

Louvain School of Management

**The Impact of Mergers & Acquisitions
on Corporate Performance
Evidence from Belgian Hidden Champions**

With the view of getting the degree in
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Table of Abbreviations

<i>Bureau van Dijk</i>	<i>BvD</i>
<i>Debt-to-equity ratio</i>	<i>D/E ratio</i>
<i>Earnings Before Interests and Taxes</i>	<i>EBIT</i>
<i>EBIT, depreciation and amortization</i>	<i>EBITDA</i>
<i>Hidden Champions</i>	<i>HCS</i>
<i>International Niche Market Leaders</i>	<i>INMLS</i>
<i>Mergers and Acquisitions</i>	<i>M&As</i>
<i>National Bank of Belgium</i>	<i>NBB</i>
<i>Research and Development</i>	<i>R&D</i>
<i>Return on Assets</i>	<i>ROA</i>
<i>Return on Capital Employed</i>	<i>ROCE</i>
<i>Return on Equity</i>	<i>ROE</i>

Introduction

International Niche Market Leaders are very particular companies. In spite of their high-quality products, the size of these companies is very small, which partly explains why they are hidden from view (Hermann, 2009). According to a study, these hidden champions seek a high return on equity while maintaining a low debt-to-equity ratio (Brenes, Ciravegna, & Woodside, 2017). This thesis, the structure of which will be based on the following points, is a follow-up to this observation.

Nowadays, companies are outsourcing a lot thanks to mergers and acquisitions. Many studies argue that it is very challenging to improve financial performance through acquisitions. Up to 70% of acquisitions result in lower returns for shareholders of both organizations (Scholes, Johnson, & Whittington, 2002).

In this context, a research question has been constructed, addressing the situation where the two above observations would be combined. While INMLs are very efficient and maintain a high ROE, M&As tend to reduce a company's immediate financial performance. As a result, some may wonder how it turns out when a company acquires a hidden champion. The purpose of this thesis is to evaluate the performance of an acquired hidden champion, measured by the performance of its financial ratios, following the acquisition activity. In other words, this paper aims to provide answers regarding how M&As impact the corporate performance of the business acquired.

Regarding the scope of this thesis, several INMLs were used for an in-depth study after having set the theoretical framework. This research was therefore conducted within a very well-established environment using specific selection criteria. Overall, the acquisitions seemed to have a positive influence on the financial ratio performance of the companies surveyed.

Methodology

With a similar scope of application, this thesis aligns with Esther Georges' work on Marketing and Innovation characteristics of Belgian International Niche Market Leaders. One of my objectives is, therefore, to support her research and provide further information on this subject. However, in the context of this paper, the real purpose is to answer the chosen research question defined as follows:

What are the impacts of Mergers & Acquisitions on International Niche Market Leaders' Corporate Performance?

In order to tackle the research question, the literature reviewed has been addressed from different perspectives. The theoretical part is of great importance since it serves as a basis for the empirical analysis. The subject has been divided into three components: Mergers and Acquisitions, Corporate Performance and INMLs.

Once the theoretical framework was well established, a survey was designed and sent to various companies, previously selected according to specific criteria. These requirements were chosen on the basis of the existing literature to meet the needs of the thesis and to correspond to the definition of a hidden champion.

Within the empirical part, the first section is devoted to mergers and acquisitions. The information conveyed is based on the data collected through the questionnaires and supplemented by annual activity reports and relevant press articles. Some reference tools, such as the Bureau van Dijk and the National Bank of Belgium, constitute the main sources for analysing the performance of the said companies in a second step.

Regarding the survey, which can be found as an appendix, its design is mainly multiple-choice and rating scale questions. Respondents were contacted via LinkedIn, to match their profile with the data sought. The aim was to investigate within six Belgian INMLs which have been acquired. As far as possible, the survey was also conducted with the acquirer companies to gather information from both sides of the acquisition. Since the scope of the study was very specific, it only applied to six Belgian companies that met the pre-established criteria. Of the six companies contacted, only two responded positively. The others claimed that the information was classified. In order to carry out this survey as efficiently as possible and to provide it with more content, many press articles and annual published reviews were used. Consequently, the evidence collected on the other four companies was based only on what the companies agree to disclose on their website, to the media or in their annual reports.

Finally, an in-depth analysis was conducted after ensuring that all the necessary data was collected. A graphical analysis of financial ratios has been carried out. The graphs were extracted using the results of the financial years around the year of the takeover. As previously mentioned, these figures were collected on the BvD, via Orbis – a tool which gathers most of the financial information on companies around the world. To create these charts, a larger sample of foreign German companies was designed. The purpose of this sample is to be able to draw inferences on the evolution of these financial ratios.

A statistical test was attached to this graphical analysis. By calculating the significance of the pre and post-acquisition evolution of the various ratios, it is possible to assess the financial impact of acquisitions. To be compared with the theory, the impact of the acquisition on a given ratio will be determined as positive or negative depending on the result of this significance test.

Chapter 1: Theoretical Section

For the purpose of this thesis, the practical cases studied come from the International Niche Market Leaders (INMLs). In order to lay the groundwork, here follow several definitions so that the reader can familiarize themselves with the concept tackled throughout this report.

*First, a **niche market** is a “relatively small market for a specialized product or service, such as a specific demographic group” (Chandler & Munday, 2011).*

***Niche marketing** means implementing a “market-coverage strategy in which a firm goes after a large share of one or a few segments or niches” (Kotler & Armstrong, 2010).*

*In this way, **International Niche Market Leaders** are “small and mid-sized companies acting in narrowly defined niche markets of a Business-to-Business (B2B) nature where they are -either on a continental level or on a worldwide scale- leader in terms of market share displaying a pronounced international sales profile” (Kamp, 2017).*

INMLs' companies refer to Simon Hermann's concept of Hidden Champions. In the very first section, a review of the available theoretical and scientific literature is offered. It is important to present the main characteristics of these companies in order to give everyone an understanding of them. More important than the overall theme of this paper, the purpose will be to answer the research question which is recalled below:

What are the effects of Mergers & Acquisitions on International Niche Market Leaders' Corporate performance?

In order to approach the research question as well as possible, specific sections will be devoted to it within the theory. Following the description of the field of application, it will be essential to cover Mergers and Acquisitions issues extensively. The theory about business performance and the tools for its measurement will close the first part of this thesis. Thereafter, the theory will be compared to several sample cases.

1.1. International Niche Market Leaders

The main INMLs' characteristics are numerous. For the sake of conciseness, and in order not to dwell too much on this part, lessons of hidden champions taken up by Simon Hermann in 2009 will serve as the chapter structure (cf. Figure 2: Circle of Hidden Champions). First, Hermann (2009) gave three criteria for a company to be one of those HCs. He said that the company should:

- Belong to the top three in global market, or be the number one on its continent, position generally determined by its market share;
- Have a revenue below \$5 billions;
- Have a low level of public awareness.

