The Impact of Diversifying Acquisitions on Shareholders' Wealth

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ABSTRACT

This study examines the impact of diversifying acquisitions on acquiring Turkish firms. Using a sample of 98 acquisitions during 2000-2011, the study finds that acquiring firms experience statistically significant abnormal returns surrounding the announcement date. The cross-sectional regression results show that diversifying acquisitions create higher abnormal returns to acquirers compared with focused acquisitions. We also show that smaller firms experience higher abnormal returns compared to larger firms in our sample and that acquiring public firms result in higher wealth gains to acquirers. Finally our results indicate that results differ among group affiliates and independent firms. If an acquisition is made by an independent firm, diversifying acquisitions generate higher abnormal returns compared to focused acquisitions. However, if the acquirer is a group affiliate, there is no significant difference between the two types of acquisition activities in terms of wealth effects.

Keywords: Shareholders' value, Wealth Effect, Stock Prices, Turkish Market
JEL Classifications: G14/G20/G34

INTRODUCTION

In recent years, mergers and acquisitions (M&As) attracted the attention of both scholars and policy makers. The dominant rationale used to explain M&A is that acquiring firms seek improved financial performance. M&A activities can be considered as a means of corporate diversification. In finance literature, many theories on benefits and costs associated with diversification have been developed. In particular, the benefits of corporate diversification, which result in diversification premium, can originate from the theories of an efficient internal capital market, coinsurance effect, economies of scope, and market power. On the other hand, the costs arising from corporate diversification, which cause diversification discount, are theoretically justified by agency arguments, overinvestment and cross-subsidization problem, and inefficient resource allocation within the firm

(Day and Benerjee, 2011; Maksimovic and Phillips, 2007; Martin and Sayrak, 2003; Kiymaz and Muhkerjee 2000). The average net effect of diversification through M&As is an empirical question.

Several studies conclude that diversification destroys value and cross sectional studies implicitly assume that single-segment firms are a valid benchmark for valuing the divisions of conglomerates (Lang and Stulz, 1994; Berger and Ofek, 1995). The excess value method for estimating the value effects of corporate diversification can be misleading if there are systematic differences between the divisions of conglomerates and the single-segment firms to which they are benchmarked. Failure to account for these differences can lead to incorrect inferences regarding the effect of corporate diversification on firm value.

To assess the extent to which these selection bias issues are important, we examine a sample of firms that expand via acquisition. Using an event study methodology, we explore the abnormal returns of the Turkish acquirer on announcing acquisitions. Our objective is to study whether diversifying and non-diversifying acquisitions differ in terms of acquirer abnormal returns once we control other factors affecting returns.

We find positive abnormal returns to acquiring firms during various event windows. The results of the cross-sectional regression analysis show that diversifying acquisitions generate higher abnormal returns compared to focused acquisitions. Furthermore, we find statistically significant negative coefficient for size of acquirers, indicating that smaller firms experience higher abnormal returns compare to larger firms. These findings are in line with the existing literature. We further find that firms acquiring publicly traded target firms experience higher returns. This finding is contrary to findings of other studies.

The rest of the paper is organized as follows. The next section provides a review of the literature. Then, we explain our data collection procedure and present sample description and methodology. The control variables used in multiple regression analysis is presented in the next section. The empirical findings for wealth gains and factors explaining wealth gains are reported in the following section. The final section concludes the paper.

LITERATURE REVIEW

Event studies in the diversification literature analyze the value effects of refocusing events such as spin-offs or diversifying events such as mergers and acquisitions (M&As) on firms involving these activities. Literature report mixed results with respect to market reactions to diversifying acquisitions. Morck, Shleifer, and Vishny's (1990) study is often cited as evidence of a negative market reaction to diversifying acquisitions. This study analyzed a sample of 327 US acquisitions between 1975 and 1987 and report negative announcement day returns for bidding firms. Agrawal, Jaffe, and Mandelker (1992) and Morgan, Nail, and Megginson (2000) also provided evidence of negative returns of acquiring firms that increase corporate diversification. Examining cross-border M&A transactions over the period 1990 to 1999, Dos Santos, Errunza, and Miller (2008) found no evidence that US acquirer firms' excess values decrease in the two-year period surrounding the acquisition. They also found that US acquirers experience a significant post-merger drop when they have been involved in unrelated M&As.

Using a different methodology, Comment and Jarrell (1995) provide complementary evidence about the valuation of conglomerate firms during the 1978-1989 periods. They find that increases in focus, subsequent to asset sales, are associated with positive abnormal stock returns in the year in which focus increases. Similarly, John and Ofek (1995) documented improvements in operating performance over the three years following a refocusing decision. Daley, Mehrotra, and Sivakumar (1997) found evidence of adding value by refocusing spin-offs, and Desai and Jain (1999) showed that long-run returns after a refocusing spin-off are greater than the returns for non-focus-increasing spin-offs. Sicherman and Pettway (1987) reported in a sample of 147 US M&A announcements, that related acquisitions enhance the shareholder wealth of acquiring firms whereas the opposite is true for unrelated acquisitions.

