Diversification, Ownership and Control of Swedish Corporations

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Abstract

We study the short- and long-term valuation effects of Swedish takeovers. Using a sample of 93 bidding firms that acquired 101 targets between 1980 and 1995, we find that diversifying acquisitions lead to a negative market reaction and deterioration of the operating performance of the bidder. Announcement and performance gains in each of the three years following the acquisition occur only when bidders expand their core rather than their peripheral lines of business. Our findings suggest that focused acquisitions lead to greater synergies and operating efficiencies than diversifying acquisitions. Intra-group acquisitions, however, show that bidders do not realise significant gains whether they adopt diversifying or focusing investment strategies by purchasing firms controlled by the Wallenberg and SHB conglomerate groups. Intra-group targets realize significant gains regardless bidder's investment strategy. Finally, the evidence does not support the view that intra-conglomerate acquisitions are associated with expropriation of minority shareholders. However, they appear to enhance the control rights of large shareholders of the bidding firm.

1. Introduction

In recent years, an increasing number of empirical studies has documented that the average diversified firm trades at a discount than a portfolio of comparable single-segment firms.[1] This is in contrast with Alchian (1969), Weston (1970), Williamson (1970, 1975, 1985), Scharfstein and Stein (1996), and Stein (1997) who argue that corporate diversification can be motivated by the benefits of creating or expanding the internal capital markets of the firm.[2] Matsasuka and Nanda (1996), and Khanna and Palepu (1997) suggest that the diversification advantages arising from internal capital markets can be even greater in the presence of significant external capital market constraints and imperfections. Consistent with this view, Khanna and Palepu (2000) find little evidence of a diversification discount in emerging countries where external capital markets constraints and imperfections are plentiful. However, more recent studies have raised doubts about the findings of the diversification discount literature.[3]

Corporate diversification research has primarily focused on US companies with widely dispersed ownership where agency problems are confined between managers and shareholders. In Europe, however, widely held corporations are in the minority (Faccio and Lang, 2000). European corporations, with the exception of UK, are characterised by high concentration of ownership, predominantly in the hands of families. Therefore, the agency problem in European firms may have its roots in the expropriation of outside shareholders by the controlling shareholder. Unlike the previous literature, this paper explores the intersection of investment decisions and ownership structure of Swedish firms where corporate ownership is not as widely dispersed as in other developed countries. In fact 62% of the firms listed in the Stockholm Stock Exchange are controlled by a family or a private individual (Agnblad, 2000). Moreover, Sweden has the highest percentage of firms issuing dual

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[1] See, for example, Lang and Stulz (1994), Berger and Ofek (1995), Servaes (1996), Lins and Servaes (1999a). An exception is Germany where diversified firms found to trade with zero percent discount (Lins and Servaes 1999a).

[2] Recent empirical evidence (Berger and Ofek, 1995; Lamont, 1997; Shin and Stulz, 1998; Scharfstein 1997; Rajan *et al.*, 2000), however, suggests that the diversification discount is partly associated with inefficient cross-subsidization.

[3] Campa and Kedia (2001) show that diversified firms are valued at a discount before they diversify, implying that diversification itself does not inevitably produce the discount reported in previous studies. Similarly, Hyland (1999) shows that conglomerate firms were poor performers prior to becoming diversified and advocates that diversification is driven by the acquisition of external growth opportunities. Maksimovic and Phillips (2001, 2002) fail to find that non-core business segments are inefficiently protected by headquarters. Billet and Mauer (1998) also report that internal capital markets transfer funds to financially constrained divisions with good investment opportunities consistent with a well functioning internal capital market. Villalonga (2000) claims that the diversification discount in the US stock market is a data artefact. Using BITS data, she finds that diversified firms trade at significant average premium.

class shares (66.07) in Europe (Faccio and Lang, 2002) used to enhance the control of the largest shareholders. Furthermore, Swedish conglomerate groups are some of the most complex organizations with interlocking ownership structures in Europe (LaPorta *et al.*, 1999). There are two dominant conglomerate groups (Wallenberg family (SE-Banken) and Handelsbanken (SHB)) in Sweden, operating in a wide variety of industries, with a strikingly high concentration of ownership and control structures. These two groups exercise control through their investment companies (closed-end funds) and by having access to a house bank. Thus, in Sweden, the agency problem may have its roots in the expropriation of outside shareholders by the controlling shareholder. Does this pattern of ownership assist insiders to remove corporate wealth from outside investors when firms engage in the acquisition of assets? According to Shleifer and Vishny (1997), Bebchuck *et al.* (1999), Wolfenzon (1999) and Claessens *et al.* (2000), expropriation possibilities by insiders, through intra-group transfers of assets and control stakes, increase when the corporation is affiliated to a group of corporations, controlled by the same shareholder.

This unique aspect of Swedish corporate environment presents itself as a testing ground to examine whether the causes and effects of corporate diversification differ between conglomerate and non-conglomerate members. We also ask whether expropriation of minority shareholders, through wealth-transfers, acts as a motive in intra-group acquisitions. Thus, by examining investment behavior in an environment of extraordinary concentration of control, we expect to shed light on whether corporate pyramids are used for the expropriation of outside shareholders.

The purpose of this paper is twofold. First, we test whether the act of corporate diversification in the Swedish corporate environment increases firm value. If diversification increases firm value by creating internal capital markets, diversifying acquisitions should be more value increasing and result in post-acquisition performance increases than non-diversifying acquisitions. This should be more pronounced in acquisitions by non-conglomerate than conglomerate bidders. Unlike non-conglomerate related acquisitions that might be motivated by the benefits of diversification arising from increased operating and internal capital market efficiencies, intra-conglomerate acquisitions, focused or diversifying, are likely to be driven by operating efficiencies rather than internal capital market efficiencies. This is mainly because, diversifying acquisitions by conglomerate-affiliated firms acquiring targets controlled by the same conglomerate group involves firms already having access to internal capital markets they should not be motivated by the need to create internal capital markets. This type of acquisition should be pursued by the intention to enhance the operating efficiency rather than the internal capital market of the bidder. Intra-group non-diversifying acquisitions should also be motivated by similar objectives. As a result, intra-group diversifying acquisitions should not be substantially different from intra-group non-diversifying acquisitions in terms of value creation and post-acquisition operating performance. Consequently, intra-group transactions are expected to allow us to draw inferences about the operating efficiency gains of acquisitions. Acquisitions by non-conglomerate firms, however, are expected to gauge the importance of internal capital markets.

The second purpose is to examine whether intra-group acquisitions are motivated by entrenched controlling interests (Shleifer and Vishny, 1997; Bebchuck *et al.*, 1999; Wolfenzon, 1999; Claessens *et al.*, 2000). That is, we investigate whether controlling shareholders expropriate minority shareholders by setting unfair terms in the transfer of control stakes. This is expected to add to the rapidly expanding literature on the

separation of ownership and control in Western Europe and East Asia (see e.g. La Porta *et al.*, 1999; Faccio and Lang 2000, 2002; Claessens *et al.*, 2000).

Our study differs from previous studies in several other ways. While there has been an extensive literature on the value of corporate diversification, the diversification discount that empirical researchers have uncovered may be attributed to the use of the same database of US firms. It can therefore not be ruled out that the diversification discount is simply the outcome of an elaborate data snooping process. Without testing the robustness of these findings outside the environment in which they were discovered, we cannot determine whether these empirical regularities are merely spurious or dependant on the institutional setting (Lins and Servaes, 1999a).[4] In this paper we address this concern by studying the effects of the act of corporate diversification outside the US context. Although previous work (Lins and Servaes, 1999a), has examined at the aggregate level the phenomenon of corporate diversification across countries, this study primarily focuses on the effects of the investment decision of the firm on its market value and post-investment performance.[5] There is no evidence on whether the act of diversification (focus) destroys (improves) corporate performance relying on non-US disaggregated data.[6] While previous studies (Doukas and Lang, 2001) have investigated the expansion of core and non-core business of firms, they rely upon US firms that are more widely held in comparison to Swedish firms. Our analysis allows us to examine whether the efficiency of corporate investment is influenced by the pronounced separation of ownership and control of Swedish corporations. Furthermore, our research differs from earlier studies in the sense that it avoids the possible limitations associated with the estimation of the diversification discount using the Berger and Ofek (1995) procedure that relies on the use of industry-matched stand-alone firms to make inferences about the imputed value of diversified firms. Such diversification discount estimates may be inappropriate if diversified firms consist of business segments that systematically differ from stand-alone firms in the same industry (Campa and Kedia, 2001; Chevalier, 1999; Graham *et al.*, 1999; Whited, 2001). In contrast with previous studies, our approach relies on the market's assessment of corporate diversifying and non-diversifying investment activities and the long-term performance of the firm to draw inferences about the value of the act of diversification. Consequently, our investigation is not subject to the

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[4] Lins and Servaes (1999a), report a significant diversification discount of 10% in Japan and 15% in the UK, respectively. For German diversified firms, however, they document a diversification discount only when insider ownership is less than 5%.

[5] See, however, Matsasuka (1993) and Hubbard and Palia (1999), who find positive announcement effects associated with diversifying acquisitions during the 1960s.

[6] Regarding US based studies, Matsusaka (1993) finds positive bidder returns at the announcement of US conglomerate acquisitions in the late 1960s and early 1970s. Ravenscraft and Scherer (1987) document that conglomerate acquisitions during the 1960s were unsuccessful because of the post-acquisition poor performance and subsequent bust-up. Kaplan and Weisbach (1992) find similar evidence. Servaes (1996) finds a negative relation between diversification and firm performance in the 1960s, and, a negative but weaker relation, in the 1970s. In fact, Lang and Stulz (1994) argue '... that firms that diversify do so because they are performing poorly and are seeking growth opportunities ...' suggesting '... that further insights could be obtained by investigating diversification at a more disaggregated level than at the segment level and by distinguishing between firms that diversify into similar activities and those that diversify into unrelated activities ...'.

construction biases contained in the diversification discount measures used in earlier studies. Another difference is that we examine the pre-diversification valuation and performance characteristics of target firms that are acquired by conglomerate and non-conglomerate groups. This feature permits testing whether diversification is driven by the motive of operating efficiencies, since the intention of achieving greater internal markets is rather weak for conglomerate bidders buying targets controlled by the same conglomerate group.

We examine a sample of 101 Swedish acquisitions that spans the 1980–95 period. The evidence shows that firms that acquire companies in related industries significantly increase shareholder value while diversifying acquisitions, in general, cause negative market reactions at the expense of shareholder value by an average of SEK108 million ($10 million) around the announcement period. Furthermore, we find bidders' long-term operating performance to be consistent with market's reaction. Industry-adjusted operating margins for firms that engage in diversifying acquisitions deteriorate by 4% three years after the acquisition year. Performance gains in each of the three years following the acquisition occur only when bidders invest in their core rather than in peripheral lines of business. Intra-group acquisitions, however, show that bidders do not realise significant gains whether they adopt diversifying or focusing investment strategies by purchasing firms already controlled by the conglomerate group. Intra-group targets realise significant gains regardless bidder's investment strategy.

