RIGHTS ISSUES, PRIVATE BENEFITS AND NEGATIVE-NPV INVESTMENTS*

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Abstract

This paper discusses the use of rights issues when interest conflicts between controlling shareholders and minorities exist, due to the existence of private benefits that the former can extract from the value of listed company. While the literature considers the issue of pre-emptive rights as an essential tool to protect minorities from expropriation, we propose that pre-emptive rights are used to enforce the subscription of seasoned equity issues. We define an abuse condition as the case when a controlling shareholder choose discretionally an issuing price, granting a discount with respect to the market price, and "enforce" minorities to undertake a negative-NPV investment. Minorities do so because they are minimizing an exit cost that is greater than zero. As the rights issue never fails under these conditions, we define this phenomenon as "enforced subscription". This model fits the Italian legal framework, and many other international contexts where rights issues are dominant. We report the case of Alitalia's rights issue in 2005 as a typical example of "enforcement at work". As rights issues at a high discount often involve an abuse of power by the controlling shareholders, we argue that their use should be carefully regulated.

Keywords: Equity Issues, Rights Issues, Private Benefits, Minority protection

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1. Introduction

This paper contributes to the discussion concerning the use of rights issues in seasoned equity offerings by considering their employment when private benefits are involved. In particular we study how this floatation method does not pursue a real minority protection, as usually agreed in the literature (Bigelli, 1996) but, on the contrary, allows a controlling shareholder to extract further private benefits. We therefore suggest the existence of cases of use and abuse of rights issues, developing some policy implications and recommendations.

It has to be mentioned that, while almost all US equity issues are arranged through public offers, in Italy and in most of other European countries new shares are mostly placed by means of rights issues. Rights offering is an alternative floatation method to public offers, that allows current shareholders to purchase shares pro rata, proportionate to their existing ownership position, at a specified issuing price, until a designate expiration date. The existence of a pre-emptive right is enshrined in most European laws, because it makes theoretically equivalent the price of new shares to the market price of those already traded. New shares are hardly ever issued at a price higher than the market. In fact, a discount is usually granted to new shareholders, and its presence does not affect existing shareholders value, in theory, as the dilution in price is to be compensated by the value of preemptive rights, traded on a separate market. If rights did not exist, an equity issue with a strong discount would favour new shareholder at the expenses of existing one, as price value for the latter would be diluted without any compensation. Moreover, a rights issue has to meet the favour of the market in order to be successful. If prices react negatively to the announcement of rights issues, market price can fall below the issuing price: the level of unsubscribed shares is therefore high and the issue can fail. Finally, when discount is relatively small, dilution is negligible. This is the case of public offers, and this is the reason why the literature on public offers does not consider dilution a problem: it focuses the attention on the choice of floatation method (see Eckbo and Masulis, 1995, for a survey of empirical evidence) and particularly on the cost of different procedures. The treatment of different groups of shareholders is often neglected: some exceptions for the Italian context are for instance Bigelli (2004) and Bertoni and Paleari (2005), that consider wealth effects on different classes of shareholders. In general, therefore, there is a consensus on the fact that pre-emptive rights guarantee protection for small shareholders, as argued for instance in Bigelli (1996) and La Porta et al. (1999), and do not affect market efficiency. According to the mainstream view, rights protect company owners from having their interest in the company and the value of their investment diluted involuntarily. Because of this strong belief, the right of existing shareholders to subscribe for new share issues represents a fundamental aspect of ownership in Italian and European law.

In this paper we contrast the idea that granting shareholder a preemptive right to buy new issues of stock can be considered in all cases a guarantee of protection for small shareholders. In fact, cases such those of Alitalia in 2005 (-15% in the three days following the announcement) show how strongly negative market reactions do not necessarily lead to a failure of the equity issue, and on the contrary the ratio of non-underwritten shares has been very low (0.59%). In our view this is an evidence of how existing minorities do not have the chance to reject operations that are very negatively valued by the market, and we link this idea to a particular (mis)use of rights issue. We provide here an interpretation framework, to investigate the recur to rights issues and display how, when the discount is big enough, shareholders are actually forced to subscribe the issue, either directly or selling rights on the market at a price that does not guarantee an exit without costs. This way, the market reaction to the announcement, even when strongly negative, does not lead to a failure as in the case of public offers, where the discount is low by definition. We define this process as "Enforced Subscription", that in our opinion represents a condition of abuse in the employment of rights issues.

