Regulation, Taxes and the Market for Corporate Control in Belgium

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Comments Welcome

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Abstract

This paper examines the effect of regulation and taxation on the characteristics of the merger and acquisition process in Belgium. Regulatory provisions are reflected in the fact that Belgian bidders own large toeholds in the target before they engage in takeover bids. Although these toeholds don't have to be disclosed, bidders don't earn any significant returns as a result of the takeover. We explain this by the fact that corporate voting laws force potential bidders to negotiate with major shareholders. It is also found that tax considerations outweigh all other factors when a firm chooses to pay with cash or with shares.

1. Introduction

The recent attempt of the Italian financier Carlo de Benedetti to take over the largest Belgian holding company, the Société Generale, has put Belgium (at least for a while) on the forefront of the international takeover scene. The newly elected Belgian Government swiftly responded by proposing "anti-raider" disclosure legislation similar to rule 13-d in the U.S.: owners of 5% of the firm's shares will have to disclose their ownership. The stated purpose of this legislation is to protect "the company", which presumably includes its shareholders. Whether these shareholders need this protection is an empirical issue that we plan to address in this paper.

This paper is a study of the Belgian market for corporate control, in particular the effect of mergers and takeover bids involving Belgian firms during the period 1970-1985. Previous published evidence on Belgian data is limited to mergers before 1976 (Gagnon, Brehain, Broquet and Guerra (1982)). Although this topic has been extensively researched in many other countries (for a survey of U.S. and European evidence see Jensen and Ruback (1983), Jarrell, Brickley and Netter (1988) and Hawawini (1984)), there are a number of reasons why the Belgian experience may be of interest to researchers in other countries.

As will be explained in detail infra, regulation of takeover activity and taxation of capital gains are different in Belgium than in other countries. Hence, the Belgian regulatory and tax environment allows testing for the relevance of institutional factors for the characteristics of the acquisition process. Moreover, although when thoroughly investigated, the topic remains controversial: the evidence from other countries is ambiguous in the sense that it is not clear whether acquiring firms lose or don't benefit from mergers. Jensen and Ruback (1983) interpret the studies they survey as evidence that acquiring firms don't lose. Roll (1986) argues that the evidence on U.S. mergers is consistent with the hypothesis that there is no net aggregate gain to mergers: there is only a distribution of wealth from losing acquiring corporations to (overpaid) acquired firms.

This paper takes off with a detailed description of the regulatory and tax environment surrounding mergers and takeover bids in Belgium. Although disclosure requirements are less important than in other countries, it seems clear that other specific regulatory provisions and corporate voting laws could create large costs to potential bidders. Moreover, in contrast to many other countries, the mode of payment (cash or shares of the bidder) does not affect the taxation of gains in takeover bids, while it does in mergers. Section three reports on the results of takeover bids. It is found that, on average, bidders don't earn abnormal returns, while target firms earn excess returns of 37% on average. The effect of the Belgian regulatory provisions is reflected in the large toeholds of the bidder and the fact that direct offers for corporate control, without prior negotiation with a large block shareholder, are very uncommon. It is also found that large bidder toeholds are bad for the target. On the other hand, the presence of a large negotiating target shareholder improves target returns. Section 4 analyses the returns arising from mergers. It is found that shareholders of target firms only realise excess returns of 6%, on average, while bidders don't gain or lose. Consistent with these small returns it is found that mergers actually involve much smaller changes in control than takeover bids. The finding that mergers are typically financed with shares of the bidder and takeover bids are financed with cash, suggests that tax considerations outweigh all other factors when firms have to chose a payment form. Section 5 summarises our findings and conclusions.

2 Regulation and taxation

2.1 Regulations of Acquisition activities: description

The Belgian equivalent of the S.E.C. is the Banking Commission (henceforth, the Commission). This is an organism set up to supervise banking and investing activities, as well as the issuing and trading of securities. The Commission bases its rules on three general stated principles: 1) equal treatment of all shareholders; 2) maximizing the flow of adequate information and 3) avoiding "disturbances" in the

capital markets. The area of influence of the Commission often exceeds the authority conferred to it by law, so that corporations seldom make a move without taking into consideration the Commission's point of view.[1]

A firm can obtain control of another corporation in four ways: by buying shares in the open market, by buying a controlling block from a major shareholder in a private transaction, by making a public tender offer for a number of shares of the target firm or by negotiating a merger with the target firm's management.

The purchase of shares in the open market is essentially unregulated. In contrast to the U.S. where investors who own more than 5% of a firm's shares have to file a 13-d disclosure form with the Securities and Exchange Commission within 10 days, no filing requirement (currently) exists.[2]

If a firm acquires control of another company through a private transaction, and pays a premium to the selling shareholder(s), a public tender offer has to be made to all[3] the remaining shareholders, under the same terms (same tender price, adjusted for rights issues, dividends, etc.) as the private transaction. The Commission determines when a transaction involves a transfer of control rather than simply a portfolio investment[4]. It is therefore not surprising that, before purchasing a large block of shares, bidders inquire whether the Commission will require an extension of the bid to the other shareholders. In addition, transactions in which more than one third of the shares of a firm operating in Belgium and with a book value of equity of at least 100 million Belgian Francs change hands, have to be reported to the regulatory authorities. Because private transactions do not have to be reported, the tender offer bid often represents a joint announcement of (1) a completed private transaction and (2) a proposed public tender offer.

Since 1964 takeover bids fall under the jurisdiction of the Commission. As Wtterwulghe (1983) notes: "Although the Commission's powers are rather limited from a strict juridical point of view, it possesses significant de facto influence on companies planning to launch takeover

bids ... the threat of these sanctions has proved to be as effective as the power of authorization would have been."

Specifically, the Commission requires to be notified by the bidding firm at least two weeks before the takeover bid is made. In order to "prevent insider trading on the basis of rumors" the bidder has to publish the terms of the offer "immediately" (ie., before the bid is approved by the Commission). Before the offer becomes effective the bidding firm also has to disclose the prospectus to the target firm's management and give it the time (a few days) to express its opinion on the offer. The bidder has to provide the Commission with a prospectus in which all shareholders are informed about a number of characteristics of the bidder, the terms of the offer and the target firm.

Information on the bidder includes balance sheets, composition of management and ownership structure and the purpose of the offer. Terms of the offer include offer price, offer period, the number of shares to be purchased and conditions under which the bidder will cancel the offer. Information on the target company includes various estimates of the value of the shares (using net asset values, market values, discounted earnings, and/or present value of expected dividends). The Commission recommends that "the price offered should reflect the value of each share as far as practicable, taking into account the uncertainties inherent in asset valuation." This valuation procedure is also performed for tax reasons: in "friendly" takeover bids of related companies it is not uncommon for the management of the bidding firm to own shares of the target firm. Unless the bid price is "fair", the management will be taxed on the gains from tendering its shares[5].

If a takeover bid is successful and the Commission feels (after discussion with officials from the Brussels Stock Exchange), that not enough shares remain publicly traded after the bid to keep the target firm listed, it requires the firm to extend the offer to all remaining shareholders for at least 6 months after the original bid[6]. In other words, non-tendering minority shareholders may get a 6 month put option if the offer turns out to be successful and the stock is delisted[7]. In

general, the Stock Exchange will delist the stock if the bidder acquires more than 90% of the shares.

With respect to counter-bids, the Commission requires the same procedure as for regular bids. However, the counter-bid must be at least 5% above the original bid and each subsequent offer must be at least 2.5% above the preceding offer. The Commission also requires the bidder to release the target shareholders who would prefer the counter-bid, but who have already tendered their shares.

Special rules apply to bids made by foreign corporations. Originally, the 1967 Royal Decree required the permission of the Minister of Finance for takeover bids by foreign companies. After this was declared a violation of the treaty of Rome, this requirement currently (ie., after July 1972) only applies to bidders outside the E.E.C. The stated purpose of this law is to prevent disruption of "employment and economic planning". New regulations concerning crossborder mergers and takeovers taking place across borders are expected to be proposed by the E.E.C. by 1992.

Because mergers (in contrast to public tender offers) are negotiated between the management of the two companies involved (and, therefore are not considered as an offer to the "public") they fall outside the jurisdiction of the Commission. Nevertheless, the Commission has provided a number of recommendations, mainly regarding the information to be provided to the stock holders. In addition, when the surviving company is listed on the stock market but the target firm is not, the Commission has to be notified before the merger: in this case "new" shares are issued so that the Commission has to provide its nihil obstat.

2.2 Regulation of takeover activity: discussion and evaluations

The previous paragraph shows that regulation of takeover activity covers two broad areas: information disclosure, and protection of minority shareholders.

