Wealth Effects in Mergers and Acquisitions

The Global Case of Listed Property Funds

This version: well-developed abstract

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Keywords: Mergers and Acquisitions, Real Estate, Corporate Governance

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Introduction

Empirical research on wealth effects following takeovers documents a consistent gain to shareholders of target firms, but the return to the bidding firm is mostly non-significant or even slightly negative, although Chang (1998) finds evidence positive abnormal returns for acquiring firms dependent on the method of payment.

The wealth effects created in takeovers are explained by several hypotheses. First, the concept of market for corporate control (Manne 1965) states that takeovers shift away resources from inefficient managers at target firms to value-maximizing, superior managers of the acquiring firm. These kinds of disciplinary takeovers address the free cash flow problem as defined by Jensen (1986). Second, the hypothesis of synergy predicts that takeovers are motivated by possibility of benefits from combining the businesses of two firms. For example, increases in market power and economies of scale. However, based on this hypothesis, two types of mergers can be distinguished: value-maximizing takeovers, in which targets are represented by positive NPV-project only, and size-maximizing takeovers, in which increasing size is more important than investing in a positive NPV-project. The latter is related to the hubris hypothesis of corporate takeovers as introduced by Roll (1986) and might explain negative returns to acquiring firms’ shareholders.

The method of payment can be another determinant of the sign and level of wealth effects in corporate takeovers. According to the asymmetric information problem of Myers and Majluf (1984), a company offering stocks instead of cash knows that its own assets are overvalued hence the market reaction to the offer will be negative. Contrasting to this hypothesis, Chang (1998) finds a positive abnormal return to acquiring firms paying with stocks. The influence of taxation on the wealth effects surrounding takeovers is expected to lead to more positive results for acquirers offering stocks than for acquirers offering cash (Franks and Harris 1988).

Although the past decades have resulted in a broad base of literature on takeovers and consequently have lead to a better understanding of wealth effects and its causes, consolidations in the real estate sector represent a special and interesting case. The implementation of real estate investment trusts (REITs), starting in the United States in 1960, yields a unique institutional investment environment, due to absence of taxation at the corporate level when obligations like yearly distribution of 90% of the taxable income are
fulfilled. This special corporate environment rules out some classical motives for takeovers (Allen and Sirmans 1987), and increases the importance of other motives.

The beginning of the new millennium has been characterized by a new wave of consolidations in the real estate sector. Merger and acquisition activity in property funds is known to be highly cyclical, partially driven by the premium or discount to net asset value (NAV) at which property companies often trade. Wealth effects for acquirers for past periods of consolidation activity in the US REIT-sector have been studied by Allen and Sirmans (1987), who document evidence on the 1977 – 1983 period, and Campbell, Ghosh and Sirmans (1998) who study the 1994 – 1998 period. Wealth effects of REIT consolidation for target firms is investigated by McIntosh, Officer and Born (1989) for the 1969 – 1986 period and by Campbell et al. for the 1994 – 1998 period.

In this study, we document evidence on wealth effects in real estate merger and acquisitions on a worldwide scope. It is the first time that merger activity in the real estate sector is empirically studied on a global basis. We study returns for public targets, considering the identity of the buyer, which is either public or private. Moreover, we take the method of payment into account. Our large sample of 120 completed mergers yields a unique laboratory situation for comparing REITs and non-REITs due to the inclusion of countries which have a REIT-structure implemented and countries in which no REIT-like structure exists. This is interesting, because the REIT-structure might affect wealth effects in consolidations due to the limitations on effective governance, caused by internal restrictions (Sirmans 1997). This might lead to maximizing managerial wealth rather than shareholder wealth.

