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Abstract:

We investigate the link between the regulation of control transactions and the institutional and corporate features of public companies, by analyzing the massive delisting activity in the Romanian capital market. The peculiar ownership reforms involving a large number of listed companies offer a unique opportunity to test Bebchuk and Roe's (2000) theory of path dependence. Over time, the Romanian authorities have undertaken wide-ranging institutional reforms, most of which favoring blockholders over small and dispersed shareholders. Our empirical approach, based on logit and duration models, allows us to analyze the evolution of public companies over this period and sheds light on the likely events causing the eclipse of frontier emerging markets. Our main findings reveal that delisting is more likely to occur when (*i*) the shareholdings acquired from the privatization authority by circumventing the capital market are high; (*ii*) the company experiences frequent takeover bids; and (*iii*) the stock liquidity is low.

Keywords: takeover regulation, squeeze-out, minority shareholder protection

JEL Classifications: G34, G38, K22

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Introduction

The question of how to deal with conflicts among the various protagonists of public companies has been recently restated within the context of the ownership reforms undergone in the European emerging markets. The vast privatization programs addressed to millions of citizens in the early nineties and the subsequent trading of distributed free shares on new revived markets were viewed as genuine steps forward to the implementation of financial discipline in deficient corporations. The very existence of small shareholders, often confusedly called "dispersed shareholders", had been considered for a longtime a trump card in the reforming process involving former state-owned enterprises. While a large number of shareholders could justify to some extent the use of the '*public corporations*' label, it represents at best a *sine qua non* condition for restructuring privatized companies. Particularly, corporate refocusing on higher valued uses of resources asks often for the involvement of institutional shareholders or industries' leaders, likely to have expertise in the area of financial engineering and substantial financial resources for acquiring the control in those companies. The ownership structure "*majority owner – small individual shareholders*" originated from partial or complete privatization was a compromise that further raised a growing debate about the role of regulation governing property rights and the adequate corporate governance mechanisms that could address conflicts opposing market players. In this respect, facilitating the emergence of a sound private sector requires specific regulatory measures insulating minority shareholders from the expropriation by the controlling ones. In emerging markets, the authorities considered that leveling the playing field among corporate claimants could be achieved simply by transposing some of the rules applicable in well-established financial markets. Whether the "imported" legal texts have reflected the evolving domestic institutional issues and have had the expected wealth effects remains an open question whose answers are likely to be contextual.

In Central and Eastern Europe (CEE), the combination of circumstances in which the corporate structures have emerged and evolved provides singular opportunities to analyze the design of explicit rights of minority shareholders in block-holder regimes. The continuous dilution inflicted to minority shareholders in public companies led the Organization for Economic Cooperation and Development (OECD) to recommend delisting as one of the remedies that could restore the confidence in the private economic sector of some transition economies. We address this issue by focusing on the main institutional and corporate factors explaining the decision to change the companies' public status, before and after the OECD

report (2001) on the Romanian capital market. In this respect, we analyze the massive delisting activity on the over-the-counter market RASDAQ (Romanian Association of Securities Dealers Automated Quotation) between 1997 and 2006. Our evidence shows that the controversy around shareholders rights finds its roots in the proliferation of deals with large blocks made by circumventing the market. It reveals that private status -- considered as an extreme form of concentrated ownership -- depends on the initial ownership structures, thus confirming the structure-driven path dependence conjecture of Bebchuck and Roe (1999).

Prior studies on buyouts frame some non mutual exclusive hypotheses individualizing the main factors likely to drive the delisting decision (see Renneboog et al., 2007, for an extensive review). Most of the findings used as benchmark concern the LBO waves that have taken place in developed markets. The studies that have examined the likelihood of delisting in the European emerging markets reveal the limited scope of several hypotheses and point to the investigation of specific characteristics pertaining to regulation that should bear directly on the decision to go private. Atanasov et al. (2009) provide evidence that the minority freeze–out at large discounts proliferated on the Bulgarian market represents an extreme form of financial tunneling facilitated by the poor legal protection. Jackowicz and Kowalewski (2005) confirm that agency conflicts occurred in the post-privatization period explain the delisting decision in Poland. While similar in intuition, this study distinguishes from the previous works in that it addresses the concern that corporate governance regulation could dissimulate the protection of minority shareholders in emerging markets behind “politically correct” texts. Our approach exploits hand-collected firm-level characteristics and institutional features for 2,729 public companies. Particularly, the empirical specifications controlling for the outcomes of privatization, takeovers and share capital changes on the decision of whether to remain public of selected companies give additional insights on the exposure of minority shareholders to potential expropriation, which could enhance our understanding of emerging markets finance.

The remainder of the article is structured as follows. In Section 2, we briefly present the history of corporate structures formation and market regulation in Romania, with a focus on the main challenges raised by the implementation of fair price standards in freeze-out bids. Section 3 outlines the main testable hypotheses, presents the empirical methodology and describes our sample selection procedure and the selected independent variables. In Section 4, we discuss the results of logistic and duration analyses explaining the likelihood a company changes its public status into a private one. The final section concludes.