I would like to introduce a few points before even discussing the main lessons from Hermann. The INMLs' strategy is value-driven. Moreover, their most valuable competitive advantage is their product quality, which ultimately allows them to attract customers with a slightly higher price. Consequently, a large part of the turnover is reinvested in research and development (R&D), powering innovation (Hermann, 2009).

R&D expenditure is of great importance to continuously improve their products and processes. By using the first mover advantage, these companies begin by first developing radical innovation before fostering incremental ones to destabilize competition. For example, these companies have five times more patents per employee than large corporations (Hermann, 2009; Hermann, Coeurderoy, & Guinchard, 2014; Venohr & Meyer, 2007).

Furthermore, an obvious but important HCs' characteristic is concealment. First, their field of operation is business-to-business (B2B). Therefore, their products are traded upstream in the value chain and remain out of sight of consumers. In addition, their products are durable unlike fast-moving goods (Kamp, 2017). Below are the lessons taught by these great companies.

Leadership and Goals

Simon Hermann (2009) keeps repeating that willpower and objectives are paramount. For HCs, leadership is all about inspiring people all over the world to be the best, especially employees. Ambitious goals are key to success and surrounding yourself with talent that matches this ideal. If this objective is achieved, it is quickly translated into the global market.

Figure 1: Market Shares of the Hidden Champions (Hermann, 2009)

	Market Leaders	Absolute market share		Relative market share	
		ten years ago	today	ten years ago	today
World	65.9%	30.2%	33.0%	1.56	2.34
Europe	78.3%	36.7%	38.4%	1.76	2.84

High performance and loyalty from employees

Among the HCs, the corporate values are demanding but highly successful. Performing well is vital and yet, staff turnover is very low, less than 5% annually. This corporate culture seems to be very well suited to high qualified employees and demonstrates high performance (Hermann, 2009).

In order to continuously improve existing products and processes, employee loyalty is important, as innovation is also driven by the knowledge transfer (McKiernan & Purg, 2013). According to Simon, this ability to boost employee motivation creates a virtuous circle since less effort and money are required to attract new talents and training investments are payback.

Focus and depth

The superiority of INMLs is based on a perfect understanding of their respective markets. By using their resources precisely for a given product, they specialize and very quickly develop many competitive advantages, or barriers for potential interested competitors. Without forgetting external opportunities, internal competencies are essential to reach the top (Hermann, 2009).

Moreover, they support, by themselves, a large part of the value chain. A maximum of the various production and distribution stages are handled by a single entity. This vertical integration is very specific to these particular companies since any other will tend to outsource as much as possible. R&D spending is all the more important (Hermann, 2009).

In other words, a resource or competency must be valuable, rare and difficult or expensive to imitate in order to be a source of sustainable competitive advantage. With regard to the kind of HCs' products, uniqueness is an important characteristic, and both the focus on the market and/or product and the depth of their knowledge helps them to reach a good position in relation to the competition (Gailly, 2018). These points will be explored later, when Mergers and Acquisitions come to the forefront.

Offering high quality products has the ability to create natural barriers to entry. Indeed, competition finds it difficult to appropriate the market because of the quality offered by the leaders. In addition, HCs manage to reach the profitable market shares (Voudouris, Lioukas, Makridakis, & Spanos, 2000).

Decentralization

These corporations are powerful in very narrow markets, creating significant growth constraints. Since diversification is rarely an option for hidden champions, they make heavy and clever use of decentralization. As there is usually a trust relationship, freedom of execution and implementation also becomes an asset (Hermann, 2009). However, this culture must be supervised by strong managers who know how to be flexible about the details of carrying out a job.

Once again, this decentralization, fed by this obsession for market focus in order to offer the best quality and obtain as much market share as possible, has consequences. As a result, apart from spreading the risks, diversification is very little used (Hermann, 2009).

Globalization

Although it operates in a narrow market, globalization makes opportunities for growth and expansion tremendous. At this rate, even hidden champions must benefit from economies of scale (Hermann, 2009). Furthermore, when we analyse their export rate, we notice that the market is much larger than expected. More than half of their income is generated outside

their borders (Kamp, 2017). Due to the specificity of their products, these companies have a strong interest in expanding their market and internationalizing.

Although this process is slow, yet regular, HCs sometimes rely on local national companies to overcome barriers to entry (Kamp, 2017). Partnerships are used to discover the new environment, after which they establish their own local subsidiaries (Hollensen, 2007; McKiernan & Purg, 2013).

Advances in technology and communication are linked to the strong current globalization of companies. As a result, HCs, willing to expand, invest heavily in innovation, R&D and internationalization (Audretsch, Lehmann, & Schenkenhofer, 2018).