The remainder of the paper is organised as follows. The next section describes the data and institutional environment. Section 3 presents descriptive statistics and analyses the pre-acquisition cash-flow performance of bidders and targets. Section 4 presents the announcement returns and cross-sectional results. The post-acquisition operating performance results are presented and discussed in Section 5. Section 6 concludes the paper

2. Institutional setting and data collection

2.1. *Swedish corporate governance and institutions*

The Swedish corporate governance model promotes strong private owners with a long-term investment horizon and a social responsibility towards other stakeholders and society in general. Within the Swedish financial system, ownership groups have often held controlling blocks in affiliated firms and taken an active part in management. These ownership groups control many firms, especially the largest ones. The largest sphere—the Wallenberg family—controls companies representing almost half of the Stockholm Stock Exchange (SSE) market capitalisation. This state has been remarkably stable for most of the last 60 years.

The groups usually exercise control through their investment companies (closed end investment funds) organised as pyramidal holding companies. The funds stem from the economic crisis in the 1920s and 1930s when Swedish commercial banks took over firms in severe financial distress. Before 1934, banks were permitted to acquire stocks as collateral for loans. As a result of this and the economic crisis, banks held large portfolios of stocks. In 1934, the new Bank Law forced banks to sell existing portfolios. The solution was to create holding companies and retain these portfolios through the holding companies. The ownership of the holding companies was distributed to the shareholders of the banks (Agnblad *et al.*, 2000).

Historically, the two most important and influential groups have been organised around SE-Banken and Handelsbanken. SE-Banken's holding company is Investor, which is controlled by the Wallenberg family through three foundations. Investor is structured as a pyramid with only two layers. In combination with dual class share systems it controls many of the largest firms on the SSE, e.g., ABB, Electrolux, Ericsson, and SKF.[7] Agnblad *et al.* (2000) report that in October 1998 the Wallenberg sphere controlled 14 large listed firms with a total market value of SEK922 billions (42% of the SSE market capitalisation) with an ownership stake of 19.4% of the capital and 41.3% of the votes in Investor (Wallenberg's Closed-End Investment Fund). Therefore with an investment of about 1% of the SSE market capitalisation in Investor, the Wallenberg foundations control 42% of the market capitalisation! Figure 1 represents the organisational structure of the Wallenberg group in 1986 (ownership data obtained from Sundqvist (1986)). The Wallenberg group is characterised by a complex pyramidal structure with interlocking ownership and voting powers that allow for the control of a large group of companies with only a fraction of their shares. For example, with 4% of equity ownership, Wallenberg has 29% of the voting power in Ericsson.

Handelsbanken's holding company is Industrivärden, which is formed around the management team of the bank that controls the fund. Agnblad *et al.* (2000) report that the Handelsbanken sphere in 1998 controlled 11 firms and a market value of SEK259 billions (about 12% of SSE's market capitalization) with an equity stake worth SEK36 billions. The organisational structure of the SHB group in 1986 is shown in Figure 2. Although SHB has a similar pyramid structure with that of the Wallenberg group, its cross ownership was more pronounced in 1986.

Firms within the Wallenberg and SHB groups have (i) access to internal capital markets and (ii) strong separation of ownership and control. Hence, intra-group acquisitions are likely to be driven by different motives than non-group acquisitions. Since Wallenberg and SHB firms already have access to internal capital markets, diversifying investments should not be determined by the will to create or expand internal capital markets. Instead, they should be motivated by the need to enhance operating efficiencies. Intra-group non-diversifying acquisitions should also be motivated by similar objectives. As a result, intra-group diversifying acquisitions should not be substantially different from intra-group non-diversifying acquisitions in terms of value creation and post-acquisition operating performance. Intra-group transactions, then, are expected to allow us to draw inferences about the operating efficiency gains of acquisitions. On the other hand, non-group diversifying acquisitions should reveal whether internal capital markets create value and improve post-acquisition performance of bidders that did not benefit from internal capital markets in the pre-acquisition period. This should be more pronounced in diversifying than non-diversifying acquisitions of non-conglomerate bidders.

Intra-group acquisitions may also reveal different motives. Since conglomerate controlling shareholders with minority capital interest do not bear the full cash flow consequences of takeovers, they have biased investment incentives and might engage in empire building acquisitions, to increase their personal power base. Furthermore, controlling shareholders might engage in intra-group acquisitions in order to

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[7] Firms issue two types of shares (A and B) with equal cash flow rights but with different voting rights. Typically, A shares carry 10 shares per vote while B shares carry one share per vote.
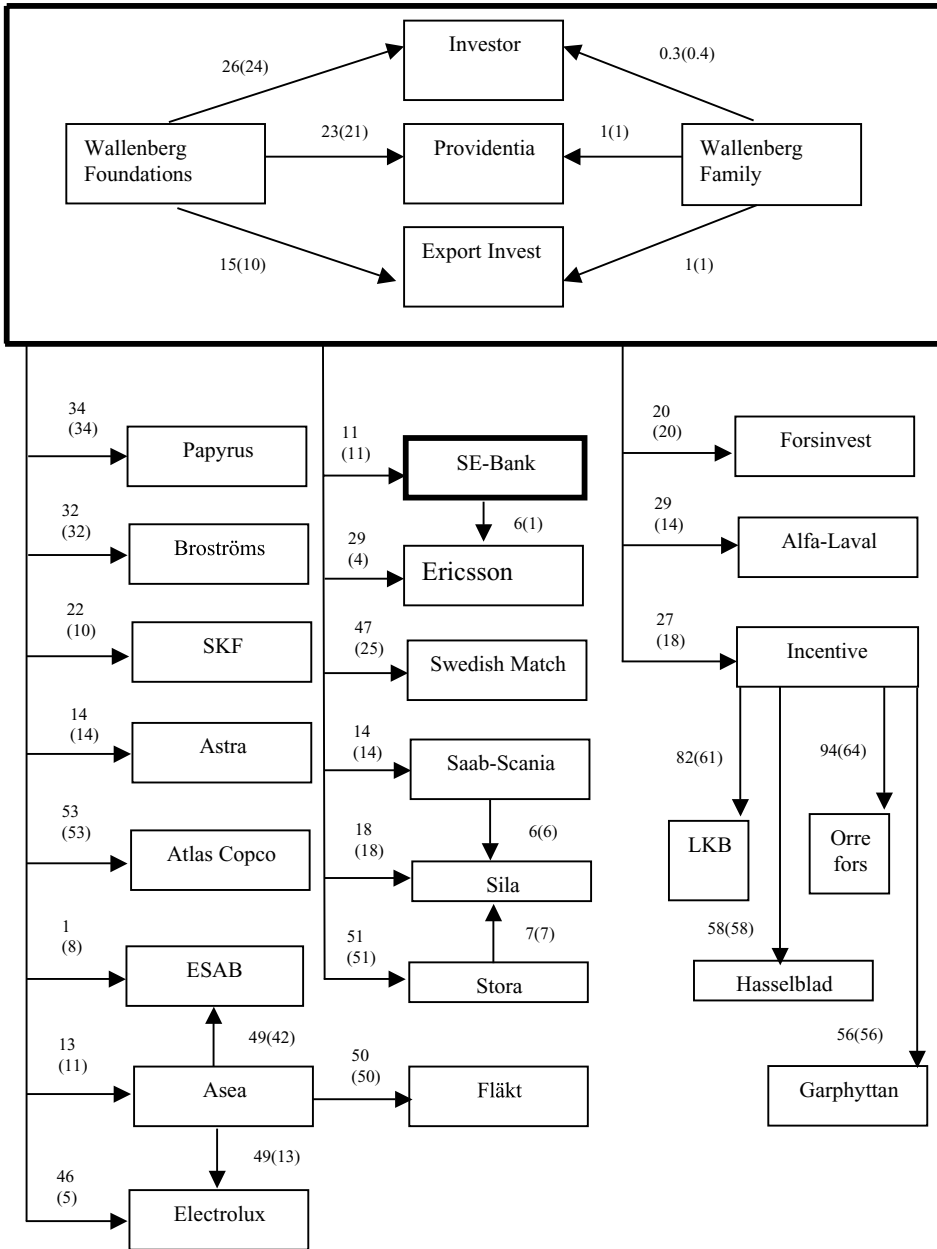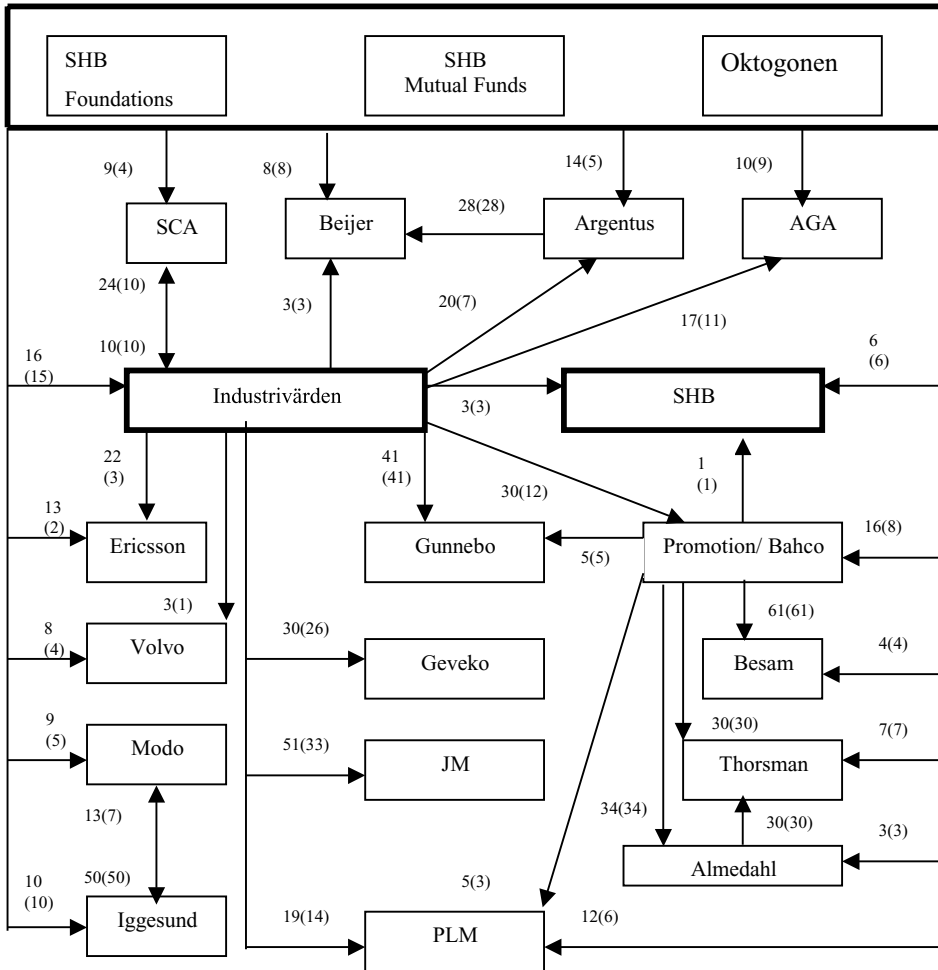
Fig. 1. The Wallenberg sphere of business in January 1986. Vote ownership (%) is reported with equity ownership (%) in parenthesis. Investor, Providentia and Export Invest are three Closed End Investment Funds (CEIFs) controlled by the Wallenbergs.

expropriate minority stakes by setting unfair terms in the transfer of assets. Intra-group acquisitions, diversifying and focused, are likely to be the manifestation of agency problems between majority and minority shareholders. Intra-group transactions, then, are also expected let us infer whether they are designed by the controlling shareholders to expropriate minority interests.

