in column 2 the size (as measured by the value of equity immediately after the IPO); in column 3 the percentage of IPOs for each category of companies with respect to all IPOs over the period 1985-92 (n. of obs. = 85); in column 4 the percentage of IPOs for each category of companies with respect to all IPOs over the period 1993-2005 (n. of obs. = 166).

	N. of IPOs	Size (eur m)		In % over IPOs in 85-92	In % over IPOs in 93-05
		Mean	Median		
Privatizations	8	14 255	5 849	1.2%	4.2%
Equity carve-outs	58	588	252	51.8%	8.4%
High-tech	30	235	200	3.5%	16.3%
Non financial independent firms	140	393	155	36.5%	65.7%

5.2 Ownership structure pre-IPO

At the IPO, the ultimate shareholder controls more than 70% of voting rights (both on average and median). Only in 24% of IPOs, the ultimate shareholder does not hold the majority of votes (Table 3).

Table 3 - Voting rights held by the ultimate shareholder ante-IPO

The table reports the distribution of voting rights (percentage) held by the ultimate shareholder at the IPO in 251 firms that went public in Italy over the period 1985-2005 (total sample), in the sub-sample of financial and non financial firms. Financial firms are either banks or insurance companies or securities houses.

	Total sample	Financial	Non financial
Mean	71.4%	70.5%	71.5%
Std. Dev.	26.2%	27.3%	26.1%
N. of Obs.	251	33	218
Percentile			
10%	33.2%	31.9%	33.8%
25%	50.0%	50.0%	50.0%
Median	77.1%	68.2%	77.5%
75%	99.3%	99.9%	99.1%

Table 4 compares categories of IPOs. In high-tech companies (Table 4, Panel A), control is less stringent than in "mature" firms and the difference on means is statistically significant. In the median high-tech firm, the ultimate shareholder does not retain the majority of votes even before the IPO, while in the other firms the controlling shareholder has secured almost 80% of voting rights.

Control is also less concentrated in business group-affiliated companies than in independent firms. The evidence is in line with expectations. Though in a subsidiary, the direct largest shareholder is usually another firm of the same group that may directly control even 100% of voting rights, group-affiliated firms are often along the control chain and the ultimate shareholder owns less than 100% of voting rights at the upper levels of pyramid. Since, by construction, I consider the weakest link in the control chain in order to measure voting rights, it turns out that carve-outs are less concentrated than business group-affiliated companies. Independent firms may also be part of a control chain (though no other firm of the same group is already listed), however: i) the control chain consists of few levels; ii) the ultimate shareholder has not diluted his stake in the upper levels[14]. So the portion of voting rights held by the ultimate shareholder is larger than carve-outs.

Table 4 - Category of IPO firms and voting rights held by the ultimate shareholder
The table reports in Panel A the distribution of voting rights (percentage) held by the ultimate shareholder before the IPO of high-tech firms vs. mature companies. In Panel B the distribution of voting rights (percentage) held by the ultimate shareholder of independent firms vs. business group-affiliated companies. A business group-affiliated company is a firm going public for which there is another company of the same group already listed.

	Mean	Median	Std. Dev.	t diff. on mean
Panel A				
High-tech	54.7%	45.8%	28.0%	-3.590***
All others	74.2%	79.7%	24.9%	
Panel B				
Independent firms	74.1%	79.9%	25.7%	2.960***
Business group-affiliated companies	62.1%	55.0%	28.5%	

***, **, * indicates statistical significance at 1%, 5% and 10% respectively

Table 5 analyzes the type of ultimate controlling owners. Consistent with expectations, families are the most important type and the State is the second one, testifying its non-negligible presence in the Italian economy before the '90s. 70% of firms are family controlled and in 15% the State is the ultimate shareholder. The State extended its arms especially over banks and insurance companies. 36% of financial firms are controlled by the State versus 12% of non financial companies[15].

(14) For instance, Snia Tecnopolimeri is a subsidiary of Fiat group, that got listed in 1986. Snia Tecnopolimeri is placed at the bottom of the control chain Ifi-Fiat-Snia BPD. Snia BPD has a direct stake in Snia Tecnopolimeri of 100%. The voting rights held by the Agnelli family (the ultimate shareholder) are: 100% in IFI, 40% in Fiat and 35% in Snia BPD. Considering the weakest link in the control chain, it turns out that Snia Tecnopolimeri is controlled at 35% by the Agnelli family. Reply is an independent firm that went public in 2000. At the IPO, the firm is controlled by Alister, Iceberg and Alika each with a direct stake of 42%, 15% and 21% respectively. Alister is controlled by Waterside Financial Limited at 99,9%, and this one is controlled by Marco Rizzante at 51%. Iceberg is fully owned by Marco Rizzante and Alika is controlled at 51% by Marco Rizzante. So Marco Rizzante is the ultimate shareholder of Reply and controls 78% of voting rights (42% through Alister, 15% through Iceberg and 21% through Alika).

(15) In terms of size as measured by the value of equity immediately after the IPO, the State controls 79% of banks and 65% of non financial firms (data not reported in the table).

Considering the historical underdevelopment of the Italian capital market and the crowding-out effect exercised by the State over decades in the allocation of capital and provision of financing, the presence as ultimate shareholder of a venture capitalist in almost 9% of non financial companies is a positive surprise. All companies (except one) whose largest shareholder is a venture capitalist went public in the last 10 years (that is from 1995 to 2005) and in such firms, the venture capitalist owns the majority of votes.

Table 5 - Type of ultimate shareholder and voting rights held ante-IPO

The table provides the frequency distribution of firms by type of ultimate shareholder and the percentage of voting rights held by each type of ultimate shareholder (on average and median) in the sample of firms that he controls. Family is a family or an individual. Financial intermediary is a widely-held financial institution, a foundation or a cooperative. Widely-held company is a non financial firm whose largest shareholder does not hold more than 2% of voting rights. Foreign company is a foreign company for which I am unable to trace the control chain. State includes national government, local authority or government agency. Venture capitalist (VC) is either a venture capital fund or a merchant bank acting as a private equity investor.