2.2.1 Disclosure regulations

Several authors have argued that disclosure regulations have shifted wealth from bidders to targets because increased disclosure encourages competing bids. In the U.S., the introduction of the Williams Act in 1968 (which increased disclosure requirements) was followed by higher premiums to targets (Bradley and Jarrell (1980) and lower returns to potential and actual bidders (Schipper and Thompson (1983)), Asquith, Bruner and Mullins (1983)). Eckbo and Langohr (1988) reach similar conclusions employing French data: after disclosure regulations were introduced in 1970 offer premiums increased from 34 to 73%. They also find that private tender offers for control, which are exempt from disclosure regulations, produce significantly lower returns to the target firm shareholders. However, Franks and Harris (1988) cast doubt on these interpretations by showing that, in the U.K., target wealth gains also increased after 1968, without any change in disclosure regulations.

The main difference between Belgian and foreign disclosure legislation (in the case of the U.S., the U.K. and France) is the lack of mandatory disclosure of toehold acquisitions. In the U.S. and the U.K., an investor has to disclose its ownership as soon as it exceeds 5%. The lack of disclosure requirement may give a significant advantage to bidders who can profit from the capital gains on their toehold, after they gain control over the target firm. Thus:

Hypothesis 1: The absence of a disclosure requirement of prior toeholds will provide bidders with a larger fraction of the gain from the takeover than in countries where such disclosure is required. The larger the prior toehold, the larger the gain to the bidder.

2.2.2 Protection of minority shareholders

The requirement that any private transaction in which a premium is paid for majority control forces the bidder to extend the offer to all minority shareholders, seems to be a deterrent to private transactions, relative to public tender offers. However, considering that owning 25% of the shares provides shareholders with a blocking minority in major corporate decisions (such as new issues and mergers), such private negotiations are likely to be inevitable. As Shleifer and Vishny (1986) point out, large shareholders play a crucial role in reducing agency costs resulting from separation between management and risk-bearing. Considering the substantial practical difficulties in reducing these agency costs (for a discussion, see Shleifer and Vishny (1988)) concentrated ownership will be the rule rather than the exception. Note that the 75% majority rule is significantly more restrictive than the U.S. where companies can avoid restrictions in their corporate charter by incorporating in states which impose little constraints (see Dodd and Leftwich (1980)); in fact this rule is almost equivalent to a supermajority clause in the U.S.

The requirement to treat all shareholders equally effectively outlaws two-tier takeover bids. In a two-tier takeover bid the bidder offers a substantial premium over the market for a majority of the target's shares. This first part of the buyout is then coupled with the promise (or threat) of a "take-out" or second stage merger, in which the remaining target shareholders receive a price well below the cash bid price. This technique, which is common in the U.S., encourages the success of a takeover bid because it eliminates the so-called "free rider" problem (See Grossman and Hart (1980): if the benefits to the bidder come from buying the target at a price below the post-offer price (eg., through improvement of the target management) individual shareholders who can't affect the outcome of the offer, have an incentive not to tender their shares. Note that, as Bradley (1980) points out, the free rider problem will be mitigated if the profitability of the bidder (also) increases as a result of the takeover.

A counter argument to the two-tier takeover procedure (see Bebchuk (1983) and Lowenstein (1983)) is that shareholders may be forced to tender to a bid they don't believe to be the best possible. Worse, in some cases they may even be forced to tender, even if, as a whole, they will be made worse off than if no bid took place (creating the so called "prisoner's dilemma"). However, evidence in the U.S., reported by Comment and Jarrell (1987) shows that two-tier takeover bids do not cause the expropriation of target shareholders.[8] The reason is that a number of factors reduce the empirical relevance of the prisoner's dilemma: (1) competing bids would be attracted because other companies would realise that the target firm is being bought below its true value; and (2) various "shark repellents", which allow target management to defend itself against unwanted suitors: supermajority provisions in which the percentage of votes required for stockholder approval of mergers with "related stockholders" (those that already own a substantial percentage of the stock) is increased (see Carney (1986)); repurchase tender offers by which the target creates its own counter bid (see eg., Vermaelen (1984), Jensen (1986), Stulz (1988) and Bagwell (1988)). Not all of these conditions apply in Belgium. Repurchase tender offers are not a good anti-takeover device for Belgian firms because of regulatory and tax reasons (see Vermaelen (1986)). On the other hand, corporate law which requires approval of 75% of the shareholders in mergers, makes supermajority the rule rather than the exception. Moreover, companies can <u>indirectly</u> buy back their own stock by having a subsidiary (a friendly bidder) make an offer for the parent's shares.

If two-tier takeover bids are ruled out, bidders in Belgium can nevertheless try to overcome free rider problems in three other ways. First, they could make unconditional tender offers, ie., offers without minimum limit, so that non-tendering shareholders are made worse off if ultimately the bid fails. Note that the free-rider problem occurs because, if the bid fails, the shareholder will be equally worse off, whether he tenders or not. In unconditional tender offers, the non-tendering shareholder will be worse off than the tendering shareholder when the bid fails. Hence, not tendering is no longer an obvious optimal strategy for the small, atomistic shareholder. However, this procedure will make unsuccessful bids very costly to the bidder.

Second, the bidder could directly negotiate with large shareholders who own controlling blocks (and who, in contrast to small shareholders, have an impact on the outcome of the offer). In this case, the Commission's requirement to extend the offer to all other shareholders will also make the offer more expensive than a public offer for majority control. Finally the cheapest alternative to the free rider problem may be to purchase shares "quietly" in the open market (see Schleifer and Vishny (1986)), an activity which in the past (in contrast to the U.S., U.K. or France) was not subject to any disclosure regulation. Thus,

Hypothesis 2: Considering the Belgian regulatory environment, we expect that (1) offers will tend to be unconditional, (2) prior bidder ownership (toeholds), will be large and (3) many tender offers will result from purchasing a controlling block at a premium.

Hypothesis 3: The Banking Commission's regulations and corporate voting laws make negotiations with large shareholders (who own controlling blocks) almost inevitable. Thus bidders will earn lower returns than in countries where such legislation does not exist. The larger the size of the controlling block, the lower the bidder returns.

Note that free rider and prisoner's dilemma problems are only relevant when a bidder faces dispersed atomistic shareholders who are unable to collide Comment and Jarrell (1987) observe that tender offers in the U.S. are typically negotiated and argue that "the bargaining power of target management ..... reduces any tactical advantage bidders may have as a result of diffuse atomistic ownership of the target's common stock".[9] Brown (1988) argues that two-tier takeover bids are set up for tax reasons: by having a non-taxable second stage the bidder tries to induce shareholders with high capital gains taxes to tender.

2.3 Taxation of merger and takeover gains in Belgium

A distinction has to be made between mergers and takeover bids. In a merger, the target firm and the target shareholders are both exempt from any taxes when the acquisition is financed with stock. In a cash merger, either the target firm or the target shareholders have to pay "liquidation taxes" or capital gains taxes. The bidder is exempt from taxation.

In a takeover bid, the target firm is not taxed. Target shareholders have to pay capital gains taxes, regardless of the means of payment. Thus, in Belgium, capital gains to target shareholders in takeover bids are taxed the same in cash offers and stock offers. This tax regime contrasts with the U.S. (and the U.K.) where cash acquisitions are taxable and equity acquisitions are not. Hence, in order to explain (in the U.S.) the use of cash as a means of payment, one has to appeal to (1) the "trapped equity" theory (King, (1988)) who argues that a cash acquisition may be an efficient way to make distributions to shareholders (as an alternative to dividends or stock repurchase), to (2) signalling models (Myers and Majluf (1984) and Miller and Rock (1985)) who argue that payment with shares will reveal bad information to shareholders, or to (3) agency theory (Jensen (1986)) which suggests that firms with excess cash-flow have incentives to use this cash in acquisitions rather than returning the funds to the shareholders. Another explanation for the use of cash may be the fact that target firm policy changes are easier to implement if the target shareholders do not obtain voting rights in the bidding firm.[10] This may be especially the case where bidder and target are of similar size.

Past research on the choice of the means of payment in acquisitions include studies which compare the announcement returns around cash-financed and equity-financed acquisitions. Asquith, Bruner and Mullins (1986), Wansley, Lane and Yang (1983), Niden (1986), Huang and Walking (1987), Franks, Harris and Myer (1988) and Eckbo and Langohr (1986) provide evidence that cash offers generate larger returns to targets than share offers in the U.S., U.K. and France. This is consistent with the hypothesis that capital gains taxes (to be paid in cash offers but not in share offers), are important: in cash offers the targets

have to be compensated for the increased tax liability, so that their pre-tax returns have to be higher. In order to explain why bidders would be willing to pay for these taxes (rather than pay with shares) one has to point to the offsetting advantages of using cash mentioned in the previous paragraph. A more direct test of the relevance of taxes for the choice of the means of payment is presented by Franks, Harris and Myers (1988) who examine the use of cash and share offers in the U.S. and in the U.K. from 1955 to 1984. They conclude that many results are difficult to explain on the basis of tax effects.