In our theoretical framework we assume we are considering a company with high concentration of ownership, where asymmetric information about private benefits of control exist between controlling and minority shareholders.

This asymmetry becomes a problem when external funds are required. Because of the existence of private benefits, controlling shareholders might be interested in draining money from the market also when new funds are to be invested in negative-NPV operations. As private benefits are assumed to be a fraction of the company value, the controlling shareholder has a further incentive in collecting money for the company, and tries to pursue this goal even against minorities' interests. The more a controlling shareholder expects the market reaction to be negative, the more he will be willing to "enforce" the market to underwrite it, making use of higher levels of discount, i.e. the difference between the market price (on announcement) and the issuing price.

By understanding the pathologic use of rights issues we think we are adding some knowledge necessary to reduce minority expropriation and enhancing the efficiency of financial markets. We believe that the positive role of rights issues has to be acknowledged but, in an efficient market, we have to guarantee to minorities the right not to participate to an inconvenient project, and give them an exit with no costs. That is why we suggest adjustments to the common legal procedure to recur to rights issues in Italy and other European countries: either a limit on discount is fixed, or a qualified majority has to be requested to vote the issue.

This study unfolds as follows: Section 2 briefly reviews former literature on rights issues; in Section 3 we present a typical case of abuse of rights issues, that of Alitalia in 2005, and provide our interpretation framework; in the following Section 4 we discuss the consequences in terms of corporate governance; Section 5 concludes.

2. Rights Issues in previous literature

In his well known paper, Smith (1986) surveys the causes and effects of the choice of alternative methods for raising equity capital and proposes a list of unsolved questions. In the following decade most of those puzzles found an appropriate answer, often supported by empirical evidence (see the survey by Eckbo and Masulis, 1995). But the financial literature has not been able yet to fully interpret the reasons for why rights issues have virtually disappeared from some financial markets, and have been replaced by underwritten offers, and what are the consequences of this choice on different groups of shareholders. The floatation method choice for seasoned equity offerings has captured the attention since the seminal paper by Smith (1977).

Here, Smith shows the seemingly paradoxical behaviour of U.S. listed firms: Smith finds statistical evidence that underwritten public offerings issuing costs were significantly greater than rights offerings issuing costs, yet the use of the latter flotation method was disappearing, displaced by the use of the former. It is worth noticing that the type of costs collected in Smith's analysis was essentially monetary expenses, as reported to the Securities and Exchange Commission.

A complete survey of the literature aimed at solving Smith's puzzle can be found in Eckbo and Masulis (1995), and we summarize the results that are most relevant in our framework, by identifying three lines along which the equity financing paradox has been solved.

First, the cited evidence is indeed not paradoxical if we maintain that managers select the less expensive issuing method and that underwritten public offerings are the cheapest when issuing costs are higher (Hansen and Pinkerton, 1982). In fact, it is possible to show that direct issuing costs are positively correlated to the amount raised, ownership dispersion and stock price volatility. At the same time, the rights method seems to be more convenient in small size issues for closely held firms, where costs are lower in absolute terms.

Secondly, Smith himself and some following papers identified a set of indirect (mostly market-specific) costs, not included in the previously cited empirical evidence. These costs could even re-verse the total cost comparison between different flotation methods, being ‘method-specific’. Among them, the ones which are proved by the empirical literature to significantly affect shareholders’ wealth are the following:

• transaction costs borne by those shareholders who want to sell their rights (Hansen, 1989);

• stock price declining during the offering period, due to arbitrage activity frequently carried out by the underwriter (if any), as reported by Singh (1997);

• permanent effects of bid-ask spread increase after a rights issue, due to ownership concentration (Kothare, 1997);

• possible wealth transfer from shareholders to convertible securities holders connected with non neutral anti-dilution clauses (Myhal, 1990);

and

• possible agency costs caused by collusion between managers and underwriters (Smith, 1977, and Herman, 1981).