Type of ultimate shareholder	Frequency distribution			Voting rights held - Mean			Voting rights held - Median		
	Total sample	Financial	Non financial	Total sample	Financial	Non financial	Total sample	Financial	Non financial
Family	70.1%	33.3%	75.7%	69.3%	48.1%	70.7%	70.8%	50.0%	77.0%
Financial intermediary	3.2%	24.2%	-	66.3%	66.3%	-	67.8%	67.8%	-
Widely-held company	2.0%	3.0%	1.8%	77.3%	77.1%	77.4%	77.1%	77.1%	87.4%
Foreign company	1.6%	-	1.8%	82.2%	-	82.2%	82.5%	-	82.5%
State	15.1%	36.4%	11.9%	87.4%	93.6%	84.5%	100.0%	100.0%	100.0%
VC	8.0%	3.0%	8.7%	57.3%	67.8%	56.7%	58.8%	67.8%	58.0%
Total	100.0%	100.0%	100.0%						

Table 6 reveals that a venture capitalist as ultimate shareholder occurs in 1/5 of high-tech companies, where he controls less than 40% of voting rights. Hence the increase in venture-backed IPO is recent and mainly related to the flotation of high-tech companies. A trend that, though smaller in size, reduces the distance with other western countries. Controlling less than 50% of voting rights is not only a prerogative of venture capitalists. Also families being the ultimate shareholder of high-tech companies do not hold the majority of votes (in median).

Business group-affiliated firms are controlled either by a family or by the State. The difference in the voting rights held by the two types of ultimate shareholder depends on the pyramidal structure the subsidiary belongs to. Family-controlled carve-outs are often at the bottom of the control chain and the family has already diluted its control stake at the upper levels. When the business group-affiliated firm is owned by the State, the control chain is usually shorter and the State has not significantly reduced its stake at the upper levels.

In 77% of non financial (non high-tech) independent firms, the ultimate shareholder is a family, in 9% is the State, in another 9% is a venture capitalist. As previously mentioned, control in independent companies is more stringent than in high-tech firms and carve-outs. Even the venture capitalist holds on average 65% of voting rights.

Table 6 - Firm category, ultimate shareholder type and voting rights held ante-IPO

The table provides the frequency distribution for high-tech, business group-affiliated and non financial (non high-tech) independent firms by type of ultimate shareholder and the percentage of voting rights held by each type of ultimate shareholder (on average and median) in the sample of firms that he controls. Family is a family or an individual. Financial intermediary is a widely-held financial institution, a foundation or a cooperative. Widely-held company is a non financial firm whose largest shareholder does not hold more than 2% of voting rights. Foreign company is a foreign company for which I am unable to trace the control chain. State includes national government, local authority, or government agency. Venture capitalist (VC) is either a venture capital fund or a merchant bank acting as a private equity investor.

	Frequency distribution			Voting rights held - Mean			Voting rights held - Median		
Type of ultimate shareholder	High-tech	Business group affiliated	Non financial indep.	High-tech	Business group affiliated	Non financial indep.	High-tech	Business group affiliated	Non financial indep.
Family	73.3%	74.1%	77.1%	56.6%	54.5%	78.0%	45.8%	50.0%	82.8%
Financial intermediary	-	3.5%	-	-	76.8%	-	-	76.8%	-
Widely-held company	-	-	2.9%	-	-	77.4%	-	-	87.4%
Foreign company	3.3%	-	2.1%	63.8%	-	88.3%	63.8%	-	100.0%
State	3.3%	22.4%	8.6%	100.0%	85.3%	82.5%	100.0%	100.0%	99.2%
VC	20.0%	-	9.3%	38.8%	-	65.0%	35.6%	-	70.8%
Total	100.0%	100.0%	100.0%						

6. Initial public offering, ownership structure post-IPO, separation of cash flow from voting rights at the flotation

6.1 The initial public offering

Table 7, Panel A presents evidence on the behavior of firms in the IPO. 76% of firms use the IPO to raise new cash: 31% just issue new shares, while in 45% of companies, existing shareholders also sell all or part of their stakes. In the remaining 24% the flotation only consists in the offering of existing shares. The distribution varies across categories. By definition, in the majority of privatized companies, the company sells only existing shares. Also in 55% of carve-outs the offering is made up only of shares held by original owners. Conversely, a negligible fraction of high-tech firms go public by offering only existing share. Instead, 40% just issue only new shares. Also few non financial (non high-tech) independent companies undertake an IPO barely to allow original owners to sell their stocks. In 59% of cases, the offering is a combination of new and existing shares and 28% of independent companies use the IPO only to raise new cash.

Table 7 - The initial public offering: shares offered and capital raised

The table shows, in Panel A, the percentage of firms offering existing shares and/or new shares for 251 firms that went public in Italy over the period 1985-2005; for financial and non financial firms as well as for the sample of business group-affiliated firms, for privatizations, for high-tech companies and for non financial (non high-tech) independent firms. In Panel B, the capital raised in the IPO in percentage. The ratio shares offered/outstanding shares ante-IPO and post-IPO is computed for all new listings; the ratio new shares/outstanding shares ante-IPO is computed for all firms offering only new shares or existing and new shares; the ratio existing shares/shares offered measures - for all firms offering only existing shares or new and existing shares - the proportion of shares sold by existing shareholders.

	Total sample	Financial	Non financial	Business group affiliated	Privatizations	High-tech	Non financial indep.
Panel A - Shares offered							
Only new shares	31.1%	45.5%	28.9%	25.9%	12.5%	40.0%	28.6%
Only existing shares	23.9%	30.3%	22.9%	55.2%	75.0%	6.7%	12.9%
Existing and new shares	45.0%	24.2%	48.2%	19.0%	12.5%	53.3%	58.6%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Panel B - Capital raised							
Shares offered/outstanding shares ante-IPO							
Mean	38.4%	34.5%	39.0%	31.8%	35.0%	41.3%	41.2%
Median	34.3%	27.4%	35.0%	27.2%	37.2%	37.2%	37.4%
N. of Obs.	251	33	218	58	8	30	140
Shares offered/ outstanding shares post IPO							
Mean	30.5%	28.0%	30.9%	27.8%	33.1%	30.5%	32.0%
Median	28.0%	26.0%	28.3%	25.9%	34.2%	28.7%	29.4%
N. of Obs.	251	33	218	58	8	30	140
New shares/outstanding shares ante-IPO							
Mean	30.9%	29.4%	31.0%	27.0%	27.5%	34.8%	31.2%
Median	29.6%	25.0%	29.9%	26.1%	27.5%	30.4%	29.8%
N. of Obs.	191	23	168	26	2	28	122
Existing shares/shares offered							
Mean	58.0%	82.3%	58.0%	87.4%	90.6%	34.3%	50.6%
Median	52.2%	100.0%	52.2%	100.0%	100.0%	25.5%	43.4%
N. of Obs.	173	18	155	43	7	18	100

At the IPO firms sell minority stakes to outside shareholders (Table 7, Panel B). On average shares offered do not exceed 30% of all stocks outstanding after the IPO. However there are some differences across firms.