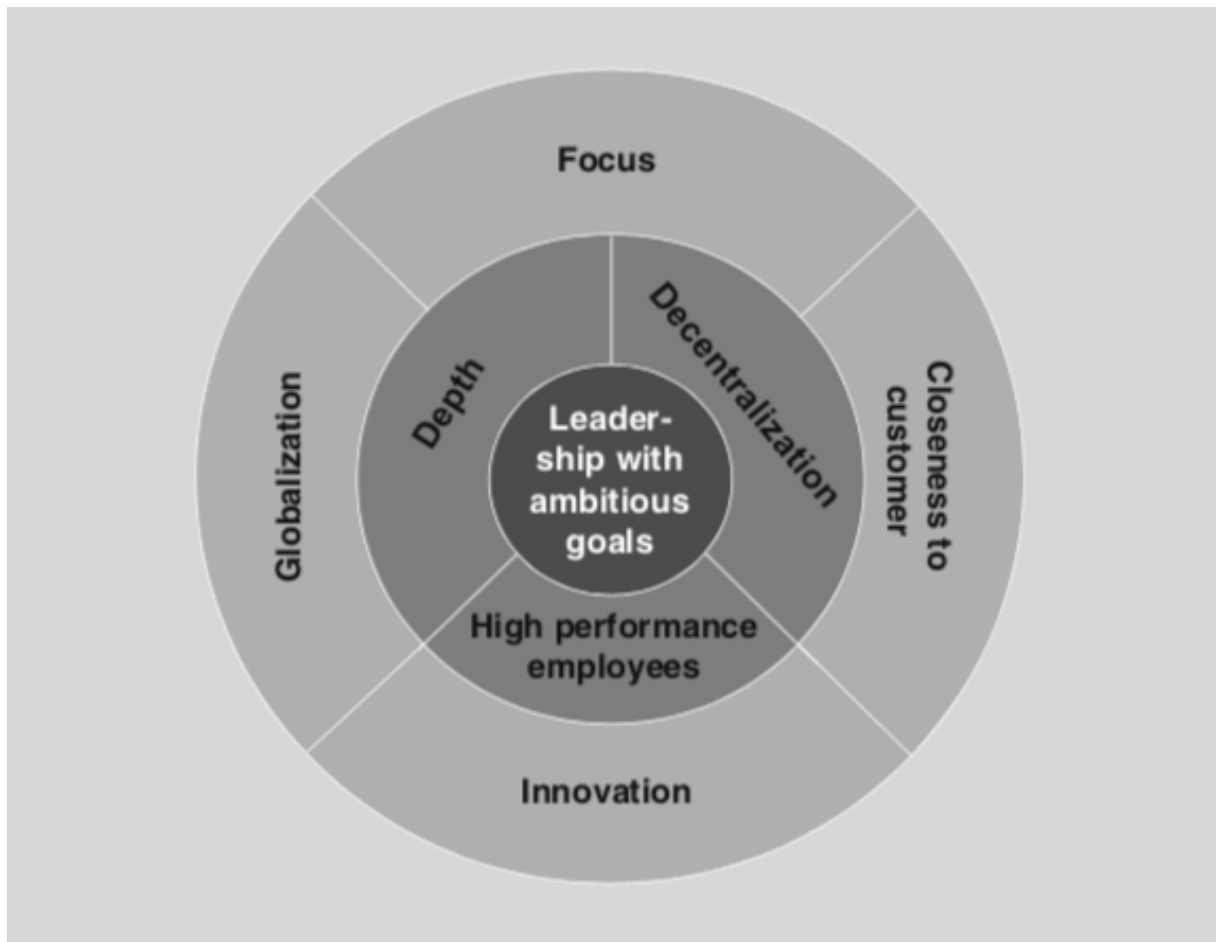
Customer intimacy

More than anything else already mentioned, the strength of hidden champions is their close relationship with their customers. Performance is intrinsically linked to customers. The customer is king, and their desire is an order (Hermann, 2009). Indeed, Simon has discovered that this long-term and close customer relationship was mentioned as one of their biggest attributes by INMLs themselves.

With strong decentralization, HCs notice the variation in customer needs across the different business units. Feedback from the latter is therefore of prime importance in order to remain competitive, in particular from top customers. These top customers have a very powerful influence and can abuse their position by bargaining against INMLs profits. While HCs generally have the upper hand over suppliers, this risk exists with their largest customer. Moreover, mouth-to-mouth is a marketing method that does a lot of business for HCs. As a matter of fact, professional marketing is barely used to reach customers (Hermann, 2009; Johnson, Whittington, Scholes, Angwin, & Regnér, 2011; Venohr & Meyer, 2007).

This relationship remains a strength asset and thanks to the perfect knowledge of their products, the after-sales service is very efficient. Nowadays, all the services provided with the sale of a product are crucial, and sometimes even a more important source of revenue than the product itself. This is another important detail for the INMLs, who offer a high quality service/product despite their more modest means than large companies (Hermann, 2009).

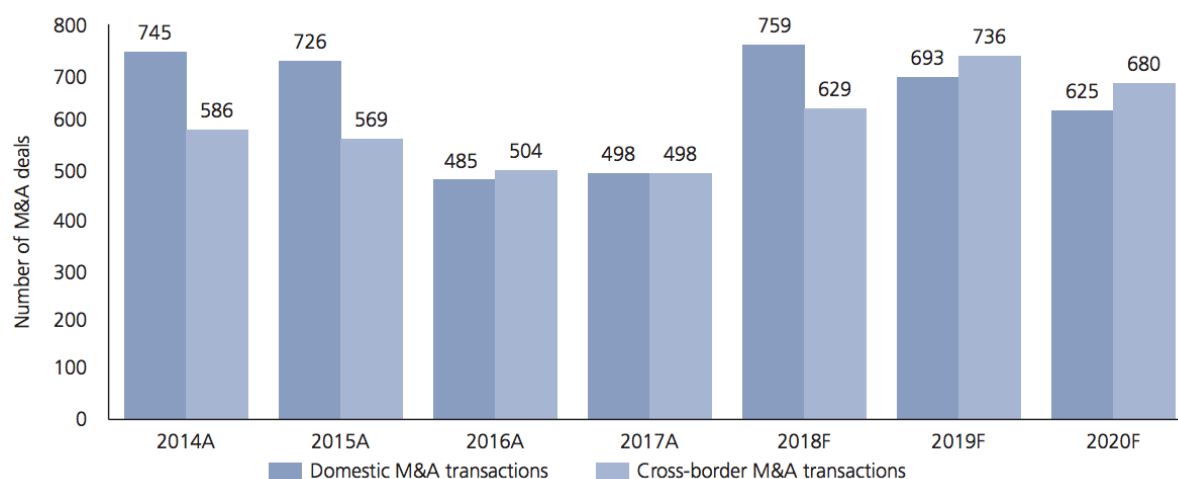
Figure 2: Circle of Hidden Champions (Hermann, 2009)



1.2. Mergers and Acquisitions

The desire to address the subject of mergers and acquisitions arose from an observation. As the graph below illustrates, in recent years German companies have enjoyed a particular interest from both domestic and foreign companies. This significant interest is driven by the profitability and rapid market growth of these specific businesses that are the International Niche Market Leaders, very successful in Germany. Both on a worldwide and Belgian scale, it seems interesting to investigate further. The next section of the opening chapter is devoted to mergers and acquisitions and the motives for undertaking such a transaction (Schalast, 2018).

Figure 3: Number of M&A deals with German involvement (Schalast, 2018)



The literature on mergers and acquisitions is very exhaustive. However, it is not very closely related to the hidden champions, companies approached in this work. Although the impact of mergers and acquisitions has been extensively studied, very few studies have been carried out on the acquisition of HCs. This work will attempt, among other things, to address this lack of available information.

As part of the theory, mergers and acquisitions will therefore be approached in a more global way and not only with a focus on INMLs. However, in the practical part, more information about the methodology and objectives of the research will be provided.

On the one hand, these INMIs are interesting to acquire for many reasons specific to their leadership situations. Acquisitions can be a way to overcome the globalization challenges and can help to ensure a certain long-term competitiveness. This is obviously not necessarily successful means because of the complexity of its management (Voudouris et al., 2000).

On the other hand, hidden champions themselves tend to go against common management practices and avoid outsourcing. Although it is advantageous in terms of costs, they prefer to ensure the quality of their services, which is largely included in their corporate culture (Voudouris et al., 2000). According to Simon, among the HCs, 42% of the added value is created internally compared to only 29.8% for industrial companies (Hermann, 2010).

1.2.1. M&A Types

For strategic or financial purposes, it happens that a few companies join forces (Nelson, 2018). Here are two definitions to distinguish mergers and acquisitions, described as associations of firms and more precisely combinations of firms (Pausenberger, 1989).