Finally, economics literature has definitely improved its insight into the problem by formally considering the effects of information asymmetries between insiders and the market when equity funds are demanded. The conceptual framework is the one depicted by Myers and Majluf (1984) and Miller and Rock (1985). Assuming that managers have incentives to issue new stock only when they believe it is overvalued, in order to favour current shareholders, Myers and Majluf predict that the issue announcement will be interpreted by the market as bad news, causing stock price to decrease. Miller and Rock, on the contrary, focus their analysis on the information asymmetry between managers and shareholders concerning the level of future expected cash-flows. Again, once the investment policy is fixed, the announcement of an issue which is greater than expected can be interpreted as bad news, signalling prospective internal funds lower than expected.

In a context of information asymmetry, it is argued that the flotation method choice represents a quality signal available to the firms, granting them superior issuing conditions and/or inferior failure probability. In particular,

Heinkel and Schwartz (1986) and Eckbo and Masulis (1992) propose different interesting models where underwritten public offerings, standby rights offerings and uninsured rights offerings are compared (see Section 3 for details on this classification in Italy). The basic idea behind these models is that both underwriters and insiders (through the subscription of new shares) can certify the quality of issues. The cost of efficient signalling makes different flotation methods more opportune in different situations. These adverse selection models tend to confirm the preference for rights issues when firms are small and closely held. As the offering announcement (and the related terms of the issue) has to be considered an information release, actual market reactions are expected to confirm the certification hypothesis.

In particular, the previously cited theoretical studies (and those which followed) predict small negative (or even null) reactions to rights offering announcement and larger negative effects in the presence of underwriters.

Following Eckbo and Masulis (1992), many European authors have studied how ownership impacts on market reactions to rights issues announcement. Consistently with this asymmetric information model, Slovin (2000) finds that the share price effect is directly related to shareholder take-up, which is the proportion of the offering "taken up" or purchased by shareholder of the firm. Accordingly, Bigelli (1998) argues how the typical higher ownership concentration in most European countries leads to "active insiders" in underwriting their quota of newly issued shares, partly explaining the positive market reaction at the announcement of most European issues.

On the contrary, in the French market, Gajewski and Ginglinger (2002) find that the share price effect is positively related to blockholders take-up renouncement for firms with prior concentrated ownership. Nevertheless, though since the contribution by La Porta et al. (1999), ownership topic is closely linked to minority protection, only few contributions explicitly link the discussion on floatation method to the existence of private benefits, and consequences on minority protection. Buzzacchi (2000) examines the choice of issuing method considering the conflict of interests between controlling shareholders and minorities, arguing that large discounts signal over-investment policies carried out at minorities’ expenses. According to Wu and Wang (2002), value-destroying rights issues are preferred to private placement because incumbent controllers do not want to share private benefits, and therefore the choice of floatation method can significantly reveal the inside information about the issuers’ private benefits.

More recently, Meoli et al. (2005) mention rights issues as a method employed by controlling shareholders earning private benefits from pyramidal business groups to drain further money from the market.

3. A case of abuse: Alitalia's rights issue in 2005

A motivation for this study on the abuse of rights issues comes from the observation of operations that we define as under "condition of abuse". There is a set of features that make these operations very peculiar: first, they are carried out by companies in great financial distress; second, the issuing price is always set much lower than the market price (or alternatively, the discount is set at an "abnormal" level); third, these operations end up as "fully subscribed", even when the market price reacts in a strongly negative way to the announcement. In our view this might be an evidence of how existing minorities do not have the chance to reject operations, even when these are detrimental for their wealth. We present here the case of Alitalia's rights issue in November 2005 as a perfect example supporting the model we are discussing in the following section.

On 7 November 2005, Alitalia's Board of Directors set the following conditions for a rights issue operation: 1,257,562,072 new shares were to be offered, at the 13:2 issue ration, at the issuing price of C=0.80, for a whole C=1,006,049,657.6 rights issue. At the time of the announcement, the market price for a share was of C=6.44.

