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Abstract

The purpose of this study is to analyze the post-acquisition performance of 384 unquoted owner-managed firms that have been acquired between 2000 and 2004, and compare it with 875 comparable, but independent owner-managed firms. It is shown in the paper that target firms in domestic acquisitions are less profitable and grow less than independent firms, both before and after the acquisition. Target firms in cross-border acquisitions are comparable to independent firms in growth and profitability, but they have higher margins and higher returns after the acquisition. Hence, our findings indicate that especially cross-border acquisitions create operational synergies.

Keywords: post-acquisition performance, owner-managed firms, independent, cross-border, domestic.
JEL Classification: G34.

Introduction

Thus far, entrepreneurship research has only started to investigate the ways in which entrepreneurs exit their firms and the consequences this exit has on the entrepreneur and the firm (Wennberg, Wiklund, DeTienne and Cardon, 2009). When an entrepreneur exits, the firm can either be terminated (through liquidation or bankruptcy) or be acquired and continue under new ownership (Leroy, Manigart and Meuleman, 2009). An acquisition is often considered as the most desirable outcome of entrepreneurial exit, as it is assumed that an acquisition allows more economic wealth to be preserved for both the entrepreneur and other stakeholders, such as employees, suppliers or customers (DeTienne, 2009). It is a common exit route, as it is estimated that around 35% of owner-managed firms are eventually acquired, rather than liquidated (excluding bankruptcies) (Leroy et al., 2009; Wennberg et al., 2009). Despite its importance in the entrepreneurial life cycle, few studies investigated what happens to a target firm after an acquisition. While there are numerous studies on the expected or realized post-acquisition performance of combined firms, there is a dearth of studies on the target's perspective.

The goal of the present study is, hence, to deepen our understanding of how the economic performance of acquired owner-managed companies develops after an acquisition. Competing forces may be at work in an acquired firm, either leading to positive or negative performance effects. For example, operational synergies may lead to acquired firms performing better (Larsson and Finkelstein, 1999; Luypaert and Huyghebaert, 2009). On the other hand, a poor culture fit and post-acquisition integration problems may lead to negative performance effects (Powell and Stark, 2005). Further, technology companies may be acquired for their intellectual property rights, potentially leading to post-acquisition downsizing (Schweizer, 2005). Hence, the impact of an acquisition on a target firm's economic performance still remains a question.

Second, we allow for heterogeneity in acquisitions by differentiating between domestic and cross-border acquisitions. While the vast majority of the academic literature on acquisitions studies domestic acquisitions, a significant fraction of acquisitions involves firms from different countries. Distinguishing between domestic and cross-border acquisitions is important, as synergies may be more challenging to implement in cross-border acquisitions than in domestic acquisitions. On the other hand, the resource based view of the firm suggests that cultural distance may also lead to better performance because previously not available routines may now be freely accessible within the target firm (Ghoshal, 1987; Mayrhofer, 2004). The two competing views suggest that it is worthwhile further investigating how domestic or cross-border acquisitions may impact the economic development of a target firm. Further, what has been written about cross-border acquisitions has mainly focused on U.S. public firms (Erel, Liao and Weisbach, 2009). Studying the post-acquisition performance of owner-managed non-U.S. firms is, hence, timely.

The research questions are empirically investigated on a sample of 384 non-financial, unquoted, Flemish[1] firms that have been acquired between 2000 and 2004. Firm data consist of accounting variables from one year before the acquisition up to four years after the acquisition. The economic performance of acquired firms is compared to that of 875 comparable, but still independent owner-managed firms, during the same time period. We consider different sources of economic performance enhancement. We start with growth in sales and profit margins. Next, we consider efficiency improvements such as asset

[1] Flanders is a region in Belgium.

turnover and return on assets. Hereby, we focus on effective post-acquisition value creation, rather than on expected value creation as in most event studies.