The Belgian tax environment permits testing for the relevance of taxes on the acquisition process through the following hypothesis:

Hypothesis 4: The Belgian tax environment implies that if there are any non-tax related advantages of cash offers, all takeover bids will be financed with cash.

Hypothesis 5: Because in mergers, equity acquisitions have a clear tax advantage over cash acquisitions, we predict that, unless there are significant non-tax related advantages of cash offers, mergers will be financed with stock.

3 The Effect of Takeovers on Common Stock Prices

3.1 Data

Data on takeovers include all tender offers made between January 1970 and December 1985, in which at least one of the firms involved (the bidder or the target) was a Belgian company quoted on the Brussels Stock Exchange. Data were taken from the annual reports of the Banking Commission. Information on the terms of the offer and toehold acquisitions were taken from offer prospectuses.

Over the period the Banking Commission supervised 198 tender offers, out of which 106 involved at least one quoted Belgian company; a number of these cases were dropped either due to lack of trading around

the event or because further analysis showed they were not really takeovers[11]. A breakdown of these figures over time is shown in Table 1, which shows that, in contrast to the U.S., there is no significant rise in takeover activity in recent years.

This selection process finally identified 86 takeovers involving 63 quoted target firms and 57 quoted bidders. In only 23 cases both the bidder and the target were traded on the Brussels Stock Exchange.

Consistent with hypothesis 4, the overwhelming majority of takeovers are cash tender offers: in only six cases the target shareholders were offered shares. Out of this total, in four cases bidders used their own shares, whilst in two other instances shares from a third company (controlled by the bidder) were offered. In only one of the events, a bond issued by the bidder was added to the share offers.

Two clear cut type of tender offers can be distinguished: those made directly to the public and those which are a follow up of a private transaction in which a major block was transferred. Information provided by the tender offer prospectus was used to determine in which category each observation fell.

The main characteristics of each subsample are shown in Table 2. The total sample splits almost equally between both methods, with the proportion holding constant over time. From the offer prospectus we were able to infer (1) prior bidder ownership of the target shares before any private transaction, (2) the number of shares acquired in a private transaction immediately before the bid (if such transaction occurred). The first number is denoted as prior ownership "6 months before the bid" and the sum of (1) and (2) is defined as the ownership "1 month before the bid". Of course, the distinction is only relevant for follow-up tender offers. The bidder's ownership 6 months before the takeover is much higher in the case of a direct tender offer (47% vs. 15%). The fraction of shares sought after the tender is higher for the follow up cases (98% vs. 90%). This is because in follow up tenders (where the bidder bought a large block at a premium) regulation requires that the bid is extended to all shareholders. Private

transactions on average allowed bidders to control an incremental 47% of the firm, leaving them with a toehold of 62% before the tender.

Table 3 provides more details on the distribution of prior ownership. Approximately 1/3 of the direct offers are made without (disclosed) toeholds, while 1/3 of the direct offers could be characterised as minority buyouts where the bidder already owns 75% of the target shares. In follow-up tenders, however, 61% of the bidders started negotiating with a major shareholder, without any toeholds.

The characteristics of the sample are largely consistent with hypothesis 2. First, 86% of the offers are unconditional, in contrast to the U.S. and the U.K. where offers are typically conditional upon a minimum number of shares tendered (Franks and Harris (1988)). Second, bidders who want to make direct offers for control, accumulate much larger toeholds than is typical in the U.S. or in the U.K. For example, Comment and Jarrell (1987) report an average toehold of 11.4% in the U.S. Franks and Harris (1988) find that in 1061 out of 1441 U.K. acquisitions bidders did not own any shares prior to the bid. Finally, considering that owning 25% of the shares effectively constitutes a blocking minority, bidders are forced in almost half of the cases to negotiate directly with a large shareholder who, on average, holds a controlling block of 47.2% of the shares.

3.2 Methodology

A classic event-study was performed where the event is the month of the start of the public tender offer. First the monthly rate of return on the bidding and target firms (when available) was regressed against the monthly rate of return of an equally weighted market index using 18 months of data, starting two years before the event.

We assume that stock returns respond to the market model (see Fama (1976)):

$$R_{it} = \alpha_i + \beta_i R_{mt} + e_{it} \qquad (1)$$

Where R_{it} = rate of return on stock i in month t

R_{mt} = rate of return on the market index

$\beta_i = \text{cov}(R_{it},R_{mt})/\sigma^2(R_{mt})$

$\alpha_i = E(R_i) - \beta_i E(R_{mt})$

e_{it} = disturbance term with expected value of zero

The model states that, given estimates of α_i and β_i, and given the rate of return on the market, R_{mt}, the expected rate of return on stock i in the observation month t is equal to

$$E(R_{it}/R_{mt}) = \alpha_i + \beta R_{mt} \qquad (2)$$

The market index is composed of the 58 most actively traded stocks on the BSE in the period. This index represents 80% of the market capitalization on the BSE. No effort was made to define a more precise announcement month for two reasons. First, from the offering prospectuses in which the announcement was mentioned, it is clear that there is only a small time lag between the announcement and the start of the offer (usually less than a month). Second, considering that many tender offers are triggered by private transactions, it is likely that information leakages will precede any official announcement (especially in a small market where there is no legal restriction on insider trading.)

Using these results from the estimation period, in each month t relative to the event month (month 0), we compute the average prediction error, AR_t as

$$AR_t = \sum_{i}^{n_t} U_{it}/n_t \qquad \text{for } t = -6, -5, \ldots, +6 \qquad (3)$$

where U_{it}, the prediction error for stock i at time t, is

$$U_{it} = R_{it} - E(R_{it}/R_{mt}) \qquad (4)$$

The number of observations used to compute the average prediction error is indicated by n_t; this number may change each period after the event if, as it happens with target firms, shares are delisted and therefore do not contribute to the average.

An estimate of the standard deviation of the average monthly prediction error in period t is given by s_t, which is computed over a period unaffected by the event, ie. the 18 month period starting 24 months before the event and ending 7 months before the event.

$$s_t = \sqrt{1/17 \sum_{e=-24}^{-7} [AR_{et} - (\sum_{e=-24}^{-7} AR_{et})/18]^2} \qquad (5)$$

$$t = -6, -5, \ldots\ldots, 5, 6$$

where AR_{et} are the average monthly prediction errors in month e, calculated over all the firms which contribute to the average prediction error in period t.

To test whether the average prediction error at time t is statistically significantly different from zero, we compute the test statistic

$$x_t = AR_t / s_t \qquad (6)$$

On the assumption that the prediction errors are independent drawings from a stationary normal distribution x_t is Student's t distributed with 17 degrees of freedom. The same null hypothesis is also tested non parametrically by computing the Wilcoxon centered signed rank statistics W, computed according to Lehmann (1975).

The cumulative prediction error, CAR_t from month -6 until month T is computed as

$$CAR_T = \sum_{-6}^{T} AR_t \qquad (7)$$

To test whether the cumulative prediction error up to month T is statistically significantly different from zero we compute the test statistic

$$Y_T = CAR_T/(S_T\sqrt{T}) \qquad (8)$$

in which S_T is given by the following expression

$$S_T = [\sum_{-6}^{T} (s_t)^2]^{\frac{1}{2}} \qquad (9)$$

Under the assumption that the average prediction errors are independent drawings from a stationary normal distribution the statistic Y_T is Student's t distributed.

3.3 Results

3.3.1 Total sample

In the total sample, bidders offered, on average, a premium of 47.5% above the market price six months before the bid, for 39.5% of the shares. Premiums are computed relative to the stock price 6 months before the offer. We also computed "market model" adjusted premiums. The results in Table 2 show that both methods lead to similar results.

As Table 4 and Figure 1 show, on average, the 63 traded targets experience abnormal returns of 37.6% in the 6 months leading up to the takeover bid. Abnormal returns to targets are significantly positive in the 5 out of the 6 months before the event and in the month of the

bid itself; a significant decline is observed in months +1 and +2 decreasing the wealth gain to 33%.[12] On average, the 57 bidders experience no significant positive or negative abnormal returns. Table 5 (part A) shows that these results are not caused by a few outliers. From 6 months before the bid, up to 6 months after the bid (or the last month of trading) 67% of the targets earn positive returns. The corresponding percentage for bidders is 54%. In addition, the mean excess return is significantly different from zero (at the 1% significance level) for the targets, but not for the bidders.

As from the month after the takeover bid an increasing number of targets start to be delisted (because less than 90% of the shares are publicly held) the post-takeover price behaviour is not comparable with the pre-takeover price behaviour. Samples were made comparable by only considering the 33 target firms which continued to be traded until 6 months after the bid. Figure 1 shows that, although the basic conclusions remain unchanged, the abnormal returns to targets in the 6 months before the bid fall to 27%. Firms which are delisted after a tender bid are also offered a higher than average premium: in the total sample an average premium of 48% was offered compared to 29% in the sample of continuously traded firms.