In contrast to studies documenting a diversification discount, there is also contrary empirical evidence. For instance, Graham, Lemmon, and Wolf (2002) used Compustat data for 356 firms from 1980 to 1995 that have made acquisitions and controlled for the existing characteristics of the acquired firms. They found that these characteristics explain nearly all of the reduction in the excess value of the acquiring firm after the merger, regardless of the type of acquisition and type of firm. Walker

(2000) also documented that related acquisitions did not generate higher value than unrelated acquisitions for both targets and acquirers in a sample of 278 US M&A announcements in the time period 1980-1996.

Finally, there are studies reporting positive market reactions to diversifying acquisitions. Kaplan and Weisbach (1992) replicated the general result of acquisition event studies that bidder returns are slightly negative but combined returns to bidder and targets were found to be positive, which implies that acquisitions increase combined shareholder value. Schipper and Thompson (1983) found significant positive abnormal performance associated with the announcement of acquisition programs by diversified firms in 1960s. In a later study, Hubbard and Palia (1999) analyzed 392 acquisitions for the period 1960-1971, where the bidder and target did not share the same two-digit SIC code. The authors were able to confirm the existence of positive abnormal returns for the bidding firm. Matsusaka (1993) reported a similar finding for the 1960s while Hyland and Diltz (2002) found positive abnormal returns for diversifying acquisitions for the 1980s and 1990s.

Among non-US studies, Sudarsanam, Holl, and Salami (1996) analyzed a sample of 429 deals made by UK companies during 1980-1990. The authors did not find any difference between the gains to shareholders in related and unrelated acquisitions. In a more recent European study, Martynova and Renneboog (2004) found that irrespective of the corporate strategy, target shareholders earned positive abnormal returns. However, the abnormal returns were significantly higher for related M&A announcements compared to unrelated M&A announcements. Bidders, on the other hand, experienced significantly higher short-term returns around the announcement of related acquisitions. Kiymaz (2006) find that both divesting and acquiring firms experience statistically significant wealth gains during the sell-off announcements. For the matched sample, only divesting firms continue to have statistically significant wealth gains. Further analysis of the industry affiliation of divesting and acquiring firms indicates that there are differences in wealth gains with respect to the industry affiliation. The author also reports direct relationships between wealth gains to divesting firms and motive announcements related to paying debt and increasing firm focus. Wealth gains are higher for financially distressed firms and firms with higher bank loans when firms announce divestitures, supporting both bankruptcy avoidance and bank monitoring arguments. Additionally, wealth gains are

higher for firms with higher efficiency, as measured by total asset turnovers, and for firms with higher profitability.

Only limited studies have dealt with takeover effects on shareholder wealth in emerging markets. In one of them, Cai (2004) examined the abnormal returns around acquisition announcements made by public companies in eight East Asian countries from 1993 to 2003. Using data collected from various sources and the standard event study methodology, the author focused on the impact of corporate ownership and control structure on the market valuation of acquiring companies in a short event window. He also tested whether diversifying acquisitions are a manifestation of agency problems and thus viewed negatively by investors. Although the diversification variable (dummy 1 if the acquirer and target are not from the same industry) was not significant, the sign was negative as predicted by the author. Kiymaz and Mukherjee (2000) posit that country diversification via cross-border mergers creates wealth by providing benefits for firms that are not available to their shareholders. The authors hypothesize that these benefits are inversely related to the extent of co-movement in the economies of the bidder and target's countries. By examining the wealth effects of U.S. targets and bidders involved in cross-border mergers with firms in other countries during 1982–1991, they show that wealth effects vary, depending on country affiliations of two merging firms, and are inversely related to the degree of economic co-movement between the two countries. In a follow up study, Kiymaz (2004) investigates the impact of mergers and acquisitions on U.S. bidders and targets involved in cross-border mergers of financial institutions. The findings indicate that while U.S. targets experience positive significant wealth gains, U.S. bidders encounter insignificant wealth gains during the merger announcements. There are also differences in wealth gains with respect to industry classification and to the regional location of foreign targets and bidders. The macroeconomic variables, including foreign and U.S. economic conditions, level of economic development of target country, exchange rate volatility along with the effectiveness of foreign government, relative size of participants, and control of target largely explain the wealth gains to bidders and targets. In a more recent study, Bhagat, Malhotra, and Zhu (2011) investigated 698 cross-border acquisitions by emerging country firms during the period between 1991 and 2008. The authors found that emerging

country acquirers experience a positive and significant market response of 1.09 percent on the announcement day in unrelated acquisitions.

This study intends to provide evidence from a rapidly growing emerging market by examining Turkish acquisitions from corporate diversification perspective.

DATA AND METHODOLOGY

Data

The sample includes acquisition announcements by the firms listed on the Istanbul Stock Exchange (ISE) during January 2000 and December 2011 period. The list of these transactions was obtained from Dealwatch database whereas *İş Yatırım* (İş Investment) provided the daily stock price data. The official announcement date for each transaction also relies on Dealwatch. We screened the sample for the following:

i) The transaction was completed.

ii) The acquiring firm is headquartered in Turkey.

iii) The acquiring firm was listed on the ISE with daily stock prices available at least 250 trading days prior and 5 trading days after the announcement date.

iv) There were no contaminating acquisition announcements of acquiring firm during 5 days before and after the given transaction.