We show that acquisition targets are, on average, underperforming before the acquisition compared to independent firms. More precisely, target firms of domestic acquirers have a lower pre-acquisition sales growth and a lower margin compared to independent firms. Target firms of cross-border acquirers are comparable to independent firms before the acquisition, except that their return on assets (but neither their margin, nor their growth) is significantly lower, suggesting that they use their assets less efficiently. After the acquisition, domestic targets continue to underperform compared to independent firms. The performance of cross-border acquisitions develops differently, however. Their sales growth is comparable to that of independent companies, but their margins improve leading to significantly higher margins compared to independent companies as from the first post-acquisition year onwards. Return on assets, however, is only significantly higher four years after the acquisition, suggesting that independent companies use their assets more efficiently. Our results, hence, suggest that synergies positively impact post-acquisition performance of the target company in a cross-border acquisition (Larsson and Finkelstein, 1999), but synergies are more important in improving internal efficiency through cost reduction rather than in enhancing revenues. Surprisingly, synergies are absent in domestic takeovers. Distinguishing between domestic and cross-border acquisitions is relevant, as we show that domestic acquisitions involve a different type of company and that the post-acquisition evolution is very different.

The paper proceeds as follows. Section 1 starts from the available literature to develop testable hypotheses. The empirical strategy is presented in Section 2, including a description of the sample and data. The results are presented in Section 3, and a discussion concludes the paper.

1. Theory

While there are numerous studies on the impact of acquisitions on quoted companies, there is little evidence on the performance effects of acquisitions of private target companies up to now. Positive performance effects are typically attributed to the potential to create synergies through an acquisition, referring to the ability of the combined firm to create more value than the sum of the values of the two stand-alone firms (Larsson and Finkelstein, 1999). Alternatively, acquisitions may lead the acquired company to underperform, for example due to poor culture fit between acquirer and target or due to post-acquisition integration problems (Powell and Stark, 2005). Further, in the context of entrepreneurial exits, the fact that the entrepreneur as driving force of the organization is leaving, may also lead to a negative performance effect (Ooghe, Van Laere and De Langhe, 2006). We will first expand on the expected post-acquisition performance effect in general, and, thereafter, theorize on expected differences between domestic and cross-border acquisitions.

1.1. The post-acquisition operating performance of owner-managed target firms. The question of whether operating performance improvements arise from corporate acquisitions is one that has been addressed by many researchers over the last decades (Powell and Stark, 2005). Scholars typically estimate the expected gains from acquisitions by measuring the market reaction to acquisition announcements for shareholders of both, the acquirer and the target firm (Devos, Kadapakkam and Krishnamurthy, 2009) or by analyzing the post-acquisition operating cash flows of the combined firms (Powell and Stark, 2005). Most studies report significant and positive industry-adjusted gains from the acquisitions that financial markets can predict to some extent (Powell and Stark, 2005). Gains in market value or in operational cash flows may accrue from different strategies, however. Firms may increase their sales, improve their operational efficiency through cost savings or use their asset base more efficiently. Most U.S. studies report that synergy realizations are mainly driven by cost savings and cutback in investments, while European studies find that enhancing sales is also an important driver of performance increases (Capron, 1999; Luypaert and Huyghebaert, 2009). Hence, we will consider the different types of operational value creation.

Post-acquisition sales of the acquired company may increase thanks to leveraging on the acquirer's tangible and intangible resources. For example, the distribution channels and customer base of the parent company may be exploited to sell the target's products (Schweizer, 2005) or the reputation of the parent company may legitimize the target's products (Gaughan, 2002). Further, the acquired company may benefit from stronger managerial capabilities in the parent company. In the long term, research and development in the parent company may benefit the products of the acquired company by enhancing their features (Capron, 1999). Higher sales levels may also be a consequence of increased market power of the combined firm. A decrease in competition may allow the combined firm to increase sales prices, leading to higher revenues with the same level of output (Kim and Singal, 1993).

There are, however, also reasons to expect sales to drop after an acquisition. First, entrepreneurs are often seen as the driving forces of their firms, with customers often identifying with them. When the entrepreneur exits, this may, hence, negatively affect the buying behavior of the (former) customers. Further, the parent company will install new reporting and control structures to integrate the acquired company. These new structures may not be fully adapted to the target firm's needs and increase the bureaucracy within the previously entrepreneurially oriented company to such an extent that it hampers flexibility, thereby, reducing sales. The managers that stay on board of the acquired firm may be less motivated when their firm loses its autonomy to the new parent company (Haspeslagh and Jemison, 1991). Finally, an owner-managed firm may not be acquired for its sales potential, but for its intellectual property rights. This may ultimately lead to underinvestment in sales efforts and ensuing loss of sales (Bobelyn, Maesen and Clarysse, 2007). The effect of the acquisition of an owner-managed firm on the development of its sales is, hence, dubious.