*A **Merger** is a combination of two or more companies in which the assets and liabilities of the selling firm(s) are absorbed by the buying firm. Although the buying firm may be a considerably different organization after the merger, it retains its original identity (Scott, 2003).*

*An **Acquisition** is the purchase of an asset such as a plant, a division, or even an entire company (Scott, 2003).*

In Belgian law, the articles 671 and 672 of the Belgian Company Code define mergers by absorption (acquisition) as distinct from mergers by the formation of a new company. As part of this paper, M&A will be defined as a strategic operation by which one company acquires a majority ownership in another or a completely new entity has been created as a result of their merger.

Before listing the different types of M&A selected for this report, it is important to focus on its two deal nature. It can be either a scale or scope deal. Depending on the M&A nature, managerial decisions and objectives sought will not be similar. When the aim is to reach scale economies, the intention is to reduce costs by increasing production. While in the case of large-scale economies, the objective is to increase revenue by reaching new markets,

customers, products, etc. Although both are compatible, it is crucial to be careful when integration decisions are made (Rouse & Frame, 2009). It is impossible to separate the upcoming types of M&A from their effects. The latter will still be more detailed in the next section.

Horizontal

The acquisition of a company by another or merger of companies competing in the same market is called a horizontal integration.

This type of M&A increases market power. The horizontal combination of companies makes it possible to achieve greater economic efficiency, due to cost and revenue synergies. Indeed, it reduces competition within the same market, and enables the combined firm to raise prices and, consequently, its own profit. The sharing of resources is also enhanced, in terms of employees and technologies transfer for instance (Hitt, Ireland, & Hoskisson, 2012; Rozen-Bakher, 2018).

Lastly, similarities between companies lead to higher performance. A related M&A is therefore less risky, and integration will be smoother. The identical styles of strategy, management, and resource allocation allow much more effective synergies to emerge (Hitt et al., 2012; Rozen-Bakher, 2018).

Vertical

A vertical integration involves companies with a supplier – customer relationship.

The primary advantage is immediate control over new parts of the value chain. Jeffrey Church (2008) argue that a vertical M&A could be either a forward integration, where the upstream (supplier) firm merges with a downstream (manufacturer) firm or vice versa, or a backward integration when a firm buys another one from which the company was purchasing its products. Due to the integration stages, the limited number of opportunities and the buyer – seller relationship, this type of integration is less recurrent than horizontal ones (Church, 2008; Rozen-Bakher, 2018).

However, vertical M&As can improve the market power, contributing to the synergies' gains. Bargaining power can also be seen to be increasing through the combination of companies. In addition, with good coordination between the parties in the value chain, costs can be reduced, and production increased. This leads to better profitability, if the integration is successful, of course (Rozen-Bakher, 2018).

Conglomerate

Conglomerate M&As involve companies in economically unrelated business activities.

Conglomerate transactions are carried out between two entities that are not related to each other, in order to reduce risks by diversifying. However, the literature does not generally defend this type of M&A. The desire for diversification is one thing, taking advantage of a merger to achieve it, is more complicated. The lack of product and service links between the concerned companies complicates the integration. Achieving the expected synergies seems to be compromised due to the difficulty of the process. Diversity limits the opportunity to reduce costs. Although the potential is significant due to very weak market relationships and great potential for synergies, the difficulty of integration increases the risk of failure (Rozen-Bakher, 2018).

The following three categories could be covered by the previous ones. However, it is interesting to dwell on it, for more subtleties and understandings.

Product extension

When referring to product extension, integration is linked to a combination of companies whose products are functionally linked in production and/or distribution. However, the finished products are not in direct competition. Concerning the products, examples would be those of a soap and bleach, or billiard balls and cues (Walsh, 1988).

Market extension

With some differences with the following type of M&A (Cross-Border), often mentioned in the literature, a market - extension occurs when the combination takes place between two companies selling the same product in different (geographical) markets. The key point of this integration is that the products are identical. It is therefore not a question of diversification but of expanding into a new market in order to increase the company's profit (Walsh, 1988).

Cross-Border

M&A involving companies from different countries is called a cross-border integration.

In today's consumer society, large companies themselves are constantly looking for maximum profit. The limits of growth within their domestic market drive the corporations to consider alternatives. That is why they are keen to discover what the economy looks like beyond their borders. Recently, these cross-border acquisitions have reached almost 50% of the total number of annual acquisitions (Hitt et al., 2012).

Despite the additional difficulties due to the borders crossed, there are many reasons for such M&As. This type of integration is used in the era of globalization to overcome entry barriers. Approximately 60% of foreign direct investment (FDI) inflows comes from this internationalization mean (Tarba, Cooper, Sarala, & Ahammad, 2016). Its benefits are listed in the next section.

1.2.2. M&A Motives

In the previous section, some reasons for companies to consider M&As were mentioned. As the panel of companies that can be involved in a M&A transaction is very broad, it multiplies the diversity of reasons existing to engage in such an operation. It will be worth considering the real motivations that some companies may have to acquire a hidden champion. A selection, as exhaustive as possible, is presented and categorized below.

One of the simplest reasons was first pointed out in 1969. It is the primary desire to develop your company as quickly as possible. From a managerial point of view, mergers and acquisitions are undoubtedly the fastest way to promote company growth (D. C. Mueller, 1969).

Then, because a common measure of merger or acquisition success is the growth in the value of the combined business, synergies are the most justifiable sources of motivation. Synergies are defined as increases in competitiveness and profit and are part of the several motives listed here after (Ebner, 2013; Mukherjee, Kiyamaz, & Baker, 2004). Each of the different motivations is a synergistic factor.

In order to present a coherent list of motivations, we will proceed with a split explained right away. Not surprisingly, many of the motivations are profit-related. Companies generally act with the intention of maximizing their profit, unless it is a non-profit organization. According to Ebner (2013), profit can only be increased by optimizing either income or costs. On the one hand, it is necessary to improve its market power in order to increase revenues. On the other hand, the company should improve its efficiency in order to cut down the costs. This is a first approach to divide the incentives for companies to engage in M&A (Ebner, 2013).

1.2.2.1. Market Power

The significance of market power is measured by a company's ability to sell a product at a higher price than its direct competitors in the market. An element of differentiation will therefore enable this company to reach consumers who are sensitive to it (Lambin & De Moerloose, 2012).

Acquire and Eliminate a Competitor

By reducing competitiveness in a market, companies have the opportunity to raise prices. Similarly, if companies agree, they can use coordination (or collusion) to increase prices. In this sense, a horizontal M&A is an opportunity to gain market power. On the other hand, many authors point out that this leads to a loss of consumer welfare because first it is in the interest of associated companies to reduce the number of products offered (e. g. by removing certain substitutes) and secondly prices rise (Ebner, 2013; Mazzeo, Seim, & Varela, 2018).