In case of clustered takeovers where the same company acquires two or more targets within the same day, we take the largest one in terms of transaction value. Acquisitions in different years by the same company are considered separate events as long as estimation and event windows do not overlap. This sample selection procedure resulted in a total of 98 deals made by 72 companies. Table 1 below provides data on our sample selection procedure.

Insert Table 1 here

Acquisitions are defined as "diversifying" when the first two-digits of the main industry code of the bidder and the target are not the same and "focused" when the first two-digits of the main industry code of the bidder and target are identical.

Table 2 below presents the frequency distribution of focused and diversifying acquisitions based on two-digit SIC codes. Of all the acquisitions, about 64 percent were classified as focused acquisitions while the remaining 36 percent as diversifying acquisitions. This pattern seems to be in line with the literature that most firms are interested in focusing strategy and are in search of synergies. The highest number of acquisitions occurred in 2007 and 2011 with 13 acquisitions. The distribution of sample overtime is even and stable.

Insert Table 2 here

We also report the distribution of sample by industry affiliation in Table 3. We use Campbell's (1996) classification to group firms. Among the 72 bidder firms, Finance/Real Estate industry is on the top with 18 firms, followed by Basic industry (10 firms) and Construction industry (9 firms). The lowest numbers of acquirers is in Services industry with only one firm. Similarly, the majority of target firms operate in Finance/Real Estate industry with 14 firms. Consumer Durables and Utilities industries are in second place with 13 firms each.

Insert Table 3 here

Methodology

Standard event study methodology is used to measure the wealth effect of acquisition announcements on acquiring firms' stock prices. The event is the announcement of an acquisition by a Turkish company listed on the ISE. The following single-market model is employed in parameter estimation:

$$R_{i,t} = \alpha_i + \beta_{i,D} \cdot R_{D,t} + \varepsilon_{i,t} \qquad (1)$$

Where:

$R_{i,t}$ = the rate of return on security i on day t,

$R_{D,t}$ = the rate of return on the ISE-All Share Index,

$\beta_{i,D}$ = the slope of the regression line of the firm i's returns against the returns on the ISE-All Share Index,

α_i = the intercept term,

$\varepsilon_{i,t}$ = the residuals.

An abnormal return (wealth effect) for common stock of firm i on day t is defined as:

$$AR_{i,t} = R_{i,t} - \hat{R}_{i,t} \qquad (2)$$

where,

$$\hat{R}_{i,t} = \hat{\alpha}_i + \hat{\beta}_{i,D} \cdot R_{D,t} \qquad (3)$$

in which α_i, and $\beta_{i,D,}$ are estimated market model parameters obtained by using the pre-estimation period (t = - 250 to t = - 31).[1] The expected value of abnormal returns and average abnormal returns is zero in the absence of abnormal performance. [2] The estimation does not include the 30 days prior to the announcement date since information leakage within this range may have an effect on the share price, which can lead to incorrect estimates of the coefficients of the market model.

Factors influencing wealth effects

In order to test whether the CARs differ between diversifying and focusing acquisitions after controlling for deal and firm specific variables expected to affect acquirer returns, we perform a cross sectional multiple regression analysis. The CAR for the [-2;+2] period around the announcement date is used as the dependent variable in the regression. The following independent variables are included in the model.

<u>Diversifying vs. Focused Acquisitions</u>

[1] Most event studies employ a pre-estimation period to estimate the market model parameters. The length of estimation period varies between 180 and 270 days. This study uses 255 days to estimate model parameters and 60 days for event-window to analyze wealth effects.

[2] The test of significance is performed by following Brown and Warner (1985) and is not illustrated here.

Since our main objective is to investigate whether diversifying acquisitions create value, we introduce a dummy variable, *DIVERS* that is equal to "1" if the first two-digits of the main industry code of the bidder and the target are different. If there exists a diversification premium, the coefficient of this variable would be positive. In case of a diversification discount, the coefficient would be negative.

Cross-Border vs. Domestic Acquisitions

Cross-border M&As may affect acquirer returns in different ways. On the one hand, the acquisition of a foreign target may provide competitive advantage to the bidder through the acquisition of valuable and unique resources such as technology management and marketing skills, production skills, patents etc. that complement and strengthen the firm's resource base (Barney, 1991). On the other hand, the main disadvantage of cross-border M&As from the bidder's perspective is the lack of country and firm specific knowledge of the foreign target firm that potentially would lead to unsuccessful acquisitions or wrong valuation of foreign targets. This is especially true in the cases where the foreign target has high levels of intangible assets (Reuer, Oded, & Ragozzino, 2004).

There are no clear empirical results confirming the shareholder wealth effects of the bidding firm due to domestic or cross-border takeover announcements. For instance, Doukas and Travlos (1988) presented evidence of positive abnormal returns to US acquirers for international acquisitions. However, Datta and Puia (1995) reported no abnormal returns while Fatemi and Furtato (1998) documented small insignificant negative returns to shareholders of acquiring firms in cross-border acquisitions. Kiymaz (2000) reports significant returns to acquiring firms' shareholders.