The analysis was repeated assuming that α and β in the market model are respectively zero and one. Table 6 and Table 5B show that abnormal returns behave in much the same way as those shown in Tables 4 and 5A respectively. As an additional check the average of the intercepts estimated for the market model is not significantly different from zero.

The results presented so far show that, on average, bidders earn zero or small negative abnormal returns, while targets earn significant positive excess returns. Although the excess returns to targets are much larger than the small negative returns to bidders, one cannot conclude from the results that takeovers create net wealth increases, because, on average, bidders are 13 times larger than targets. In order to estimate the net wealth change, we multiplied the market value of the equity of bidder and target 6 months before the announcement

with the abnormal performance index. The abnormal performance index for security i, API_i is computed as

$$API_i = \sum_{t=-6}^{0} (1 + U_{it}) \qquad (10)$$

The results in Table 7 show that, on average, bidders gained 12 million BF in value (which is not significantly different from zero) while the targets realised a significant (t = 2.60) average value increase of 45 million BF. All 85 takeover cases combined result in a total wealth increase of 3,446 BF. We conclude that takeover bids generate net wealth increases for the shareholders of targets and bidders combined.

3.3.2 Direct vs. follow up tender offers

When the total sample is split according to the type of tender offer, the results are similar but when the tender offer results from a private transaction, target gains are much higher and are earlier reflected in security prices (see table 8 and figure 2). In these follow up tenders target firms realise an average abnormal return of 46% from the beginning of the test period up to the month of the event, with all but one average return significantly different from zero; in the months after the tender no significant abnormal returns are observed. On the other hand, in direct tender offers target firms realise an abnormal return of 29% in the 6 months before the bid. The two successive negative returns in the first and second month after the event are possibly caused by delisting of target firms.

Bidders do not appear to realize any significant gain, or loss, in the case of follow up tenders. But in the case of direct tender offers a significant and permanent negative return of 4% (t = -3.13) is observed three months before the tender.

Hence, we conclude that both bidders and especially targets are better off in follow up tenders than in direct offers for control. This is not surprising, considering that, unlike follow-up tender offers,

direct offers do not involve a crucial change in control: on average, bidders already own 47% of the shares before they make a bid.

3.3.3 Toeholds and the distribution of shareholder gains

Proponents of disclosure regulation argue that bidders get an unfair advantage in Belgium because, unlike in the U.S. or the U.K., they don't have to disclose their holdings in the target firm. The preliminary results of this paper provide no support for this contention. If anything, bidders earn smaller returns in Belgium than in the U.S. and the U.K. Moreover, the average abnormal return to targets of 37% is not significantly smaller than the return realised by the average U.S. or U.K. target firm (see for example, Jensen and Ruback (1983), Franks and Harris (1988)).

We explain this by arguing that the other regulatory features of Belgian takeover and voting laws, such as (1) the requirement to extend a private offer to all other shareholders and (2) the need to own 75% of the target firm shares in order to ensure control, counterbalances the lack of disclosure regulation, so that, on average, Belgian bidders don't earn more than their foreign counterparts.

A counterargument may be that it is impossible to measure the gains to the bidders because of imprecise announcement dates and because bidders are, on average, 13 times larger than targets. We can accommodate this criticism if we adopt the framework of Schleifer and Vishny (1986) who assume that the gains to bidders arise from the capital gains on the toeholds they acquire before any news about the takeover is reflected in security prices. The net gain to bidders is then computed as

$$GAIN = \left[[P_E - P_o]N_p - (P_T - P_E)N_T\right]/SIZE \qquad (11)$$

where

P_E = target stock price per share 5 days after the expiration of the bid

P_o = price per share of the target firm 6 months before the takeover bid, adjusted for market movements.

N_p = number of target shares held by the bidder "6 months" before the bid

P_T = tender price

N_T = number of shares of the target firm acquired by the bidder as a result of the bid (including private transactions)

SIZE is the market value of the bidder 6 months before the takeover.

Hence, the first part of the gain measures the holding gain on the toehold, while the second part measures the cost from overpaying the tendering shareholders. Because the computation requires both bidder and target to be traded at least until the day after expiration, the sample is limited to 26 observations.

The results in Table 9 show that, on average, bidders did not earn any significant positive or negative returns around the takeover. This result may seem surprising, considering that the bidder should earn an abnormal return on its toehold. However, because the average premium paid to tendering shareholders is above the abnormal return to the non-tendering shareholders (see Figure 1) the holding gains are all but washed out by the overpayment for the target shares.

Further insight into the effect of toehold acquisitions on the return to bidders and target shareholders is obtained by regressing excess returns against (1) the fraction of shares held by the bidder six months before the bid and (2) for follow-up tender offers, the fraction of shares purchased in the private transaction which preceded the public tender offer. Because direct and follow-up offers have different characteristics, regressions were run separately for both subsamples.

The results in Table 10 show that the results are very different for direct tenders and follow-up tenders. For direct tenders the relationship between toeholds and excess returns is not statistically significant. However, for follow-up transactions, one cannot reject

the hypothesis (at the 5% level) that returns to target shareholders are (1) significantly negatively related to the fraction of shares held by the bidder before the negotiations with the controlling block holders and (2) significantly positively related to the importance of the large block holders. The existence of multicollinearity explains why both variables don't turn up significantly when they jointly appear in a multiple regression. Spearman rank correlations between toehold positions and target returns and between the position held by a large block holder and target returns are equal to -0.60 (significant at the 1% level) and 0.38 (significant at the 10% level) respectively. For bidders the results are not as strong, possibly because announcement returns are much more difficult to measure.

We conclude that, although the lack of toehold disclosure regulation has not hurt targets, on average, target returns are negatively related to the fraction of prior ownership. At the same time, the presence of a large shareholder which can directly negotiate with the bidder, is beneficial for the target shareholders.

4 The Effect of Mergers on Stock Prices

4.1 Data

Data on mergers include all mergers between January 1970 and December 1985 in which at least one company (acquiring or acquired) was listed on the Brussels Stock Exchange. The data were collected from several Belgian financial periodicals, in particular L'Echo et la Bourse, De Financieel Ekonomische Tijd, Memento der Effecten and Le Recueil Financier and include the merger terms and the date when the merger was submitted to the acquiring shareholders meeting for approval. Because mergers are not subject to the control of the Banking Commission or any other regulatory entity, we are less confident about the completeness of this sample than the one of tender offers. Firms that were not continuously traded around the event or delisted before the actual merger announcement were excluded. In addition, six mergers were preceded by public tender offers. Since it could be argued that al information is revealed to the market by the first event these

observations were also dropped from the sample. In this manner we identified a total of 82 mergers involving 76 traded acquiring firms and 48 traded acquired firms. Out of this total, in only 32 cases both the target and the bidder were traded on the Brussels Stock Exchange.

All mergers in the sample resettled by exchanging the targets' shares for new shares of the acquiring company. This result is consistent with hypothesis 5: tax savings are apparently much more important than any other advantages from cash payments.

Table 11 shows the distribution of mergers through time. Except for the merger wave in 1973, no outliers or identifiable trends can be detected.

4.2 Methodology

The methodology is essentially the same as for takeovers. Abnormal returns are examined around the month the merger was submitted for approval to the shareholder's meeting. Estimation and observation periods relative to the event date were the same as those considered in the case of tender offers.

4.3 Results

The average prediction error AR, as well as the cumulative error CAR, for 76 acquiring firms and 48 acquired firms over a period spanning from 6 months before the merger month until (at least for the acquiring corporations) 6 months after are shown in Table 12.

Stock prices of the acquired firms (targets) increase abnormally and significantly by approximately 8.5% ($t = 3.70$) in the 3 months before the merger. Acquiring firms earn small abnormal returns of 2.1% ($t = 1.83$) in the 6 months prior to the merger. Both targets and bidders earn significant negative returns in the event month of - 2.3% ($t = -2.5$) and -1.7% ($t = -3.71$), respectively. Note that, at that time, the exchange ratio has already been set, so that the target firm's stock price mirrors the bidder's performance. In the next 5 months, bidders

earn zero or negative returns, so that the cumulative average abnormal return from 6 months before the mergers until 6 months after is -1.20%.

The results are largely consistent with results based on U.S. and U.K. data (see Jensen and Ruback (1983), and Franks and Harris (1988)) who report, for bidders, positive excess returns before the merger and negative returns afterwards.[13] The fact that bidders earn positive returns prior to the merger and negative returns during the merger month is consistent with the hypothesis that bidders try to take advantage of an overvalued stock price when negotiating a merger. Note that insider trading is completely unregulated in Belgium. The results are also consistent with asymmetric information models of Myers and Majluf (1984) and Miller and Rock (1986), who argue that issuing equity is "bad news".