The controller of Alitalia, at that time, was the Treasury, that announced its intention to subscribe a C=489.2 millions, in order to reduce its share from to original 62.3% to little less than 50%. Italian government called this operation as "privatisation", fulfilling its commitment to the European Commission, that in 2004 authorized a temporary loan by Dresdner, a German bank. Another relevant shareholder, Air France, submitted its 2% share, by paying around C= 20 millions. Another German bank, Deutsche Bank AG, was the stand-by underwriter, i.e. committed to buy the part of unsold share, partly on its own behalf (C=200 millions) and partly on behalf of other institutions (C=100 millions for Intesa; C=25 millions each for Lehman Brothers, Unicredit, Sanpaolo-IMI, Société Générale; smaller shares for Capitalia, Nomura, Morgan Stanley and others). This protection network showed to be unnecessary, as the offered shares were soon sold out on the market, and only a negligible 0.6% of rights was unexercised on the market. In fact, the success of this subscription was very impressive, particularly because it did not reflect at all the behaviour of the share price on the market. As reported in Figure 1, in the three days following the announcement, the price dropped by 15% from C=6.44 to C=5.48 (cum-rights, unadjusted), and even more impressively, during the following ten days, when the rights could be traded on their specific market, share prices dropped by another 29%, from 1.38 to 0.98 (ex-rights). According to a public report published by the Deutsche Bank (2008), Alitalia stock share's value, nowadays, are worth approximately C=0.01.

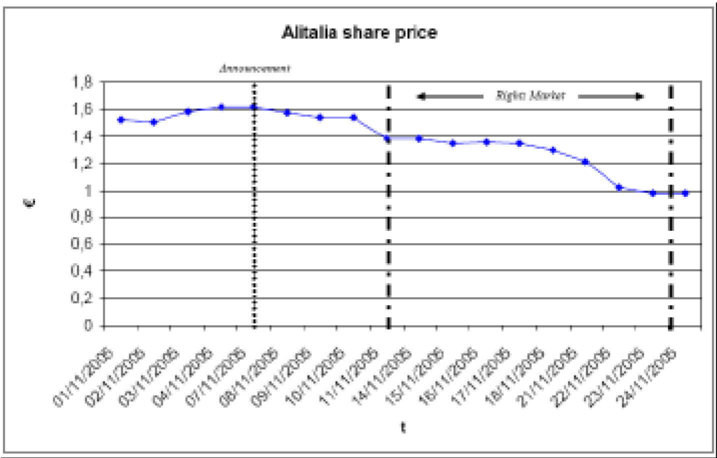

Figure 1. The behaviour of Alitalia (adjusted) share price during November 2005. The price dropped by 15% in the days following the announcement, and by another 29% during the rights market activity.

4. Interpreting the Abuse of Rights Issues

4.1 The conditions for the abuse

Several theoretical models interpreting rights issues have been proposed in the literature (see Bigelli, 1996 for a thorough review), explaining technical aspects and information asymmetry implications. Our aim is to contribute to this strand of literature discussing whether rights issues are actually an instrument to protect minorities. In order to do this, we propose an interpretation of cases as such that of Alitalia, by proposing a theoretical framework. We consider a company that, at a certain point in time, wants to undertake a fractionable investment Δk with an expected return rinv . At the same point in time, the best alternative investment at the same level of risk is featured by an expected return ralt. We suppose that financial conditions force the company to choose an external source of capital. There are two classes of shareholders: the controlling shareholder, who holds a α share of the capital, corresponding to the necessary votes to take the decision whether to issue new equity or not; the minorities, holding a (1 − α) share of the capital, that are simply allowed either to accept or reject the proposal. We suppose that both controlling shareholder and minorities are not cash constrained, and they take decisions according to their NPV with an unlimited time horizon, being the only source of asymmetry the existence of a source of private benefits at the advantage of the controlling shareholder, that (s)he earns as an annuity at the rate rpb on the whole value of the company[1]. Minorities might be aware of the existence in this flow (we don't need them to know exactly the measure) and consider all their earning discounting the effect of private benefits. Thus, market value is the correct value of the firm for both class of shareholders, but we consider a further source of earnings for the controlling shareholder. There are no taxes, transaction costs or other capital market imperfections. We model a time framework where t = 0 refers to the time when the controlling shareholder needs to decide whether to carry out the issue, while minorities simply decide whether to take part or not in the issue. In t = 1 effects take place, while the issuing time is just an instant between the two stages (we are not therefore considering technical implications for prices during the issuing period or information releases).