2. Institutional setting and legal provisions regulating control transactions

2.1. Initial patterns of corporate ownership structures

The peculiar experience of the Romanian stock market has been fuelled by the controversial mass privatization policy. Unlike other countries from CEE, where the transfer of State property into private hands involved private financial intermediaries that competed for collecting privatization vouchers (e.g. Poland, the Czech Republic, Bulgaria), in Romania the authorities preferred to institute a direct contact between companies and citizens. In this respect, each adult citizen could exchange the voucher received for free for the shares of a single company. In 1995, when the mass privatization program was re-launched, they could opt for one of 3,905 companies included in the official list, based on some basic information (industry code, share capital, sales, gross profit and the maximum percentage of share capital to be privatized). During the subscription period, the vouchers could not be bilaterally exchanged and thus, nobody could gather more vouchers. At the end of the subscription period, the Privatization Authority (AVAS) assigned a certain number of shares to individual shareholders based on the subscription degree: (1) if the offer was over-subscribed, it made a pro-rata distribution without exceeding the initial offered percentage; (2) if the offer was under-subscribed, it allotted the corresponding shares, while keeping the unsubscribed ones. Those who could not decide themselves were allowed to exchange their privatization vouchers for the shares of one of the five private property funds administratively created in 1991. The stock market emerged at this stage of the restructuring process as a "natural" result of the mass privatization program. All companies included in that program were compulsory listed either on the Bucharest Stock Exchange (1995) or on the over-the counter market, RASDAQ (1997). The distributed shares to citizens formed the free float of companies, considered from then-on public companies. According to the number of listed companies, the Romanian market has become over night the largest market of the region.[1] Nonetheless, the mass privatization concerning thousands of industrial companies created 18 million small shareholders but very few companies with dispersed shareholdings. As of the end of 1998, Earle and Telegdy (2002) report a mean and median ownership of shareholders who received shares within the mass privatization program of 24.5% and 18.4%, respectively. As, on average, the individual shareholders could not make any corporate decision even with perfect coordination, they have been for a long time regarded as a class of tolerated passive investors.

[1] Berglöf and Pajuste (2003) and Pajuste (2002) present a comparative analysis among the markets of Central and Eastern Europe which could provide the reader with further details.

Paradoxically, the stock market was viewed as a platform were "voucher" shareholders could sell their holdings and thus enjoy the last free lunch proposed by the government, rather than an institutional structure facilitating capital raising.

Despite its scope, the mass privatization was only one piece in the puzzling restructuring program of the Romanian government. Meanwhile, the Privatization Authority (AVAS) had been continuing to sell the State property to individual and institutional investors either by means of direct deals or market bids. According to AVAS data, 9,258 blocks were dealt between 1993 and 2003, more than 45% transactions involving majority stakes.

The broad picture of the very way the AVAS holdings were sold credibly signals that the Romanian government aimed principally at attracting large investors. While investments in controlling positions arouse the interest in performing the needed changes, the pervasive block-holdings obstruct the portfolio investments, calling thus into question the endurance of market structures. Fama and Jensen (1983), Maupin et al. (1984), Jansen and Kleimeier (2003), Atanasov et al. (2009) argue that high ownership concentration makes companies decide to go private. According to this broad picture a gradual eclipse of public companies in blockholders regimes is reasonably predictable. Our contention is that the Romanian stock market is an excellent candidate for identifying and analyzing the peculiar conditions in frontier emerging markets[2] that could have a major influence on delisting decisions.

2.2 Imported or tailored corporate rules?

The vast majority of companies listed on the Romanian capital market were under the control of a major shareholder from the very first day of their public episode. The low free floats had a negative impact on trading and created scope for market price manipulations that further deepened the market illiquidity. The OECD (2001) report provides anecdotic evidence on expropriation practices used by major shareholder in small- and medium-sized enterprises, especially changes to share capital and related-parties transactions. Under this view, the main redress available for minority shareholders was to create the premises for ownership consolidation and delisting of illiquid companies by instituting an equitable system of tender offers. In this respect, the OECD recommended to the Romanian market authority to

[2] In order for a market to be considered as "emerging" several criteria have to be met: (1) the market is localized in an emerging country; (2) the market does not exhibit financial depth; (3) there exist broad based discriminatory controls for non-domiciled investors; (4) it is characterized by a lack of transparency, depth, market regulation, and operational efficiency. *Wilshire Consulting* provides an annual report classifying the emerging markets in two distinct categories: (1) "investable" emerging markets; and (2) "frontier" emerging markets. The aim of this classification is to identify those markets that are able to support institutional investments and not to evaluate the current attractiveness for investment managers. For the time being, the only European emerging markets classified as "investable" are Hungary, Poland, and the Czech Republic.

determine a reasonable threshold triggering the squeeze-out procedure and assure the implementation of a fair price standard.