4.4 Shareholder returns and management changes

The results indicate that target shareholders are significantly better off in takeover bids than in mergers. Similar findings in the U.S. (eg. Jensen and Ruback (1983) and Huang and Walkling (1987)) have been explained by tax arguments: tender offers are generally cash offers and taxable, while mergers involve an exchange of shares and are tax exempt. Thus, bidders have to compensate the shareholders for their increased tax liability in tender offers. Although takeover bids in Belgium are, in principle, taxable for corporate shareholders and mergers are not, it is unlikely that tax effects alone could explain the difference: in Belgium individual shareholders are exempt from capital gains taxes.

An alternative explanation could be based on Schleifer and Vishny's (1986) analysis: if bidders own much larger fractions of the target firm before they engage in a merger than when they make a takeover bid, a merger will be typically less "unexpected" and generate smaller abnormal returns than a takeover bid. Or, if the benefits from mergers and takeover bids essentially arise from a change in control and, because of larger bidder toeholds, mergers involve smaller changes in control than takeover bids, one would expect smaller gains from mergers than from takeover bids.

In order to test the extent to which mergers and takeover bids involve a direct change in control, we computed two measures. First, the number of board members that sat on both the board of directors of the bidder and target firm one year before the takeover or merger was collected. This number of common directors was then standardised by dividing it by the total number of board members of the target and bidders concerned. Second, we collected the number of "surviving" directors, ie., directors of the target firm that remain on the bidders board (as a percentage of the total number of directors) one year after the merger or, in the case of takeovers, the percentage of target firm directors which remained on the board of the target firm 1 year after the takeover. The first variable measures the extent to which some individuals are involved in the management of both the target and bidder before the merger or takeover bid. The second variable measures to what extent the managers of the target firm remain involved 1 year after the bid. Data were obtained from the Memento der Effecten and the firm's annual reports. In total we obtained information on 45 tender offers (23 direct offers, and 23 follow-up offers) and 54 mergers. The number of observations is small because the Memento only contains listed firms.

The results in Table 13 show that, on average, the number of common directors in mergers before the event was significantly larger than in follow-up tender offers: 27.5% vs. 14.2% ($t = 2.28$). Although, on average, direct offers are also characterised by smaller percentages of common directors[14], the difference with the merger sample is not statistically significant. Recall that the abnormal return to target shareholders in direct offers is significantly below the return to target shareholders in follow-up offers. Large differences arise when we compare the survivorship variable. In mergers, target shareholders, own on average, 33% of the board seats 1 year after the merger. In takeover bids, this percentage is significantly smaller. We conclude that, unlike in takeover bids, the target firm's management remains heavily involved in the surviving firm's business after a merger. Hence, mergers do not involve a drastic change in control of the target because (1) the bidder already controlled a large fraction of the board seats before the merger and (2) the target firm's management remains involved in the surviving firm's operations. This may explain why

mergers produce much smaller changes in market value than takeover bids.

5 Summary and Conclusion

The results of this paper can be summarised as follows.

First, targets in takeover bids earn significant abnormal returns of 37%, on average. Bidders earn zero abnormal returns. These results are similar to the ones reported by others in U.S., U.K. and French data (see eg. Jensen and Ruback (1983), Franks and Harris (1988) and Eckbo and Langohr (1988)), in spite of a different regulatory environment. Therefore, we reject the hypothesis that bidders, in Belgium, get an advantage over targets (or, equivalently, targets suffer) because they don't have to disclose their toeholds. If anything, results for bidders are worse in Belgium than, for example, in the U.S., where some studies find significant positive (although small) excess returns to bidding firms in takeover bids. We explain this by arguing that corporate voting laws (which give a blocking minority to any shareholder owning 25% of the stock) force potential bidders to negotiate with major shareholders. These major shareholders play an important role in negotiating the benefits from the takeover bid: the more important the large shareholders, the more substantial the gain to target shareholders. The beneficial effect of large shareholders is consistent with Jensen and Meckling (1976) and Schleifer and Vishny (1986) also argue that concentrated ownership guarantees that managers and shareholders interests are alligned.

Second, the characteristics of Belgian corporate laws and regulations are reflected in the nature of the takeover process. Since toeholds don't have to be disclosed, bidders start from a much larger ownership position in the target than in the U.S. On the other hand, corporate voting laws and restrictions on two-tier takeover bids force bidders to negotiate with large block holders.

Third, the returns to targets in follow-up tender offers (which follow private negotiations with a large shareholder) are larger (46%) than in

direct tender offers (29%). At the same time returns to targets in mergers (6%) are much smaller than in takeover bids. Moreover, for follow-up tender offers, target returns are negatively related to the fraction of shares held by the bidder before the bid. All these results are consistent with the hypotheses that shareholders in target firms will benefit from takeover bids to the extent that there is a fundamental change in control. A more fundamental change takes place in follow-up tender offers than in direct tender offers or in mergers (where the target firm directors remain, to a large extent, on the surviving firm's board). The implication is that, research in mergers and takeovers should control for prior ownership, when comparing various subsamples of acquisitions in order to test for, eg. tax effects.

Finally, the results are consistent with the hypothesis that, at least in Belgium, tax considerations are the most important variable in deciding whether the target will be paid with shares of the bidder or with cash. In mergers, where share acquisitions are tax-exempt and cash acquisitions are taxable, all transactions are share exchanges. At the same time, when taxes are irrelevant (such as in takeover bids) acquisitions are typically made for cash. Thus, the arguments made in the literature for cash offers don't outweigh the tax implications, at least in Belgium.

FOOTNOTES

1. A detailed description of the regulations (with legal references) can be found in Wtterwulghe (1973, 1983, 1988) and in Le Brun (1979). Section 2 draws heavily on these references.

2. Corporations have to disclose their corporate holdings in their annual reports. Furthermore if a project of law presently being reviewed by the Parliament is adopted, the Belgian situation would be similar to that of the U.S. Under this proposal, bidders will have to disclose their holdings as soon as they acquire more than 5% of the shares.

3. When the private transaction only involves a fraction of the large shareholder's holding, the offer has to be made for only the same fraction of the remaining shares. For example if the bidder acquires 60% of the shares of a large shareholder who owns 80% of the shares, the bidder has to make an offer for 60% of the other 20% of the outstanding shares.

4. For example, when Cobepa acquired 44% of Sait's shares held by Generale Maatschappij, the Commission did not required Cobepa to launch a public tender offer, because of the specific ownership structure of Sait. Specifically, 27% of the shares were held by Thompson. Because, according to all major corporate decisions, the Commission ruled that Thompson had as much controlling power as Cobepa. If the Generale Maatschappij had been the only major shareholder, the Commission would have ruled differently.

5. Normally, capital gains earned by individuals are tax-exempt.

6. Wtterwulghe (1983), p. 49, mentions "several months" after the bid. Discussions with Banking Commission officials revealed that this meant at least 6 months.

7. Wtterwulghe (1988), p. 186, points out that this provision is practically unknown to the public and even brokers, and therefore hardly ever occurs.

8. Moreover they report that less than one third of the tender offers executed between 1981 and 1984 used the two-tier system, and this percentage is decreasing.

9. Comment and Jarrell (1987, p 304)

10. In mergers, target shareholders are generally paid with share of the bidding firm.

11. These cases were essentially not takeover bids but other types of restructuring activities involving purchase of shares of a company. See Wtterwulghe (1988), p. 109, for some examples. One particular case of such restructuring activities dissolves public tender offers which are aimed at repurchasing shares of a firm by means of a subsidiary. Repurchasing by a firm of its own shares is discouraged Belgian regulation, but seems to take place anyway under more subtle forms (e.g. shares of the parent are purchased by a fully owned subsidiary).

12. If the tender price overstates the expected price after expiration, the price during the offer period will tend to overstate the post-expiration price (see Bradley (1980)).

13. Franks and Harris (1986), Langetieg (1978), Asquith (1983) and Malatesta (1983) also report significant negative abnormal returns after the merger, for acquiring firms. Explanations for this effect assuming semi-strong market efficiency are usually based on misspecification of the model of "normal" returns (see eg., Franks and Harris (1986)): if acquiring firms typically acquire other companies to take advantage of recent abnormal returns in their own stock prices, we expect abnormally high a's in the estimation period. Thus, the abnormal returns to the acquiring firms around the merger are underestimated. However, the average α in our various samples is always smaller than .002.

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Table 1

HISTORY OF TAKEOVERS

(Events per Year)

Year	Total Tender Offers Supervised by the Banking Commission	Observations Eliminated			Sample Used in Study
		Firms Not Quoted	Not Takeovers	Other	
1970	11	7	2	-	2
1971	15	7	-	2	6
1972	9	3	1	-	5
1973	18	10	-	2	6
1974	17	12	-	-	5
1975	10	5	-	1	4
1976	12	3	1	1	7
1977	12	7	-	-	5
1978	15	3	-	3	9
1979	7	3	-	-	4
1980	11	5	-	2	4
1981	15	5	1	1	8
1982	13	2	1	-	10
1983	13	7	-	-	6
1984	8	4	-	-	4
1985	12	9	-	2	1
	198	92	6	14	86

Notes: [a] Most of the cases result from lack of prices in the months preceding the event, due to temporary or permanent delisting of the shares.