Profits and cash flows may increase even if sales remain constant, as synergy gains may also be realized through either efficiency gains or increased market power (Gugler, Mueller, Yurtoglu and Zulehner, 2003). Efficiency gains are driven by a more efficient use of the available resources, leading to either economies of scale or economies of scope. Economies of scale result from spreading fixed costs (e.g., R&D or marketing expenses) over higher output levels, but also from an increased specialization of labor and management and a more efficient use of capital equipment (Gaughan, 2002; Devos et al., 2009). Economies of scope arise when the costs of producing multiple products in one company are lower than having them produced in separate firms (Luypaert and Huyghebaert, 2009). The latter cost savings may show up when two firms can share a unique resource, for example technology or distribution channels (Nayyar, 1993). Lower relative costs may also be a consequence of increased market power, as the combined firm may have stronger bargaining power towards its suppliers, potentially leading to lower input prices (Gugler et al., 2003).

Acquired owner-managed firms may, on the one hand, benefit from increased market power and economies of scale and scope but, on the other hand, suffer from higher reporting and control costs imposed by the parent company. Further, the parent company may impose transfer costs for administrative and managerial expenses, occurred at headquarter level. These may be significantly higher than comparable costs in the pre-acquisition situation. Again, the expected impact of a merger on relative cost efficiency and firm margins is unclear.

A third source of post-acquisition operational value creation is through cutbacks in investment expenditures (Capron, 1999; Devos et al., 2009). When two companies combine, they can improve the efficiency of their investments by sharing particular assets, like a common office building or a factory, and by divesting redundant ones. Further, stronger managerial discipline may result in a more efficient use of net working capital (Luypaert and Huyghebaert, 2009). Hence, we expect that the post-acquisition asset turnover will improve.

1.2. Domestic versus cross-border acquisitions. Whether the firm is acquired by a domestic company or a cross-border company may have far-reaching consequences for its post-acquisition performance, however. Moeller and Schlingemann (2005) report that the change in operating performance in cross-border acquisitions is significantly lower than in domestic deals, but acquirers are able to benefit more from target R&D expertise in cross-border acquisitions, thereby improving their own capabilities to innovate (Eun, Kolodny and Scheraga, 1996).

Luypaert and Huyghebaert (2009) expect cross-border acquisitions to result in larger revenue-based synergies for the combined company. The increase in sales due to the sharing of complementary resources, like distribution channels or brand names, tends to be larger when the acquisition involves firms with a different nationality, because of a more limited geographical overlap of the combining firms.

In contrast, economies of scale can be realized more easily when bidder and target firms have their headquarters in the same country, thanks to lower cultural differences between the target and acquirer (Brock, 2005). This decreases uncertainties (Gomez-Mejia and Palich, 1997) and post-acquisition integration costs (Cartwright and Price, 2003; Hofstede, 1980). Further, potential conflicts between employees may be lower in domestic deals (Brock, Barry and Thomas, 2000). This leads to lower expected efficiency gains and margin improvements in cross-border acquisitions compared to domestic acquisitions (Luypaert and Huyghebaert, 2009).

2. Sample and research method

2.1. Sample. To explore our research questions, we analyze a sample of 384 acquisitions (of which 175 cross-border) of Flemish, non-financial, unquoted firms between 2000 and 2004. These acquisitions were selected using the Zephyr[1] database, based upon following criteria. First, we focused on target firms located in Flanders. Second, acquisitions had

[1] Zephyr is a database provided by Bureau Van Dijk. It covers information on over 700,000 mergers and acquisitions and gives links to detailed financial statement information.

to be completed within the period of 2000-2004, in order to allow analyzing the post-acquisition growth and performance. Third, and consistent with previous research, we excluded targets active in the banking, insurance or financial services industry, because financial companies have different financial structures and reporting requirements. Fourth, only deals with non-private equity acquirers were retained, as private equity firms have typically different goals and objectives compared to corporate acquirers. Fifth, only acquisitions, where the acquirer acquired 100% of the target's stock, were retained, in order not to have confounding shareholder effects. All targets in our sample remain separate legal entities with individual financial statements after the acquisition, however, allowing analyzing their post-acquisition performance[1]. Finally, 25 cases had to be dropped due to data unavailability. The acquisitions, dropped from the initial population due to data availability or lack of financial statement information, do not differ significantly from those retained in the sample.