In business group-affiliated firms the IPO is mainly used by existing shareholders to sell part of their stakes. When considering all business group-affiliated firms issuing only existing shares or a mix of existing and new shares (74% of the sample), shares sold by existing shareholders account for 87% on average and 100% in median of all shares offered.

In high-tech companies such fraction reaches its lowest value and the IPO is used to raise new cash. Looking at high-tech companies that issue only new shares or a mix of new and existing shares (93% of the sample), new shares on average account for 35% of all shares outstanding post-IPO, the highest among all firms.

Similarly, non financial (non high-tech) independent firms undertake an IPO mainly to raise equity capital as new shares on average account for 31% of all shares outstanding ante-IPO and in the majority of such companies, existing shares represent 43% of all shares offered, significantly lower than business group-affiliated firms.

The behavior of ultimate shareholders also varies across types (Table 8).

Family-controlled firms do not have a unique strategy when going public. When the family lists a carve-out, the decision is driven by the desire to reduce the stake held: existing shares account for 89% of all shares offered and in 87% of cases is the family at the top of the pyramid that sells shares.

In independent family firms, the main motive behind the flotation is not the desire of the controlling family to diversify its holdings, but rather the need of new financing. Offerings that consists only in existing shares account for a mere 8% of all IPOs compared to 55% of family-controlled carve-outs. The ratio of existing shares over all shares offered drop to an average of 43% (34% in median). It is also evident that 55% of existing shares are sold by family members, but in the remaining 45% are shareholders other than the ultimate owner that cash in.

Table 8 - Type of ultimate shareholder of non financial firms and behavior in the IPO
The table shows the percentage of non financial firms offering existing shares and/or new shares, the capital raised in the IPO by type of ultimate shareholder. The ratio shares offered/outstanding shares ante-IPO and post-IPO is computed for all new listings; the ratio new shares/outstanding shares ante-IPO is computed for all firms offering only new shares or existing and new shares; the ratio existing shares/shares offered measures – for all firms offering only existing shares or new and existing shares – the proportion of shares sold by existing shareholders. Business group-affiliated family is an equity carve-out controlled by a family or an individual. Non business group-affiliated family is an independent firm controlled by a family or an individual. Widely-held company is a non financial firm whose largest shareholder does not hold more than 2% of voting rights. Foreign company is a foreign company for which I am unable to trace the control chain. State includes national government, local authority or government agency. Venture capitalist (VC) is either a venture capital fund or a merchant bank acting as a private equity investor.

	Family		Widely-held corporation	Foreign company	State	VC
	Bus. group-affiliated	Non bus. group-affiliated				
Only new shares	28.9%	33.9%	50.0%	50.0%	7.7%	10.5%
Only existing shares	55.3%	7.9%	0.0%	25.0%	65.4%	5.3%
Existing and new shares	15.8%	58.3%	50.0%	25.0%	26.9%	84.2%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Shares offered/outstanding shares ante-IPO						
Mean	32.6%	39.1%	55.1%	29.6%	32.8%	58.0%
Median	30.0%	35.0%	48.6%	29.4%	32.8%	58.6%
N. of Obs.	38	127	4	4	26	19
Shares offered/ outstanding shares post IPO						
Mean	28.2%	29.9%	36.4%	24.6%	30.4%	43.4%
Median	26.9%	28.1%	36.3%	24.5%	27.1%	48.0%
N. of Obs.	38	127	4	4	26	19
New shares/outstanding shares ante-IPO						
Mean	31.7%	31.2%	47.3%	27.0%	24.3%	35.0%
Median	33.8%	29.6%	41.9%	25.5%	25.0%	31.9%
N. of Obs.	17	117	4	3	6	18
Existing shares/shares offered						
Mean	88.8%	43.4%	37.1%	68.7%	80.4%	47.2%
Median	100.0%	34.5%	37.1%	68.7%	100.0%	41.1%
N. of Obs.	27	84	2	2	13	17
Existing shares sold by the ultimate shareholder						
Mean	86.9%	54.6%	100.0%	60.1%	92.3%	63.8%
Median	100.0%	51.4%	100.0%	60.1%	100.0%	70.8%

Somehow in line with expectations is the behavior of venture capitalists. 84% of the offerings in which the private equity investor is the ultimate shareholder consists of a mix of new and existing shares. Shares offered reach 58% of all stocks outstanding ante-IPO. The flotation is clearly used by venture capitalists as an exit option, though partial. Existing shares account for 47% of all shares offered and in 64% of cases (71% in median) shares are sold by the private equity investor. Not only do companies whose ultimate shareholder is a venture capitalist go public to allow the private equity investor a way out from its investment, but they also use the flotation to raise further financing (or to substitute private with public financing). New shares represent 35% of all shares outstanding ante-IPO.

6.2 Ownership structure immediately after the IPO

There is evidence that going public allows initial owners to sell shares in order to diversify their portfolios and to obtain cash either to finance future investments or to

rebalance the firm's capital structure. Both of these occur at the IPO. However, though reduced, the voting rights held by the ultimate shareholder after the IPO are still substantial. Such evidence is shown in Table 9. Post-IPO, the ultimate shareholder still retains the majority of votes and in 27% of firms the blockholder controls at least 2/3 of voting rights, a majority that gives the power to vote on non-current issues, like merger approval.

Companies whose ultimate shareholder retains less than 50% of voting rights represent 36% of the whole sample (compared to 24% pre-IPO). 50% of firms whose ultimate shareholder loses majority control in the IPO are controlled by a venture capitalist, 10% are equity carve-outs and 3% are privatizations.

Table 9 - Voting rights held by the ultimate shareholder post-IPO
The table reports the distribution (percentage) of voting rights held by the ultimate shareholder immediately after the IPO in 251 firms that went public in Italy over the period 1985-2005 (total sample), in the sub-sample of financial, non financial, high-tech and non financial (non high-tech) independent firms. Financial firms are either banks or insurance companies or securities houses.

	Total sample	Financial	Non financial	High-tech	Non financial independ.
Mean	52.8%	54.8%	52.5%	38.8%	55.0%
Std. Dev.	19.8%	23.7%	19.1%	20.5%	17.4%
N. of Obs.	251	33	218	30	140
Percentile					
10%	23.3%	23.5%	23.0%	16.4%	31.3%
25%	37.8%	35.0%	39.0%	22.0%	46.2%
Median	53.7%	54.0%	53.7%	33.9%	56.9%
75%	69.4%	70.8%	68.0%	58.3%	70.0%
90%	75.0%	81.6%	75.0%	67.3%	75.0%
Firms whose ultimate shareholder controls 2/3 of voting rights	27.5%	33.3%	26.6%	16.7%	27.9%

The pattern of high-tech companies contrasts with other IPOs. The ultimate shareholder of technology firms is willing to give up control when taking the company public, probably in order to raise capital to finance growth opportunities. That occurs regardless of the largest shareholder being a venture capitalist or a family. For example (not reported in the table), the stake of the family declines from an average of 57% (46% in median) ante-IPO to 42% (37% in median) immediately after the listing.