Fig. 2. The SHB sphere of business in January 1986. Vote ownership (%) is reported with equity ownership (%) in parenthesis. Industrivärden is a Closed End Investment Fund (CEIF) controlled by the SHB sphere.

2.2. Data collection

The acquisition of a publicly traded firm is usually accomplished through a public tender offer. Therefore, almost all acquisitions are preceded by a public tender offer (Bergström and Rydqvist, 1989).[8] We create a sample of publicly traded firms that engaged in acquisitions during the 1980–95 period from several sources. The tender offers associated with the acquisitions for the 1980–91 period were collected from the records of the SSE and daily financial newspapers. The announcements of tender offers, reported in the Swedish financial press, were confirmed with the SSEs quarterly reports. Tender offers for the 1992–95 period were collected from the SSE Quarterly Report. Only successful non-partial bids where both the target and the bidder were

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[8] We are aware of only two successful non-partial mergers without a public tender offer.

listed at the time of the bid are included in the sample. The final sample contains complete data for 101 successful acquisitions.[9] Most of the excluded observations were due to missing data for small target firms.

The typical bidder is an industrial firm or a holding company, which has been listed on the SSE for at least ten years. Targets are also industrial firms, but publicly traded firms for less than ten years on the SSE. Almost one third of the target firms had been traded on the Stockholm stock market for less than four years when they were taken over. An interesting observation is that 14 of the bidders went bankrupt or were taken over within three years from the acquisition announcement.[10] Another sample characteristic is that 20 of the bidders made more than one bid during the sample period. This implies that their performance measures and industry segments may overlap between observations. Since we are interested in focused and diversifying investment strategies, these observations are important and we leave them in the sample. Bidders that made two acquisitions in the same year are counted only once. This reduced the sample to 93 bidders and 101 targets.

It is noteworthy, that almost all acquisitions were uncontested (i.e., there was only one bidder). This was the case in 94 of the transactions. Six bids in our sample were revised before they ultimately succeeded. It should be noted that a shareholder, or a group of shareholders, with 10% of the shares can block the acquisition and that almost all firms traded on SSE have at least one 10% blockholder. Therefore, the terms of the tender offer are often negotiated between the bidder and the large shareholders before the public announcement. When large blockholders have accepted the terms of the bid, a follow-up tender offer is made for all target shares including the blockholders' shares (Rydqvist, 1993). The legal system and the fact that we include only successful bids suggest that all the acquisitions in our sample are friendly. This also implies that there is no auction for target shares.

3. Descriptive statistics and pre-acquisition performance

In this section we provide summary statistics of Swedish firms involved in acquisitions during the 1980–95 period. We also outline the industrial structure of bidders and targets three years before the acquisition. Finally, we investigate their pre-acquisition cash flow performance. This is investigated in order to determine potential differences between bidders and targets as well as differences between bidders that invest outside their core business and bidders that invest within their core business.

3.1. *Descriptive statistics*

Table 1 lists summary statistics for Swedish companies involved in acquisitions during the 1980–95 period. Although the number of business segments suggests that, on average, target firms are more diversified than bidding firms, the difference is

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[9] Acquisitions of state dominated companies by other state dominated companies have been deleted since they may have been politically motivated. Furthermore, other acquisitions which were made under specific circumstances have been deleted (e.g., Trygg Hansa SPP's acquisition of Gota was deleted since it was motivated by Trygg Hansa SPP being the major owner in Gota and therefore wanting to save Gota from bankruptcy). However, the major reason for the exclusion of an acquisition from our sample is due to missing data.

[10] Eight bidders actually show up as targets subsequently in our sample.

Table 1

Summary statistics for Swedish firms involved in acquisitions: 1980–95.

The sample used in this study consists of Swedish acquisitions over the 1980–1995 period. Bidder (N = 93) and target (N = 101) firms were listed on the Stockholm Stock Exchange (the A-list, the OTC, or the Unofficial list) at the time of the announcement.

	N	Mean	Std. Dev	Min	Median	Max
Panel A: Bidding Firms						
Number of Segments	93	1.750	0.991	1	1	5
Approximate q[1]	93	1.206	0.353	0.742[3]	1.101	2.759[3]
Debt/Total Assets	93	0.700	0.165	0.079	0.718	0.973
Size of Investment[2]	101	1579	3066	30	603	25617
Firm Size (M SEK)	93	20397	39634	146	4642	238011
Managerial Ownership	93	0.162	0.192	0	0.082	0.709
Panel B: Target Firms						
Number of Segments	101	1.850	1.123	1	1	5
Approximate q	100[3]	1.304	0.474	0.563[4]	1.114	3.117[4]
Debt/Total Assets	101	0.666	0.182	0.011	0.672	0.968
Firm Size (M SEK)	101	7623	26593	28	1220	243745
Managerial Ownership	101	0.184	0.248	0	0.023	0.852

[1] The approximate q ratio is defined as market value of equity plus book value of total debt divided by book value of total assets.
[2] Market value of target's equity in M SEK.
[3] One extreme outlayer (Hötorget 1989, $q = 9.68$) deleted.
[4] For bidding firms, Min is Kanthal 1986 and Max is WM Data 1989. For target firms, Min is Elverk 1981 and Max is Hilleshög 1985.

negligible.[11] The approximate q ratio, measure of firm performance and management's ability to increase shareholders value, suggests that there are no significant differences between bidding and target firms.[12] Thus, bidders do not seem to buy firms of superior or inferior performance.

The debt ratio of bidding firms is marginally exceeding that of target firms. The size of bidding firms, measured by book value of total assets, is on average three times as large as targets' firm size. Bidders' market value of equity is about four times larger (SEK6167 million) than the market value of equity of target firms. While bidding firms are considerably larger than target firms, they are as diversified as targets are. Hence, there is no distinct pattern between size and industrial structure (i.e., number of industry segments).

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[11] Accounting data were collected from Findata's FINLIS database. Industry segments were obtained from the *Sweden's Largest Corporations (1980–1996)*. This source gives summary statistics for the 5000 largest firms in Sweden each year. The industry segments given in this source are the ones reported by the companies themselves. Ownership data was collected from Sundqvist (1985–93), Sundin and Sundqvist (1994–95). The q ratios have not been industry adjusted since we do not have access to industry qs.

[12] Approximated by the sum of the market value of a firm's equity and the book value of total debt divided by the book value of assets. Deflating q values may not equally affect all firms in the sample. However, it should affect the sub-samples equally if they have a similar industry profile.

Table 2

Frequency distribution of acquisitions by years.

The sample used in this study consists of Swedish acquisitions over the 1980–95 period. Bidder and target firms were listed on the Stockholm Stock Exchange (the A-list, the OTC, or the Unofficial list) at the time of the announcement. If the bidder and the target have the same first two digits industry code, the acquisition is defined as focused and as diversifying when the bidder and the target do not share the same main two-digit industry code.

	Frequency		
Year	Focused	Diversifying	Total
1980	1	2	3
1981	1	1	2
1982	0	0	0
1983	0	2	2
1984	1	3	4
1985	7	7	14
1986	9	5	14
1987	3	4	7
1988	10	8	18
1989	8	2	10
1990	4	3	7
1991	2	4	6
1992	0	1	1
1993	0	0	0
1994	2	5	7
1995	4	2	6
Total	52	49	101

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. We use industry codes based on the UN international classification standard (ISIC) for the 1980–92 period. For the rest of the sample period, we use the SNI 92 industry classification. Both systems provide a four-digit industry code where the first digit identifies a wide industry classification. The classification is, then, narrowed by the second, third and fourth digit. The SNI 92 is constructed as the ISIC, but the actual code numbers are different. The rationale for using two-digit industry codes is that industries with the same first two digits are closely related and require comparable management skills.[13] Consistent with Servaes (1996), we consider the 4-digit classification as inappropriate to identify accurately the industrial structure of

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[13] Business activity within the same two-digit level is also defined as 'related diversification' (see Rumelt, 1974; Matsusaka, 1993; Servaes, 1996). Operating in several 2-digit industry (SNI) codes is defined as unrelated diversification (see Palepu, 1985). Morck *et al.* (1990), however, define an acquisition as related if the bidder and the target have one of their 4-digit industry codes in common.

acquisitions in our sample.[14] Table 2 presents the frequency distribution of focused and diversifying acquisitions based on the two-digit industrial classification measure.

Very few acquisitions occurred before 1985. More than 75% of the acquisitions occurred during the 1985–91 period. Takeover activity declined considerably in 1992 and 1993, coinciding with the collapse of the financial sector in Sweden, and picked up again in 1994. The median acquisition year in the sample is 1988. While more than half of the acquisitions are classified as diversified (i.e., 49 out of 101), no discernable pattern characterises the two types of acquisition activity in Sweden throughout the 1980–95 period.

Table 3 lists the number of reported business segments for the year the acquisition took place and for each year during the three-year pre-acquisition period.[15] Panels A and B suggest, on average, that the corporate structure of bidding and target firms changes over time. For both groups the number of business segments increases as we draw near to the acquisition year. Targets' number of business segments, however, increased by 13.49% while bidders' business segments increased only by 5.42% over the three-year period prior to the acquisition to the year. The target's increasing business diversity during the pre-acquisition period is consistent with the view that firms that diversify are likely to become targets. Columns 3 and 4 report the corresponding number of business segments for bidders and targets by type of acquisition. What is more interesting is that bidders that acquire related targets (i.e., conduct focused acquisitions) report activity in fewer business segments than bidders that acquire unrelated targets (i.e., conduct diversifying acquisitions). The differences are significant at the 10% level for years minus one and zero (i.e., the years when the acquisitions were planned and carried out). This suggests that diversified bidders are likely to acquire firms outside their core business while focused bidders are likely to acquire firms within their core business.

Panel B shows that target companies associated with focused acquisitions, on average, have fewer business segments than target companies associated with diversified acquisitions. The difference is significant at the 5% level at the announcement year. These results suggest that diversifying acquisitions are more likely to be the choice of diversified companies that appear to seek growth opportunities outside their core business by purchasing diversified targets. Panel C confirms that multi-segment bidders are more likely to engage in diversified than focused acquisitions. More than 56% of acquisitions by multi-segment firms are classified as diversified while 46% of acquisitions by single-segment firms are classified as diversified. Panel D shows that a higher percentage of diversified targets is acquired by multi-segment than single-segment bidders.

We conclude that diversified bidders expand considerably their degree of industrial structure not only by investing outside their core business but also by acquiring targets with a diverse industrial profile. Focused acquisitions, however, are pursued by less diversified bidders with the objective to enhance their core business.

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[14] An alternative would be to compare the 4-digit SNI codes. This classification method provides qualitatively similar results, but the number of acquisitions defined as focused declines dramatically.