In order to understand the decision rules for the controlling shareholder, we define a wealth functions, at the time t = 0, as follows:

$$W_0^{CS} = V_0^{CS} + \Delta k^{CS} + \frac{r_{pb} V_0}{r_{alt}} \qquad (1)$$

where $V_0^{CS} = \alpha V_0$ is the market value of the company owned by the controlling shareholder, $\Delta k^{CS} = \alpha \Delta k$ is an amount of cash equal to the equity-issue fraction preemptively offered to the controlling shareholder, rpb is a further rate of return that the controlling shareholder can extract from the value of the company V0, ralt is the alternative rate at which all cash flows are discounted. Therefore, this function evaluates the wealth owned by a controlling shareholder as the sum of: a) the ownership share in the company, evaluated as a fraction of the market value; b) an amount of money, owned as cash, available to undertake her/his part of equity issue, in case the equity issue is performed; c) private benefits (s)he can enjoy on the whole value of the firm, as a discounted annuity.

Next we consider minorities as a singles subject, whose wealth function at t = 0 equals:

$$W_0^{MS} = V_0^{MS} + \Delta k^{MS} \qquad (2)$$

where $V_0^{MS} = (1-\alpha)V_0$ is the market value of the company owned by the minorities, $\Delta k^{MS} = (1-\alpha)\Delta k$ is the cash necessary to undertake the part of the equity issue pre-emptively offered to the minorities.

In an NPV framework, the controlling shareholder adopts the following condition rule:

$$NPV_{CS} > 0 \qquad (3)$$

$$\frac{\Delta k^{CS} r_{inv}}{r_{alt}} + \frac{r_{pb}\Delta k}{r_{alt}} - \Delta k^{CS} > 0 \qquad (4)$$

where $\frac{\Delta k^{CS} r_{inv}}{r_{alt}}$ is a perpetuity of cash flows originated by the new investment and earned by the controlling shareholder; $\frac{r_{pb}\Delta k}{r_{alt}}$ is a perpetuity of private benefit earnings obtained on the whole amount of capital raised, and Δk^{CS} is the controlling shareholder's contribution to the equity issue.

As far as the NPV is positive, the decision to carry out this operation is not under discussion, but obtaining the participation of minorities may not be so straightforward. In fact, minorities consider a different decision rule, similar to the one above, but not containing any private-benefit earning:

$$NPV_{MS} > 0 \qquad (5)$$

$$\frac{\Delta k^{MS} r_{inv}}{r_{alt}} - \Delta k^{MS} > 0 \qquad (6)$$

where $\frac{\Delta k^{MS} r_{inv}}{r_{alt}}$ is a perpetuity of cash flows originated by the new investment and earned by minorities, and Δk^{MS} is the minorities' contribution to the equity issue.

It is therefore clear that the existence of the private-benefit earnings can make an operation desirable for a controlling shareholder also when it is not appealing for minorities. This situation occurs when the following conditions hold:

$$NPV_{MS} < 0 \;\; and \;\; NPV_{CS} > 0 \qquad (7)$$

$$[r_{inv} < r_{alt}] \;\; and \;\; [r_{pb} > \alpha(r_{alt} - r_{inv})] \qquad (8)$$

where $r_{inv} < r_{alt}$ set the new investment to be always detrimental for existing minorities' wealth, and $r_{pb} > \alpha(r_{alt} - r_{inv})$ makes the operation attractive for the controlling shareholder[2].

This condition explains why controlling shareholders may invest in a negative-NPV project

[1] This assumption is similar to that of seminal contributions in this literature such as Grossman and Hart (1980) and Shleifer and Vishny (1986). We are here referring to a broad definition of private benefits, that quantifies all effects of control that are not strictly observable.
The theoretical literature (Dyck and Zingales, 2004) often identifies private benefits of control as the "psychic" value some shareholders attribute simply to being in control (e.g., Harris and Raviv, 1988, and Aghion and Bolton, 1992). Another traditional source of private benefits of control is the perquisites enjoyed by top executives (Jensen and Meckling, 1976). In our model we intend a broad definition of benefits, referring both to psychic and monetary advantages of control.

[2] Note that: 1) when $r_{inv} \geq r_{alt}$, we do not define a condition for abuse: new investments are so appealing that even if private benefits are extracted, minorities appreciate their earning; 2) if r_{inv} is smaller than r_{alt}, a controlling shareholder may still be attracted by the investment if it is possible to extract a compensating flow of private benefits.

because of the existence of private benefits. In the following paragraph, we explain why minorities cannot react to the controller decision, and lead the issue to a failure.