To compare the performance of acquired and independent firms, a second sample was constructed, consisting of 875 owner-managed firms with the same characteristics but which remained independent between 2000 and 2004. Following this methodology, we matched our sample of 175 cross-border acquisitions to independent firms along the following dimensions: location, industry, age and size. To distinguish between small, medium and large firms, we defined a small firm as a firm that employs less than 50 employees, from which the yearly total assets do not exceed 5 million euro or the yearly sales do not exceed 7 million euro and that complies with the independency criterion. A medium-sized firm is a firm with less than 250 employees, from which the yearly sales do not exceed 40 million euro or the yearly total assets do not exceed 27 million euro and that complies with the independency criterion (UNIZO, 2010, http://www.unizo.be/viewobj.jsp?id=27159). The matching procedure resulted in a final sample of 875 (5 independent firms for each cross-border target[2]) independent, Flemish, non-financial firms that all dispose of the essential data.

Table 1 represents an overview of the annual distribution of the acquired and independent firms sample. Table 2 represents an overview of the industry distribution of the acquired and independent firms sample.

Table 1. Annual distribution of the acquisitions sample

	Domestic		Cross-border		All acquisitions	
Year	N	%	N	%	N	%
2000	18	8.61%	15	8.75%	33	8.59%
2001	41	19.62%	47	26.86%	88	22.92%
2002	31	14.83%	27	15.43%	58	15.10%
2003	50	23.92%	38	21.71%	88	22.92%
2004	69	33.01%	48	27.43%	117	30.47%
Total	209	100.00%	175	100.00%	384	100.00%

Table 2. Industry distribution of the sample firms

	Domestic targets		Cross-border targets		Independent firms	
Industry	N	%	N	%	N	%
Manufacturing	88	42.11%	51	29.31%	195	22.29%
High and medium-high technology	47	22.49%	24	13.79%	40	4.57%
Medium-low and low technology	41	19.62%	27	15.52%	155	17.71%
Services	110	52.63%	117	67.24%	572	65.37%
Knowledge-intensive services	50	23.92%	70	40.23%	172	19.66%
Less knowledge-intensive services	60	28.71%	47	27.01%	400	45.71%
Other	11	5.26%	6	3.45%	108	12.34%
Agriculture, utilities and construction	11	5.26%	6	3.45%	108	12.34%
Total	209	100.00%	174	100.00%	875	100.00%

Few acquisitions occurred in 2000 (during the Internet bubble), as only 8% of the acquired companies in the sample were taken over in 2000. The proportion of acquisitions in the following years is broadly comparable, with a peak of 30% in the last year, 2004. These trends hold for both cross-border and domestic acquisitions. The industry distribution in Table 2 shows that more than half of the acquisitions in our sample occur in the (knowledge- or less knowledge-intensive) services sector. The industry distribution is comparable for domestic and cross-border acquisitions. Roughly, one third of the acquisitions occur in an unrelated industry (conglomerate merger), with equal proportions among the cross-border and the domestic samples.

The cross-border acquirers originate mainly from the Netherlands (24.00%), from the U.S. (17.71%) and from France (15.43%). Many of them are also coming from nearby countries as Germany (8.57%), the UK (8.57%) and Ireland (5.14%). Most of the other bidders in our sample are located in European countries (Norway, Sweden, Italy, etc.), with only a minority coming from overseas, excluding the U.S. (Canada, Kuwait). It is worthwhile noting that 31.4% of the cross-border acquirers is listed, compared to only 11.5% of the domestic acquirers.

[1] We excluded 36 cases that were fully integrated and no longer disposed of individual financial statements.

[2] The matched sample is comparable to the 175 cross-border targets. As there are no statistically significant differences between the 175 cross-border and the 209 domestic targets, the independent firms can also be considered as comparable to the domestic targets.