[15] The information given for each year is the industry codes reported by the firm's management and published at the end of the year. The business activity reported for year zero is based on the last reported segments prior to the announcement of the acquisition.

Table 3

Statistics on number of segments for bidding and target firms in Swedish acquisitions.

The sample used in this study consists of Swedish acquisitions over the 1980–95 period. Bidder (N = 93) and target (N = 101) firms were listed on the Stockholm Stock Exchange (the A-list, the OTC, or the Unofficial list) at the time of the announcement. If the bidder and the target have the same first two digits industry code, the acquisition is defined as focused and as diversifying when the bidder and the target do not share the same main two-digit industry code. ** and * denote significance at the 5% and 10% levels, respectively.

Panel A. The number of two-digit industry segments reported by the bidders the years before the acquisition.

Year	Total sample Mean (N = 90[1])	Focused acquisition Mean (N = 46)	Diversifying acquisition Mean (N = 44)	Difference
−3	1.66	1.56	1.75	0.18
−2	1.69	1.54	1.84	0.30
−1	1.78	1.59	1.98	0.39*
0	1.77	1.61	1.93	0.32

[1] Three bidders made one focused and one diversifying acquisition the same year. These eight observations are deleted (Asea 1988, Esselte 1988, and Investor 1991). Five bidders made two focused or two diversifying acquisitions the same year. These bidders are only counted once (Volvo made two diversifying acquisitions 1985, MoDo made two focused acquisitions 1988, Nobel made two diversifying acquisitions 1988, Gota made two focused acquisitions 1989, and Asea made two focused acquisitions 1990).

Panel B. The number of two-digit industry segments reported by the targets the years before the acquisition. The sample is divided by whether or not the firm was acquired by a bidder within the same industry or not.

Year	Total sample Mean (N = 101)	Focused acquisition Mean (N = 52)	Diversifying acquisition Mean (N = 49)	Difference
−3	1.63	1.40	1.86	−0.45**
−2	1.64	1.38	1.92	−0.53***
−1	1.72	1.42	2.04	−0.62***
0	1.85	1.52	2.20	−0.68***

Panel C: Corporate structure of bidders and proportion of diversifying acquisitions (i.e., the fraction of bidders that acquire targets with a different main two-digit industry code

Corporate structure bidder, N = 90	N	Fraction of diversifying acquisitions
Single segment	50	0.44
Multi-segment	40	0.55
Difference		−0.11

Panel D: Corporate structure of targets and proportion of diversifying acquisitions (i.e., the fraction of targets that is acquired by bidders with a different main two-digit industry code

Corporate structure target, N = 101	N	Fraction of diversifying acquisitions
Single segment	52	0.37
Multi-segment	49	0.63
Difference		−0.26***

3.2. *Pre-acquisition cash-flow performance*

In this section we estimate bidders' and targets' pre-acquisition cash flow performance using industry-adjusted growth in sales and profitability changes in operating margin, return on assets, and return on equity [(EBITD)/Sales, (EBITD)/Total Assets, and (EBITD)/Equity]. The motivation of our analysis is to gain additional insights about the pre-acquisition performance characteristics of bidders and targets. This is expected to help us determine whether diversification is driven by inferior performance relative to the performance of industry peers. Industry-adjusted performance changes from year n to 0 for firm i are calculated as

$$\prod_{t=n}^{0} (1 + \Delta X_{firm\ i,\ t}) - \prod_{t=n}^{0} (1 + \Delta X_{Industry,\ t})$$

where

$\Delta X_{firm\ i,\ t}$ is the change in the performance measure, X, between year n and year 0
$\Delta X_{Indsutry,\ t}$ is the change in the industry-mean of the performance measure, X, between year n and year 0; $n = -3, -2, -1$

Medians and median differences between focused and diversifying acquisitions for years -3, -2, and -1 and year 0 are reported in Table 4.[16] Panel A shows that acquiring firms in our sample have an average annual sales growth performance that is substantially better than the industry median in year -3. While bidders' growth in sales is considerably higher than the industry mean three years before the acquisition, it declines steadily in years -2 and -1 and that resembles the industry median. In contrast with the evidence reported by Lang and Stulz (1994) at the aggregate level, our results do not necessarily suggest that bidders seek growth through acquisitions because they have exhausted their own growth opportunities relative to their industry peers. The empirical evidence also shows that both diversified and focused bidding firms had not been underperformers long beforehand. Consequently, analysis of the post-acquisition performance of diversified and focused bidders will reveal the extent to which the nature of acquisition (i.e., diversifying and focused) impacts differently on the long-term profitability of the bidder. This issue is addressed later in Section 4.

Our results are also consistent with Berger and Ofek (1996), who find that firms with value losses are likely to be taken over. The sales growth measure of performance for target firms indicates that the typical target has a negative performance prior to the acquisition year. Therefore, this suggests that acquiring firms do not buy firms that exhibit performance greater than their industry median. When we split the sample into diversifying and focused acquisitions, we observe the same pattern. Bidders and targets associated with diversified acquisitions have, in general, lower pre-acquisition performance than the industry median in comparison to firms engaged in focused acquisitions. For all three pre-acquisition intervals, however, the performance differences are not statistically significant at any conventional level. The evidence also shows that focused bidders do not have superior pre-acquisition performance than diversified bidders. The performance difference between the two types of acquiring firms is not statistically significant for all three pre-acquisition intervals. Hence, the type of acquisition, not the pre-acquisition performance of the bidder, is expected to have a direct bearing on the post-acquisition performance of the bidder.

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[16] Medians and median differences are reported since the distributions are skewed.

Table 4

Pre-acquisition industry adjusted growth and profitability changes.

The sample used in this study consists of Swedish acquisitions over the 1980–95 period. Bidder
($N = 93$) and target ($N = 101$) firms were listed on the Stockholm Stock Exchange (the A-list, the
OTC, or the Unofficial list) at the time of the announcement. If the first two-digit industry code is the
same for the bidder and the target, the acquisition is defined as focused and as diversifying when the
bidder and the target do not share the same main two-digit industry code. Growth in sales is
computed as industry adjusted changes in Total Sales. Profitability changes are computed as (1)
industry adjusted changes in operating margin (EBITD/sales); (2) industry adjusted changes in
Return on Total Assets (ROA = EBITD/Total assets). Total Assets (TA) = Market Value of Equity
(MVE) plus Book Value of Debt (BVD) averaged over the year, i.e. (TA beginning of year plus TA
end of year)/2; and (3) industry adjusted change in return on equity (ROE = EBITD/MVE). Market
Value of Equity is averaged over the year, i.e. (MVE beginning of year plus MVE end of year)/2.
Median significance test based on Wilcoxon signed rank test. ***, ** and * denote significance at
the 1%, 5% and 10% levels, respectively. Year 0 is the year of the acquisition announcement.

	Total sample median	Focused acquisitions median	Diversifying acquisitions median	Difference
Panel A: Yearly Sales Growth industry adjusted				
Bidder				
Year −3 to 0	0.0358*** ($N = 85$)	0.0431** ($N = 44$)	0.0320* ($N = 41$)	0.0111
Year −2 to 0	0.0236 ($N = 85$)	0.0415 ($N = 44$)	0.0139 ($N = 41$)	0.0276
Year −1 to 0	0.0094 ($N = 90$)	0.0112 ($N = 46$)	−0.0046 ($N = 44$)	0.0158
Target				
Year −3 to 0	−0.0214 ($N = 86$)	−0.0179 ($N = 43$)	−0.0251 ($N = 43$)	0.0072
Year −2 to 0	−0.0210 ($N = 86$)	−0.0248 ($N = 43$)	−0.0210 ($N = 43$)	−0.0038
Year −1 to 0	−0.0070 ($N = 90$)	−0.0293 ($N = 46$)	0.0083 ($N = 44$)	−0.0376
Panel B: Yearly Δ(EBITD/Sales) industry adjusted				
Bidder				
Year −3 to 0	0.0024 ($N = 85$)	0.0086 ($N = 44$)	0.0019 ($N = 41$)	0.0009
Year −2 to 0	−0.0032 ($N = 85$)	0.0025 ($N = 44$)	0.0005 ($N = 41$)	0.0020
Year −1 to 0	−0.0005 ($N = 86$)	−0.0036 ($N = 44$)	−0.0005 ($N = 42$)	−0.0010
Target				
Year −3 to 0	−0.0120 ($N = 86$)	−0.0215 ($N = 43$)	−0.0144 ($N = 43$)	−0.0033
Year −2 to 0	−0.0131 ($N = 86$)	−0.0077 ($N = 44$)	−0.0086* ($N = 42$)	0.0009
Year −1 to 0	−0.0060 ($N = 90$)	−0.0087 ($N = 46$)	0.0000 ($N = 44$)	−0.0087
Panel C: Yearly Δ(ROA) industry adjusted				
Bidder				
Year −3 to 0	0.0030 ($N = 45$)	0.0044 ($N = 22$)	0.0015 ($N = 23$)	0.0029
Year −2 to 0	0.0032 ($N = 52$)	0.0039 ($N = 26$)	0.0027 ($N = 26$)	0.0012
Year −1 to 0	0.0033 ($N = 90$)	0.0048 ($N = 46$)	0.0022 ($N = 44$)	0.0026
Target				
Year −3 to 0	−0.0005 ($N = 53$)	0.0029 ($N = 26$)	−0.0010 ($N = 27$)	0.0039
Year −2 to 0	0.0027 ($N = 60$)	0.0021 ($N = 31$)	0.0033 ($N = 29$)	−0.0012
Year −1 to 0	0.0019 ($N = 73$)	0.0056 ($N = 38$)	−0.0047 ($N = 35$)	0.0103
Panel D: Yearly Δ(ROE) industry adjusted				
Bidder				
Year −3 to 0	−0.0089 ($N = 57$)	−0.0027 ($N = 29$)	−0.0134** ($N = 28$)	0.0107
Year −2 to 0	−0.0164* ($N = 64$)	0.0064 ($N = 33$)	−0.0235** ($N = 31$)	0.0299
Year −1 to 0	−0.0114 ($N = 90$)	−0.0021 ($N = 46$)	−0.0203* ($N = 44$)	0.0182
Target				
Year −3 to 0	−0.0175*** ($N = 61$)	−0.0167* ($N = 30$)	−0.0205** ($N = 31$)	0.0038
Year −2 to 0	−0.0155** ($N = 68$)	−0.0138* ($N = 35$)	−0.0172* ($N = 33$)	0.0034
Year −1 to 0	0.0027 ($N = 83$)	0.0046 ($N = 43$)	0.0026 ($N = 40$)	0.0020

Using the operating margin, return on assets, and return on equity performance measures, Panels B, C and D report similar pre-acquisition performance patterns for bidders and targets. The return on equity performance measure, however, suggests that the pre-acquisition performance of diversifying bidders was considerably lower in comparison to the industry median. Consistent with the operating margin results, the return on equity change for targets is negative and statistically significant. We conclude that a possible motive for related and unrelated acquisitions to the core business of the bidder is the restoration of bidders' performance. However, focused bidding firms may find it more profitable to expand core lines of business than to diversify, while diversified firms may find it more profitable to expand to peripheral than core business. We investigate both the short- and long-term profitability effects of these two strategies next.