For a defensive purpose, it is a truth that acquiring a competitor can prevent it from growing and get more market share. In the same way, it can also hinder any other investor from expanding by acquiring this business and all its resources or know-how (Motis, 2007).

Finally, the competitive intensity reduces the scope of a company's activities. By reducing this rivalry through an acquisition, a company can reduce its dependence on a specific product or market offering much more flexibility (Hitt et al., 2012).

Increase Entry Barriers

Entry barriers make access to a market difficult because of particular factors or intense competition. These barriers are also created by economies of scale within the target market. In order not to use its resources in vain, mergers and acquisitions should be considered, especially since it offers immediate access to the market. Moreover, cross-border mergers often serve as a springboard to overcome these barriers (Hitt et al., 2012).

Nevertheless, the reason here is to increase these barriers in order to keep potential competitors away from the market. Thanks to vertical acquisitions, the market power of combined companies is increasing. Indeed, by foreclosing the sale of products to certain competitors in terms of price or quality, the combined company's market power increases. And vice versa regarding procurement and the influence that the new company can have on suppliers. Still, tacit agreements can result in the same outcome, even if less economically stable (Ebner, 2013). A minimum of entry barriers is required to maintain collusion (Motis, 2007).

Diversification and Risks Spreading

By diversifying its portfolio, a company marks its strategy of spreading risk and maximizing expected returns. Conglomerates are the perfect M&As for this kind of motives. Diversification of a portfolio helps to increase market power while risk optimization through uncorrelated products rather supports the company's market value (Motis, 2007).

The spreading of the portfolio concerns more specifically, the merger of companies whose products are somehow related or complementary. The idea is to gain market power by attracting buyers from the acquired company. This complementarity makes it possible to obtain bargaining power towards the client since the offer meets their needs. Moreover, a cost efficiency occurs since the company offers a full range of products under the same brand and not separately. In the fact, merging saves operational costs (Motis, 2007).

Finally, if diversification is part of a company's strategy, it is obvious that developing a new product internally is complicated due to lack of experience. Since diversification remains a risky operation, it is recommended to focus on related and horizontal acquisitions (Hitt et al., 2012).

Expand Client base

By merging with or acquiring an entity, the company is also acquiring a new client base. Indeed, as soon as the acquired company has a loyal customer base, the combined company could benefit from it. This is sometimes a fairly simple motivation for expansion. The aim is to create in this new customer base a desire to consume the acquirer's products.

Reach a new product market – Expand product mix

As much as anything, M&A can result in a new product. If you do not have the internal knowledge required in order to launch a specific product, acquiring a company already producing it is cost-effective. Product extension mergers are carried out purely with the aim of avoiding investment in R&D. This will enable the buyer to acquire a product similar in terms of production and distribution to those of the company wishing to grow.

Reach a new geographic market

In order to enter a new geographic market, acquiring a company already evolving in it seems to be the perfect solution. On the one hand, this is a reason for market expansion acquisitions. The aim is to increase the company's profit by buying a company selling an identical product in another geographic market.

On the other hand, some companies want to adapt to the international environment by setting up abroad. Cross-border acquisitions are then required. This is therefore a clear motivation for this type of M&A, even if the market power acquired through it is only one motivation among others.

Gain bargaining power by gaining market shares (financial synergies)

If companies downstream of production merge, they can achieve cost savings by increasing their bargaining power with suppliers. This merger allows the enlarged company to exercise negotiation as effectively as possible, which in other words increases its purchasing power (Motis, 2007).

1.2.2.2. Efficiency Increases

The effects on productivity are generally related to an improvement in the production chain itself. Since operational efficiency is a key competitive advantage, its continuous improvement is therefore essential, especially because of the fast dissemination of the identified best practices (benchmarking) (Lambin & De Moerloose, 2012). In addition, the modern consumer favours available and affordable products forcing the company to organize itself to meet his wishes, in terms of production (Kotler & Armstrong, 2010).

Acquire Unique Capabilities

In order to broaden its scope of knowledge, a company can proceed with an acquisition. Indeed, acquiring an entity allows you to benefit from its capabilities as well. To remain agile, companies invest in research and development and/or develop with the technological knowledge of external companies. When combined companies are complementary, technological progress can quickly lead to product or process innovations. Furthermore, combined R&Ds can be very powerful and lead to amazing joint production possibilities (Hitt et al., 2012; Motis, 2007; Röller, Stennek, & Verboven, 2000).

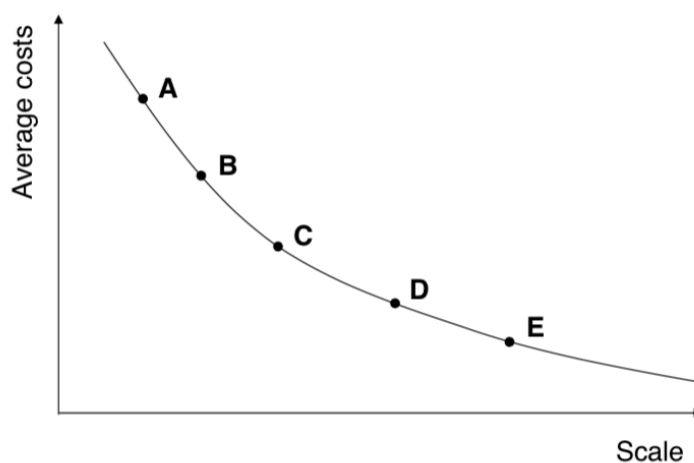
Although it is easier to assimilate complementary knowledge into your own business, international expansion (through cross-border acquisitions) can provide you with the opportunity to acquire unparalleled talent (Hitt et al., 2012). What explains this fertile exchange is the interaction between human capital, organizational cultures, patents, know-how or simply technological capabilities (Motis, 2007; Röller et al., 2000).

Economies of scale

These savings come from the average cost decrease as a result of the increase in the number of production sites. The graph below (Fig. 3) shows that the average cost is inversely proportional to the size of the company. Horizontal mergers are very effective in reducing costs, especially if the combined companies are small because the change in production is more significant. While in the short-term economies of scale make production and distribution less expensive, in the long-term investment coordination can even further improve them (Ebner, 2013; Motis, 2007).

With regard to vertical acquisition, the savings come from the elimination of one step in the production chain. By acquiring an upstream or downstream company, the acquirer hopes to benefit from superior quality and better control over it, cost reduction, shorter lead times etc. In addition, this M&A radically eliminates the transfer of goods and services between companies (Ebner, 2013).

Figure 4: Industry with significant scale economies (Mueller, 2003)



Economies of scope

Economies of scope stem from joint production. They exist because of the plant's greater efficiency to produce several goods under the same brand name compared to separate production under distinct companies, or because joint storage and delivery can save money. In fact, these are economies of scale widespread to companies selling several products (Ebner, 2013; Motis, 2007).