Table 3. Characteristics of the sample firms

	Domestic targets		Cross-border targets		Independent firms	
Firm characteristic	Mean	Std. dev.	Mean	Std. dev.	Mean	Std. dev.
Age	18	19	18	17	18	15
Total assets (EUR)	3,635.49	4,442.87	7,245.44	8,982.75	3,817.64	4,761.62
Added value (EUR)	1,345.88	1,622.60	2,839.01	3,607.11	1,055.33	1,379.78
Profit (EUR)	11.71	187.24	35.46	447.80	34.40	83.58
Sales (EUR)	7,451.92	7,932.58	15,411.39	17,696.71	12,467.11	12,514.89
Number of employees (FTE)	20	26	32	36	12	17

Table 3 provides an overview of the pre-acquisition characteristics of the sample firms. Both domestic and cross-border target firms are on average 18 years old in the year before their acquisition. As age is one of our matching criteria, the comparable independent firms have the same average age at that point in time. Further, the mean total assets of domestic targets (3635 thousand euro) and independent firms (3818 thousand euro) are comparable, while those of cross-border targets (7245 thousand euro) are about twice as high. The same goes for the added value. The average profit, on the other hand, is comparable for cross-border targets and independent firms, but is much lower for domestic targets. In addition, domestic targets generally have the lowest sales (7452 thousand euro) and cross-border targets the highest (15411 thousand euro), while the average sales of independent firms are in between (12467 thousand euro). The number of employees differs between the three types of firms, with cross-border targets employing 32 people, domestic targets 20 people and independent firms 12 people on average.

2.2. Research method. To compare the evolution of the economic performance of acquired and independent companies, growth and performance measures in the year before the acquisition until four years after the acquisition are compared. The accounting data to compute growth in sales ($(sales_t\text{-}sales_{t-1})/sales_{t-1}$), net margin ($EBIT_t$/total $assets_t$), asset turnover ($sales_t$/total $assets_t$), and net return on assets (net $profit_t$/total $assets_t$) were retrieved from the Bel-First database. This database is provided by Bureau Van Dijk and contains financial statements and other financial information of Belgian companies. Outliers were excluded. An observation is considered an outlier if it is higher (lower) than the 75th (25th) percentile plus (minus) 1.5 times the interquartile range. Finally, the means of all variables were compared with bivariate t-tests. The means of cross-border and domestic targets were compared with those of independent firms and cross-border, and domestic targets were compared to one another as well.

3. Results

Table 4 presents the results of the t-tests[1]. First, acquisition targets are different compared to independent companies before their acquisition. Target firms, on average, have a lower growth and performance in comparison to independent firms in the year before the acquisition. More precisely, especially domestic targets experience a lower growth in sales and lower margins. Their sales growth is even negative (-12.40% on average), while independent firms grow at a positive rate of 3.20% on average. The margin of domestic targets is 1.20% on average, while independent firms show statistically significantly higher margins of 3.40% on average. The asset turnover and return on assets do not differ between domestic targets and independent firms in the pre-acquisition year. Target firms of cross-border acquirers, on the other hand, have a sales growth, margin and asset turnover which is comparable to that of independent firms before the acquisition, but their return on assets is significantly lower (3.10% on average compared to 6.10% on average), suggesting that they use their assets less efficiently.

Table 4. Results of tests on performance measures (t = acquisition year)

Measure	Year	N	Mean domestic (1)	N	Mean cross-border (2)	N	Mean independent (3)	p-value (1) vs (3)	p-value (2) vs (3)	p-value (1) vs (2)
Growth in sales	t - 1	107	-0.124	90	0.009	1712	0.032	**0.000**	0.251	**0.014**
	t	109	-0.284	87	-0.034	1992	0.033	**0.000**	**0.001**	**0.000**
	t + 1	100	-0.324	82	-0.056	1982	0.020	**0.000**	**0.000**	**0.000**
	t + 2	89	-0.134	84	-0.002	1939	0.023	**0.000**	0.198	**0.022**
	t + 3	76	-0.028	80	0.035	1875	0.035	**0.002**	0.972	0.200
	t + 4	73	-0.113	75	0.027	1775	0.039	**0.000**	0.503	**0.009**

[1] The results for the gross margin and gross return on assets are comparable to those for the net margin and net return on assets, respectively. Therefore, they are not reported here.