Table 2

MAIN DESCRIPTIVE STATISTICS OF TAKEOVERS SAMPLE

	Direct Tender	Follow up Tender	Total Sample
Observations	40	46	86
Average Prior Ownership (toeholds)			
- 6 months before the bid (a)	46.9%	15.1%	30.3%
Pct. Cases > 50%	57.5%	13.0%	33.7%
Pct. Cases > 25%	67.5%	23.9%	44.2%
- 1 month before the bid (b)	46.9%	62.3%	55.0%
Pct. Cases > 50%	57.5%	67.4%	62.8%
Pct. Cases > 25%	67.5%	93.4%	81.4%
Average Privately Acquired	-	47.2%	-
Average Target Fraction	43.5%	35.9%	39.5%
Average Fraction Purchased	35.0%	23.3%	28.5%
Average Target Final Ownership	90.4%	98.2%	94.5%
Average Obtained Ownership	81.5%	85.1%	83.5%
Average Tender Premium (6 months before)			
- Unadjusted	40.5%	52.1%	47.5%
- Adjusted (c)	36.4%	56.4%	48.5%
Average Equity Size (Millions of BF)			
- Bidders	BF 4787	BF 3553	BF 4202
- Targets	BF 321	BF 191	BF 245
Average Bidder-To-Target Equity Ratio (d)	14.0	13.2	13.6

(a) number of target shares held by the bidder before any private transaction
(b) number of target shares held after any private transaction (if it occurred)
(c) premium is adjusted for market movements using the market model
(d) computed for subsample where cash bidder and target are traded

Table 3

PRIOR OWNERSHIP FREQUENCY DISTRIBUTION: Details

Direct Public Tender Offer: 40 cases

	Prior Ownership of Bidder (6 months before bid)					
	0	0< <25%	25%< <50%	50%< <75%	>75%	Total
Cases	12	1	4	10	13	40
Pct.	30%	2%	10%	25%	33%	100%

Follow Up Tender Offer: 46 cases

Percentage Acquired Privately	Prior Ownership of Bidder (6 months before bid)					
	0	0< <25%	25%< <50%	50%< <75%	>75%	Total
0< <25%	3	-	1	1	5	10
25%< <50%	8	3	3	-	NA	14
50%< <75%	9	3	1	NA	NA	13
>75%	8	1	NA	NA	NA	9
Cases	28	7	5	1	5	46
Pct.	61%	15%	11%	2%	11%	100%

Note: NA Not Applicable.

Table 4

AVERAGE ABNORMAL RETURNS FOR TAKEOVERS
Full Sample

Bidders (n = 57)

t	AR_t	n	x_t	W	CAR_T	y_T
-6	-0.5%	57	-0.42	-96.5	-0.5%	-0.42
-5	-0.6	57	-0.54	-124.5	-1.1	-0.68
-4	-0.8	57	-0.67	-169.5	-1.8	-0.94
-3	-1.9	57	-1.67	-180.5	-3.7	-1.65
-2	-0.7	57	-0.66	6.5	-4.5	-1.77
-1	-0.2	57	-0.21	-14.5	-4.7	-1.70
0	-1.3	57	-1.19	-133.5	-6.0	-2.03*
1	0.7	57	0.58	107.5	-5.4	-1.69
2	-0.5	57	-0.46	-91.5	-5.9	-1.75
3	1.0	57	0.87	-58.5	-4.9	-1.38
4	0.2	57	0.16	-46.5	-4.7	-1.27
5	-0.6	57	-0.50	-59.5	-5.3	-1.36
6	1.1	57	1.02	36.5	-4.2	-1.03

Targets (n = 63)

t	AR_t	n	x_t	W	CAR_T	y_T
-6	1.7%	63	1.90	93.0	1.7%	1.90
-5	1.2	63	1.37	38.0	2.9	2.32*
-4	4.5	63	5.02**	412.0**	7.4	4.79**
-3	6.2	63	6.96**	312.0*	13.6	7.62**
-2	10.2	63	11.46**	234.0	23.9	11.94**
-1	8.7	63	9.74**	305.0*	32.6	14.88**
0	5.1	62	5.72**	392.5**	37.6	15.94**
1	-3.2	57	-3.60**	-177.5	34.4	13.64**
2	-2.3	54	-2.28*	-351.5*	32.1	11.82**
3	-0.2	45	-0.24	-84.5	31.9	10.94**
4	1.1	38	0.93	-5.5	33.0	10.47**
5	1.5	37	1.21	40.5	34.5	10.20**
6	1.1	33	0.79	30.5	35.6	9.69**

Notes: variables defined as follows:

- t — Months relative to date of tender offer.
- AR_t — Average prediction error in period t.
- n — Number of observations in the period.
- x_t — Test statistic for H_0: $AR_t=0$.
- W — Wilcoxon centered signed rank statistic for H_0: $AR_t=0$.
- CAR_T — Cummulative prediction error from -6 to t.
- y_T — Test statistic for H0: $CAR_T=0$.
- * — Indicates that the corresponding AR or CAR is significantly different from zero at 5% level based on the indicated statistic.
- ** — Ditto at 1% level.

Table 5

DISTRIBUTION OF INDIVIDUAL ABNORMAL RETURNS FOR TAKEOVERS

Main descriptive statistics of the sample's individual abnormal returns for periods -6 through period 6, or last possible period if target was delisted after takeover.

$$CAR_6 = \Sigma AR_t \qquad \text{for} \quad t = -6, -5, \ldots, 5, 6$$

A Using Market Model	Bidders	Targets
Sample Size	57	63
Mean	-0.3%	38.1%
Maximum	83.1%	317.0%
Minimum	-94.1%	-50.5%
Median	2.5%	39.7%
Skewness	-0.11	2.72
Pct. Positive	54.4%	85.5%
t-Statistic Mean	-0.09	5.74**
Wilcoxon Cent. Signed Stat.	-2.50	797.50**

B Assuming $\alpha = 0$ $\beta = 1$	Bidders	Targets
Sample Size	57	63
Mean	-3.5%	33.5%
Maximum	86.1%	296.9%
Minimum	-94.1%	-41.6%
Median	-2.6%	28.9%
Skewness	-0.35	2.16
Pct. Positive	40.4%	77.4%
t-Statistic Mean	-1.00	4.72**
Wilcoxon Cent. Signed Stat.	-125.50	666.50**

Notes: * Indicates that the corresponding CAR is significantly different from zero at 5% level based on the indicated statistic.
** Ditto at 1% level.

Table 6

AVERAGE ABNORMAL RETURNS FOR TAKEOVERS
Full Sample
Abnormal Returns Assuming $\alpha = 0$ $\beta = 1$

Bidders (n = 57)

t	AR_t	n	x_t	W	CAR_T	y_T
-6	-0.1%	57	-0.09	-18.5	-0.1%	-0.09
-5	-0.6	57	-0.50	158.5	-0.7	-0.42
-4	-0.7	57	-0.56	155.5*	-1.4	-0.66
-3	-1.9	57	-1.63	-220.5	-3.3	-1.39
-2	-0.7	57	-0.58	-55.5	-4.0	-1.50
-1	-0.2	57	-0.24	-29.5	-4.3	-1.47
0	-1.3	57	-1.11	-260.5*	-5.6	-1.78
1	0.5	57	0.45	95.5	-5.0	-1.50
2	-0.8	57	-0.66	-122.5	-5.8	-1.64
3	0.8	57	0.66	-115.5	-5.0	-1.34
4	0.6	57	0.51*	40.5	-4.4	-1.13
5	-0.5	57	-0.42	-77.5	-4.9	-1.20
6	1.4	57	1.20	112.5	-3.5	-0.82

Targets (n = 63)

t	AR_t	n	x_t	W	CAR_T	y_T
-6	1.8%	63	2.11*	142.0	1.8%	2.11*
-5	1.2	63	1.42	56.0	3.1	2.50*
-4	4.0	63	4.68**	377.0**	7.1	4.74**
-3	5.9	63	6.82**	288.0*	13.0	7.51**
-2	11.1	63	12.77**	270.0	24.1	12.43**
-1	8.9	63	10.29**	463.0**	33.0	15.55**
0	4.0	62	4.68**	222.5	36.9	16.17**
1	-3.8	57	-4.61**	-306.5*	33.1	13.65**
2	-3.2	54	-3.52**	382.5**	29.9	11.54**
3	0.9	45	0.99	52.5	30.8	11.26**
4	0.7	38	0.69*	-17.5	31.5	10.83**
5	0.6	37	0.60	0.5	32.1	10.42**
6	0.6	33	0.47	-29.5	32.7	9.80**

Notes: variables defined as follows:

t	Months relative to date of tender offer.
AR_t	Average prediction error in period t.
n	Number of observations in the period.
x_t	Test statistic for H_0: $AR_t=0$.
W	Wilcoxon centered signed rank statisticfor H_0: $AR_t=0$.
CAR_T	Cummulative prediction error from -6 to t. May not add up because of rounding.
y_T	Test statistic for H0: $CAR_T=0$.
*	Indicates that the corresponding AR or CAR is significantly different from zero at 5% level based on the indicated statistic.
**	Ditto at 1% level.