1.2.3. M&A Concerns

Due Diligence

Before conducting the final negotiation, the buyer company must make sure it has knowledge of the targeted venture. Due diligence consists of an investigation with regard to the precise situation of the business being bought. The ultimate goal is to prevent any element that could harm the operation. By being careful, the buyer carries out a check of the risks engendered. It is on the basis of this investigation that warranties and indemnities will be established and negotiated (Howson, 2017a, 2017b).

There are many types of due diligence, from a commercial – financial and – legal point of view, aimed at reducing the risks of negotiation. A second goal is to reduce the risks of the process itself, as M&A is very risky and often fails. Therefore, planning for integration is already underway in the very first stage of due diligence (Howson, 2017a, 2017b).

Negotiation for Valuation and Deal Price

The next step consists generally in protecting the company from the risks previously identified. It is at this stage that the purchase price will be negotiated, and the other deal details will be contracted (Howson, 2017a).

The success of negotiation depends on the investigation and relevant knowledge gathered on the targeted company. Due diligence allows the exertion of maximum influence during the negotiation process and obtain the best negotiation outcomes. In addition, understanding the opposing corporate culture is crucial; firstly, to find out how best to approach this negotiation, and secondly to integrate the company in an appropriate way afterwards (Weber, Belkin, & Tarba, 2011).

Integration Plan

Once the deal is signed, it is important to make sure that the price paid is worth it. It is not especially the previous steps that are challenging, but that of taking care of the acquired company in its entirety, starting with its takeover (Howson, 2017a). Challenges related to management and corporate culture will undoubtedly be at stake. It is a good idea to not weaken the human capital of the acquired company because it holds the organization's knowledge and its weakening may have a negative effect on the company's performance (Hitt et al., 2012).

The company integration must be regularly assessed to ensure that due diligence is achieving its expected results. In this step it is therefore essential to establish an assessment methodology for the M&A. Potential synergies between the two companies must first be investigated during the due diligence process. Then, the integration objective is to secure a certain return on investment and to have an evaluation plan. It is therefore necessary to identify the sources of value creation or leakage due to businesses' interconnection. Setting key performance indicators for each measure and define how to monitor the integration plan regarding the KPI improves the integration process (Gates & Very, 2003).

1.2.4. Postface

An article published by Deloitte provides some very meaningful figures. The paper discusses the benefits of acquiring a business. Between 2010 and 2017, more than a half (56% of 8.000 deals) of the follow-on mergers and acquisitions were carried out for the purpose of strengthening operations through geographical expansion. Through these transactions, companies also generally seek to improve cost-effectiveness and expand products and services offerings. These two last reasons were mentioned at least one time out of ten in the Deloitte study (Federer, Joshi & Renner, 2018).

A study conducted in Tunisia insists on the technical motivations resulting in economies of scope and synergies. The writers argue that these are objectives sought in more than three out of four M&A transactions. Improving the profitability of the new entity is also a frequently mentioned source of motivation. This is followed by, for example, the increase in market share, the growth of the company size, the expansion of distribution networks and the strengthening of bargaining power (Ferchichi & Souam, 2015).

The other motives given in this section should not be ignored. The objective of rapid growth is, for example, taken up by many authors. The acquisition of new technologies and know-how or risk and portfolio diversification are often mentioned as well. In the context of INMLs, this will be addressed in the practical section (Bian & Emons, 2017; D. C. Mueller, 1969).

Finally, given all the successful characteristics of hidden champions, it is understandable that they arouse external interest from companies looking for M&A. Since HCs are generally less inclined to outsource and tend to keep their business internally, the empirical part will focus on the INMLs which have been acquired by external actors and not the few which have purchased an external business.

1.3. Corporate Performance

In general, authors addressing the corporate performance design it according to their own background. This ranges from marketing to finance, shareholders and human resources. Whatever can characterize the success of a business according to one parameter or another can be part of the measurement of its performance (Frolick & Ariyachandra, 2006; Neely, 2007).

This theoretical chapter will aim to provide the necessary foundations to address, on the one hand, the corporate performance of the companies studied in the practical part and, on the other hand, the effects of M&A on it. In this subsection, performance is therefore carefully approached from an analytical point of view in order to be able to measure it in different practical cases.

As previously analysed, hidden champions attach a high value to innovation. Performance could therefore be evaluated according to this capacity to innovate. Such an innovative approach could be a starting point, as could environmental, social or managerial performance be. However, the corporate performance will be analysed from an economic point of view. Indeed, according to several authors, this is undoubtedly the best way to evaluate the performance. In addition, it consists of quantifiable and available data on the various existing tools, such as the NBB or the BvD (Gantumur & Stephan, 2011; Hermann, 2009; Hřebíček, Štencl, Trenz, & Soukopová, 2011).

Secondly, with regard to mergers and acquisitions, the analysis could also be divided into different stages. M&A performance could be assessed according to the success of the integration process considering a targeted level, according to the value creation generated by the M&A, or finally according to the overall variation in the performance of the combined business (Zollo & Meier, 2008). However, in this paper, the analysis will focus on financial ratios as described in the following paragraph.

Economic performance can be considered as financial corporate performance. In this section it will be broken down into several financial indicators based on an accounting approach. First, the profitability parameters followed by liquidity indicators will be presented. Finally, the leverage parameters will close the chapter (Hřebíček et al., 2011; Leepsa & Mishra, 2012). These three different orientations will be addressed by ratios, although relevant to the

objective of this thesis, available on Orbis, the main tool used in the practical framework. Moreover, the formulas below are taken from the BvD and Investopedia.

How is the financial performance of a company assessed? From which indicators is it measured? Finally, how M&A affect it?

1.3.1. Profitability parameters

The profitability indicators are generally financial ratios. Many authors report a significant increase in profitability following a M&A event. Below is a non-exhaustive overview of the financial profitability ratios, expected to improve during the post-merger period, found in the literature. The empirical literature agrees on this improvement, pointing out also that M&A activities lead to an increase in market shares (Ismail, Abdou, & Annis, 2011; R. Kumar, 2009; Leepsa & Mishra, 2012; Yanan, Hamza, & Basit, 2016).

However, many studies raise concerns about these parameters after a company have acquired another. For example, case evidence from the UK shows a drop in ROA and ROE from pre-merger to post-merger. According to several authors, it is often due to a lack of management efficiency in generating gains from assets or shareholders' capital (Jallow, Masazing, & Basit, 2017). It is therefore difficult to venture into conclusions, as the literature offers different results according to the period identified, the market sector or the size of the business (Ismail et al., 2011).