In Romania, the control transactions between private investors have been regulated drawing on the EU legislation. According to the regulation enacted from the very capital market inception, an investor must make a non discriminatory voluntary or mandatory tender offer whenever she seeks of acquiring 33% and 50% of the voting rights in a listed company, respectively. As a practical consequence of this rule, more than 1,500 takeover bids leading to the acquisition or reinforcement of control have been approved by the market authority (CNVM) over a 10-year span. However, before 2001 a public company was allowed to delist only (a) after concluding a tender offer initiated in the name of the majority of shareholders to buy-back the outstanding shares; and (b) if the General Assembly of Shareholders of the company having afterwards fewer than 500 shareholders or a share capital lower than ROL 1 billion decided to transform the company into a private one. The main objective of this regulation was to maintain a minimal functionality of the capital market on behalf of small shareholders willing to trade their stocks. Beginning with 2002, the updated takeover rules, in line with the recommendations made in the OECD (2001) report, state the '*obligation*' for the largest shareholder owning at least 90% of the capital to cash-out the minority shareholders. The law regulating the capital market promulgated in 2004 redefines this '*obligation*' as a '*right*' of controlling shareholder owning 95% or having received more than 90% of the target shares in a previous takeover bid to take the company private.

However, the appraisal remedy granted to the minority shareholders has raised a lot of controversy. From 1996 to 2002, the buyout price was based exclusively on the net asset value. Beginning with March 2002, when the first draft of a new market law was proposed, the calculation details of the exit price had been changed at least five times until the promulgation of the law. According to its final version, the buyout price had to be compounded based on three distinct values: (1) the average market price in the 12 months preceding the going private transaction; (2) the maximum price paid by the acquirer for the target shares over the same period; and (3) the equity per shares valuated based on the International Accounting Standards. The ambiguity created by the frequent change of the market law made some major shareholders interpret their obligation only in respect to the buyout of controlled company but not to the minimum price to be paid to minority shareholders. In 2004, the market authority modified once again the squeeze-out price provision that states this time that the price paid in a previous tender offer in which at least

90% of the remaining shares were tendered is a fair price.[3] Unless the controlling shareholder does make use of his right in the next three months following the acquisition of such a stake, the fair price will be valued by an independent expert. Besides, according to the market law of 2004, the minority shareholders were given the right to sell-out the remaining shares[4] to the dominant shareholder owning 95% of share capital either according to the terms of the bid preceding the acquisition of such a stake[5] or based on the valuation made by an external expert. However, if an external valuation of the minority holdings is necessary, the small shareholder contesting the bidding price is obliged to bear the valuation costs. When small shareholders are wealth constrained and the valuation costs are likely to be higher than stock value, such a fairness principle becomes simply unfeasible.

The acquisition literature argues that providing an acquirer with a squeeze-out right is an alternative to voluntary dilution when target shareholdings are dispersed (see Yarrow, 1985). In such cases, "allocational" acquisitions are possible only if acquirers can either limit the access of atomistic shareholders to post-acquisition gains (via dilution, private benefits of control or squeeze out rights) or build a toehold in the target. The exclusion mechanisms have a socially desirable function because they allow the market for corporate control to play its disciplinary role. However, on capital markets where blockholdings prevail, the regulator should first assess whether acquirers and target shareholders still play a zero-sum game, in which the last ones systematically have positive gains.

Furthermore, the valuation criterion based on the previous bidding prices seems highly inadequate in emerging markets. According to the "theory of bid capture" (Bates et al., 2006), the minority shareholders need protection mainly because of the ability of major shareholder to structure binding bids. The freeze-out right is regarded as an important source of private benefits, whenever the controlling shareholder uses private information having a downside effect on the company value. In illiquid markets, the investors possessing private information have the ability to exploit the inefficiencies caused by the low free float (Lehn and Poulsen, 1989). Bebchuk and Kahan (2000) argue that there is an adverse selection effect that results from the use of market prices as benchmark for no freeze-out value of minority shares.

[3] According to the acquisition literature, establishing a price for the going private transaction equal to that paid in the previous stage of a two-stage bid conditioned by the acquisition of 90% of the voting rights is argued by the free rider behaviour of atomistic shareholders. If the final price were higher than this limit, all the minority shareholders would wait the final stage of the offer. Besides, as each stockholder has a choice of whether to tender the shares to prospective investor, such a price could not be considered coercive.

[4] According to Holderness and Sheenan (1988), such a fair price provision restricts ex-ante the scope of bidders' opportunism and insulates the small investors from excessive expropriation.

[5] An extensive discussion about the mirroring characteristics of the rights of controlling shareholder and minority shareholders, respectively, is provided in Burkart and Panunzi (2004).