4.2 The "enforcement" mechanism

In this section we show why rights issues force minorities to participate in the investment project against their interest, when the condition for abuse (8) holds. We do this by considering all options available to minorities, and comparing them with an optimal solution that an efficient market is supposed to guarantee. First, we consider what are the outcomes in a special, i.e. when all rights are exercised, either because minorities undertake the issue, or because they sell rights on the market. Then we extend our analysis to the more general case when only a fraction of rights is exercised.

a) Exercising the rights

Under the definition of "condition for abuse", minorities' optimal choice consists in investing in the best alternative project, instead of accepting the rights issue. By contrast, by subscribing their shares, minorities accept to loose a part of their wealth because of the negative-NPV of the new project. Indeed, this loss is experienced also by majority shareholders, but in their case it is more then compensated by the private benefits extracted on the whole value of the company.

b) Selling the rights

Now we consider an alternative decision available to minorities, consisting in selling pre-emptive rights on the rights market. In theory, existing minorities can sell the rights on the market at their theoretical price, transferring the loss on new minorities. Actually, supposing the market is aware of the negative-NPV operation, new shareholders will be willing to buy preemptive rights only at a lower price, incorporating the expected loss due to the negative-NPV investment.

Of course, full information available to existing and new minorities is a very strong assumption. Nevertheless, it seems to be much less restrictive to suppose, at least, that new minorities are as informed as existing minorities, and still they are not available to buy rights at their theoretical price, when the condition for abuse is evident. As a consequence, selling rights is not a solution for existing minorities, as rights incorporate the information on the negative-NPV operation.

c) Selling the shares

If the theoretical discussion above presented works, selling shares is not an escape solution for minorities. Until the beginning of trading on the market for rights, they can actually sell their shares at the whole price. Of course, as assumed above, either the buyer needs a discount to enter the operation, or the buyer finds himself in the same conditions of the seller, not compromising the consequences of the operation.

Concluding, as long as we suppose the market to be efficient, when an abuse of rights issue is performed, market price immediately absorb the bad news. If the market is partially inefficient, news are absorbed later, and they will affect both stock prices and rights prices. Therefore, losses can be experienced both/either on stock market and/or rights market. Nevertheless, minorities cannot avoid it. That is why we define this mechanism as "enforced rights issues".

d) Partial employment of rights

So far we have assumed that all minorities make use of their rights, either undertaking their respective proportion of shares, or selling rights on the dedicated market. Now we consider that existing minorities experience the same loss in both cases, so they may simply decide not to cooperate in the rights market[3]. In this case we drop the assumption that all minorities take the same decision, and have to consider a further variable $0 < \gamma < 1$, as the percentage of shareholders undertaking the issue (both directly or buying rights on the market). Actually, we do not need to let γ vary between 0 and 1. In fact, as long as the controlling shareholder has an interest in undertaking its part of issue, for instance under the condition for abuse, γ is always positive, and takes values equal or higher than the ownership share α.

Under this new conditions, individual choices become now more complex. As in former case, shareholders are affected by the negative-NPV return. Further, minorities non exercising their rights, suffer also the dilution effect, usually compensated by the rights value. The key question is whether the loss of non-exercising shareholder is greater than those who exercise/sell the rights. While a formal solution can be derived[4], we propose here an intuitive argument. While the negative-NPV loss is given, the dilution effect can be discretionally increased, as long as law requirement are satisfied[5].

Therefore, the controller of the company has a certain degree of freedom in setting operations that can "enforce minorities" to exercise/sell their rights, ensuring the success of rights issues linked to negative-NPV operations. It follows that rights issues do not guarantee a condition for market efficiency, namely a chance for minorities to reject the new investment.

5. Corporate Governance Implications

The following considerations can be drawn from our discussion:

[3] Most European legislation consider, in this case, some alternatives to re-offer rights on the market according to different procedures. We do not consider these following aspects, and simply suppose there is no further possibility to underwrite the corresponding shares.

[4] A formal derivation of this result is available on request.

[5] With no exception in Europe, the law requirement is that the issuing price should not be lower than the par value.