4. Empirical tests and results

In this section we examine the market reaction to tender offer announcements in Sweden over the 1980–95 period. Our approach relies on the market's assessment of corporate diversifying and non-diversifying investment activities in order to draw inferences about the effects of diversification on firm value. Finally, cross-section regression analysis is conducted to test the prediction of the internal capital market hypothesis, while we control for other effects as well.

4.1. *Bidder announcement returns*

We examine the market reaction to tender offer announcements. The abnormal excess returns are estimated by subtracting bidder's expected daily return from its actual. Following the methodology of Bradley *et al.* (1988), the expected daily return is estimated by using a market model that is estimated over the 180-trading-day period that ends 20 days before the announcement.[17] The market index used is the Affärsvärldens General Index, which is a value weighted index representing 95% of the SSE's market capitalization. When the firm has both A and B shares traded, a value weighted portfolio of the two types of stock is calculated. When the A shares are not traded, the abnormal return on the B shares is used as a proxy for the abnormal return on the A shares.[18] We checked our sample of acquisition announcements for possible concurrent announcements from day −10 to day 0. We found no such announcements. However, the daily abnormal returns (ARs) and cumulative abnormal returns (CARs) are calculated for only 92 observations since one bidder's acquisition was ambiguous and four bidders made two offers on the same day. When two offers occur on the same day, it is impossible to separate the effect of each tender offer.[19]

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[17] Stock prices were collected from the Aktiedata Oy tape and the Superchart tape.

[18] Some firms do not have their A shares traded. The founding family keeps the controlling A shares when the firms go public and only the B shares are traded.

[19] Volvo made tender offers for Cardo and Hilleshög 21 November 1985. MoDo made tender offers for Holmen and Iggesund on 11 March 1988. Nobel made tender offers for Asken and Carnegie on 20 October 1988. Gota made tender offers for Skaraborgsbanken and Wermlandsbanken on 2 October 1989.

Panel A and B of Table 5, report the name, affiliation with the Wallenberg (a) and SHB (b) conglomerate groups, industrial structure (ISIC) of firms engaged in acquisitions along with bidder's abnormal return at the announcement date (Day 0) for diversifying and focused acquisitions, respectively. Intra-group related acquisitions represent one fourth of the sample: 13 for the Wallenberg (a) and 12 for SHB (b) group, respectively. It is noteworthy that Wallenberg and SHB firms are subject to tender offers, but only in intra-group acquisitions. The only exception is Skandia's diversifying tender offer for Almedahl (controlled by SHB). SHB was a shareholder in Skandia but did not have control. Given that Wallenbergs and SHB are very entrenched in the firms they control, change of control is almost impossible without the approval of the controlling shareholder. Furthermore, since the control rights are very valuable to them, they will only be willing to sell the controlling block if someone is interested to pay for these control rights. Our sample suggest that it would be uncommon for an outsider to pay the price Wallenbergs and SHB demand for these control rights.

Panel C of Table 5 reports the abnormal stock returns for both diversifying and focused acquisitions for each day in the period -5 to $+5$ days around the announcement day. The daily abnormal return to the diversifying bidder on the announcement of the acquisition (day -0) is positive but not statistically significant at any conventional level. In contrast, the abnormal return to bidders that expand their core business is 0.0063 and significant at the 10% level. While there is a different market response to the acquisition announcements of diversifying and non-diversifying firms, the difference (0.0037) does not appear to be statistically significant at conventional levels. One day after the announcement (day $+1$), the market's reaction is significantly negative for diversifying acquisitions, while positive and insignificant for focused acquisitions. The difference is 0.0149 and significant at the 1% level, implying that diversifying acquisitions are harmful to shareholders' wealth. Though the mean return differences are not significant, with the exception of the day after the announcement (0.0149) and the two-day day after the announcement (0.0076), the daily abnormal returns are, in general, larger for bidders associated with focused than diversifying acquisitions. Consistent with the pattern of daily abnormal returns, the percentage of positive abnormal returns is by and large higher for focused than diversifying acquisitions.

Following Bradley *et al*. (1988), our analysis is based on a five-day window interval around the announcement of the acquisition (days -5 to $+5$), to capture pre-announcement leakage effects as well as post-announcement corrections. These results are listed on Panel D along with cumulative returns for other trading intervals. Most of the excess return comes from day -5 to $+5$. The cumulative abnormal return to the non-diversifying bidder on the 11-day period is 0.0274 and significant at the 1% level (with a z-value of 2.819). Over the same trading interval, the abnormal return for the diversifying bidder is -0.0237 and marginally significant (with a z-value of -1.941). The means difference is 0.0511 and significant at the 1% level. These results suggest that shareholders of firms that buy targets related to their core business (non-diversifying) gain 2.7%, while shareholders of firms that buy targets unrelated to their core business realize 2.3% negative returns. While these results appear to be consistent with the diversification discount literature, one can also argue that the market's negative reaction to diversifying acquisition announcements is likely to be driven by its perception of whether the bidder has overpaid the target rather than by the costs of

Table 5

Daily and cumulative abnormal returns for focused and diversified acquisition announcements.

The sample used in this study consists of Swedish acquisitions over the 1980–95 period. Bidder and target firms were listed on the Stockholm Stock Exchange (the A-list, the OTC, or the Unofficial list) at the time of the announcement. If the bidder and the target have the same first two-digit industry code, the acquisition is defined as focused and as diversifying when the bidder and the target do not share the same main two-digit industry code. Daily (ARs) and cumulative (CARs) abnormal returns are computed from the market model prediction errors, z-statistics are computed and reported in parenthesis. ***, ** and * denote significance at the 1%, 5% and 10% levels, respectively. Day 0 is the first announcement of the acquisition. [a] and [b] denotes that the firm was controlled by the Wallenberg sphere and the SHB sphere, respectively.

Panel A: Sample of diversifying acquisitions

Date	Bidder	Bid Isic	Target	Tar Isic	Bidcar
800118	Skandia	8201 Insurance	Forsen	5000 Construction	0.0361
800919	Skanska[b]	5000 Construction	Drott[b]	8310 Real estate	−0.0350
810411	Asea[a]	3830 Manufacture of electrical machinery	Elverk[a]	4200 Water works	0.0948
830301	Proventus	8103 Financial services	Upsala-Ekeby	3610 Manufacture of pottery	−0.1187
830914	Skrinet	8103 Financial services	NPL	5012 Construction	−0.1841
840904	Bofors	3810 Manufacture of fabricated metal products	Kema Nobel	3511 Manufacture of basic industrial chemicals	0.1320
841122	Volvo[b]	3840 Manufacture of transport equipment	STC[b]	6132 Wholsesale trade	0.0212
841211	Saba	6121 Wholesale trade	Svea	3119 Manufacture of chocolate and confectionary	0.0877
850130	Saba	6210 Retail trade	Carnegie	8102 Financial institution (other)	−0.1200
850508	Aga[b]	3511 Manufacture of basic industrial chemicals	Uddeholm[b]	3710 Iron and basic steel industries	−0.0403
850906	Faluhus	3311 Sawmills, planing, and other wood mills	Nils Weibull	3810 Manufacture of fabricated metal products	−0.0589
851202	Enstrom	6112 Wholesale trade	Kabinettet	8310 Real estate	0.0642
851211	Skanegripen	3810 Manufacture of fabricated metal products	Järnbron	3311 Sawmills, paling, and other wood mills	−0.0553
860127	Boliden	2303 Ore mining	Ahlsell	6111 Wholsesale trade	−0.1035
860417	Aritmos	3100 Food manufacturing	Kuben	6124 Wholsesale trade	0.0671
860505	Proventus	8103 Financial services	GAB	3901 Manufacture of jewellery	0.0084
860528	Skandia	8201 Insurance	Almedahl[b]	3211 Spinning, weaving, and textiles	−0.0004

860630	Kanthal	3810 Manufacture of fabricated metal products	Höganäs	3710 Iron and basic steel industries	−0.0064
870209	Skandia	8200 Insurance	Sth Badhus	8310 Real estate	−0.0311
870209	Beijer	8102 Financial institution (other)	Kebo	6112 Wholsesale trade	−0.0112
870930	Trelleborg	3550 Manufacture of rubber products	Boliden	2303 Ore mining	0.0859
871026	Industrivarden[b]	8102 Financial institution (other)	PLM[b]	3819 Manufacture of fabricated metal products (other)	−0.0354
880205	Hexagon	6112 Wholesale trade	Hemglass	6221 Retail trade	−0.1097
880310	Stora [a]	3411 Manufacture of pulp and paper	Swedish Match[a]	3311 Sawmills, paling, and other wood mills	−0.0044
880316	Asea[a]	3830 Manufacture of electrical machinery	Broströms[a]	7120 Water Transport	0.0532
880426	Almedahl	3211 Spinning, weaving, and textiles	Fagerhult	3830 Manufacture of electrical machinery	−0.0954
880426	Skrinet	8103 Financial services	Johnson Pump	3829 Manufacture of machinery	−0.0124
880914	Esselte	3420 Printing, publishing and allied industries	Enstrom	6112 Wholsesale trade	−0.0539
891212	Procordia	3819 Manufacture of fabricated metal products	Pharmacia	3522 Manufacture of drugs and medicines	−0.1105
891218	Industrivärden[b]	8102 Financial institution (other)	Dacke[b]	2950 Other mining and extraction	−0.0272
900503	BPA	5012 Construction	HP	3521 Manufacture of paints and laquers	−0.0650
900605	Munksjo	3412 Manufacture of containers and boxes	Hexagon	6112 Wholsesale trade	−0.0018
900820	Bahco[b]	3811 Manufacture of cutlery and hand tools	Thorsman[b]	3560 Manufacture of plastic products	−0.0453
910225	Investor [a]	8102 Financial institution (other)	SAAB[a]	3840 Manufacture of transport equipment	−0.0932
911011	Svedala	6129 Wholesale trade	Componenta	3810 Manufacture of fabricated metal products	−0.0961
911017	Industrivärden[b]	8102 Financial institution (other)	Bahco[b]	3811 Manufacture of cutlery and hand tools	0.0204
911220	Skandia	8201 Insurance	Anticimex	9200 Sanitary services	0.0083
921020	Volvo	3840 Manufacture of transport equipment	Protorp	8103 Financial services	0.0629
940616	Volvo[b]	3840 Manufacture of transport equipment	BCP[b]	3140 Tobacco manufactures	−0.0507
941020	Hidef	3819 Manufacture of fabricated metal products	Gnosjö	8329 Business services	−0.0545
941031	Sifab	8310 Real estate	Andersson	5011 Construction	0.0532
941107	Celsius	3841 Ship building	Enator	5011 Construction	0.0383
941220	Stena	7120 Water transport	Råckstahus	8310 Real estate	0.0754
950403	Latour	8102 Financial institution (other)	Swegon	3909 Manufacture industries (other)	−0.0140
950519	WM data	7220 Software consultancy and supply	Owell	6112 Wholsesale trade	−0.0053