The rest of this paper is organized as follows. In section 2, a literature review will be provided, including both general corporate finance research on merger wealth effects and real estate specific research on wealth effects following consolidations. Section 3 describes the data and methods used in this study. The empirical results are presented in section 4. The paper ends with a summary and discussion of conclusions in section 5.
Literature Overview

**Corporate finance literature**

**Real estate literature**

Numerous studies investigate price effects of corporate merger and acquisition announcements. Only a few, however, examine the share price response to takeover announcements of real estate investment trusts in particular. In an overview of the literature on REIT restructuring transactions (Campbell 2002), it is stated that the restrictions on managerial control of cash flows inherent to the REIT form of organisation lead REIT managers to look for restructuring arrangements in order to accumulate cash reserves for new investments. REIT-to-REIT mergers are thereby observed to be cyclical in occurrence, generally financed with stock and practically always of a friendly, manager-negotiated nature. The existence of positive wealth effects in merger transactions is generally attributed to increased economies of scale, added market power, improved managerial efficiency, or to synergistic effects. Different studies, however, report different findings on the distribution of these wealth effects over targets and acquirers.

Allen and Sirmans (1987) analyse the wealth effects to acquiring firms’ shareholders in a study of 38 REIT-to-REIT mergers. In contrast to acquisition studies involving other kinds of mergers, they find a statistically significant increase in acquirer shareholder wealth during the announcement period. As this value gain is greater in acquisitions of a trust with similar types of assets than of a trust comprised of different assets, the increase is attributed to improved management of the target REITs assets.

A period of increased merger activity in the US REIT market in the 1990s is examined by Campbell, Ghosh and Sirmans (1998). They find an average negative return of −1.1% for the acquiring firm shareholders, with all mergers being stock-financed. This is a better performance than for mergers between conventional companies, which might be explained by the much weaker negative signal stock swaps have for REITs. As REITs are restricted in accumulating cash flows due to restrictions, shareholders already expect stock financing and therefore this method of payment is not interpreted as negative. Target firm shareholders experienced a positive value gain of 5.2% on average. Finally, an unconventional lack of
hostile merger activity during the studied period is documented, which might be explained by
the special legal protections REITs have as a result of their unique tax status.

Acquirer shareholder wealth effects of mergers and acquisitions in the REIT industry are also
investigated by Young and Elayan (2002). A sample of 69 announcements is studied to
measure abnormal responses in the stock returns. The results indicate a marginally significant
positive excess return of 0.7% for all bidders during the announcement period. Furthermore
Young and Elayan find that the announcement period excess return is significantly higher for
REIT acquirers with outside management than for those that are self-managed. This might
reflect the absence of agency problems in externally managed REITs. Another finding is that
acquirer REITs proposing a cash bid exhibit a significantly larger announcement period
excess return than those proposing a stock swap. Investors’ preference for cash is attributed to
dilution and time delays inherent to an exchange of stock.

In a study of 27 mergers, McIntosh, Officer and Born (1989) find that target REIT
shareholders experience a statistically significant positive wealth effect upon the
announcement, irrespective of the fact whether the acquirer is a REIT or not. This result is in
line with other acquisition studies, except for the fact that the pre-announcement abnormal
returns are not significant. Neither significant are their findings regarding the relationship
between the identity of the bidders and the scope of the performance effects. It seems, though,
that the price appreciation of a target REIT is larger in case the bidder is a REIT as well.

Combining the different aspects of these separate studies in this research, a thorough analysis
of the performance effects of both targets and acquirers will be performed. In line with the
other investigations, it is expected that there will be a statistically significant positive wealth
effect for target shareholders. The difference in wealth effects due to various methods of
payment will also be investigated, with the expectation that a cash transaction leads to a larger
performance effect at both target and acquirer firms than a proposed stock exchange.
Besides, there will also be tested whether the target wealth effect is different upon
announcements of transactions in which the bidder is a private company compared to
transactions in which the target is acquired by a publicly listed company. The latter sort of
consolidation has been extensively recorded in the real estate industry during the last years.
Moreover, Masulis (1980) notes in a study on the causes of common stock price changes that
many pre-announcement rates of return exhibit a distinct pattern. This may be caused by the
fact that the bidder already owns some of the target its stock before the announcement. Therefore, we test expectation that pre-announcement returns of both targets and acquirers are higher in case the bidder already owns a (minority) part of the target.