In emerging markets, the freeze-out regulation should address, besides financial considerations, the matter of "fair dealing" that implies analyzing how some control transaction, including privatization, were initiated, structured, and disclosed to the minority shareholders in the previous stages. Particularly, the mandatory bid rule, while deemed to be public regarding, was tailored so that to meet privatization objectives and the interests of groups dominating the corporate realm. Thus, an investor who buys directly from the Romanian privatization authority a stake that triggers the mandatory bid rule is exempted from the obligation to make a tender offer for the remaining shares. These direct deals, called in the legal text '*excepted transactions'*, allow the investors to build up high toeholds in public targets, even to control them, outside the market mechanism. Under these circumstances, the market prices cannot convey any information about the valuation of potential bidders. Pop (2006) stresses the ineffectiveness of the mandatory public offers made on the Romanian market from the point of view of minority shareholders of the target company, especially when a dominant shareholder exists and the insider trading is unbounded. In public to private transactions the minority shareholders run the danger to be under-compensated despite the premium paid above the market price. Consequently, in markets fraught with opportunities to exert substantive coercion on minority shareholders, the authorities should avoid imposing the price paid in the previous tender offers as the exclusive benchmark of fair value.

Because of the regular changes of legal details and fair price standards, as well as the looser intervention of the market authority against the abuses proliferated by majority shareholders, we wonder whether benchmarking regulation against modern takeover laws is sufficient to meet the general objectives of "efficiency" and "fairness" in minority freeze-outs.

3. Data, Sample Selection and Empirical Methodology

Maximizing the firm value often asks the revision of the form of business organization of firms from public to private ownership. A going private transaction usually refers to a buyout transaction of a public company by one or a handful of the target's shareholders, its management or external investors. Typically, the remaining stocks are paid in cash, sometimes raised by issuing debt securities backed by the target's assets and serviced by its operating cash flow. The intent of offeror to take private a company is materialized in a tender offer for the outstanding shares. One can prefer a two-step deal having similar economic terms: (1) a tender offer directly to the target's stockholders; (2) conditioned on the acquisition of 90% of the target's stock, a squeeze out of minority stockholders who did not

tender in the previous offer. While it is acknowledged that going private transactions create some benefits, there is a broad disagreement around the sources of the gain arising by reason of leaving the market. In the studies conducted on developed markets the following hypotheses were tested: (1) the agency costs-related hypotheses, including the free cash flow hypothesis, incentive realignment hypothesis, and control hypothesis; (2) the undervaluation hypothesis; (3) the takeover defense hypothesis; (4) the transaction costs hypothesis; (5) the tax benefit hypothesis; and (6) the wealth transfer hypothesis (see Renneboog et al., 2007). A broad reading of international evidence shows that the assumptions made in the related literature for explaining why the private status is preferred to the public one are not necessarily mutually exclusive. To get a better view on the range of conditions likely to defy those provisions, we analyze empirically whether specific trades (privatization, public offers, and capital transactions) could explain the choice for a private status of controlled companies, as well as the timing of the delisting decision.

From the universe of 3,596 companies that were delisted between 1997 and 2006, we excluded all those justifying their decision based on the following reasons: (1) merger with other companies; (2) divestiture; (3) bankruptcy; (4) radiation from the Commerce Registry; (5) administrative decision of the market authority; (6) transfer to the Bucharest Stock Exchange. We further deleted the companies having the one-digit NACE code "A. – Agriculture, forestry, and fishing", as far as during the analyzed period the judicial regime of the land had been ambiguous. Consequently, we identified 2,081 delisted companies having as stated argument on the official market reports either "withdrawn" or "closely held company" reasons. In order to reveal the rationale behind the decision to delist, we construct a control sample, which includes 1,240 industrial companies that were still listed on RASDAQ on December 31st, 2006. As in the previous case, we excluded from the control sample all agricultural firms. Of 3,321 observations meeting the selection criteria we lost 592 observations because financial reports or detailed market data for those companies were not publicly available.

For each of these companies we collect detailed information about privatization, public offers, share capital changes, stock market data, as well as financial data during the public status episode. In order to construct our independent variables, we explored and cross examined several sources of information: RASDAQ, the Romanian Minister of Finance, AVAS, CNVM, and Romanian Universe Database. The stock market raw information regarding the transaction history of the peer companies was kindly provided by Broker S.A., a Romanian investment firm.

As our main inquiry is whether the privatization policy of AVAS influenced the decision to take a company private, we construct three alternative variables: (1) *AVAS_major*, which is a dummy variable taking the value of 1 if the size of the block sold directly by AVAS exceeds 50% and 0 otherwise; (2) *AVAS_maxdir*, representing the maximum size of the block dealt with AVAS by circumventing the stock market; and (3) *Privatization Rounds*, defined as the total number of privatization rounds in which the company was involved. To test whether the ability to restructure, or conversely to divert resources, depends on the identity of the major shareholder, we include in our empirical models two dummy variables, *ESOP* and *Individual*, that equal 1 if the maximum block of AVAS was sold to the company's employees or individuals, respectively, and 0 otherwise.