Panel B: Sample of focused acquistion

Date	Bidder	Bid Isic	Target	Tar Isic	Bidcar
801125	Sonesson	3820 Manufacture of machinery	Nife	3810 Manufacture of fabricated metal products	−0.0040
810210	Alfa Laval[a]	3820 Manufacture of machinery	Rotor[a]	3820 Manufacture of machinery	0.0661
840924	Stora	3411 Manufacture of pulp and paper	Billerud	3411 Manufacture of pulp and paper	0.0749
841203	Papyrus[a]	3411 Manufacture of pulp and paper	Nymölla[a]	3411 Manufacture of pulp and paper	0.0760
850228	Reinholds	8310 Real estate	SÅA	8310 Real estate	−0.0297
850423	Sth Badhus	8310 Real estate	Citadellet	8310 Real estate	0.0827
850808	Stralfors	3420 Printing, publishing and allied industries	Topflight	3420 Printing, publishing and allied industries	0.0088
850821	Sundsvallsbanken	8101 Monetary institution	Uplandsbanken	8101 Monetary institution	0.0084
850822	Catena	6131 Wholesale trade	Säfveån	6140 Wholsesale trade	0.0738
851127	Promotion[b]	3810 Manufacture of fabricated metal products	Bahco[b]	3810 Manufacture of fabricated metal products	0.0178
851203	Bilsped	7190 Transport services	Scansped	7190 Transport services	0.0988
860111	Bilspedition	7190 Transport services	Adamsson	7190 Transport services	−0.0119
860225	Volvo[b]	3840 Manufacture of transport equipment	Sonesson[b]	3820 Manufacture of machinery	0.0058
860526	Pronator	8329 Business services	Företagsfinans	8329 Business services	0.1534
860623	Malmros	6112 Wholesale trade	Stiab	6112 Wholesale trade	0.1053
860822	Philipsons	6131 Wholesale trade	Ivars Bil	6131 Wholesale trade	−0.0002
860929	Stora[a]	3411 Manufacture of pulp and paper	Papyrus[a]	3411 Manufacture of pulp and paper	−0.0451
861008	Pharmacia	3522 Manufacture of drugs and medicines	LKB	3529 Manufacture of chemicals	−0.0069
861124	Munksjo	3411 Manufacture of pulp and paper	Ljungdals	3419 Manufacture of pulp and paper (other)	0.1253
861208	Gotabanken	8101 Monetary institution	B&B Invest	8101 Monetary institution	0.0881
870203	Pronator	8329 Business services	Enator	8310 Real estate	−0.0565
870406	JW	8324 Engineering and architectural services	Sjölander	8324 Engineering and architectural services	−0.0032
870413	Argentus	6112 Wholesale trade	Beijer	6111 Wholsesale trade	0.1851
880126	Bahco[b]	3819 Manufacture of fabricated metal products	Besam [b]	3830 Manufacture of electrical machinery	−0.0044

880224	Asea[a]	3830 Manufacture of electrical machinery	Fläkt[a]	3810 Manufacture of fabricated metal products	0.0755
880413	Esselte	3420 Printing, publishing and allied industries	Kontorsutveckling	3420 Printing, publishing and allied industries	0.0468
880416	Proventus	8103 Financial services	Gotabanken	8101 Monetary institution	0.0717
880430	Opus	6121 Wholesale trade	Sardus	6121 Wholesale trade	0.1188
880621	Ericsson[a]	3830 Manufacture of electrical machinery	Radiosystem	3839 Manufacture of electrical apparatus	−0.0313
880818	Bilsped	7190 Transport services	Transatlantic	7120 Water Transport	0.0746
880924	Skandia	8201 Insurance	Skandia Int	8201 Insurance	−0.0047
890324	BGB	8310 Real estate	Hötorget	8310 Real estate	−0.0568
890620	WM data	8329 Business services	Edebe	8323 Data processing	0.0515
890901	Marieberg	3420 Printing, publishing and allied industries	Duni	3419 Manufacture of pulp and paper (other)	−0.0437
891206	PK	8101 Monetary institution	Nordbanken	8101 Monetary institution	−0.0170
900129	Volvo[b]	3840 Manufacture of transport equipment	Åkermans[b]	3820 Manufacture of machinery	−0.1001
900323	BGB	8310 Real estate	Convexa	8310 Real estate	0.0059
900402	Asea[a]	3830 Manufacture of electrical machinery	Incentive[a]	3849 Manufacture of transport equipment	−0.0408
900531	Asea[a]	3830 Manufacture of electrical machinery	Hasselblad[a]	3850 Manufacture of scientific equipment	0.0310
910204	Aritmos	3820 Manufacture of machinery	Malmros	3840 Manufacture of transport equipment	0.1819
911126	Investor[a]	8102 Financial institution (other)	Providentia[a]	8102 Financial institution (other)	−0.0316
940207	Klövern	8310 Real estate	Bastionen	8310 Real estate	0.0697
940314	Investor[a]	8102 Financial institution (other)	Export Invest[a]	8103 Financial services	−0.0231
950609	Exab	7000 Real estate	Hilab	7000 Real estate	−0.1053
950609	Prifast	7000 Real estate	Stancia	7000 Real estate	−0.0440
950807	ASG	6310 Cargo handling and storage	Frigoscandia	6310 Cargo handling and storage	0.0068
950912	Assi Domän	0201 Forestry and logging	Hasselfors	0201 Forestry and logging	0.0430

Panel C: Average abnormal returns, ARs

	Average abnormal return, ARs		Positive ARs		
Day	Focused Acq. ($N = 47$)	Diversifying Acq. ($N = 45$)	Focused Acq	Diversifying Acq.	Difference $AR_{foc} - AR_{div}$
−5	−0.0010 (−0.521)	−0.0069 (−1.921)*	46.8	46.6	0.0059
−4	0.0038 (1.113)	−0.0023 (−0.415)	48.9	55.6	0.0061
−3	−0.0015 (−0.190)	−0.0005 (0.205)	59.6	46.7	−0.0010
−2	0.0006 (0.368)	0.0037 (1.528)	59.6	51.1	−0.0030
−1	0.0024 (1.347)	0.0039 (0.696)	66.0	46.7	−0.0016
0	0.0063 (1.823)*	0.0026 (0.632)	48.9	46.7	0.0037
+1	0.0035 (0.053)	−0.0114 (−3.587)***	48.9	37.8	0.0149***
+2	0.0059 (2.695)**	−0.0017 (−0.327)	53.2	48.9	0.0076*
+3	0.0003 (−0.547)	−0.0060 (−2.120)**	46.8	35.6	0.0060
+4	0.0037 (1.392)	−0.0024 (−0.287)	51.1	44.4	0.0062
+5	0.0039 (1.817)*	−0.0024 (−0.695)	55.3	37.8	0.0063

Panel D: Cumulative average abnormal returns, CARs

	Cumulative abnormal returns, CARs		Difference $_{foc} - CAR_{div}$
Trading Interval	Focused Acq. ($N = 46$)	Diversifying Acq. ($N = 46$)	
(−5 to +5)	0.0274 (2.819)***	−0.0237 (−1.941)*	0.0511***
(−5 to +1)	0.0138 (1.509)	−0.0112 (−1.082)	0.0250 (2.118)**
(−1 to +1)	0.0119 (1.861)*	−0.0052 (−1.305)	0.0171 (1.942)*
(−1 to 0)	0.0083 (2.241)**	0.0062 (0.939)	0.0021 (0.300)
(0 to +1)	0.0095 (1.327)	−0.0091 (−2.089)**	0.0186 (1.983)**

Panel E: Cumulative abnormal returns (CARs) sorted by type of acquisition and whether the bidder is associated with one of the two conglomerate groups (Wallenberg or SHB) in Sweden. Means are reported with medians in parentheses. Median testes were conducted using the Wilcoxon signrank test. Median difference testes were conducted using the Wilcoxon ranksum test. ***, ** and * denote significance at the 1%, 5% and 10% levels, respectively. $N = 92$.

Bidder	Diversifying	Focused	Difference
Group member	−0.0118 (−0.0311) $N = 12$	0.0123 (0.0007) $N = 13$	−0.0241 (−0.0318)
Non-group member	−0.0178 (−0.0112) $N = 33$	0.0380*** (0.0259)*** $N = 34$	−0.0558*** (−0.0371)***
Difference	0.0060 (−0.0199)	−0.0257* (−0.0252)	

diversification. We revisit this issue in the cross-sectional analysis by explicitly accounting for the possible effects of overpayment/underpayment by the bidder.

If diversification is driven by internal capital market advantages, firms should benefit from corporate diversifying activities as they are expected to increase their existing internal capital market advantages. Consistent with the predictions of the internal capital market hypothesis, bidders that are not associated with one of the top two conglomerate groups in Sweden are expected to benefit the most from diversifying acquisitions. Conglomerate group members, however, are expected to experience small gains from similar transactions since they have access to greater internal capital markets. Panel E shows that the diversifying acquisitions of group and non-group related bidders fail to produce significant firm value gains. Focused acquisitions, however, appear to be mostly beneficial for non-group related bidders.

Consistent with the findings of Morck *et al.* (1990), and Doukas and Lang (2002), these results also imply that acquisitions of related assets have a better fit and they are worth more as part of the bidder's organization. Consequently, they are expected to produce synergy gains from increased operational efficiencies, reduction of costs, leveraging of purchasing power with suppliers and synergies. In addition, acquisitions of related business are expected to increase shareholder value by expanding the bidder's market share. Although not in the context of focused acquisitions, the Swedish results are also consistent with asset sales (selloffs) studies (see, for example, John and Ofek, 1995) which report that unrelated asset sales (i.e., increased corporate focus) lead to firm value increases in the seller's remaining assets. The non-positive excess returns of diversifying acquisitions, however, suggest that the newly acquired assets are expected to interfere with the buyer's core business operations and, therefore, neutralise any positive synergies. This result is also consistent with Lins and Servaes (1999a, b) who find that the agency costs of diversification dominate the potential benefits in most developed and emerging capital markets.

Overall, the evidence is consistent with the view that the market expects operating inefficiencies and agency costs to outweigh the potential benefits of internal capital markets when firms expand outside their core business by acquiring unrelated assets. The opposite expectation, however, seems to be formed by the market when firms expand their core business by acquiring related assets.

4.2. *Abnormal returns in intra-conglomerate group acquisitions*

In this section we take a closer look at the valuation effects of diversifying and non-diversifying activities of firms controlled by the Wallenberg and SHB conglomerate groups. Table 6 lists the cumulative abnormal stock returns over the 11-day period (i.e., -5 to $+5$ days) around the announcement day for the bidder, the target, and the value weighted portfolio of bidder and target.

Panel A of Table 6 reports the abnormal returns of firms involved in acquisitions controlled by the Wallenberg group. While 69% of the acquisitions are focused, the evidence suggests that targets realise significant gains regardless of whether the bidder acquires assets related or unrelated to its core business. Bidders do not experience significant losses even when they diversify their operations. While the transaction *per se* suggests a wealth transfer from bidders to targets, bidder shareholders do not suffer from significant losses. Consistent with our previous results reported in Table 5, this result suggests that intra-conglomerate industrial diversification (focus) does not destroy (create) firm value. This is also confirmed by the value weighted portfolio

Table 6

Sample acquisitions by firms controlled by the Wallenberg and SHB conglomerates.