Finally, in studying wealth effects following takeovers, we will make a comparison between countries in which a REIT-structure has been implemented and countries in which real estate funds do not have a REIT-like structure. This yields the opportunity of precisely establishing the effects of the REIT-structure on wealth effects following takeovers.

Data and Methodology

We use an initial sample of 156 merger and acquisition transactions in the international property share market, which is provided by Global Property Research. This sample consists of all mergers and acquisitions for listed real estate funds worldwide that were made, announced or pending in the 2000 – 2003 period. Deal information in this sample is updated, corrected and extended by means of the Bloomberg database, the Dow Jones & Reuters newspaper database and Thomson SDC Platinum. We exclude transactions for which no further information could be found, that appeared to be complicated multi-stage deals, deals that appeared to be cancelled, still pending and of which the target is not delisted after all. Moreover, we do only include mergers if the acquirer did not already own more than 50% of the target’s shares. The result is a final sample of 120 executed mergers worldwide.

The sample contains targets from 18 different countries and acquirers from 19 different countries. The majority of the transactions take place in the United States, the United Kingdom and Australia. Almost half of all transactions are privatisations, of which there are especially many in the United Kingdom, Canada, Sweden. Most or all of the targets in Australia, Belgium, France, The Netherlands, New Zealand, Singapore and the United States, however, are taken over by publicly listed acquirers.

Seven deals are cross-border transactions, of which six involve an acquirer or target from the Netherlands. Two deals in the United States are mergers; the remainder of the sampled transactions consists of all acquisitions of a target by one or multiple acquirers. Except for two Australian deals, all takeovers are of a friendly nature, which corresponds with the observations in the studies of Campbell (2002) and Campbell et al. (1998). Deals vary in value from US$20mln. to US$6,600mln. and have a median of around US$393mln. The
method of payment in the majority of the deals is cash, followed by stock swaps, and finally by a combination of cash, stock and/or debt. In most transactions a target was acquired by a company that did not own any shares of it beforehand. In 30 transactions, however, the acquirer already owned a (minority) part of the target. There were competing bids for targets in 11 deals.

Many deals were announced in the year 2000, almost twice as much as in 2002. This is representative of the cyclical occurrence of REIT transactions as noted by Campbell (2002). No systematic pattern in the month of announcement was found, however. The average time to completion, that is when the targets are delisted from the stock exchange, is about 4 months. The time to completion of a transaction is defined as the time between the announcement date of the deal and the delisting of the target, the majority of the deals (15.5%) are closed in 2.5 months.

In analysing the value creation effect of takeover announcements, the Comparison Period Return methodology of Masulis (1980) is applied. A study on methodological sensitivity of event studies by Brown and Warner (1980) shows that this method is often more powerful than standard market model approaches in assessing security price impacts.

Abnormal returns are determined by comparing the event period daily return of a stock with the mean daily return of the comparison period. The latter is assumed to be the securities normal return, under the assumption that the return process is stationary and that the comparison period time series is representative of a stock’s return distribution. By subtracting this normal return, event day returns are adjusted for general return behaviour in order to examine aberrant daily movements in the property share price. We use a comparison period which runs from 120 through 21 trading days before the first public announcement of the acquisition (defined as day 0). The event period consists of 20 trading days prior to and after the announcement, with day 0 and day +1 being the actual announcement period.\(^1\)

Cumulative mean adjusted returns are calculated to observe performance effects over the longer term, which is done by cumulating the subsequent mean adjusted returns.

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\(^1\) As Bloomberg is used to retrieve announcement dates, day +1 is included in the announcement period to capture effects of announcements made after trading on day 0 and of subsequent newspaper publication.
These calculations are performed for both the target and acquirer portfolios. Differences in value creation effects between countries, between transactions involving public versus private acquirers, as well as between deals with different methods of payment and with different forms of previous ownership of the acquirer are examined. The pattern of adjusted returns is interpreted in three distinct periods: pre-announcement, announcement or event, and post-announcement. This allows for an integral exploration of the wealth effects due to the takeover announcements, of which the results are described in the next chapter.