To investigate whether there is a cross-border effect in our sample, we introduce a dummy variable *INT* that is equal to "1" if the target is a foreign company, "0" otherwise.

Payment Type

When one firm acquires another, it can pay for the acquisition with cash (cash in exchange for shares), equity (a specified number of the acquirer's shares for each target share), or some combination

(loan notes, deferred payment, share and equity). The method of payment in takeovers has been cited as an important factor for a number of reasons.

From a theoretical point of view, Jensen (1986) argues that acquisitions financed with cash will generate larger benefits than those accomplished through exchange of stocks because stock acquisitions are unlikely to motivate managers to use resources more efficiently. This theory is in line with the signaling hypothesis of information asymmetry presented in Myers and Majluf (1984), suggesting that the board of the bidder company will fund an acquisition by stock only if they believe their shares are overvalued. On the contrary, boards who believe that their stocks are undervalued will fund the takeover by other means such as cash or debt. Since target shareholders know this, and are not informed about the "true" value of the acquiring firm, an adverse selection arises, and they reduce their estimate of the acquirer's value. The result is that target shareholders are not inclined to accept a stock offer.

In addition, Hansen (1987) argues that bidders, in the case of uncertainty in target valuation, make stock offers as they have a "contingency pricing effect" i.e. reduce overpayments because target shareholders share part of the risk if the bidder overpays when evaluating a stock offer.

Finally, an alternative tax-based hypothesis exists that favors stock offers. Cash acquisitions are considered as immediately taxable for the target firm shareholders. On the other hand, stock acquisitions in general are tax deferrable until the shares are sold. Consequently, in cash offers a larger premium is required to compensate for that additional tax burden for the target firm. (Travlos, 1987 and Fuller et al. 2002).

Empirical research generally supports the hypothesis that shareholders of acquiring firms view cash offers more positively than stock offers. For instance, Travlos (1987), Fuller et al. (2002), and Moeller et al. (2003) found higher abnormal returns to bidders in cash acquisitions compared to stock acquisitions.

To investigate whether the method of payment has an impact on CARs, we use a dummy variable *PMT* that is equal to "1" for acquisitions paid with cash, "0" otherwise.

<u>Target Type</u>

Empirical studies generally report higher returns for private target acquisitions. For example, Chang (1998) reported higher abnormal returns for companies acquiring privately held targets compared to those acquiring publicly held targets. Fuller et al. (2002) found positive abnormal returns for subsidiary acquisitions, which are robust to different forms of payments. Hansen and Lott (1996) and Moeller et al. (2003) also found positive abnormal returns to bidders acquiring private targets.

Three reasons are given in the previous literature to explain these findings. The first reason involves the liquidity impact and limited competition. Compared to publicly traded firms, buying and selling private firms and subsidiaries is more difficult. This lack of liquidity makes these investments less attractive and hence offers are generally lower for private firms. Thus, shareholders of bidding firms earn a higher return on such transactions (Fuller et al., 2002).

A second reason relates to the monitoring hypothesis. Firms acquiring privately held targets through common stock exchanges tend to create outside block holders because a small shareholder group owns the targets. The creation of outside block holders can serve as an effective monitoring device of management, which, in turn, can increase bidder returns (Chang, 1998).

A final reason concerns the portfolio preferences of investors. Hansen and Lott (1996) hypothesize that if investors are diversified, management's goal should be to maximize the value of the shareholder's portfolio, not to maximize shareholder value. Thus, when a public bidder acquires a public target, diversified shareholders who own stock in both firms should be indifferent to how the gains from the acquisitions are divided. Hence, the bidding firm's shareholders should not expect any abnormal return when acquiring a public firm.

To investigate whether the type of the target has an impact on CARs in our sample, we use a dummy variable *PUBLIC* that is equal to "1" for deals involving public targets, and "0" for private targets.

Cash Reserves of the Acquirer

Cash reserves can provide funds for investment opportunities. Firms often accumulate much more cash than they require for normal business operations. Jensen (1986) argues that the presence of large free cash flows can compound a firm's agency problem by insulating managers from being monitored

by external market forces. Managers at firms with more cash have more resources available to them and are more likely to engage on empire building. Thus, they may use excess cash in making poor investments such as nonproductive acquisitions instead of distributing it to the firm's shareholders. As a result, an acquiring firm with excessive cash reserves may generate lower levels of abnormal returns. Yet, Moeller et al. (2004) do not find support for this hypothesis in the US context.

On the other hand, higher free cash flows can also proxy for better recent firm performance, which could be correlated with higher quality managers, who tend to make better acquisition decisions (Masulis et al. 2007).

To investigate whether acquirer's cash reserves have an effect on abnormal returns, we use the variable *CASH* that is measured by total cash divided by total assets of the acquirer at the year-end before the acquisition.

Leverage of the Acquirer

Past studies argue that leverage can be used to limit managerial discretion and discourage managers from conducting empire-building activities when they have excessive free cash flow (Stulz, 1990). Leverage would have a positive impact on the acquirer's announcement return because leverage would provide managers with the incentive to make more value maximizing acquisitions.