Conversely, the ultimate shareholder of non financial (non high-tech) independent companies holds on average 55% of voting rights after the IPO (57% in median) and in 28% of firms he keeps controlling at least 2/3 of voting rights.

6.3 Separating ownership and control at the IPO

By going public, initial owners that want to keep control of the firm, may take actions to ensure that they will maintain their private benefits after the firm's stocks are publicly traded. For example, Field and Karpoff (2002) show that in the US managers use takeover defenses at the IPO to help insulate themselves from the market of corporate control. In an attempt to dilute the investment necessary to hold the majority of votes, the initial owner may change the proportion of cash flow and voting rights he controls by the use of devices that allow so.

Table 10 shows the firms with a separation of ownership from control. Before going public, 55 firms (22% of the sample) have in place a mechanism that dissociates cash flows from voting rights. In 60% of cases such firms went public before 1993. 53 out of 55 have set up pyramidal structures, the remaining two have restricted shares outstanding. In most cases firms with separation of ownership from control are family controlled and belong to a pyramidal group[16]. It is thus a phenomenon mainly related to the flotation of carve-outs.

Table 10 - Separation of ownership from control at the IPO

The table shows in Panel A, column 1 the number of firms with separation of ownership from control before the IPO; in column 2 and 3, firms with separation are split between those that went public before 1993 and those that listed after. Panel B reports firms that use the IPO to dissociate cash flow from control rights.

	N. of firms	% of firms listed in 1985-1992	% of firms listed in 1993-2005
Panel A - Ante-IPO			
Firms with separation	55	60.0%	40.0%
Of which family firms	50	60.0%	40.0%
Of which State controlled	5	60.0%	40.0%
Of which carve-outs	41	78.0%	22.0%
Firms that use			
Only pyramids	53		
Only DCS	2		
Both	0		
Panel B - At the IPO			
Firms that separate	8	75.0%	25.0%
Of which family firms	2	50.0%	50.0%
Of which State controlled	5	80.0%	20.0%
Of which financial intermediares controlled	1	100.0%	-
Firms that use			
Only pyramids	2		
Only DCS	6		
Both	0		

At the IPO, 8 firms (3% of the sample) separate cash flow from voting rights. 5 out of 8 are State-controlled companies. In most cases, companies go public by issuing non voting shares[17]. It is also evident that the pattern is time dependent. 75% of firms that separate at the IPO went public before 1993. Besides, firms that by going public dissociate cash flow from voting rights represent 7% of all IPOs before 1993, and the fraction drops to 1% after 1992. The evidence sharply contrasts with that reported by Holmén and Högfeldt (2004) for Sweden. The authors find that 74% of firms that go public issue only low voting shares at the IPO. The evidence for Italian IPOs indicates that, at the flotation, very few firms use devices to separate ownership from control. This is inconsistent with the view (Bebchuk, 1999) that initial owners wishing to keep a lock on control, try to separate cash flow from voting rights in order to lower the costs of sub-optimal diversification and liquidity.

(16) The 2 firms with dual-class shares are State-owned banks (San Paolo di Torino and Monte dei Paschi di Siena) that at the IPO issue ordinary shares having non voting shares outstanding.

(17) The Italian law of 1974 first introduced non voting shares. Listed companies can issue such shares up to 50% of capital. Non voting shares do not give the owner any voting right, are entitled of a minimum dividend (5% of par value) and have prior claims in case of liquidation.

7. Evolution of ownership and control after the IPO

7.1 Changes in the ultimate shareholder

The decision to go public is clearly affected by considerations of corporate control. However the IPO may represent a first step in the shaping of ownership structure.

In the spirit of Zingales (1995), if the aim of initial owners is to sell the company, the sale of the firm should proceed in stages, with the IPO being the first step. Hence a high turnover of control should be observed.

On the other hand, large private benefits of control may motivate original owners to retain control after the IPO (Bebchuk, 1999). So when control is valuable, ultimate shareholders are expected to retain the majority of voting rights even years after the IPO.

Table 11 shows the dynamics of control in IPO firms up to 10 years after the IPO. In 75% of firms, control does not change, that is the original ultimate shareholder retains the largest stake of voting rights in the company. A change in control occurs in 23% of firms. For 2% of firms failure, that is either bankruptcy or insolvency, is detected. In almost 30% of firms, the change in the ultimate shareholder occurs within 3 years from the IPO.

Table 11 - The dynamics of control

Table 11 shows in Panel A, the distribution (percentage) of firms that change ultimate shareholder and the distribution of changes in the years after the IPO; in Panel B, the distribution of firms that change ultimate shareholder by type of controlling owner; in Panel C, the frequency of changes according to the motivation behind the transfer of control for each type of ultimate shareholder; in Panel D, the frequency of changes in the ultimate shareholder in business group-affiliated and independent firms for the whole sample and for family-controlled companies.

Panel A - Dynamics of control

No control changes	74.9%
Control changes	22.7%
Failures	2.4%
Total	100.0%
Control changes occur	
by IPO +1	14.0%
by IPO +3	29.8%
by IPO + 5	33.3%
After	22.8%
Total	100.0%

Panel B - Control changes by type of ultimate shareholders

	In proportion of all changes	In proportion of each type of firm at IPO
Family	56.1%	18.2%
Financial intermediary	3.5%	25.0%
Widely-held company	1.8%	20.0%
Foreign company	1.8%	25.0%
State	15.8%	23.7%
VC	21.1%	60.0%
Total	100.0%	

Panel C - Reasons for changes

	Acquisition	Financial distress	Privatization	Total
All	73.7%	17.5%	8.8%	100.0%
Family	75.0%	25.0%	-	100.0%
Financial intermediary	100.0%	-	-	100.0%
Widely-held company	-	100.0%	-	100.0%
Foreign company	100.0%	-	-	100.0%
State	44.4%	-	55.6%	100.0%
VC	91.7%	8.3%	-	100.0%

Panel D - Control changes in equity carve-outs vs. independent firms

	Carve-outs	Independent firms	p-value on diff. in prop.
All	26.8%	20.7%	0.440
Family-controlled firms	25.6%	15.8%	0.222

In most cases control changes involve family firms (Panel B). However, when control transfers are scaled by the number of firms within each shareholder type, it is firms with a venture capitalist as ultimate shareholder that experience most of the changes. That is not surprising as venture capitalists sell part of their shares in the IPO and in the following years divest the remaining stake from the company. Only 18% of family-controlled firms give up control. In most cases the control stake is sold to another blockholder on a friendly basis (hostile takeovers account for 12% of all family acquisitions) and in another 25% of cases the family is forced to relinquish control due to financial distress (Panel C).