The takeover activity is captured by constructing the following variables: (1) *First Bid_Submitted* representing the ratio of the number of shares submitted to the number of targeted shares in the first takeover bid; (2) *Nb. Bids*, representing the total number of takeover bids made for the company's shares; (3) *Bid_Av Price*, expressed as the ratio of maximum biding price to average price over the considered period.

To control for market conditions, we used the *Stock Turnover* variable, measuring the ability of firms to attract the market participants' interest, computed as the ratio of trading volume to the average number of outstanding shares. The denominator of this variable is compound by taking into account the duration between every two subsequent changes to share capital made over the considered period. Besides, we control for the stock market conditions by including in the analysis the proxy *Market Trend*, computed as the ratio of the closing price on the last transaction day of the considered period to the average market price over the same period. For the peer companies, we construct the market specific variables with respect to the 31st of December 2005, in order to avoid an implicit bias in the size of transaction volume linked to their continual public status.

In the related literature it is argued that new share issues might represent a subtle strategy for adjusting the position of large shareholders in the detriment of the small ones. The OECD (2001) report provides anecdotic evidence about practices aiming to dilute minority shareholders' rights through share capital increases without prior revaluation of existing assets or through in-kind contribution of the majority shareholders. *A priori* increasing the share capital does not necessarily imply an ownership adjustment. Over the analyzed period all listed companies were allowed to revalue their assets because of the losses incurred from high inflation. In order to update the assets value, the shareholders could decide to modify either the number of outstanding shares or their face value. In the last case, companies may not have

to issue any additional shares. As we have no information about the evolution of ownership structure, we control for financial tunneling by considering two proxies (1) the number of times a company changed its total number of shares, *Nb. Capital Changes*; and (2) the total percentage share capital increases between the listing date and the delisting or "censored" date, *Capital Change*.

The relationship between the financial characteristics and probability of delisting is expressed by the following variables: (1) *Size*, the logarithm of total assets; (2) *ROE*, which whenever the equity value is negative this ratio is considered –100%; (3) *Leverage* computed as the ratio of debt to total assets; (4) *Assets Turnover*, equal to sales divided by total assets; and (5) *FATA*, representing the proportion of fixed assets in total assets. All financial variables are based on the financial statements reported by companies at the end of the year preceding the delisting / "censored" year.

In order to analyze the determinants of the delisting process for the Romanian companies listed on the OTC market RASDAQ, we use three different empirical specifications. The first specification is based on a standard *logit* model of the following form:

$$Proba[STATUS_t = 1] = F(\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \cdots + \beta_n X_n)$$

where $F(.)$ represents the cumulative logistic distribution, X_1, …, X_n a set of explanatory variables, and

$$STATUS_t = \begin{cases} 1 \text{ if the firm was delisted at time } t \\ 0 \text{ otherwise} \end{cases}.$$

Our second specification is based on a Cox proportional hazard (PH), which allows for censoring in the sense that not all companies included in our sample were delisted during the analyzed period (see Kalbfleisch and Prentice, 1980, for more details on the estimation of survival models). A crucial assumption behind the Cox proportional hazards specification is that the hazard ratio is proportionally distributed over time. To evaluate this assumption, we performed a test of nonzero slope in a generalized linear regression of the scaled Schoenfeld residuals on various functions of time (see Grambsch and Therneau, 1994, for additional details). The test is equivalent to evaluate the hypothesis that the log hazard ratio function is constant over time. After estimating each Cox proportional hazard model, we generated the matrix of Schoenfeld residuals (scaled adjusted), tested the null hypothesis that the slope is equal to zero for each covariate in various models, and performed the global test recommended by Grambsch and Therneau (1994). Although the null hypothesis of zero slope

in the appropriate regressions was accepted for some *individual* covariates of interest, the *global* test indicated in most cases deviations from the proportional hazards assumption. Consequently, our third specification is based on an alternative modeling choice: the *accelerated failure-time* (AFT) model. The AFT specification supposes a linear relationship between the logarithm of the survival time and the covariates. As usual, the assumption on the distributional form of the error term determines the class of the regression models. Particularly, assuming a normal, logistic, extreme-value or three-parameter gamma distribution for the error term, the corresponding regression models are lognormal, log-logistic, Weibull and generalized gamma, respectively. In the present paper, we opted for the generalized gamma model for two distinct reasons. First, as it is well known, the hazard function implied by the generalized gamma specification is extremely flexible, allowing for a large specter of possible shapes (in particular, the Weibull and lognormal distributions can be viewed as special cases of the generalized gamma density). Second, to discriminate between various AFT models, we computed for each model the log likelihood and the *Akaike Information Criterion* (AIC). According to our comparisons, the gamma generalized model appears to be the best-fitting model (i.e. exhibiting the largest log likelihood) and the one with the smallest AIC value.