**First Exploratory Results**

The results of the price effect computations with regard to all target firms are shown in figure 1. The results of the quantitative analysis are to be followed. There is a statistically significant positive adjusted return of 6.10% on the announcement day (day 0). A newspaper publication effect is revealed by the 7.34% cumulative adjusted return for the two-day announcement period (day 0 and day +1). The corresponding graph shows that from about ten trading days before the announcement the cumulative adjusted return is increasingly positive, which unveils the market its expectation of a deal to be announced or some insider trading that is taking place. The positive wealth effect corresponds with the findings of Campbell et al. (1998) and McIntosh et al. (1989).

![Figure 1: Mean-adjusted return for all targets](attachment:image.png)

To find out whether any difference in takeover announcement reactions exist between targets that are privatised and targets that are taken over by a public acquirer, these separate subsets
are compared with respect to their average and cumulative excess returns. Firms acquired by a consortium of public and private acquirers are excluded from this calculation. The results in figure 2 show that targets that are being privatised experience a stronger upward average price reaction (7.80%) on the announcement day than targets that are announced to be purchased by a publicly listed firm (4.56%). The two-day announcement period adjusted returns are 9.18% and 5.37%, respectively. An ANOVA F-test indicates that the difference between those means is statistically significant at the 90% confidence level.

This confirms that investors react more positively to the privatisation trend than to the consolidation trend. Real estate is perceived to be better off in the private market when the stock market is bearish, during which funds usually trade at a discount. This result contradicts the suggestion concerning the identity of the bidder made by McIntosh et al. (1989). Besides the diverging reactions on the announcement day, there is also slightly different aftermarket price behaviour between these two subsets. The cumulative adjusted return series in the post-announcement period show that there is an upward shift in the mean adjusted returns for targets that are being consolidated, whereas there is a downward shift for targets that are being privatised. This logically reflects the shrinking interest of investors for companies that are about to be taken private, whereas those that are about to become part of a bigger firm increasingly attract the interest of investors.

Figure 2. Targets taken over by public vs. private acquirers

The average excess return of all acquirers is 0.26% on the announcement day, followed by 0.38% on the next trading day. Results are shown in figure 3. The cumulative adjusted returns
are all positive after the announcement day, although this series has an inconsistent pattern with as many negative mean adjusted returns as positive ones. The weak reaction of the market might be a result of the presence of self-dealing at the management of the acquiring firms, as suggested by Campbell et al. (1998). This result contradicts the findings of Allen and Sirmans (1987) but is in line with Young and Elayan (2002).

Figure 3. Mean adjusted return for all acquirers

Investigating whether the method of payment influences the performance effects, different panels of both targets and acquirers are compared. Targets that are paid for with cash experience a large and significant positive adjusted return of 8.10% on the announcement day and a cumulative adjusted return of 9.90% during the two-day announcement period. The value creation effect of targets paid for with stock yields a lower return, whereas the sample of targets that are paid for with a combination of cash and stock exhibits an announcement day and announcement period adjusted return of 1.56% and 1.26% respectively, with a negative sentiment following the event.

With respect to the sampled acquiring firms, those that paid for their acquisition with cash experience a significant positive adjusted return of 1.34% on the announcement day, and an adjusted return of 1.73% during the announcement period. Acquirers paying with stock exhibit a positive but insignificant excess announcement day return of 0.65%, cumulating to 1.27% on the next trading day. There is an upward shift in mean adjusted returns in the post-announcement period.
The panel of acquirers that announce to pay with a combination of cash and stock exhibits an insignificant announcement day adjusted return of –0.40%, but an adjusted return of 0.02% for the two-day announcement period. The cumulative adjusted return series shows that payment of a combination is negatively perceived in the trading days after the announcement. The differences between the announcement day averages are less profound than for target firms, since they are not statistically significant. The results are therefore not as strong as those of Young and Elayan (2002).

The results presented here give a first insight in the data. However, the most important part of the analyses, such as the comparison of wealth effects between REITs and non-REITs, still has to be performed.
References