What is also evident from Table 11, Panel D is the disproportion between control changes in business group-affiliated firms with respect to independent firms and the discrepancy is even more severe among family-controlled companies. A control transfer occurs in 26% of family-controlled carve-outs that go public and only in 16% of independent firms that are controlled by a family. As previously documented by Panetta, Pagano and Zingales (1998), in equity carve-outs the ultimate shareholder is more likely to go public to relinquish control.

Previous data allow to draw some preliminary conclusions: i) most Italian IPO firms are tightly held; ii) control changes largely occur in companies with a venture capitalist as ultimate shareholder thus allowing the exercise of the exit option held by the private equity investor. In firms whose ultimate shareholders is a family: i) transfers of blockholdings mostly occur on a friendly basis through a direct bargain with a potential acquirer; ii) most changes occur in equity carve-outs.

7.2 Evolution of cash flow and voting rights

If, in most cases, the Italian IPO firms do not experience a change in the ultimate shareholder, it then needs to be assessed how the ownership structure evolves.

Table 12 explores the dynamics of ownership for different sub-samples of IPO firms according to different time periods after the IPO. So, for example, the sub-sample of firms that are still listed after 3 years includes all firms that went public over the period 1985-2002 for which the ownership structure can be recorded up to three years after the IPO (hence firms that went public after 2002 are excluded) and that do not change ultimate shareholder.

The evidence reveals that shareholdings are rather stable after the IPO and, most important, the ultimate shareholder maintains the majority of voting rights (both in mean and median). Even ten years after the flotation the ultimate shareholder has not reduced his stake below the control level. So the ownership structure of Italian firms does not become more dispersed over time.

The ownership of cash flow rights (Table 12, Panel B) is lower than the control of votes, though still substantial. That's can be more clearly detected from Panel C as the O/C ratio equals on average 85%.

Table 12 - Evolution of voting rights, cash flow rights and O/C ratio in the years following the IPO

The table shows in Panel A, the voting rights (percentage); in Panel B, the cash flow rights (percentage), in Panel C, the O/C ratio at the IPO and in the following years for the sub-sample of firms whose ultimate shareholder is still in control 3, 5 and 10 years after the IPO.

	Firms still listed 3 years after the IPO (N. of Obs. = 161)		**Firms still listed 5 years after the IPO** (N. of Obs. = 139)		**Firms still listed 10 years after the IPO** (N. of Obs. = 51)	
	Mean	Median	Mean	Median	Mean	Median
Panel A - Voting rights						
IPO	56.3%	57.8%	57.7%	59.5%	64.0%	63.6%
IPO + 1	54.6%	55.9%	56.0%	57.0%	61.8%	61.9%
IPO + 3	53.5%	54.8%	54.7%	55.1%	60.6%	58.7%
IPO + 5			52.7%	53.7%	58.3%	56.1%
IPO + 10					52.9%	52.3%
Panel B - Cash flow rights						
IPO	49.4%	52.8%	50.8%	54.0%	53.6%	57.4%
IPO + 1	47.5%	51.1%	56.0%	57.0%	51.4%	57.3%
IPO + 3	46.5%	52.0%	47.6%	52.3%	50.1%	56.2%
IPO + 5			45.6%	50.2%	48.1%	51.0%
IPO + 10					44.7%	47.6%
Panel C - O/C						
IPO	0.85	1.00	0.85	1.00	0.80	1.00
IPO + 1	0.85	1.00	0.84	1.00	0.79	1.00
IPO + 3	0.85	1.00	0.85	1.00	0.79	1.00
IPO + 5			0.85	1.00	0.79	1.00
IPO + 10					0.80	0.98

Two further points deserve to be mentioned: i) the O/C ratio does not widen over time; ii) the discrepancy between means and medians suggests that the majority of firms does not dissociate cash flow from voting rights, but the separation of ownership from control is substantial in a minority of companies. This will be made clear below.

The dynamics in the voting rights held are common across most types of ultimate shareholders (Table 13). Families maintain the majority of voting rights and so do financial intermediaries and foreign companies. The State keeps controlling listed companies with more than 2/3 of voting rights. The private equity investor, in the few firms in which remains ultimate shareholder, gradually dilutes its stake in the company.

Table 13 - Evolution of voting rights by type of ultimate shareholder

The table shows the percentage of voting rights held by each type of ultimate shareholder in the sub-sample of firms in which the original ultimate shareholder is still in control 3, 5 and 10 years after the IPO respectively. Family is a family or an individual. Financial intermediary is a widely-held financial institution, a foundation or a cooperative. Widely-held company is a non financial firm whose largest shareholder does not hold more than 2% of voting rights. Foreign company is a foreign company for which I am unable to trace the control chain. State includes national government, local authority or government agency. Venture capitalist (VC) is either a venture capital fund or a merchant bank acting as a private equity investor.

	Firms still listed 3 years after the IPO (N. of Obs. = 161)		**Firms still listed 5 years after the IPO** (N. of Obs. = 139)		**Firms still listed 10 years after the IPO** (N. of Obs. = 51)	
	Mean	Median	Mean	Median	Mean	Median
Family (N. of Obs.)	117		104		38	
IPO	53.9%	55.0%	54.2%	55.9%	57.8%	58.1%
IPO + 1	52.3%	54.9%	53.0%	55.1%	55.8%	56.5%
IPO + 3	51.9%	53.9%	52.2%	54.0%	57.3%	56.0%
IPO + 5			50.5%	52.2%	55.2%	53.2%
IPO + 10					51.8%	52.4%
Financial interm. (N. of Obs.)	3		3		1	
IPO	66.0%	66.0%	62.0%	54.0%	81.9%	81.9%
IPO + 1	63.9%	63.9%	60.6%	54.0%	77.4%	77.4%
IPO + 3	58.8%	60.1%	58.8%	60.1%	60.1%	60.1%
IPO + 5			59.5%	60.0%	60.0%	60.0%
IPO + 10					43.4%	43.4%
Widely-held corp. (N. of Obs.)	4		2			
IPO	51.4%	57.7%	65.7%	65.7%		
IPO + 1	47.3%	50.0%	59.4%	59.4%		
IPO + 3	37.8%	35.5%	44.8%	44.8%		
IPO + 5			44.9%	44.9%		
IPO + 10						
Foreign company (N. of Obs.)	3		2			
IPO	67.3%	75.0%	63.0%	63.0%		
IPO + 1	67.3%	75.0%	63.0%	63.0%		
IPO + 3	62.9%	62.7%	63.0%	63.0%		
IPO + 5			62.5%	62.5%		
IPO + 10						
State (N. of Obs.)	26		24		12	
IPO	72.7%	75.0%	74.8%	75.0%	82.4%	80.3%
IPO + 1	70.5%	69.2%	71.7%	69.2%	79.4%	79.4%
IPO + 3	67.2%	65.9%	67.3%	65.9%	71.2%	68.8%
IPO + 5			66.2%	69.1%	68.2%	76.0%
IPO + 10					57.4%	52.0%
VC (N. of Obs.)	8		4			
IPO	34.6%	38.2%	35.3%	38.2%		
IPO + 1	32.9%	35.3%	33.4%	35.3%		
IPO + 3	35.0%	31.1%	40.7%	35.3%		
IPO + 5			24.1%	25.2%		
IPO + 10						