Leverage also provides incentives for managers to improve firm performance, since managers have to cede significant control to creditors and often lose their jobs if their firms fall into financial distress. There is also evidence that leverage is related to a firm's takeover protection (Garvey & Hanka, 1999).

Following the existing literature, we include leverage as a control variable, *LEV*, defined as a firm's book value of short-term and long-term debt divided by its total assets at the end of the year preceding the acquisition.

Pre-bid Performance of the Acquirer

According to empirical studies, pre-bid acquiring firm performance, usually measured by price-to-earnings (P/E) or market-to-book (MTB) ratios, has a negative impact on abnormal returns.

For instance, Rau and Vermaelen (1998) and Sudarsanam and Mahate (2003) use P/E and MTB ratios prior to the bid and assess their impact on bidder performance and find that high P/E acquirers receive significantly negative returns. The authors argue that glamour acquirers (i.e. high P/E or MTB) are overvalued based on superior past performance. Value acquirers (i.e. low P/E or MTB), however, were subject to poor performance in the past and therefore forced to evaluate acquisitions more carefully.

Taking into account that high P/E or MTB ratios are generally regarded as positive (i.e. that companies are doing well), it seems surprising that acquirers perform particularly badly if their pre-bid performance is good. Hence, much research cites Roll (1986), who suggested a "hubris" explanation for acquisitions, stating that acquiring firm managers are unaware of how bad their acquisitions are. The main argument is that individual managers seem to become over-optimistic and misguided when their company has a strong market value.

Even though there seems to be no direct evidence that the hubris hypothesis is true, it remains the most likely explanation for the bad performance of glamour acquirers. There is evidence that acquirers with a high market value or bids made when the stock market is booming tend to perform badly. An alternative explanation could be that executives are under pressure to invest when their companies have a high market value. Competition among acquirers for targets could also be stronger during "hot" market periods, therefore allowing management less time for a careful evaluation of bid decisions.

To investigate whether pre-bid acquirer performance affects abnormal returns, we employ the variable *PE* that is equal to the stock price of the acquirer divided by its net income per share at the end of the year preceding the acquisition.

Size of the Acquirer

Studies such as Banz (1981) and Reinganum (1983, 1992) show that small firms consistently experience significantly larger risk-adjusted returns compared to larger firms. In a more recent study, Moeller et al. (2004) found robust evidence that bidder size is negatively correlated with acquirer return measured by announcement period CAR. They report a two percent higher announcement

return for smaller acquiring firms irrespective of the form of financing and target type (public or private).

There are several possible reasons for such observations. First, managers of larger firms may suffer from managerial hubris (Roll, 1986) and may overpay. Second, larger firms tend to make acquisitions by stock, which typically sends a negative signal to the market. Finally, smaller firms are more likely to acquire private firms, thus having a favorable market reaction (Masulis et al., 2007).
Part of the previous literature also uses relative size of the acquiring firm compared to the target firm. Since we do not have data on the size of target firms in our sample, we only use *SIZE* defined as the natural logarithm of the acquirer's total assets at the year-end preceding the acquisition.

Group affiliation of the acquirer

Industrial groups (or *holding*s) consisting of companies with strong cross-shareholdings are common in Turkey. These groups are somewhat similar to diversified firms since member companies may support each other economically in potentially profitable projects. Previous studies found that sensitivity of investment to cash flow is smaller for group member firms (Lins & Servaes, 1999, 2002). Therefore, it is possible that diversification via acquisitions only benefits firms that do not belong to industrial groups. For firms that have a group affiliation, further diversification via acquisitions might not be beneficial because some of the benefits of internal capital markets may already be captured by the group structure (Lins & Servaes, 1999, 2002). Therefore, investors may have different perceptions of diversifying and focused acquisitions depending on whether the acquirer is a group affiliate or not. Diversifying acquisions made by group affiliates may not be perceived as positive as those made by independent firms

To capture this effect, we include the dummy variable *GR* which is equal to 1 for group affiliates in the regression equation. We consider a firm to be a group affiliate if the ultimate owner is a *holding* company. We also include the interaction between diversification dummy and group membership dummy.

Insert Table 4 here

Table 4 describes both dependent and independent variables use in cross sectional regression analysis. Correlation coefficients among independent variables are also reported. We use (-2,+2) event window cumulative abnormal returns as our dependent variable. Table 4 also provides descriptive statistics for the variables. The mean cumulative abnormal return over (-2, 2) event window surrounding the acquisition is 2.39 percent. About 36 percent of the acquisitions in our sample are classified as diversifying based on two-digit SIC codes. Around 18 percent of the acquisitions are cross-border and 13 percent were financed with cash. 17 percent of the target companies in the sample are public.

The cash reserves of the acquirer firms divided by their total assets has a mean value of 0.11 at the end of the year preceding the acquisition. The leverage of the acquirer has a mean of 0.46 while the average P/E ratio for acquirers registers a mean of 19.09. The mean acquirer size measured by the natural logarithm of its total assets is equal to 20.17. Finally, 56 percent of the acquirer companies in the sample are group affiliates.