Table 7

DISTRIBUTION OF INDIVIDUAL WEALTH CHANGES FOR TAKEOVERS

Main descriptive statistics of the sa ple's individual market value changes for periods -6 through +6, or last possible period if target was delisted after takeover.

Full Sample

W_{61}	Bidders	Targets
Sample Size	57	63
Mean	BF 12 Mils	BF 45 Mils
Maximum	3797	616
Minimum	-3296	-312
Median	12	20
Sum	686	2760
Skewness	0.49	2.19
Pct. Positive	52.6%	75.8%
t-Statistic Mean	0.09	2.60*
Wilcoxon Cent. Signed Stat.	-10.50	536.50**

Notes: * Indicates that the corresponding mean is significantly different from zero at 5% level based on the indicated statistic.
** Ditto at 1% level.

Table 8

AVERAGE ABNORMAL RETURNS FOR TAKEOVERS
Full Sample
By Type of Tender

	Bidders (n = 57)			
	Direct (n = 30)		Follow up (n = 27)	
Period[a]	AR_t	CAR_T [b]	AR_t	CAR_T [b]
-6	1.1%	1.1%	-1.9%	-1.9%
-5	-0.5	0.6	-0.3	-2.2
-4	-1.0	-0.4	0.1	-2.1
-3	-3.7**	-4.1	0.6	-1.5
-2	-0.1	-4.2	-0.7	-2.1
-1	0.2	-3.9	-0.1	-2.2
0	-1.1	-5.1	-1.0	-3.2
1	-0.3	-5.4	2.4	-0.8
2	0.6	-4.8	-1.1	-1.9
3	2.3	-2.5	-0.1	-1.9
4	-0.5	-3.0	2.1	0.2
5	-0.7	-3.7	0.3	0.5
6	0.5	-3.2	2.4	2.9

	Targets (n = 63)			
	Direct (n = 26)		Follow up (n = 37)	
Period[a]	AR_t	CAR_T [b]	AR_t	CAR_T [b]
-6	-0.1%	-0.1%	3.5%*	3.5%
-5	1.0	0.9	1.8	5.3
-4	3.1*	3.9	5.7**	11.0
-3	6.5**	10.5	5.5**	16.4
-2	1.8	12.2	17.6**	34.7
-1	13.2**	25.4	6.5**	40.6
0	3.5*	28.9	5.1**	45.7
1	-5.1**	23.8	-2.1	43.6
2	-5.2**	18.6	-0.7	42.9
3	1.2	19.8	1.1	44.0
4	1.7	21.5	1.1	45.0
5	5.2*	26.7	-0.8	44.2
6	0.3	27.0	1.4	45.6

Notes: a Months relative to date of tender offer.
b May not add up because of rounding.
* Indicates that the corresponding AR is significantly different from zero at 5% level based on a t-test.
** Ditto at 1% level.

Table 9

ACTUAL GAINS PER SHARE TO BIDDERS
Reduced Sample - Both Bidder and Target Traded

Main descriptive statistics of the sample of gains to bidders defined as follows

$$GAIN = [(P_E - P_O)\ N_P + (P_T - P_E)\ N_T] \ / \ SIZE$$

in which

- P_E : price of target 5 days after the tender offer
- P_O : price of target 6 mos. before tender adjusted for normal market changes.
- N_P : amount of shares from the target owned by the bidder one year before the bid.
- P_T : tender price.
- N_T : number of shares acquired of the target firm, including their private transactions if any
- SIZE : bidder's equity market value.

GAIN	Direct	Follow Up
Sample Size	12	14
Mean	-2.2%	0.8%
Maximum	3.3%	5.2%
Minimum	-21.6%	-2.2%
Median	1.2%	0.0%
Skewness	-2.88	0.92
Pct. Positive	33.3%	57.1%
t-Statistic Mean	-1.16	1.38
Wilcoxon Cent. Signed Stat.	-12.00	12.00

Table 10

PRIOR OWNERSHIP EFFECTS ON ABNORMAL RETURNS FOR TAKEOVERS

OLS Regression of the cumulative abnormal returns from months - 6 to 0, against the following variables

OWN : percent of prior ownership by bidder six months before the bid
PRIV : percent of ownership acquired by bidder in a private transaction prior to the bid (only for follow-up offers)
* : significantly different from zero at 5% significance level

A Follow-up offers

	Intercept	Coeff. (t-stat)			
	(t-stat)	OWN	PRIV	F-stat	Adj R^2
Bidders					
1)	-3.6 (-0.51)	0.3 (1.72)		2.96	7.54%
2)	9.4 (0.80)		-0.1 (-0.71)	0.50	0.00%
3)	-10.6 (-2.10)	0.4 (2.48)*	0.1 (1.45)	1.54	4.33%
Targets					
1)	38.9 (2.81)*	-1.3 (-2.24)*		5.02*	16.08%
2)	-30.6 (-1.24)		1.4 (2.55)*	6.50*	20.76%
3)	-7.4 (-0.25)	-0.8 (-1.32)	1.0 (1.72)	4.24*	23.56%

B Direct Offers

	Intercept	Coeff. (t-stat)		
	(t-stat)	OWN	F-stat	Adj R^2
Bidders				
	-12.9 (-1.74)	0.2 (1.78)	3.16	6.52%
Targets				
	30.5 (1.99)	-0.3 (-0.81)	0.66	0.00%

Table 11

DISTRIBUTION OF MERGER SAMPLE OVER TIME

(Events per Year)

Year	Events
1970	5
1971	1
1972	5
1973	12
1974	5
1975	3
1976	7
1977	9
1978	2
1979	2
1980	7
1981	5
1982	5
1983	7
1984	5
1985	2
	82

Table 12

AVERAGE ABNORMAL RETURNS FOR MERGERS

Acquiring firms (n=76)

t	AR_t	n	x_t	W	CAR_T	y_T
-6	0.8%	75	1.82	68.0	0.8%	1.82
-5	1.1	76	2.26*	283.0	1.9	2.89**
-4	-0.4	76	-0.77	-68.0	1.5	1.88
-3	0.0	76	0.03	-21.0	1.5	1.64
-2	0.3	76	0.62	-139.0	1.8	1.74
-1	0.3	76	0.59	30.0	2.1	1.83
0	-1.7	76	-3.71**	-349.0	0.3	0.27
1	0.1	74	-0.30	-280.5	0.2	0.15
2	-0.7	74	-1.39	-252.5	-0.5	-0.33
3	-0.5	75	-0.99	-117.0	-0.9	-0.63
4	0.0	75	-0.03	24.0	-1.0	-1.08
5	-0.8	75	-1.70	-166.0	-1.8	-0.70
6	0.6	75	1.19	-33.0	-1.2	-1.20

Acquired firms (n = 48)

t	AR_t	n	x_t	W	CAR_T	y_T
-6	-0.1%	46	-0.14	-33.5	-0.1%	-0.14
-5	1.6	47	1.65	171.0	1.5	1.10
-4	0.2	47	0.25	-27.0	1.7	1.04
-3	1.0	48	1.10	16.0	2.7	1.44
-2	3.2	48	3.49**	213.0*	5.9	2.82**
-1	2.5	48	2.79*	7.0	8.5	3.70**
0	-2.3	48	-2.50*	-141.0	6.2	2.51*

Notes: variables defined as follows:

t	Months relative to date of approval meeting.
AR_t	Average prediction error in period t.
n	Number of observations in the period.
xt	Test statistic for H0: ARt=0.
W	Wilcoxon centered signed rank statisticfor H_0: AR_t=0.
CAR_T	Cummulative prediction error from -6 to t. May not add up because of rounding.
y_T	Test statistic for H_0: CAR_T=0.
*	Indicates that the corresponding AR or CAR is significantly different from zero at 5% level based on the indicated statistic.
**	Ditto at 1% level.