The previously reported gap between mean and median O/C ratios is largely due to business group-affiliated firms. Table 14 reports the evolution of the O/C ratio for carve-outs and independent firms that are family-controlled. As mentioned before, families are the ultimate shareholder in 75% of carve-outs that go public. It can easily be detected from Table 14 that in independent family firms the disproportion between cash flow and voting rights is negligible (O/C ratio is 0.96 on average). In business group-affiliated family firms the separation between ownership and control is substantial (average O/C ratio is around

0.45) and tends to slightly increase in the following years. That reflects the (old-time) practice of historical families controlling vast business groups to list subsidiaries along the control chain. For such companies the separation between cash flow and voting rights is considerable even before the IPO and at the flotation widens[18]. However it is a phenomenon that has been fading away since from 1993 the listing of carve-outs is significantly reduced[19].

Table 14 - Evolution of O/C in business group-affiliated and independent family firms

The table reports the evolution of the O/C ratio in business group-affiliated and independent firms whose ultimate shareholder is a family. The evidence is shown for a sub-sample of firms in which the original ultimate shareholder is still in control 3, 5 and 10 years after the IPO respectively.

	Firms still listed 3 years after the IPO		Firms still listed 5 years after the IPO		Firms still listed 10 years after the IPO	
Family firms	Mean	Median	Mean	Median	Mean	Median
Independent (N. of Obs.)	84		75		23	
IPO	0.96	1.00	0.97	1.00	0.98	1.00
IPO + 1	0.96	1.00	0.96	1.00	0.99	1.00
IPO + 3	0.96	1.00	0.96	1.00	0.99	1.00
IPO + 5			0.95	1.00	0.98	1.00
IPO + 10					0.99	1.00
Business group-affil. (N. of Obs.)	33		29		15	
IPO	0.45	0.48	0.44	0.48	0.48	0.64
IPO + 1	0.42	0.32	0.42	0.32	0.44	0.58
IPO + 3	0.44	0.30	0.45	0.26	0.45	0.57
IPO + 5			0.47	0.33	0.46	0.59
IPO + 10					0.48	0.69

The overall evidence indicates that the evolution of ownership in Italy follows a pattern that significantly differs from Anglo-Saxon countries, though more aligned with other European countries.

In the US, Mikkelson, Partch and Shah (1997) document that right before the IPO in only 12% of firms the largest shareholder controls more than 50% of voting rights, which reduces to 6% five years after the flotation. Overall ownership stakes decline significantly after going public. The median ownership stake of officers and directors decreases from 68% before the initial public offering to 44% immediately afterward. Five years after going public, the median stake of officers and directors is 29%. Ten years after the flotation the median stake is 18%.

Brennan and Franks (1997) report similar results for the UK. Holdings of directors

(18) For example, the De Benedetti family in 1994 lists Finanza & Futuro, a securities house. Before the IPO, 96.93% of votes are controlled by Cofide, the holding, that is controlled at 31% by the De Benedetti family. Cofide has also non voting shares outstanding and ordinary shares account for 79% of capital. After the IPO, the direct ownership of Cofide reduces to 43%. So, before the IPO, the ultimate shareholder of Finanza & Futuro controls 31% of voting rights (the weakest link along the control chain) and has the right to 24% of cash flows (0.9693*0.79*0.31). Immediately after the flotation, the De Benedetti family still controls 31% of votes and has the right to 12% of cash flows. So the O/C ratio declines from 0.76 before the IPO to 0.38 immediately after.

(19) For example, the sub-sample of business group-affiliated firms whose ultimate shareholder is still in control 5 years after the IPO counts 29 companies of which only 3 went public after 1992.

shift from 42% before the IPO to 35% immediately after the offering and reduce to 29% some years later. Family members that are not members of the board of directors gradually sell off from the company since their stake declines from 44% before the IPO to less than 3% some years after going public.

Conversely, post-IPO holdings of initial owners are larger in Continental Europe. In a comparison between Germany and UK, Georgen and Renneboog (2003) find that original shareholders of German IPOs on average lose majority control six years after the offering. Goergen (1998) also reports that six years after going public, families still hold majority stakes in 44% of the companies. In Sweeden, Holmén and Högfeldt (2004) find that original non-institutional owners still control 50% of voting rights five years after the IPO.

If control seems valuable in Continental Europe, it appears even more valuable in Italy.

7.3 The use of devices to dissociate cash flow from voting rights after the IPO

In Italian IPOs, original shareholders do not reduce their stakes in the company by gradually selling them off to the market.

When initial owners establish an ownership structure in which they maintain control, Bebchuk (1999) suggests that separation between cash flow and voting rights will tend to be used, since such schemes enable to maintain a lock on control without requiring the controller to bear the cost of holding a large fraction of cash flow rights.

Votes can be separated from cash flows using different arrangements – dual-class shares (DCS), pyramids, cross-holdings. Table 15 shows the means used to enhance the separation of cash flow from voting rights after the flotation for a sub-sample of firms whose initial ultimate shareholder is still in control 3, 5 and 10 years after the IPO respectively.

Table 15 - Means used to enhance the separation of cash flow from voting rights

The table reports the percentage of firms with a disproportion of cash flow from voting rights in the years following the IPO and the means used to separate ownership from control. Data are reported for the sub-sample of firms whose original ultimate shareholder is still in control 3, 5 and 10 years after the IPO respectively.