EMPRICAL FINDINGS

Wealth Effect

The wealth gains to acquiring firms are calculated by using a market model. The behavior of abnormal returns to acquiring firms surrounding the acquisition announcement is reported in Table5. We both report average abnormal returns (AARs) and cumulative abnormal returns (CARs) to capture potential news leakage as well as post-announcement market corrections. We use multiple event windows to report wealth gains.

Insert Table 5 here

As shown on Panel A of Table 5, average abnormal returns (AARs) for days 0 and -2 are positive and statistically significant. However, the AAR on day +3 is negative and significant. As shown on Panel B, over the event windows [-1,0], [-2,0], [-1,+1], and [-2,+2], CARs are positive and

statistically significant. For example, during [-2,+2] window, the acquiring firms experience abnormal returns of 2.39 percent. Over the two-day [0,+1], three-day [0,+2] and eleven-day [-5,+5] event windows surrounding the acquisition, the CAARs are also positive but not statistically significant. Over the event window [-10,+10], CAAR is negative but not significant

Overall, the evidence suggests that, at the time of the announcement, the Turkish market considers acquisitions as a value creating strategy as by the fact that abnormal returns are significantly positive for the majority of event windows considered.

We also report wealth gains to acquirers with respect to industry affiliation on Table 6 that follows. The results show differences in CARs to acquiring firms based on industry affiliation. The basic industry, construction industry, finance/real estate industry, textiles/trade industry, transportation industry and utilities industry subgroups exhibit statistically significant CARs. With the exception of the average CAR for textiles/trade industry which is negative over the window (-2,0), CAR values are positive, indicating significant wealth gains. The highest CAR is 6.69 percent for the construction industry over the event window (-2,0) followed by 5.98 percent for the same industry over the event window (-2,+2). Six of the ten subgroups display statistically significant wealth gains, indicating that there is a difference in the impact of M&A activities on acquirers based on industry affiliation.

Insert Table 6 here

Factors Influencing Wealth Effects

The results of the cross-sectional regression analyses are reported in Table 7. To control heteroskedasticity problem, variables are normalized by the standard errors of the market model. Table 7 contains results for four separate equations. The first equation uses deal characteristics (DIVERS, INTL, PMT) and the status of the target (PUBLIC) to explain wealth effects. The second equation contains acquirer's pre-bid characteristics (CASH, LEV, PE, SIZE) as independent variables. The third equation considers deal variables as well as acquirer and target characteristics together. Finally, the fourth equation adds the group affiliation of the acquirer (GR) and the interaction between group affiliation and diversification dummy (GR*DIVERS) into the model

Insert Table 7 here

The regression results reported on Table 7 have adjusted R-squared values between 4.43 percent and 24.84 percent. The F-statistic values are significant for all four equations.

The first equation tests the impact of deal variables and target status on wealth gains. Among these variables, the coefficient estimate for the variable *DIVERS* is positive and statistically significant at the ten percent level, meaning that diversifying acquisitions generate higher abnormal returns compared to focused acquisitions. This finding indicates existence of diversification premium in Turkish market. These findings support the earlier studies on corporate diversification (Schipper and Thompson, 1983; Hubbard and Palia, 1999; Matsusaka, 1993; and Dyland and Diltz, 2002) and contradicts more recent studies in this area (Morck, Shleifer, and Vishny, 1990; Agrawal, Jaffe and Mandelker, 1992; Morgan, Nail, and Megginson, 2000, among others). The coefficient estimate for the variable *PUBLIC* is also positive and significant at the one percent level. This indicates that firms acquiring publicly traded target firms experience higher returns. This finding is contrary to findings of other studies. For example, Chang (1998), Fuller et al. (2002) and Moeller et al. (2003) report higher abnormal returns to bidders acquiring private companies. The ownership structure in Turkey is very concentrated, firms mostly owned by a group or family. Acquiring firms may have to pay excess premium to convince these firms to sell their entities and it may be easier to buy public companies. The coefficients of the variables PMT and INTL are positive but not statistically significant.

The second equation tests the impact of the acquirer firm's pre-bid characteristics using CASH, LEV, PE and SIZE variables. Among these, the coefficient estimate for the variable *SIZE* is negative and statistically significant at the one percent level, indicating that smaller firms experience higher abnormal returns compare to larger firms. These findings are in line with the existing literature, reporting consistent higher risk adjusted returns to smaller firms (Banz, 1981; Reinganum, 1992; Moeller et al. 2004, among others). The variables CASH and LEV have positive coefficient estimates while the coefficient estimate for the variable PE is negative. However, neither of these is statistically significant.

The third equation considers previous variables together and confirms the results that diversifying acquisitions generate higher abnormal returns to acquirers compared to focused acquisitions. We also demonstrate that smaller firms experience higher abnormal returns compare to larger firms in our sample and that acquiring public firms result in higher wealth gains to acquirers.