Return on Assets (ROA)

The ROA is a ratio used to evaluate a company's performance level. Developed by DuPont, this ratio is employed by many companies to assess how efficiently their assets are used in order to generate earnings. Actually, it measures the combined effect of net profit margin and total asset turnover (Kharatyan, Nunes, & Lopes, 2016; Sheela & Karthikeyan, 2012).

$$ROA = \frac{Net\ Income}{Total\ Assets}$$

Every investment matters, and every item of property, plant or equipment does too. This indicator reveals the profit made by a company for each unit of its assets: the higher its ROA the higher is its asset efficiency (Ross, 2008). The return on assets is strongly influenced by the

company's industry. This is why, in order to judge a company's performance thanks to this ratio, it must be compared either with similar companies or on a timeline in relation to previous and/or subsequent ROA numbers (Investopedia, 2019).

Return on Equity (ROE)

This is the measure of the rate of return on shareholders' funds. In 1970s', the DuPont model was modified in order to include much more factors influencing the corporate performance. The purpose of this ratio is to assess the efficiency of the use of investors' money in order to determine whether management is driving up the company's value at an acceptable rate (Sheela & Karthikeyan, 2012).

$$ROE = \frac{\text{Net Income}}{\text{Average Shareholders' Equity}}$$

Return on Capital Employed (ROCE)

Sometimes simply called the return on investment, or even under other terms, this ratio is calculated differently within the business world. It is used to calculate a company's ability to generate income from capital. It reflects the capability to transform the capital invested in the economy into profit for the business (Kouser & Saba, 2011). The following formula is the one used in this report:

$$ROCE = \frac{EBIT}{\text{Capital Employed}} = \frac{\text{Earnings Before Interest and Tax}}{\text{Total Assets} - \text{Current Liabilities}}$$

An acceptable rate could be estimated using the long-term average of the S&P 500, which is 14%. Investors can therefore rely on this average, also considering that a return of less than 10% is poor. Through the retention rate, the percentage of net income reinvested to finance the company's growth, ROE can be used to estimate the company's future growth rate (Investopedia, 2019).

Profit Margin

The profit margin is the percentage of income remaining after the various expenses. This shows the business' ability to turn sales into profit for investors. This margin is influenced by a number of cost variations; in terms of fixed business costs, inventory valuation or commodity/goods prices, for example (Jallow et al., 2017; Kharatyan et al., 2016).

$$\text{Profit Margin} = \frac{\text{Net Income}}{\text{Sales (Revenue)}}$$

This profit margin ratio is used as an indicator of a company's financial health, management skills or growth potential. Again, these figures are specific to the sectors of activity. Even within the same industry, each company has its own distinct activities influencing its profit margin (Investopedia, 2019).

EBITDA Margin

EBITDA is a performance measure providing a clear overview of operating cash flow and profitability. It gives an idea of the impact of the financing of M&A deals and the method of accounting for the transaction (Grigorieva & Petrunina, 2015).

$$\text{EBITDA Margin} = \frac{\text{EBITDA}}{\text{Total Revenue (Turnover)}}$$

The higher the EBITDA margin is, the more advantageous it is for an acquisition. It means that the company's operating expenses are low compared to the total income (Eisenbarth & Meckl, 2014).

1.3.2. Liquidity parameters

Managing these ratios gives companies the assurance that they have enough liquidity to meet their payment obligations. There is a trade-off between liquidity and profitability; earning more of one generally means having to give up some of the other (Saleem & Rehman, 2011). Concerning this ability to respect its commitments, acquired companies tend to have more liquidity than non-acquired companies (B. R. Kumar & Rajib, 2007). Several common liquidity ratios will be discussed below.

Current ratio

This parameter raises the company's ability to return its short-term obligations. Although a high ratio tends to suggest that the company can easily fulfil its obligations, a high ratio may reveal difficulties in effectively using its short-term assets to get rid of its short-term liabilities. One certainty is that if the ratio is under one, it means that the company will have trouble paying off its debts due within the year (Investopedia, 2019).

$$\text{Current ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

The standard value of this ratio is 2.0. However, it is tending to decrease due to improvements in human capital management in particular. Depending on the industry, this ratio can still vary widely (Neely, 2007).

Liquidity ratio (Quick ratio, acid test)

This ratio is an indicator of the short-term liquidity situation of a company. Like the current ratio, it measures a company's ability to pay its short-term obligations with its most liquid assets, but without needing to sell its inventory (Investopedia, 2019).

$$\text{Liquidity ratio} = \frac{\text{Current Assets} - \text{Stock}}{\text{Current Liabilities}}$$

This ratio generally fluctuates around 1.0. If it is equal to 1, it indicates that the liquid assets could exactly pay off the current liabilities. It is clear that the viability of a business is not based solely on this result (Neely, 2007).

Solvency ratio (equity ratio)

The solvency ratio shows how well a company's cash flows are sufficient to cover its short and long-term commitments. It evaluates the long-term health of a business by assessing its ability to repay its long-term debt and the interest on that debt (Investopedia, 2019).

$$\text{Solvency ratio} = \frac{\text{Shareholders funds}}{\text{Total Assets}}$$

To be financially healthy, a company must generally aim for a solvency ratio of more than 20%. As with other ratios, however, it is influenced by the sector of activity. It should therefore be compared either with competitors or with previous financial years, but not considered as a stand-alone measure (Investopedia, 2019).

1.3.3. Leverage parameters

In addition to equity, debt can also be a source of financing. Debt ratios measure the amount of a company's capital that comes from debts/loans (Investopedia, 2019).

The largest increase in leverage can be attributed to recent improvements linked to the reduction of capital expenditures and increase in operating cash flow. Investors could therefore anticipate these positive effects by keeping in mind that increases in financial leverage are often associated with subsequent improvements in productivity. Naturally, this is one analysis among others, and depending upon internal strategies, the result may be completely different (Safieddine & Titman, 1999).

Gearing ratio (debt-to-equity)

According to Investopedia, the gearing ratio reflects the extent to which a company's equity can cover all outstanding debt in the event of a business slowdown.

$$\text{Gearing ratio (D/E)} = \frac{\text{Total Debt}}{\text{Total Equity}} = \frac{(\text{Non - current Liabilities}) + \text{Loans}}{\text{Shareholders funds}}$$

The D/E ratio highlights the risks associated with a company's equity results. Working capital, for example, is often used to finance long-term needs. In this sense, this ratio indicates the potential riskiness of such an arrangement (Neely, 2007).

Borrowing is risky. A high debt ratio means that a company uses debt to increase its assets. It can also boost its profits by financing the business growth through accumulated debt. The cost of the debt will then have to be taken into account and will be very important for future income (Investopedia, 2019).

Interest coverage ratio (times interest earned)

This ratio shows the number of times a company can cover its interest costs on the basis of its pre-tax profit. It is used to determine the degree of risk a company faces in relation to its current debt or future borrowings (Investopedia, 2019).

$$\text{Interest Cover} = \frac{EBIT}{\text{Interest Paid (Total Interest Expense)}}$$

Since it is the margin of safety a company has to pay interest on its debt over a specific period of time, the lower the ratio, the heavier the debt burden will be. The analysis of this interest coverage ratio over time is recommended. This gives better indications of the viability of the business. Generally, the stability of this ratio is a very good indicator of financial health, even if it does not provide any guarantee over the long term. The aim is to maintain a ratio of at least 1.5 (Investopedia, 2019).