Table 13

COMPARISON BETWEEN DESCRIPTIVE STATISTICS CONCERNING COMMON DIRECTORS IN MERGERS AND TAKEOVERS

Common and surviving directors are measured by the following variables:

COMDIR : percent of common directors on bidders and target board 1 year before the takeover or merger

SURV : percent of directors of target firm which remain on their board 1 year after the takeover, or which sit on the acquiring firm's board in the case of a merger

	COMDIR	SURV
A Mergers		
Observations	54	54
Mean	27.5%	33.2%
Median	21.1%	25.0%
B Follow-Up Tender Offers		
Observations	22	22
Mean	14.2%	13.4%
Median	0.0%	3.3%
Diff. Means vs. Mergers	-13.3%	-19.8%
t-test Statistic	2.28*	3.73**
Median Test Chi Square Statistic (d.f.=1)	3.10	5.79**
C Direct Tender Offers		
Observations	23	23
Mean	20.6%	23.0%
Median	16.7%	16.7%
Diff. Means vs. Mergers	-6.9%	-10.2%
t-test Statistic	1.14	2.53**
Median Test Chi Square Statistic (d.f.=1)	0.78	2.30**

Notes: * Coefficient significantly different from zero at 5% level
** Ditto at 1% level

Figure 1
TAKEOVERS - CUM. ABNORMAL RETURNS
Full Sample

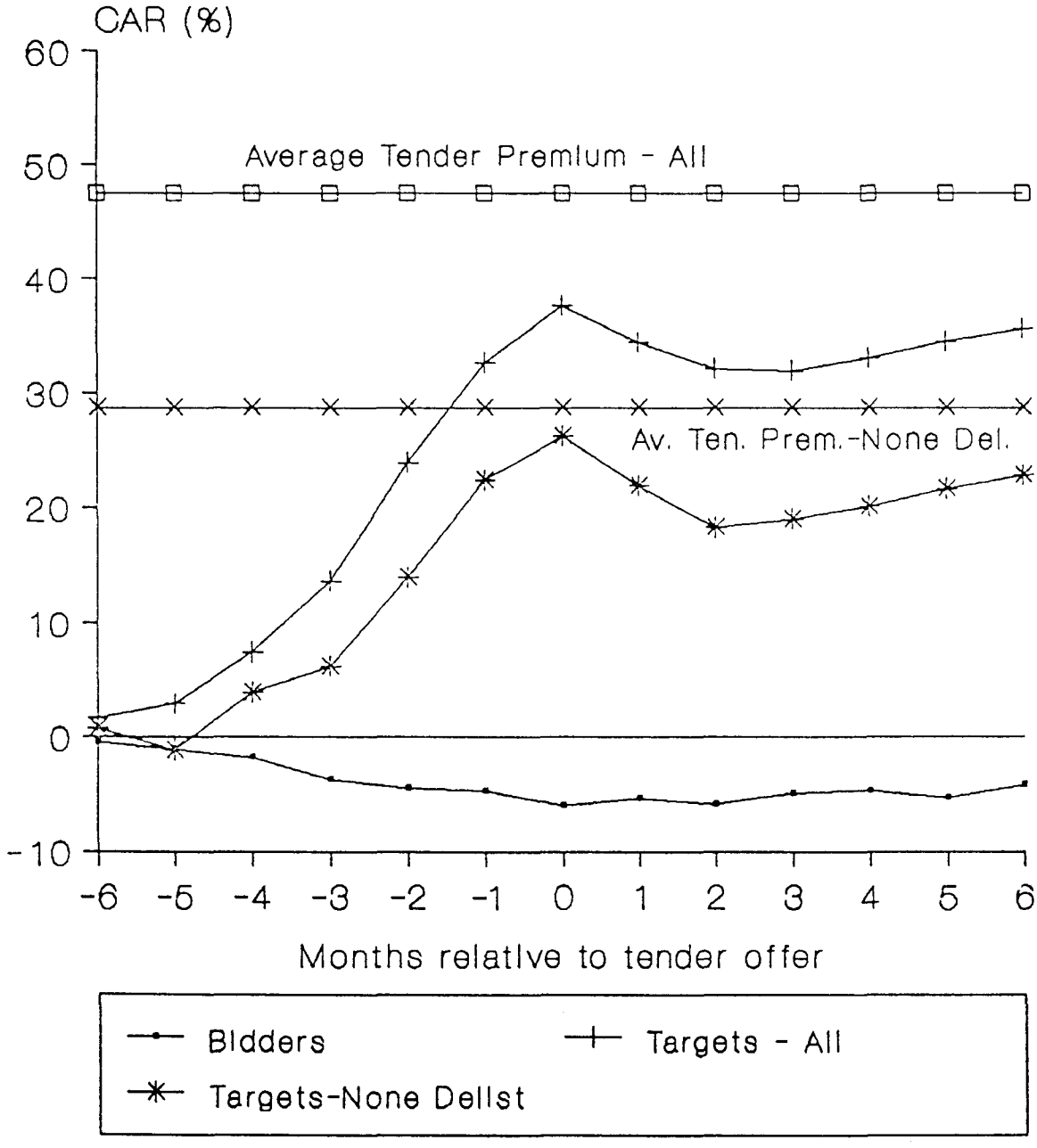
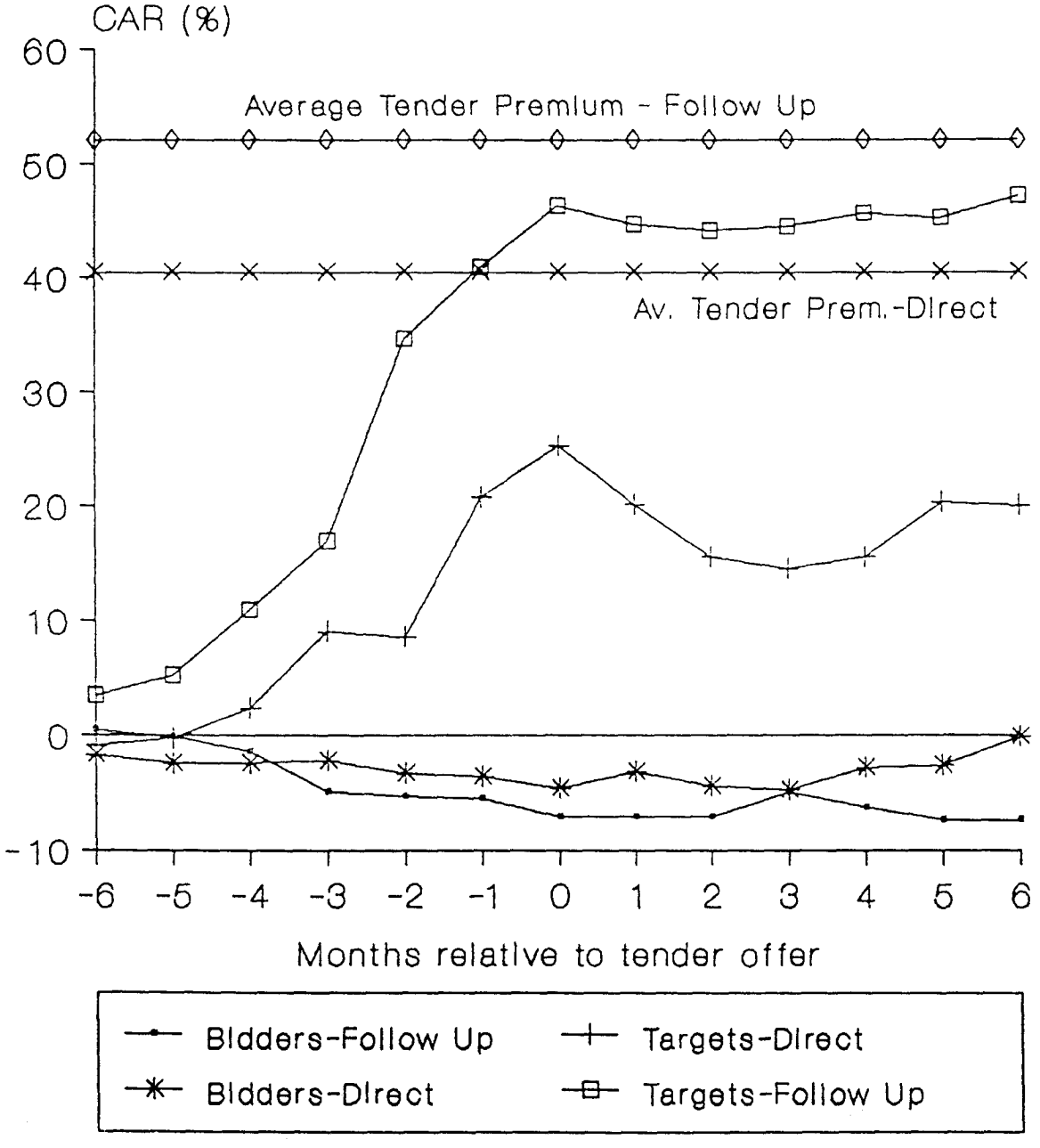


Figure 2
TAKEOVERS - CUM. ABNORMAL RETURNS
Full Sample by Type of Tender



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