The sample used in this study consists of Swedish acquisitions over the 1980–95 period. Bidder and target firms were listed on the Stockholm Stock Exchange (the A-list, the OTC, or the Unofficial list) at the time of the announcement. If the bidder and the target have the same first two-digit industry code (ISIC), the acquisition is defined as focused and as diversifying when the bidder and the target do not share the same main two-digit industry code. 11-day C cumulative Abnormal Returns (CARs) for the bidder, the target, and the value weighted portfolio of bidder and target shares are computed from the market model prediction errors. [a] and [b] denotes that the firm was controlled by the Wallenberg sphere and the SHB sphere, respectively. ***, ** and * denote significance at the 1%, 5% and 10% levels, respectively.

Panel A: Acquisitions by firms controlled by Wallenberg conglomerate group

Date	Bidder	Bid ISIC	Target	Tar ISIC	Classification	Bidder CAR	Bid Z	Target CAR	Tar Z	Portfolio CAR	Port Z
810210	Alfa Laval[a]	3820	Rotor[a]	3820	Focused	0.0661	1.5082	0.2727	5.7873***	0.0723	1.6365
810411	Asea[a]	3830	Elverk[a]	4200	Diversifying	0.0948	1.7335*	0.0077	0.0955	0.0905	1.6516*
841203	Papyrus[a]	3411	Nymölla[a]	3411	Focused	0.0760	1.7093*	0.3776	7.7018***	0.1514	3.2074***
860929	Stora[a]	3411	Papyrus[a]	3411	Focused	−0.0451	−0.6973	0.2099	3.2414***	0.0296	0.4567
880224	Asea[a]	3830	Fläkt[a]	3810	Focused	0.0755	1.3282	0.2111	3.7071***	0.0891	1.5661
880310	Stora[a]	3411	Swedish match[a]	3311	Diversifying	−0.0044	−0.0906	0.2251	4.6132***	0.0149	0.3045
880316	Asea[a]	3830	Broströms[a]	7120	Diversifying	0.0532	0.9449	0.3522	6.2632***	0.0556	0.9874
880621	Ericsson[a]	3830	Radiosystem	3839	Focused	−0.0313	−0.6645	0.2346	2.8091***	−0.0526	−0.6295
900402	Asea[a]	3830	Incentive [a]	3849	Focused	−0.0408	−1.3251	0.3747	12.1615***	−0.0112	−0.3659
900531	Asea[a]	3830	Hasselblad[a]	3850	Focused	0.0310	1.0840	0.2244	7.9217***	0.0368	1.2892
910225	Investor[a]	8102	SAAB[a]	3840	Diversifying	−0.0932	−1.2062	0.2324	3.0109***	0.0273	0.3541
911126	Investor[a]	8102	Providentia[a]	8102	Focused	−0.0316	−0.6078	0.0783	1.4935	0.0091	0.1697
940314	Investor[a]	8102	Export invest[a]	8103	Focused	−0.0231	−0.5706	0.1863	4.5873***	−0.0038	−0.0961
						Mean 0.0098	Agr Z 0.8725	Mean 0.2298	Agr Z 17.5822***	Mean 0.0391	Agr Z 2.9210***

Panel B: Acquisitions by firms controlled by SHB conglomerate group

Date	Bidder	Bid ISIC	Target	Tar ISIC	Classification	Bidder CAR	Bid Z	Target CAR	Tar Z	Portfolio CAR	Port Z
800919	Skanska[b]	5000	Drott [b]	8310	Diversifying	−0.0350	−1.3086	0.0632	1.8791*	−0.0241	−0.9580
841122	Volvo[b]	3840	STC[b]	6132	Diversifying	0.0212	0.5617	0.6891	5.3259***	0.0613	0.8476
850508	Aga[b]	3511	Uddeholm[b]	3710	Diversifying	−0.0403	−1.6194	0.1770	7.0658***	0.0957	3.8175***
851127	Promotion[b]	3810	Bahco[b]	3810	Focused	0.0178	0.4055	0.0302	0.6958	0.0224	0.5129
860225	Volvo[b]	3840	Sonesson[b]	3820	Focused	0.0058	0.1306	0.0760	1.9795**	0.0121	0.2970
871026	Industrivarden[b]	8102	PLM [b]	3819	Diversifying	−0.0354	−0.5475	−0.0696	0.3806	−0.0420	−0.3702
880126	Bahco[b]	3819	Besam[b]	3830	Focused	−0.0044	−0.0637	0.1097	1.6324	0.0086	0.1296
891218	Industrivärden[b]	8102	Dacke[b]	2950	Diversifying	−0.0272	−0.6809	0.3173	5.0260***	0.0296	0.4718
900129	Volvo[b]	3840	Åkermans[b]	3820	Focused	−0.1001	−2.1590**	0.0729	1.5867	−0.0864	−1.8833*
900820	Bahco[b]	3811	Thorsman[b]	3560	Diversifying	−0.0453	−0.8060	0.1918	3.3263***	−0.0164	−0.3019
911917	Industrivärden[b]	8102	Bahco[b]	3811	Diversifying	0.0204	0.3672	0.2319	4.2727***	0.0902	1.6560*
940616	Volvo[b]	3840	BCP[b]	3140	Diversifying	−0.0507	−0.9791	0.0455	0.6067	0.0195	0.1785
						Mean −0.0228	Agr Z −1.9339*	Mean 0.1612	Agr Z 9.7507***	Mean 0.0142	Agr Z 1.2695

returns. Similar results are reported in Panel B of Table 6 for firms involved in acquisitions controlled by the SHB conglomerate group. While more than 66% of acquisitions are diversifying, the evidence shows that targets gain significant abnormal returns. Bidders experience no significant losses whether they invest in related or unrelated assets. Value weighted portfolio returns indicate that bidder's intra-conglomerate diversifying and non-diversifying investments do not enhance its firm value. Overall, the evidence suggests that intra-conglomerate acquisitions benefit the shareholders of targets but they do not harm the minority shareholders of the buyer. The evidence also points out that the market does not anticipate significant operating efficiency gains from, diversifying or non-diversifying, intra-group acquisitions.

It is noteworthy that Wallenberg and SHB acquire mostly targets that are group members. The only exception is Ericsson's (Wallenberg) focused acquisition of Radiosystem.[20] In the pure intra-group acquisitions (24 observations) the bidder is typically a dual class firm (23 observations) while the typical target is a one share—one vote firm (14 observations). This practice suggests that Wallenbergs and SHB use intra-group acquisitions to enhance their control. In a dual class firm (bidder) a certain vote fraction requires less capital than in the one share-one vote firm (target). Hence, the controlling bidding shareholder tends to enhance his voting rights (i.e., in excess of their ownership rights) in intra-group acquisitions that involve a dual class bidder and one share-one vote target. We conclude that intra-group acquisitions are motivated by control considerations, rather than by the expropriation of minority shareholders in the transfer of control stakes.

4.3. Increased corporate diversification and bidder short-term returns

We have documented that unrelated acquisitions by Swedish buyers fail to increase shareholder value while related acquisitions augment buyer's shareholder value. Intra-conglomerate related and unrelated acquisitions, however, have no significant impact on bidders' firm value. The non-conglomerate findings suggest that the costs associated with diversification outweigh the benefits arising from the creation and/or increase of internal capital markets when managers seek to expand the size and scope of the firm. In order to test the robustness of these results, we proceed with a cross-section regression analysis that is also designed to control for other effects.

An implication of the diversification hypothesis is that there should be a positive relation between the abnormal return of the bidder, when a diversifying acquisition is announced, and the increase in corporate diversification achieved by an acquisition. In the regression analysis, the measure of diversification used in testing its influence on firm value is an indicator variable, DIV, that takes the value of one if the two-digit main industry code of the bidder is different from the two-digit main industry code of the target, and zero otherwise. If diversification benefits the shareholders of the bidding firm through the creation of internal capital market advantages, the coefficient of the indicator variable, DIV, should be positive and significant. To distinguish between conglomerate and non-conglomerate acquisitions, we introduce the GROUP binary variable that takes the value of one if the bidder is controlled by the Wallenberg or SHB group and its interaction term with the diversification

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[20] Sonesson, Åkermans, and BCP were not directly controlled by the SHB group. However, they were controlled by Volvo, which was controlled (largest vote holder) by SHB.

variable, DIV*GROUP. DIV*GROUP examines whether the effect of diversification is different between group and non-group members. If diversification works for non-group members but not for group members, the sum of the coefficients of DIV and DIV*GROUP variables should be statistically insignificant.

We also control for the effects of insider ownership in bidders and the terms and characteristics of the takeover. The ownership variable, MANOWN, measures the fraction of insider ownership stakes by the CEO and the board of directors of the bidding firm. This variable is used to examine whether bidder's abnormal returns are affected by ownership concentration.

Furthermore, we control for the method of payment, METPAY, (Travlos, 1987) and the relative size of the target to the bidder, RELSIZE, (Jarrell and Poulsen, 1989). The METPAY is an indicator variable that is set equal to one if it is a pure cash offer, and zero otherwise. The RELSIZE is measured as the logarithm of the ratio of the total sales of the target to the total sales of bidder.[21,22] Finally, we introduce the abnormal return of the target, TARCAR, to account for possible overpayment or underpayment effects by the bidder.

Table 7 presents the results of regressions relating bidder's abnormal return to measures of increased corporate diversification. All regression results document a negative and significant relation between increases in diversification, DIV, and abnormal announcement returns. The negative and significant coefficient of the diversification variable suggests that industrial diversification results in value losses for bidders. The coefficients indicate that bidder's shares decline by 4.76–6.00% around the announcement of diversifying acquisitions. Hence, returns to firms that did not invest outside their core business are 4–6% higher than returns to firms that did invest outside their core business. These results also suggest that the value loss documented in the aggregate studies of the diversification literature is partly associated with the investment activities of the firm. Given that bidders in our sample had a pre-acquisition performance similar to their industry peers while targets' pre-acquisition performance was inferior to their industry peers, our evidence also suggests that diversifying investments of this nature are inefficient. The coefficient of the GROUP variable indicates that conglomerate bidders experience losses when they engage in acquisitions as well. As expected, the coefficient of the DIV*GROUP variable is positive but insignificant suggesting that intra-group diversifying acquisitions do not result in internal capital market efficiency gains.

In an additional set of regressions, results not reported, we relate the bidder's abnormal return to an alternative measure of diversification. In these regressions we use the change in the number of business as a measure of diversification. The negative and significant coefficient of the increase in the number of segments provides further support for our previous findings. These results indicate that bidders lose more when they announce unrelated acquisitions. We find that firms that increased the number of business segments through diversifying acquisitions experienced 3.3–6.8% lower returns than firms that engaged in focused acquisitions (i.e., acquisitions by firms that did not increase the number of their business segments). Once again, these results imply that decreases in bidder' equity value stem from the anticipation of cash flow

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[21] The sales figures based on the fiscal year prior to the acquisition announcement year are used.

[22] We have also used an asset-based relative size variable. The results are qualitatively similar to those reported for the sales-based relative size variable.

Table 7

Bidder's announcement return and diversifying acquisition announcements.