The two classes of regression models used in our empirical analysis (*logit* and *survival -- PH & AFT* -- models) help to shed light on two distinct facets of our main research question. On the one hand, the *logit* methodology allows us to conclude on the *unconditional* predictive power of the various determinants of the decision to delist. On the other hand, the *survival analysis* allows us to obtain estimates of the impact of the covariates on the *conditional* probability to delist; that is, the probability to delist *conditional* on being listed to a certain point in time and exhibiting certain values for the covariates in the previous period. The later methodological issue is highly relevant to the literature on the decision of public companies to delist.

4. Empirical Results

The empirical results presented in Table 1 reveal a positive and significant relationship in all logit specifications between the variables used as proxies for the Government involvement in the course of capital concentration and the probability of going private. Firms involved in direct privatization end with lesser investor participation, as long as the block owned by AVAS is dealt with a single or a small group of investors. This result lends support to Bates et al.'s (2006) thesis that the likelihood of having minority shareholders "left out in the cold"

increases whenever there is discrepancy between them and the controlling shareholder. By linking this result to the theory of bid capture, we validate indirectly the control hypothesis indicating that the delisting decision and wealth of minority shareholders are negatively related. While highly significant in the logistic regression, the size of the block obtained by avoiding the market, irrespective of its level, has no impact on the duration of public status. However, this result is of common sense. On the one hand, in closing-held companies few private investors would accept to continue to have the Government as partner. On the other hand, bearing in mind the strong dealing position of AVAS it is hard to imagine that it could behave like a usual shareholder and tender voluntarily its shares in a regular takeover bid. The stylized facts show that AVAS has always cashed out its minority positions in distinct deals and has defined distinct transactions terms. A similar effect of the Government stakes is reported in Atanasov et al. (2005), in their analysis of the Bulgarian market but they explain their results by political costs arguments. As direct privatization leads to high ownership concentration, the shareholder base of companies cannot be unexpectedly changed. Under these circumstances, the takeover defense hypothesis is less plausible in our case.

The probability and conditional probability to delist are lower when companies are controlled by employees' association compared with those firms where AVAS's shareholdings were dealt with industrial companies or financial institutions. The negative sign of this variable can be explained by the peculiar conditions stated in the privatization contracts concluded between AVAS and employees' associations. In the majority of cases employees could defer the complete payment of the negotiated acquisition price for several years but were forbidden to resale the acquired block to other investors during the teasing period.

The significant positive effect of *First Bid_Submitted* shows that companies whose shareholders massively accepted the conditions of the first takeover bid are taken private sooner than their counterparts. The positive and significant coefficient of the *Nb. Bids* variable reveals that when bidders intend to obtain the whole participation in the target, the company has more chances to end its public episode.

The change in the organizational form becomes less likely for companies that modify the total number of shares more often. The sign of variable *Nb. Capital Changes* is negative and highly significant in all empirical specifications. We have also controlled for the amplitude of these changes through the ratio of the number of outstanding shares before delisting/"censored" date to the initial number of outstanding shares, but the estimated results

based on this variable are not conclusive. One possible explanation could be that in the case of very intensive assets firms, the revaluation process could cause a steep increase in the total number of shares. As in such cases existing shareholders receive free shares proportionally with their holdings, such a decision could be followed by improved market liquidity. Another way of explaining why the estimated coefficients of this variable are not significant concerns the distribution of dividend shares. It is worth underlying that the two types of decisions leading to the increase of share capital do not trigger any change in the ownership structure. Even if the stylized facts reported by the OECD show that the dilution inflicted by major shareholders trough in-kind contributions was a recurrent practice in small and medium size enterprises, tracing such strategies based only on the history of capital changes is practically impossible. In order to distinguish between "benign" and "malign" operations, we would have to control for the ownership structure before and after such an event (unavailable data). However, when we control for this influence in the hazard models, our intuition is confirmed by the results; that is, within companies experiencing a steeper increase in the total number of shares the decision to end the public episode is made sooner than in the peer companies.

As one of the main concerns of our study is to test how the conflicts of interest over the use of companies' resources influence the decision to go private or dark, in the empirical models we control for financial conditions. Financial literature predicts that companies that expand their activity but sacrifice the profitability are more likely to face conflicts of interest. By using the operating decision against small shareholders' interest, the blockholders seek to affect minority discounts paid in going to private transactions or to simply influence their willingness to delist the company. Gilson and Gordon (2003) argue that by taking private the company, the large shareholders can capture the capitalized value of future private benefits over the value of a non-controlling share. Besides, there is a strong link between those gains and the level of benefits likely to be expropriated by operational means. If so, the positive sign of *Assets Turnover* and the non-significant influence of the financial performance (proxied by *ROE*) can be interpreted as an indication of the use of such stratagems, i.e. disadvantageous transfer prices between the public companies and other companies owned by the controlling shareholder. The positive and significant coefficient of the *FATA* variable lends support to the conjecture that companies in which expropriation behavior is more likely choose to leave the stock market and exit sooner than their competitors. As companies listed on the stock market were seriously undervalued, significant gains could be realized by taking over the company and by selling afterwards its physical assets by pieces. This finding is consistent with the hypothesis that dilution inflicted to the small shareholders can be a

practice associated with the decision to go private. The low market capitalization made the debt a useless source of financing and going to private transactions neutral events with respect to taxes. Consequently, the conditions needed for testing the traditional tax benefit and the wealth transfer (from bondholders) hypotheses are not validated within the peculiar context of the Romanian market. According to our findings, the probability of delisting is decreasing in the company's size. The inherent difficulty to completely acquire companies of large size is a common result in the literature.