Finally the fourth equation investigates whether the perception of diversifying acquisitions by the investors depends on the group affiliation of the acquirer by adding a group dummy (GR) and the interaction between the group dummy and diversification dummy (GR*DIVERS) into the equation. In this specification, the coefficient of the diversification dummy represents difference in abnormal returns between diversifying and focused acquisitions for non-group affiliates only. Since the coefficient is equal to 0.06 and significant at one percent level of significance, it can be inferred that, for the acquisitions made by independent firms, wealth gains to diversifying acquisitions are higher than wealth gains to focused acquisitions. This result is consistent with the overall sample. However, for group affiliates, the difference between diversifying and focused acquisitions is captured by the sum of coefficients of the variables DIVERS and GR*DIVERS. This coefficient is equal to -0.101 (0.060-0.070) and is not statistically significant. Hence, for group affiliates, there is no difference between diversifying and focused acquisitions in terms of acquirer abnormal returns. It might be the case that, since group members are already capturing positive effects of diversification such as access to internal funds or risk reduction, due to their group structure, investors do not perceive any difference between focused and diversifying acquisitions in terms of value creation.

SUMMARY AND CONCLUSION

Mergers and acquisitions (M&As) continue to receive attention of both scholars and policy makers. M&A activities could give firm opportunity to diversify to its operations. Diversification can either destroys value or create value for the acquirers. Most recent studies tend to show that the diversification at the corporate level is redundant and value destroying

We examined this issue by analyzing a group of Turkish firms that expand via acquisitions. Using an event study methodology, we investigated the abnormal returns of the Turkish acquirer upon the announcement of acquisitions. Our objective was to investigate whether diversifying and non-diversifying acquisitions differ in terms of acquirer abnormal returns while controlling other factors.

Our findings indicated that Turkish acquirer enjoy positive abnormal returns during various event windows. The results of the cross-sectional regression analysis show that diversifying acquisitions generate higher abnormal returns to acquirers compared to focused acquisitions. We also demonstrate that smaller firms experience higher abnormal returns compare to larger firms in our sample. Finally, acquiring public firms result in higher wealth gains to acquirers.

We also analyzed whether results differ among group affiliates and independent firms. Indeed, estimation results showed that if an acquisition is made by an independent firm, diversifying acquisitions generate higher abnormal returns compared to focused acquisitions. However, if the acquirer is a group affiliate, there is no significant difference between the two types of acquisition activities in terms of wealth effects.

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Table 1
Sample Selection

	Number of deals
Beginning sample	188
Less: Contaminated events	44
Less: Clustered takeovers	9
Less: Missing data	37
Final sample	**98**

Table 2
Distribution of Acquisitions by Type and Year

This table reports the distribution of acquisitions type and years. Acquisitions are classified as either focused or diversifying acquisitions.

	Type of Acquisitions		
Year	***Focused***	***Diversifying***	***Total***
Pre-2005	19	9	28
2005	4	2	6
2006	6	1	7
2007	7	6	13
2008	6	2	8
2009	6	5	11
2010	9	3	12
2011	6	7	13
Total	63	35	98
Percentage	64%	36%	100%

Table 3
Distribution of Acquisitions by Industry Affiliation

This table reports industry affiliations of both acquirers and target firms.

	Acquiring firms		Target firms	
Industry	**No of firms**	**%**	**No of firms**	**%**
Petroleum industry	0	0	1	1
Finance/real estate industry	18	25	14	14
Consumer durables industry	8	11	13	13
Basic industry	10	14	11	11
Food/tobacco industry	8	11	12	12
Construction industry	9	13	6	6
Capital goods industry	0	0	3	3
Transportation industry	3	4	5	5
Utilities industry	8	11	13	13
Textiles/trade industry	4	6	11	11
Services industry	1	1	7	7
Leisure industry	3	4	2	2
Total	**72**	**100**	**98**	**100**

Table 4
Variables used in cross-sectional regression analysis

This table presents the variables used in cross-sectional analysis. Both description of variables and statistical properties are reported.

Panel A. Variable Descriptions and Descriptive Statistics

Variable	***Description of Variable***	***Mean***	***Standard Deviation***
Dependent Variable	(CAR -2,+2)	0.0239	0.0555
Deal variables			
DIVERS	Diversifying vs. focused acquisition: Dummy equal to 1 if the target and the acquirer's main businesses are different	0.3571	0.4816
INTL	Cross-border acquisition: Dummy equal to 1 if the target is not a Turkish company	0.1837	0.3892
PMT	Payment type: Dummy equal to 1 for cash payments	0.1327	0.3409
Target characteristic			
PUBLIC	Public vs. private target: Dummy equal to 1 if the target is a public company	0.1735	0.3806
Acquirers' pre-bid characteristics			
CASH	Cash reserves of the acquirer: Cash / Total Assets	0.1127	0.1357
LEV	Leverage of the acquirer: Total Debt / Total Assets	0.4611	0.2613
PE	Performance of the acquirer: Price per share / Earnings per share	19.0911	35.7294
SIZE	Size of the acquirer: ln (Total Assets)	20.1706	1.9274
GR	Group affiliation: Dummy equal to 1 for group affiliates	0.5612	0.4988

Panel B. Correlation Coefficients

	DIVERS	INTL	PMT	PUBLIC	CASH	LEV	PE	SIZE	GR
DIVERS	1								
INTL	-0.0786	1							
PMT	0.0852	-0.0301	1						
PUBLIC	-0.1165	-0.0781	-0.0203	1					
CASH	0.1619	-0.0609	0.0498	-0.054	1				
LEV	-0.0971	0.3081	0.1143	-0.0098	-0.2934	1			
PE	0.0613	-0.0641	-0.1052	-0.1306	0.5377	-0.1831	1		
SIZE	-0.0438	0.3372	0.2252	-0.0054	-0.2378	0.4984	-0.2847	1	
GR	0.187	-0.1647	-0.0786	0.0249	0.0441	-0.1619	0.0322	-0.145	1

Table 5
Abnormal returns to Turkish acquirers during announcements of acquisitions

This table presents the abnormal return to Turkish acquirers (N=98) surrounding the announcement of acquisitions. The null hypothesis is that the average abnormal returns are not statistically different from zero.