Firms still listed 3 years after the IPO (N. of Obs. = 161)			
	IPO	IPO+1	IPO+3
Firms with separation	27.3%	30.4%	31.7%
Firms that use	(in % over all firms with separation)		
Only pyramids	77.3%	63.3%	54.9%
Only DCS	15.9%	26.5%	31.4%
Both	6.8%	10.2%	13.7%
Total	100.0%	100.0%	100.0%
Firms that use	(in % over all sample firms)		
Only pyramids	21.1%	19.3%	17.4%
Only DCS	4.4%	8.1%	9.9%
Both	1.9%	3.1%	4.4%

Firms still listed 5 years after the IPO (N. of Obs. = 139)				
	IPO	IPO+1	IPO+3	IPO+5
Firms with separation	28.8%	31.7%	33.1%	33.8%
Firms that use	(in % over all firms with separation)			
Only pyramids	77.5%	65.9%	56.5%	55.3%
Only DCS	17.5%	27.3%	32.6%	34.0%
Both	5.0%	6.8%	10.9%	10.6%
Total	100.0%	100.0%	100.0%	100.0%
Firms that use	(in % over all sample firms)			
Only pyramids	22.3%	20.9%	18.7%	18.7%
Only DCS	5.0%	8.6%	10.8%	11.5%
Both	1.4%	2.2%	3.6%	3.6%

Firms still listed 10 years after the IPO (N. of Obs. = 51)					
	IPO	IPO+1	IPO+3	IPO+5	IPO+10
Firms with separation	41.2%	45.1%	45.1%	47.1%	54.9%
Firms that use	(in % over all firms with separation)				
Only pyramids	71.4%	65.2%	65.2%	62.5%	60.7%
Only DCS	28.6%	34.8%	34.8%	37.5%	39.3%
Both	-	-	-	-	-
Total	100.0%	100.0%	100.0%	100.0%	100.0%
Firms that use	(in % over all sample firms)				
Only pyramids	29.4%	29.4%	29.4%	29.4%	33.3%
Only DCS	11.8%	15.7%	15.7%	17.7%	21.6%
Both	-	-	-	-	-

In most of the companies with a dissociation between ownership and control, cash flows are separated from voting rights through the use of pyramids. At the IPO, more than 70% of firms with a separation have a pyramidal structure in place as they belong to business groups. However, in the years following the flotation, there is no increase in the number of firms that make use of pyramids to dissociate ownership from control.

Post-IPO, it can be detected an increase in the number of companies that create a dual-class structure by issuing non voting shares. For example, in the sub-sample of firms

whose ultimate shareholder still retains control 10 years after the IPO, 11% of companies have established a dual-class structure at the IPO and 21% ten years later. Non voting shares are also used in conjunction with pyramids, so firms belonging to a control chain when issuing non voting shares can achieve a substantial separation between ownership and control.

The data reveal a positive trend in the use of such devices. For example, in the sub-sample of firms whose ultimate shareholder is still in control 10 years after the offering, the proportion of companies that has in place an arrangement to dissociate cash flow from voting rights raises from 41% immediately after the IPO to 55% ten years later.

However such positive pattern is largely time dependent and turns out to be a practice of old-time IPOs. When considering all the listings that occurred after 1992, the use of devices to enhance the separation of ownership from control is greatly reduced.

For post-1992 IPOs, it can be observed that:

- companies that go public with a separation of cash flow from voting rights already in place are 9 (5% of all IPOs from 1993 to 2005);
- at the IPO, only one company creates a pyramidal structure and no one issues non voting shares;
- in the years following the IPO, only 3 companies (2% of all firms in the sample) set up structures that allow to dissociate cash flow from voting rights (two are banks that issue non voting shares and one is a company that takes up the non voting shares of the target company it acquires).

The use of devices to separate cash flow from voting rights is thus a rare phenomenon in recent IPOs. There is no evidence that companies once public create pyramidal structures to dissociate cash flow from voting rights[20]. The practice of issuing non voting shares almost disappears. Indeed there is a trend toward stock unifications. Among the reasons that can account for such pattern (Bigelli, 2004), the enlargement of investors' base for the Italian stock market together with the pressure of large institutional investors for "one share-one vote" structures seem to play an important role.

(20) Also Franks and Mayer (2001) find that in Germany pyramidal structures are not used for control purposes, that is as a means to reduce the costs of control and extract private benefits.

8. Ownership and seasoned equity offerings (SEOs)

Previous evidence has shown that in the majority of firms that go public, the initial ultimate shareholder maintains a lock on control even in the years following the flotation. This section analyzes if IPO firms re-enter the capital market.

Table 16 shows the proportion of seasoned equity offerings (SEOs) for all IPO firms as well as for family and non-family controlled companies. 26% of IPO firms go back to the capital market within 3 years from the flotation and when distressed firms - that somehow may be "forced" to issue new shares - are excluded, the proportion declines to 22%. That's a figure that sharply contrasts with the 44% of Swedish IPOs documented by Holmén and Högfeldt (2004) or with the 30% of firms going public in the US as reported by Welch (1989). There is no significant difference in the behavior of family-controlled firms with respect to other companies.

Table 16 - The re-enter of the capital market after the IPO

The table shows the percentage of companies conducting at least a SEO in the 3 years after the flotation for the whole sample and for the sample of family-controlled firms compared to all other firms whose ultimate shareholder is not a family. The same percentage is also shown for all firms except those that at the time of the SEO are in distress. The sample is also split in firms that change ultimate shareholder after the IPO and conduct at least a SEO and firms whose initial ultimate shareholder maintains control after the IPO and conduct at least a SEO.

Companies conducting at least a SEO within 3 years from the IPO				
	Total sample	Family firms	Non family firms	p-value on diff. on prop.
All firms	26.3%	25.6%	28.0%	0.807
Firms not in distress	22.3%	20.5%	26.7%	0.359
Number of all SEOs	34.3%	34.1%	34.7%	0.930
Firms that change control. conducting at least a SEO within 3 years from the IPO				
	Total sample	Family firms	Non family firms	p-value on diff. on prop
All firms	33.3%	43.7%	20.0%	0.109
Firms not in distress	30.0%	40.0%	20.0%	0.217
Firms that do not change control. conducting at least a SEO within 3 years from the IPO				
	Total sample	Family firms	Non family firms	p-value on diff. on prop
All firms	24.2%	21.5%	32.0%	0.195
Firms not in distress	22.4%	19.4%	30.6%	0.159
p-value on diff. in proportions				
family firms that change control vs. family that do not change				0.017**
family firms that change control vs. family that do not change (not in distress)				0.046**

***, **, * indicates statistical significance at 1%, 5% and 10% respectively

Greater differences emerge when the sample is split between firms that change ultimate shareholder and firms that do not. What is evident from Table 16 is that firms experiencing a change in control also report a higher frequency of SEOs. For instance, looking at the whole sample, 33% of firms that change control re-enter the capital market versus 24% of firms that do not change control. But significant results occur with respect to family-controlled firms. 44% (40% if distressed companies are excluded) of family firms that change ultimate shareholder conduct a SEO within 3 years from the IPO, while

only 21% (19% if distressed companies are excluded) of the firms whose ultimate shareholder maintains control re-enter the capital market.