One of the previous influences, namely the ownership concentration, creates scope for insider trading based on proprietary information and consequently for market misevaluation. The negative and significant coefficient of the *Stock Turnover* variable lends additional support to our intuition that the delisting decision concerns mainly public companies obliterated by the investors' ignorance. This finding is in line with those reported by Jackowicz and Kowalewski (2005) and Atanasov et al. (2009) for other CEE emerging markets and proves that the absence of scrutiny from small investors could be critical for the survival of public companies.

All in all, our results validate the control and undervaluation hypotheses. The delisting practices prevailing in the Romanian market bring into attention the operations involving control positions and the subsequent effects of the low free float. As privatizing public companies is an arbitrary choice that decisively affects the investment incentives of private players, our results provide an empirical proof that the regulation is in reality adapted to fit the institutional environment.

Conclusion

In this paper we provide additional evidence about the causes of delisting by focusing on the expropriation of minority shareholders, one of the main stated concerns as well as an empirical regularity found in previous studies on emerging markets (Atanasov et al., 2009; Jackowicz and Kowalewski, 2005). Our approach emphasizes the possibility that the incentives to take advantage of outside shareholders are explained by the very way the initial shareholdings of controlling shareholders were chosen. The interest groups emerged in the early privatization weakened the regulatory response to corporate governance failures in the Romanian market. Even if the law regulating going private transactions taken as a whole could be public regarding, the details of the fair price standard, the frequent changes of those details, as well as the exemptions to the rule in the case of the transactions involving State

majority or minority ownership make this law little effective in preventing the expropriation of minority shareholders.

The main findings of this study are that delisting is likely to occur especially when (1) the block obtained by circumventing the market is large; (2) the companies are more often involved in capital transactions; and (3) the companies are less scrutinized by investors and therefore market prices are less informative. In the light of our empirical findings, the regulatory provisions seem to perversely defend the sticky concentrated ownership structures.

The ample phenomenon of delisting that experienced the Romanian capital market, including even blue-chips companies, after the issue of the OECD (2001) report brings into question the likely effectiveness of the introduction of the squeeze-out rights. Unfortunately, the implementation of the "acquis communautaires" expressed too often the political decisions made during privatization and the interests of those shareholders become influential. In the long run, beyond the fairness principle, a matter of serious reflection should be the shrink of capital markets caused by massive delisting.

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Table 1: Results from logistic and duration models

Independent	Logistic models			Cox Proportional Hazard models			Generalized Gamma Duration models		
Variables	1	2	3	4	5	6	7	8	9
AVAS_major	0.222**			0.981			0.006		
	(0.020)			(0.720)			(0.764)		
AVAS_maxdir		0.006***			1.000			+0.000	
		(0.000)			(0.622)			(0.525)	
Privatization Rounds			0.208***			1.025			–0.006
			(0.002)			(0.501)			(0.704)
ESOP	–0.358***	–0.345***	–0.376***	0.789***	0.802***	0.787***	0.096***	0.087***	0.093***
	(0.001)	(0.002)	(0.001)	(0.000)	(0.001)	(0.000)	(0.000)	(0.001)	(0.000)
Individual	0.103	0.100	0.115	0.987	1.024	1.008	0.006	–0.010	–0.004
	(0.460)	(0.489)	(0.425)	(0.840)	(0.731)	(0.903)	(0.831)	(0.719)	(0.868)
First Bid_Submitted	1.233***			1.578***			–0.181***		
	(0.000)			(0.000)			(0.000)		
Nb. Bids		0.600***	0.581***		1.252***	1.254***		–0.093***	–0.094***
		(0.000)	(0.000)		(0.000)	(0.000)		(0.000)	(0.000)
Bid _Av Price	0.058**	0.011	0.013	>1.000**	>1.000**	>1.000**	–0.000*	–0.000*	–0.000*
	(0.053)	(0.520)	(0.461)	(0.035)	(0.034)	(0.035)	(0.057)	(0.056)	(0.058)
Nb. Capital Changes	–0.206***	–0.202***	–0.203***	0.774***	0.782***	0.781***	0.099***	0.096***	0.096***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Capital Change[a]	0.021	0.018	0.016	>1.000***	>1.000***	>1.000***	–0.000***	–0.000***	–0.000***
	(0.760)	(0.816)	(0.786)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Size	–1.101***	–1.179***	–1.171***	0.760***	0.750***	0.750***	0.106***	0.112***	0.112***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
ROE	0.016	0.013	0.015	1.047*	1.048*	1.046*	–0.013	–0.012	–0.012
	(0.353)	(0.435)	(0.339)	(0.069)	(0.071)	(0.081)	(0.142)	(0.159)	(0.166)
Leverage	0.058	0.074*	0.078*	0.989***	0.989***	0.989***	0.005***	0.005***	0.005***
	(0.153)	(0.081)	(0.071)	(0.005)	(0.006)	(0.006)	(0.001)	(0.002)	(0.002)
Asset Turnover	0.137***	0.125**	0.117**	1.037***	1.035***	1.035***	–0.016***	–0.016***	–0.016***
	(0.006)	(0.012)	(0.018)	(0.001)	(0.002)	(0.002)	(0.000)	(0.001)	(0.001)
FATA	0.435**	0.429**	0.426**	1.679***	1.684***	1.672***	–0.204***	–0.206***	–0.204***
	(0.027)	(0.031)	(0.032)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Stock Turnover	–0.095**	–0.104**	–0.125***	0.949*	0.930**	0.934**	0.021*	0.031**	0.029**