Table 4 (cont.). Results of tests on performance measures (*t* = acquisition year)

Measure	Year	N	Mean domestic (1)	N	Mean cross-border (2)	N	Mean independent (3)	p-value (1) vs (3)	p-value (2) vs (3)	p-value (1) vs (2)
Net margin	*t* - 1	106	0.012	89	0.033	2089	0.034	**0.000**	0.946	0.051
	t	101	0.013	86	0.027	2084	0.035	**0.000**	0.120	0.242
	t + 1	96	0.009	88	0.054	2044	0.036	**0.000**	**0.002**	**0.000**
	t + 2	91	0.006	81	0.057	1988	0.039	**0.000**	**0.002**	**0.000**
	t + 3	85	0.008	85	0.060	1924	0.043	**0.000**	**0.006**	**0.000**
	t + 4	79	0.005	77	0.069	1800	0.044	**0.000**	**0.000**	**0.000**
Asset turnover	*t* - 1	161	1.137	106	1.127	3931	1.057	0.399	0.549	0.943
	t	144	1.189	137	1.060	3964	1.033	0.118	0.789	0.344
	t + 1	89	1.335	132	1.075	3962	0.996	**0.006**	0.436	0.102
	t + 2	126	1.094	126	1.050	3930	0.951	0.160	0.328	0.748
	t + 3	122	1.012	84	1.148	3874	0.901	0.264	**0.039**	0.407
	t + 4	102	0.988	106	1.178	3718	0.865	0.246	**0.003**	0.201
Net return on assets	*t* - 1	155	0.090	116	0.031	3593	0.061	0.098	**0.000**	0.537
	t	154	0.012	108	0.059	3626	0.060	**0.000**	0.902	0.396
	t + 1	143	-0.159	115	0.044	3607	0.060	**0.000**	**0.022**	0.161
	t + 2	134	-0.100	108	0.059	3581	0.060	**0.000**	0.845	**0.025**
	t + 3	126	-0.025	106	0.071	3557	0.063	**0.000**	0.322	**0.006**
	t + 4	117	-0.072	74	0.085	3397	0.062	**0.000**	**0.011**	0.067

In the post-acquisition years, domestic targets continue to underperform compared to independent firms. Their growth in sales remains negative and lower than that of independent companies. Their margins remain at lower levels as well. Asset turnover of these companies is comparable to that of independent firms, showing that they use their assets equally efficiently. A lower margin, combined with comparable asset turnover, leads to lower return on assets of -6.88% on average (which was at a comparable level before the acquisition).

The post-acquisition evolution in the performance measures of cross-border targets is again different. In the year of the acquisition and the first post-acquisition year, cross-border acquisition targets have a sales growth which is negative and lower (-3.40% in year *t* and -5.60% in year *t* + 1 on average) than that of an independent firm (3.30% in year *t* and 2.00% in year *t* + 1 on average). Thereafter, their growth gradually improves and reaches a level comparable to that of independent firms.

Interestingly, their margins do not only become comparable to, but outperform those of independent firms in the years following the acquisition[1]. Their return on assets only becomes significantly higher in the fourth year after the acquisition (8.50% compared to 6.20% for the independent firm on average). As both the net margin and the asset turnover are significantly higher, the higher return on assets is now driven by both factors. This higher return means that, in the fourth year after the acquisition, cross-border acquisitions benefit target firms through higher cost efficiencies and more efficient use of their assets. Independent companies, on the other hand, use their assets more efficiently before the fourth post-acquisition year.

The last column of Table 4 compares cross-border and domestic targets. Overall, they are comparable before the acquisition, except for the growth in sales which is significantly higher for cross-border (0.90% on average) than for domestic (-12.40% on average) target firms. After the acquisition, sales growth generally continues to be higher for the cross-border target firms. The net margin is higher for cross-border targets in most post-acquisition years, while the asset turnover does not substantially differ between the two types of firms. Combined, this leads to higher return on assets in most post-acquisition years for cross-border targets.