Panel A: Average abnormal returns (AARs)

Days	AARs (%)	t-value	Positive	Negative
-10	-0.13	-0.62	49	49
-9	0.08	0.29	46	52
-8	0.01	0.04	51	47
-7	0.14	0.73	48	50
-6	-0.06	-0.27	44	54
-5	-1.33	-1.47	44	54
-4	-0.05	-0.19	51	47
-3	-0.18	-1.04	38	60
-2	1.32	1.69*	59	39
-1	0.25	0.99	46	52
0	0.80	2.27**	46	52
1	-0.15	-0.45	43	55
2	0.18	0.63	47	51
3	-0.41	-2.01**	46	52
4	0.11	0.46	50	48
5	-0.30	-1.63	38	60
6	0.24	0.82	44	54
7	-0.19	-0.64	40	58
8	-0.27	-0.95	40	58
9	-0.16	-0.85	44	54
10	-0.06	-0.24	44	54

Panel B: Cumulative abnormal returns (CARs)

Windows	CARs (%)	t-value	Positive	Negative
(-1,0)	1.04	2.58**	56	42
(-2,0)	2.36	3.33***	64	34
(-1,+1)	0.89	1.70*	52	46
(0,+1)	0.65	1.29	46	52
(0,+2)	0.83	1.51	52	46
(-2,+2)	2.39	4.27**	70	28
(-5,+5)	0.22	0.24	44	54
(-10,+10)	-0.18	-0.14	43	55

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

Table 6

Abnormal returns to Turkish Acquirers by industrial classification

	N		CAR (-1,0)	CAR (-1,+1)	CAR (-2,0)	CAR (-2,+2)
Basic industry	12	Mean	1.30	-0.09	3.64	1.75
		t-value	1.50	-0.09	2.96**	1.65
Consumer durables industry	11	Mean	1.45	0.82	-0.18	-0.05
		t-value	0.79	0.30	-0.06	-0.03
Construction industry	11	Mean	-0.03	-0.11	6.69	5.98
		t-value	-0.05	-0.11	2.64**	2.50**
Finance/real estate industry	29	Mean	1.03	1.17	1.76	1.73
		t-value	1.65	1.78*	2.12**	2.91***
Food/tobacco industry	12	Mean	-0.20	1.48	-0.10	1.84
		t-value	-0.35	0.69	-0.03	1.04
Leisure industry	4	Mean	4.88	2.51	3.60	1.15
		t-value	1.23	0.56	2.02	0.76
Services industry	1	Mean	4.20	2.26	18.44	17.94
		t-value	-	-	-	-
Textiles/trade industry	5	Mean	-0.73	-0.20	-3.78	0.43
		t-value	-0.86	-0.14	-2.54*	0.14
Transportation industry	4	Mean	2.91	2.45	3.10	3.00
		t-value	2.07	1.62	4.95**	4.09**
Utilities industry	9	Mean	1.32	0.88	4.45	4.39
		t-value	0.63	0.45	2.21*	1.82

Table 7
Cross-sectional regression results for Turkish Acquirers

$CAR= \beta_0+\beta_1 DIVERS+\beta_2 CASH+\beta_3 LEV+\beta_4 PE+\beta_5 SIZE+\beta_6 INT+ \beta_7 PMT+\beta_8 PUBLIC+\beta_7 GR+ \beta_8 GR*DIVERS+\varepsilon$

Variable	1		2		3		4	
	Coef.	t-value	Coef.	t-value	Coef.	t-value	Coef.	t-value
Constant	0.0061	0.76	0.1953	3.00***	0.1990	3.09***	0.1825	2.98***
DIVERS	0.0186	1.65*			0.0194	1.75*	0.0603	3.43***
INT	0.0085	0.61			0.0182	1.25	0.0201	1.46
PMT	0.0046	0.29			0.0129	0.81	0.0065	0.42
PUBLIC	0.0519	3.66***			0.0504	3.62***	0.0498	3.8***
CASH			0.0201	0.40	-0.0019	-0.04	-0.0106	-0.24
LEV			0.0331	1.33	0.0304	1.27	0.0241	1.06
PE			-0.0003	-1.62	-0.0002	-1.12	-0.0001	-0.83
SIZE			-0.0091	-2.68***	-0.0102	-3.05***	-0.0102	-3.23***
GR							0.0392	3.21***
GR*DIVERS							-0.0704	-3.16***
Adj. R^2	0.1018		0.0443		0.1547		0.2484	
F-statistic	3.75***		2.13*		3.22***		4.21***	

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