	(0.015)	(0.018)	(0.008)	(0.060)	(0.020)	(0.022)	(0.057)	(0.015)	(0.017)
Market Trend[b]	0.003	0.003	0.002	<1.000	<1.000	<1.000	+0.000	+0.000	+0.000
	(0.406)	(0.377)	(0.373)	(0.571)	(0.566)	(0.565)	(0.570)	(0.561)	(0.560)
Intercept	8.109***	8.435***	8.450***				6.435***	6.345***	6.360***
	(0.000)	(0.000)	(0.000)				(0.000)	(0.000)	(0.000)
McFadden R2	0.200	0.212	0.212						
Ancillary							0.402	0.406	0.405
Kappa							0.866***	0.838***	0.843***
Number of firms	2,729	2,729	2,729	2,729	2,729	2,729	2,729	2,729	2,729
Delisted firms	1,632	1,632	1,632	1,632	1,632	1,632	1,632	1,632	1,632
Log likelihood	–1,468.8	–1,449.2	–1,450.8	–11,676.3	–11,666.5	–11,666.4	–1,952.7	–1,940.9	–1,941.0
LR	743.0***	782.0***	778.9***	1,009.5***	1,029.0***	1,029.2***	1,002.8***	1,026.5***	1,026.2***
AIC	1,090.3	1,072.5	1,073.0				3,939.5	3,915.8	3,916.0

This table presents the estimation results from logistic and duration model regressions using various sets of covariates. For ease the interpretation, the results from Cox Proportional Hazards regressions (models 4-6) are presented in the *log relative-hazard metric*, e.g. a hazard ratio equal to 2 means that a one-unit change in the covariate doubles the hazard of "failure", whereas a hazard ratio of .3 implies that a one-unit change in the covariate cuts the hazard to one-third. For computational reasons, it is worth noting that the results from Generalized Gamma regressions (models (7-9) are expressed in the *accelerated failure-time metric*, e.g. negative coefficient estimates translate into a *positive* impact on the hazard of "failure", whereas a positive coefficient estimate implies that a change in the covariate decreases the hazard.

The explanatory variables are defined as follows: *AVAS_major,* is a dummy variable that takes the value of 1 if the size of block sold directly by AVAS exceeds 50% and 0 otherwise; *AVAS_maxdir* is the maximum size of the block dealt with AVAS by circumventing the stock market; *Privatization Rounds* represents the total number of privatization rounds in which the company was involved; *ESOP/Individual* is a dummy variable that takes the value of 1 if the block was sold to the company's employees/physical person and 0 otherwise; *First Bid_Submitted* represents the ratio between the number of shares submitted in the first takeover bid and the number of targeted shares; *Nb Bids* represents the total number of takeover bids made for the company's shares; *Bid_Av Price* is the ratio between the maximum biding price and the average price on the considered period; *Nb Capital Changes* is the number of times the company has changed its total number of shares; *Capital Change* is the percentage difference between the final number of shares and the number of shares at the listing date; *Size* is the logarithm of total assets; *ROE* is the return on equity; *Leverage* is the ratio between the debt and total assets; *Assets Turnover* is the ratio between sales and total assets; *FATA* is the ratio between fixed assets and total assets; *Stock Turnover* is the ratio between the total volume and the average number of shares on the considered period; *Market Trend* is the ratio between last closing price and the average market price over the considered period.

P-values are reported in parenthesis, below each coefficient / hazard ratio estimate.

***, **, * indicate statistical significance at the 1%, 5%, and 10% respectively

[a](x 10-2). [b] (x 10-4) -- for the logistic models only

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