The sample used in this study consists of Swedish acquisitions over the 1980–95 period. Bidder and target firms were listed on the Stockholm Stock Exchange (the A-list, the OTC, or the Unofficial list) at the time of the announcement. The 11-day cumulative abnormal returns (CARs) are computed from the market model prediction errors. The t-values are reported in the parenthesis. ***, ** and * denote significance at the 1%, 5% and 10% levels, respectively. N = 92. DIV is equal to one if the two-digit main industry code of the target firm is different from the bidding firm's two-digit main industry code (i.e. the two firms' core businesses are not the same), and zero otherwise. GROUP is equal to one if the bidder is controlled by Wallenberg or SHB, and zero otherwise. MANOWN is equal to the fraction of insider ownership by the CEO and board members in the bidder. METPAY is equal to one if it is a pure cash offer, and zero otherwise. RELSIZ represents the target's sales divided by the bidder's sales and then transformed into its logarithmic form. TARCAR is the target firm's Cumulative Abnormal Returns at the day of the acquisition announcement. All regression models are tested for heteroskedasticity according to White (1980).

Dependent variable: Cumulative abnormal returns

Variables	(1)	(2)	(3)
Intercept	0.0270	0.0296	0.0328
	(1.769)*	(1.866)*	(2.085)**
DIV	−0.0476	−0.0479	−0.0600
	(−3.358)***	(−3.352)***	(−3.533)***
GROUP		−0.0133	−0.0353
		(−0.891)	(−1.771)*
DIV*GROUP			0.0441
			(1.412)
MANOWN	0.0595	0.0566	0.0621
	(1.579)	(1.489)	(1.606)
METPAY	0.0414	0.0435	0.0425
	(2.585)**	(2.607)**	(2.655)***
RELSIZ	−0.0091	−0.0084	−0.0072
	(−1.841)*	(−1.737)*	(−1.459)
TARCAR	−0.0872	−0.0860	−0.0852
	(−1.511)	(−1.449)	(−1.482)
Adj R² (%)	17.13	16.85	17.82

declines due to the combination of unrelated assets. The rest of the control variables resemble the results of the reported regressions.

Consistent with our previous results, the positive but insignificant coefficient of the interactive term, DIV*GROUP, suggests that corporate diversification by firms controlled by the Wallenberg and SHB conglomerates might be less harmful to firm value. This result is in not consistent with the empirical finding of US studies that show the diversification discount to be a function of the corporate diversity of the firm.

In agreement with previous evidence (Travlos, 1997), the coefficient of the METPAY variable is statistically significant at the 1% level of significance, suggesting that cash acquisitions are associated with greater abnormal returns than stock

acquisitions. Interestingly enough, the coefficient of the RELSIZE variable is negative and statistically significant at the 5% level of significance in two out of three regressions. This finding is consistent with the view that large target firms force bidders to share with targets a large portion of the added value generated by the acquisition. The coefficient of the TARCAR is insignificant at conventional levels of significance and inconsistent with the notion that bidders overpay targets.

5. Diversifying acquisitions and long-term operating performance

We have reported that an increase in corporate diversification results in value losses for non-conglomerate related acquisitions. We have attributed this finding to market's anticipation of future cash flow declines arising from increased agency costs and inefficiencies in managing more diverse assets after the merger. This implies that there should be a negative relation between the bidder's long-term performance and diversification increases. In this section, we use regression analysis to examine the relation between changes in performance and increase in diversification when an acquisition is announced.

Following Pagano *et al.* (1998), we use a fixed-effects model to regress the annual industry-adjusted changes in operating margin, $\Delta(EBITD/Sales)$, spanning the period from year -3 to year $+3$ on the firm's diversifying acquisition. The effect of the decision to engage in a diversifying acquisition is captured by dummy variables (DIV). To capture the different effects of diversifying acquisitions on operating performance between non-group and group members (GROUP), we also include the interaction variable between diversification and group member, DIV*GROUP. We also use industry-adjusted changes in return on assets, $\Delta(ROA)$ and return on equity, $\Delta(ROE)$, as alternative performance measures. Because the internal capital market hypothesis also predicts that corporate diversification weakens the cash flow constraint, we also introduce a cash flow measure, ΔCF, to investigate whether the expansion of internal capital markets, stemming from the acquisition, has an effect on the firm's post-acquisition cash flows. If internal capital markets work, the cash flow constraint should lessen during the post-acquisition period. Cash flow is measured as the absolute change in net cash flows (Net Income plus Depreciation) scaled by the average net cash flow from year -3 to year 0 (year 0 to year $+3$) for the pre-acquisition (post-acquisition) period ($|\Delta CF|$/Mean CF). Using a fixed-effect model allows us to use each bidder before the acquisition as a control for itself after the acquisition.

Table 8 presents the coefficient estimates of the effects of diversifying acquisition dummy variables on three financial performance measures and cash flow volatility. The regression results show that the profit margin steadily declines after the diversifying acquisition. Consistent with the market's predictions, this result suggests that firms that expand their operations by acquiring assets outside their core business adversely affect their long-term profitability following the acquisition. The effect ranges from -2.9% in the first year after the acquisition to -3.4% and -3.9% in the second and third years, respectively. The decline in profitability is statistically significant at the 10% level. The coefficients of the interaction terms show that the effects of diversification for group members are less pronounced relative to non-group members. Even though the difference is insignificant, this suggests that the harmful effects of diversification on bidder's operating efficiency are less dramatic in intra-group acquisitions. Non-group diversifying acquisitions appear to exert mostly

Table 8

Profitability and volatility effects of diversifying acquisitions.

The sample used in this study consists of Swedish acquisitions over the 1980–95 period. Bidder and target firms were listed on the Stockholm Stock Exchange (the A-list, the OTC, or the Unofficial list) at the time of the announcement. If the bidder and the target have the same first two-digit industry code, the acquisition is defined as focused. The acquisition is defined as diversifying when the bidder and the target do not share the same main two-digit industry code. For each of the variables listed we estimate the following specification for the industry-adjusted changes:

$$y_{it} = \alpha + \sum_{j=1}^{3} \beta_j \text{DIV}_{t-j} + \text{GROUP}^* \sum_{j=1}^{3} \beta_j \text{DIV}_{t-j} + d_i + \varepsilon_{it}$$

where y_{it} represents annual changes of alternative performance measures spanning the period from year-3 to year+3 relative to the acquisition announcement year, DIV_{t-j} are dummy variables equal to one if year $t-j$ was the year of the diversifying acquisition, and zero otherwise. GROUP is equal to one if the bidder is controlled by Wallenberg or SHB, and zero otherwise. d_i is a firm specific effect. Operating margin is defined as EBITD/sales, where the operating margin year -1 is the sales weighted operating margin of bidder and target. Return on Total Assets (ROA) is defined as EBITD/Total assets, where ROA year -1 is the value weighted ROA of bidder and target. Total Assets (TA) = Market Value of Equity (MVE) plus Book Value of Debt (BVD) averaged over the year, i.e. (TA beginning of year plus TA end of year)/2. Return on equity (ROE) is defined as EBITD/MVE, where ROE year -1 is the value weighted ROE of bidder and target. Market Value of Equity is averaged over the year, i.e. (MVE beginning of year plus MVE end of year)/2. Cash flow (CF) is measured as the absolute change in net cash flows (Net Income plus Depreciation) scaled by the average net cash flow from year -3 to year 0 (year 0 to year +3) for the pre-acquisition (post-acquisition) period ($|\Delta \text{CF}|$/Mean CF). Heteroskedasticity robust t-statistics are reported in parentheses. The last column reports the p-value of an F-test of the hypothesis that the sum of the coefficients of all acquisition dummies are equal to zero. ***, ** and * denote significance at the 1%, 5% and 10% levels, respectively.

Profitability and cash flow effects of diversifying acquisitions

Dependent Variable	Year +1	Year +2	Year +3	GROUP*Year +1	GROUP*Year +2	GROUP*Year +3	F-test
Δ(EBITD/Sales)	−0.0293	−0.0343	−0.0389	0.0276	0.0338	0.0407	0.383
N = 454	(−1.671)*	(−1.841)*	(−1.896)*	(0.778)	(0.903)	(1.020)	
Δ(ROA)	−0.0168	−0.0299	−0.0111	0.0320	0.0367	0.0154	0.187
N = 441	(−1.562)	(−2.784)***	(−0.973)	(1.504)	(1.614)	(0.669)	
Δ(ROE)	0.0306	−0.0538	−0.0175	0.0084	0.1026	0.0411	0.791
N = 473	(0.683)	(−1.198)	(−0.368)	(0.092)	(1.054)	(0.420)	
ΔCF)	−0.3078	−0.3750	−0.4435	0.2545	0.3856	0.3857	0.211
N = 454	(−1.827)*	(−2.029)**	(−2.247)**	(0.746)	(0.889)	(1.005)	

negative influence on the other financial measures of performance following the acquisition year as well.

The negative impact on long-term performance is also found on bidder's ROA while no significant effect is found on bidder's ROE. In contrast with the view that corporate diversification increases firm value by generating internal capital market advantages, our results show that expansion outside the core business of Swedish bidders does not improve long-term profitability. Consistent with Jensen (1986), and Stulz (1990), our evidence suggests that diversification benefits do not exceed costs rooted in increased agency problems and operating inefficiencies of the diversified firm. Our findings are also consistent with recent studies (see, for example, John and Ofek (1995)) which show that long-term operating performance improves when firms divest unrelated assets to their core business.

While diversification fails to increase firm value and operating performance, it reduces the cash flow volatility of the bidder as indicated in the last regression. The absolute changes in yearly cash flows decrease significantly in the post-diversifying acquisition years. However, the cash flow volatility decreases do not seem to improve bidder's post-acquisition operating performance. If the decline in cash flow volatility is one of the internal capital market benefits arising from the diversification, it seems that they are not strong enough to improve bidder's post-acquisition performance.

6. Conclusion

In this study we examine whether the act of corporate diversification increases the short- and long-term performance of 101 Swedish bidding firms over the 1980–95 period. We also examine the diversification effects of conglomerate-affiliated firms that acquire targets controlled by the same conglomerate group. Our findings are not consistent with the view that diversification creates value.

Consistent with the agency cost theory, our evidence based on non-conglomerate diversifying acquisitions, seems to suggest that investing in unrelated assets results in greater agency costs and operating inefficiencies that outweigh the diversification benefits. We find investments in peripheral lines of businesses to have adverse effects on the short- and long-term performance of the firm, suggesting that corporate managers engage in diversifying investment activities at the expense of shareholder wealth. Announcement and post-acquisition performance gains are realised when bidders expand their core line of business.

Intra-conglomerate diversifying acquisitions, however, show that bidders do not realise significant gains whether they undertake diversifying or focusing investment strategies by purchasing firms controlled by the Wallenbergs and SHB conglomerate groups. Intra-group targets realise significant gains regardless of bidder's investment strategy. Our evidence also shows that there are no substantive wealth transfers from bidder to target shareholders in intra-conglomerate acquisitions. Finally, our findings do not necessarily support the view that intra-conglomerate acquisitions are associated with expropriation of minority shareholders. However, intra-group acquisitions appear to enhance the control rights of large shareholders of the bidding firm since in the typical intra-group acquisition the bidder is a dual class firm while the target is a one share-one vote firm.

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