1. Use and abuse of rights issues

We underline that the role of rights issues in protecting minorities is not denied in this model. First of all, when the condition for abuse does not hold, rights operate the protection effect from dilution. Moreover, also when the condition for abuse holds, the choice of non exercising the rights still produces the worst scenario for minorities. Therefore, if pre-emptive rights did not exist, the position of minorities would be even worse.

2. When are abuses likely to be performed?

In our theoretical framework, the main cause of interest conflicts between controlling shareholders and minorities is the existence of private benefits. The theoretical literature (Dyck and Zingales, 2004) often identifies private benefits of control as the "psychic" value some shareholders attribute simply to being in control (e.g., Harris and Raviv, 1988, and Aghion and Bolton, 1992). Another traditional source of private benefits of control is the perquisites enjoyed by top executives (Jensen and Meckling, 1976). In our model we intend a broad definition of benefits, referring both to psychic and monetary advantages of control. What really matters is that the existence of benefits may convince a controlling shareholder to pursue negative-NPV operations just to protect their position. Typical example of these operations are: mergers and acquisitions (namely, operations that enlarge the dimension of a company, and therefore the potential extraction of private benefits); rescue operations of company in financial distress (namely, operation that save "private benefits"), as such in the case of Alitalia.

3. Enforced subscription

The keystone in our paper is the level of the discount, that the controlling shareholder can discretionally set. As we discuss above, the level might be set to such a level that an "enforcement effect" is created in the market. Of course, not all rights issues are carried out with reference to negative-NPV investment. Genuine rights issues exist, and at the same time a genuine level of discount can be set. Historical volatility of an asset, as well as market condition and investment expectations, are all factors that are considered when issuing rights, and involve the setting of a certain level of discount. In our theoretical framework we argue that in addition, when a condition for abuse holds, the controlling shareholder may set the discount at a higher level, in order to enforce minorities to take part in a negative-NPV project and be able to eventually extract private benefits.

4. Is it really an excess of power?

Former theoretical literature discusses how a controlling shareholder accesses all retained earnings stock in a company at time of control (Almeida and Wolfenzon, 2005). This could lead us to think that the opportunity for a shareholder to invest all proceeds from an equity issue in a project he believes in is part of his controlling rights. This argument is sustainable concerning retained earnings already inside the company at a certain moment in time but cannot, in our opinion, be extended to money that are to be drained from the market.

5. Policy recommendations

In terms of policy implications, we think a revision of rules regarding the level of discount the issuing company can set is to be expected. As the (almost) unlimited use of this variable is the key to perform enforcement, fixing a maximum amount (in term of past volatility of assets) could be a first suggestion. But as the use of the discount is not negative per se, but only when a condition for abuse holds, a second solution could consist in providing an "exit option" for minorities (a guarantee on a certain percentage of theoretical value). An alternative policy strategy, that would still preserve the protection role of rights issues, would be a revision of majority requirements, at least when issues are pre-emptively offered at high discounts.

6. Conclusions

In this paper we provided some new theoretical answers with reference to the use of rights issues in Italy. Rights issues are an important legal device to protect minorities both from ownership and value dilution following to seasoned equity issues at prices lower than the market. In this paper we present the case of Alitalia's rights issue in 2005 as a typical example of abuse of rights issue, and provide an interpretation framework. As a novelty in the literature, we discuss rights issues carried out at negative NPV, and we investigate the role of rights issues in avoiding minorities to lead the operation to a failure. Due to the existence of private benefits, only available to the controlling shareholder, rights issues might be contemporaneously attractive for the controller and detrimental to minority's wealth. While we are not contesting a positive use of rights issues, we put under light the risk for minorities to be enforced to take part to equity issues against their own interest. This risk is particularly high when a controlling shareholder needs to defend or enlarge its flow of private benefits, such as when a company is in financial distress, or a big merger is planned.

In our opinion, this model should raise a debate about the role of rights issues, and in particular about the discretional power of the controlling shareholder in fixing the level of discount. In terms of policy implications, we would suggest either a limit to applicable discount on paid rights issues; or a qualified majority to carry out rights issues recurring to a high level of discount.

In future work we aim to empirically validate our conclusion with an original analysis of the rights market. We also leave an empirical investigation of market reaction to announcement to future work.

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