Discussion and conclusions

This study is one of the first large-scale longitudinal studies to empirically document what happens to an owner-managed company after it has been acquired. First, we show that domestic firms acquire firms with different pre-acquisition characteristics compared to cross-border acquirers. Domestic acquisition targets have a lower growth and lower margins, but comparable return on assets compared to independent companies. Cross-border acquisition tar-

[1] A remarkable fact is that the average net margin is in some cases lower than the net return on assets (e.g., for cross-border targets in the acquisition year and the second, third and fourth post-acquisition year). This might be due to EBIT being lower than net income and would happen if a firm does not pay taxes and has a net interest income. Alternatively, this might also be driven by sample behavior, with more extremely low net margins compared to net return on assets, decreasing the average net margins.

gets, on the other hand, have comparable growth and margins as independent companies, but have a lower return on assets.

Second, the post-acquisition evolution is also different. Domestic acquisitions continue to perform worse than independent companies, resulting in lower return on assets. Overall, our results suggest that domestic acquisitions do not create value in the target company. Declining sales support the view that the disappearance of the entrepreneur as the driving force of the company has detrimental effects on the firm's output. Low and continuously declining margins suggest that neither economies of scale or scope are realized, nor market power is exploited. Post-acquisition integration seems to be difficult. Obviously, declining sales combined with lower margins lead to unsatisfactory, and even negative average returns on assets.

Cross-border acquisitions, on the other hand, lead to a drop in sales in the acquisition year and in the two years after the acquisition. Hence, it takes time to absorb the effects of operating under new ownership. Thereafter, sales grow at the same rate as independent companies. Hence, we did not find positive revenue-related synergies. Interestingly, owner-managed companies, acquired by an international company, show an almost immediate and consistent improvement in their margins, making them more cost efficient than independent companies. This outperformance is not driven by the relative strength of the parent companies' economies as the real GDP growth, inflation and unemployment rates indicate that the health of the economies of Flanders, the Netherlands, the U.S. and France was roughly comparable in these years. Taken together, these results go against earlier evidence that it is easier to realize cost improvements in domestic acquisitions than in cross-border acquisitions. Clearly, results obtained from studying large takeovers cannot be transferred to owner-managed companies: other dynamics are at play.

As always, this study has limitations. The most obvious one is the fact that no confounding effects were considered. Further versions will, therefore, estimate changes in sales, margins and performance with multivariate models including, for example, whether the target was operating in the same industry, or whether the acquirer was listed. Second, the takeover targets are limited to Flemish companies. This has as major advantage (next to data availability) that all companies are exposed to the same context, such as the same legal and institutional environment. This might, however, limit the external validity of our findings. While we do not claim that our results have no geographical limitations, we feel that Flanders is a representative region for a major part of Continental Europe. Third, the variables are taken from the companies' financial accounts. While the reliability of these data is relatively high in Flanders, especially margins and return on asset measures might be impacted by earnings management practices. Synergy motivated acquisitions generally affect performance in a positive way and, therefore, are characterized by higher quality earnings (Barragato and Markelevich, 2008; Zhang and Wang, 2007). Earnings management practices are especially prevalent in acquisitions with an agency or hubris motive, as these are typically value decreasing and negatively affecting performance. Earnings management is then used to hide the loss in value. However, earnings management is only possible in the short term. In the longer term, earnings management will be revealed. As we extend our post-acquisition analyses to four years, it is unlikely that earnings management drives our results. Fourth, we were not able to fully rule out alternative explanations. It might be, for example, that cross-border acquirers are better at identifying targets with high potential for improvement. If so, pre-acquisition selection is more important than post-acquisition integration.

Our results are, nevertheless, important for exiting entrepreneurs, for stakeholders of target companies and for policy makers. First, entrepreneurs often have an emotional attachment to their company. Selling their company is then a major decision, which they will only want to take if they feel that the company will not be hampered by their leaving. Our results show that it is more beneficial if the company is taken over by an international company than by a domestic company. Domestic acquisitions lead, on average, to companies becoming smaller and less efficient in the medium term, while cross-border acquisitions lead to companies performing better and, hence, creating more value. Policy makers are often concerned about the fact that companies are "sold out" to foreign companies, fearing loss of economic value in their region. Our results show that this is not the case. Especially cross-border acquisitions are beneficial to target companies. Hence, more efforts are needed to make acquisition markets more efficient.

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