Hence, when original families remain as ultimate shareholder in the years following the IPO, they tend to go back to the capital market with less frequency.

Further evidence can be gained from the analysis of the evolution of voting rights held by the family as shown in Table 17. Immediately after the IPO, the proportion of voting rights held by the ultimate shareholder is not significantly different among family firms, though in firms that change control and conduct a SEO, the family does not hold the majority of votes even immediately after the flotation.

Table 17 - Ownership and seasoned equity offerings (SEO) in family firms

The table shows the percentage of voting rights (VR) held by the ultimate shareholder immediately after the IPO and 3 years after the offering for the sample of family firms that change ultimate shareholder after the flotation and for firms whose ultimate shareholder maintains control after the IPO.

	Firms that change control		Firms that do not change control	
	Conduct at least a SEO (1)	Do not conduct a SEO (2)	Conduct at least a SEO (3)	Do not conduct a SEO (4)
VR after the IPO	43.7%	53.4%	51.8%	54.4%
VR 3 years after the IPO	42.2%	52.5%	45.0%	54.9%
t diff. on means	1 vs. 2	3 vs. 1	3 vs. 2	3 vs. 4
VR after the IPO	-1.360	1.264	-0.286	0.736
VR 3 years after the IPO	-1.583	0.499	-1.316	2.782***

***, **, * indicates statistical significance at 1%, 5% and 10% respectively

A sharp contrast emerges within the sample of family firms that do not change control. When family-controlled firms re-enter the capital market, the family loses the majority of voting rights though still controls a large stake. When firms do not raise new capital, the controlling family keeps retaining majority control.

That seems to suggest that whenever family firms raise new capital, the controlling family is willing to accept a dilution in its stake even if that implies losing the majority of voting rights. If the family were seriously concerned about control, it could avoid dilution by subscribing a (pro rata) portion of the new issue (as SEOs usually consists in rights offers). Instead, data reveal that majority control is preserved in family firms that do not re-enter the capital market. Though that may indicate that such firms do not need new financing or the controlling family is reluctant to put more money in the business, it may also signal that the ultimate shareholder is particularly concerned about control, even if that may lead to forgo investment opportunities. That is an issue that deserves further research. Indeed, Franzosi and Pellizzoni (2005) analyze 127 Italian small and mid caps that went public over the period 1995-2002 and find that post IPO companies keeps investing at a pace of 23% a year (statistically significant higher than 15% ante-IPO). However a re-enter of equity markets is infrequent among IPO firms; instead, leverage tends to increase after the flotation and to return to its pre-IPO levels.

9. Summary and conclusions

In Anglo-Saxon countries, it is commonly believed that the IPO is the start of a process that leads initial owners to lose control. Either because the original shareholders use the IPO as an exit option or because they gradually reduce their stake over time or sell to another blockholder. The history of Italian IPOs reveals that is not necessarily so.

Over the past 20 years, IPOs have occurred in waves. Up to late '80s, one IPO out of two consisted in an equity carve-out. The early '90s were dominated by large privatizations. In recent years, most new listings are non financial independent firms and a non negligible fraction are high-tech companies, in many cases with a venture capitalist as largest shareholder.

That leads to differences in the evolution of ownership immediately after the IPO and in the following years, though a common feature of all firms is that they go public with high levels of control.

In business group-affiliated firms, the ultimate shareholder is more likely to go public to relinquish control. The IPO is used by the controlling shareholder to sell existing shares and equity carve-outs are more likely to change control after the flotation. Such finding supports the argument of Zingales (1995) and Mello and Parsons (1998) that the IPO is the first stage in the eventual sale of the company, at least for equity carve-outs.

A similar pattern occurs for firms with a venture capitalist as ultimate shareholder since the IPO is part of the exit strategy of the private equity investor.

However, except such firms, data show that control issues are important not only at the flotation but also in subsequent years. Though firms use the IPO to raise new capital, the fraction of shares offered is designed to allow initial owners to maintain the majority of voting rights. Shareholdings are rather stable after the flotation. Even ten years after the IPO, the ultimate shareholder has not reduced his stake below the control level. So control is particularly valuable in Italy and hardly contestable. Families appear to value control most. Control changes mainly occur on a friendly basis and, most important, only a small fraction of family-controlled firms gives up control.

To the extent that the ultimate shareholder has a strong preference for control, he may be reluctant to issue new shares after the flotation if he does not have or want to put more money in the business by purchasing a pro rata portion of the new issue. This raises the question as to what triggers subsequent seasoned equity offerings.

SEOs are relatively infrequent among family firms, as only one-fifth of the family-controlled companies that are not in distress go back to the equity market. Besides, family firms whose initial ultimate owner eventually sell the company to another blockholder, re-enter the capital market with a higher frequency than families whose original ultimate owner retains his stake. Families that preserve the majority of voting rights in the years following the IPO are also those that avoid raising new equity capital. Instead, when family firms conduct at least a SEO, their stake gets diluted below the control level.

It is a fact that the ownership structure of Italian firms does not become more dispersed over time. When initial owners establish an ownership structure in which they maintain control over the company, Bebchuk (1999) suggests that separation between cash

flow and voting rights will tend to be used, since such schemes enable to maintain a lock on control without requiring the controller to bear the cost of holding a large fraction of the cash flow rights.

This view is not fully consistent with my findings. At a first sight, data indeed document a certain number of firms that use mechanisms to dissociate cash flows from voting rights after the IPO. Specifically, there is an increase in the creation of dual-class shares through the issue of non voting shares, though ultimate shareholders do not appear to systematically "dilute" the investment necessary to hold the majority of voting rights. Firms do not seem either to create more pyramidal structures after the IPO, though families and the State controlling business groups used to list companies along the control chain with a high degree of separation between ownership and control even before the IPO. However that appears a characteristic of old-time IPOs. Early '90s mark a change with the past, as IPO firms stop issuing non voting shares, it is also greatly reduced the practice to list business group-affiliated firms.

That may suggest that the increased investor protection together with the pressure of large institutional investors may have reduced the chance of enjoying large private benefits and thus the incentive to separate cash flow from voting rights.

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