1.3.4. Postface

The effect of mergers and acquisitions on business performance depend on many factors. For the purposes of this thesis, the empirical measures are the evolution of each of the earlier presented ratios. To determine whether the difference between the pre and post-acquisition ratios is meaningful, the degrees of significance will be calculated. The few existing studies lead to poor conclusions because the impact of M&A operations on companies' economic and accounting performance is not significant enough (Ferchichi & Souam, 2015).

Through the analysis of a sample, an assessment will be made of how M&As influence the performance of financial ratios. For example, the evolution of return on equity is interesting to consider, knowing that hidden champions aim for a high ROE ratio (Brenes et al., 2017; McKiernan & Purg, 2013).

Chapter 2: Empirical Section

Throughout the practical study, this thesis will cover the different points addressed in the theory by means of specific cases. At the outset, the various companies identified to meet the research question will be presented. Then mergers and acquisitions, and their effect on the companies' performance, will be featured.

After covering the findings, a section designed for analysis and discussion of the results will be opened. The remaining questions will be addressed as well as various suggestions for further experimental research. In order to gather evidence, a survey was carried out. The original is available in the appendices. The participants pointed out the existing incentives in acquiring a company, in this case a hidden champion. The aim was also to verify, according to certain criteria, that the targeted companies fell into the pre-defined category of INMLs. Due to the lack of cooperation from the companies contacted, it was necessary to provide content from other sources (websites, press articles, annual reports and so on). These are included in the references at the end of the report.

In order to address the performance of financial ratios, here is how it has been handled. The data was mainly collected using the previously mentioned tool: The Bureau van Dijk. Once the figures were inputted into an Excel document, the graphs of these ratios' change were constructed. Statistically, the significance of the difference between each ratio before and after the acquisition was calculated. To conclude the empirical section, the outcome of this analysis will form the basis of a detailed discussion.

2.1. International Niche Market Leaders

According to the theory, several parameters have been chosen to define what an International Niche Market Leader is. Thanks to these considerations, some case examples have been selected within Belgian companies. In fact, the basic criteria were the same as those used by Esther Georges in her thesis. The selected companies therefore come from her research.

Here are the criteria for a first selection chosen according to what the literature has agreed on in relation to INMLs and what the needs of Esther's thesis. Companies we are looking for should:

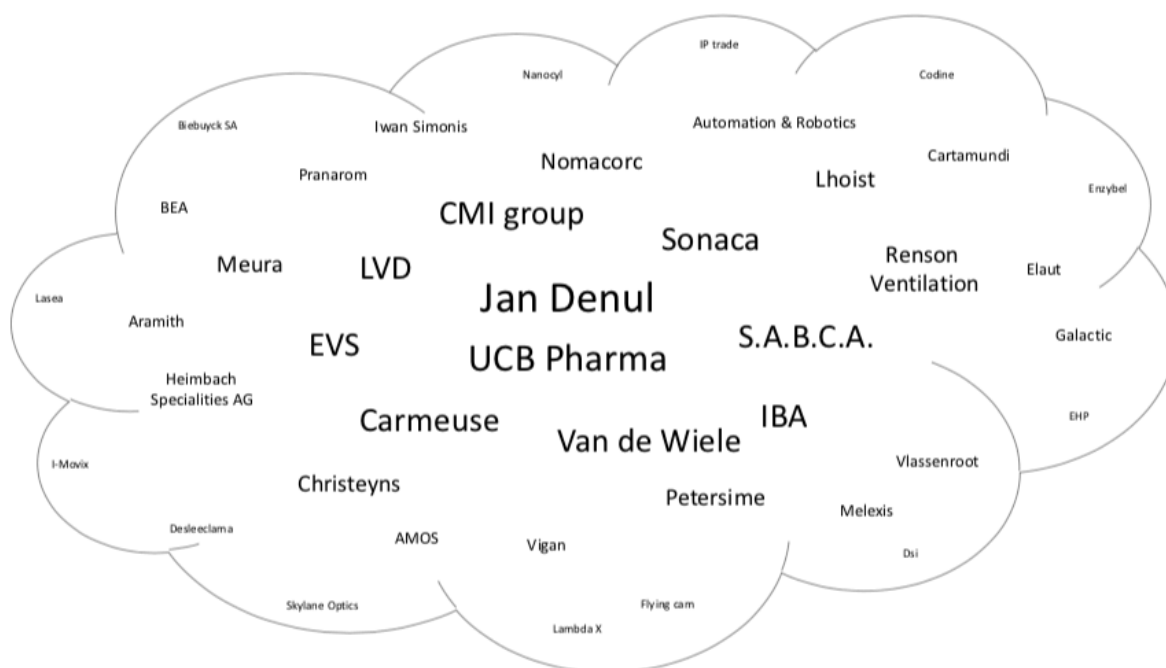
- *Belong to the top three in global market, or be the number one on its continent (position generally determined by its market share);*
- *Have a revenue below \$1 billion;*
- *Have a low level of public awareness;*
- *Be Belgian owned;*
- *Be at least 10 years old.*

All these criteria have the specific purpose of ensuring that the study focuses on international niche market leaders, subject of this thesis. The first is to assure that the companies are leaders in their market while the others reduce the research among businesses unknown to the general public. As Hermann repeats, INMLs are hidden champions, hence a low recognition of these companies among end customers and a limited income. The niche market in which they operate also hinders the possibility of revenue since these are very specific markets where the product/service is particular and targeted.

In addition, the age of the companies was added in order to target companies that have reached a certain maturity/stability point. This guarantees that they maintain their market leadership and that the market remains a niche market. According to the product life cycle, changes and competition within a market tend to stabilize at this maturity stage. Esther made an estimation of the age of a company (10 years) to reach this life cycle point. The Belgian context was, as for this thesis, part of the deliberate research delimitation.

Below are the 42 Belgian INMLs from Esther's paper. In order to correspond to the parameters of this paper, a second selection will be made.

Figure 5: Belgian International Niche Market Leaders (Georges, 2017)



The larger and more centrally written the company is shown above, the more it has a significant income and is a prestigious INML. Fortunately, as part of the research question, a post-selection could be done. At the risk of being repetitive, the purpose of this paper is to assess and list the impacts of mergers and acquisitions on corporate performance. Since literature is almost non-existent on this subject concerning hidden champions, these particular cases were chosen as subjects for testing.

At this stage, it is therefore necessary to select the interesting companies, regarding M&A, from this cloud of INMLs. The Bureau van Dijk is a Moody's Analytics Company and has been used to obtain information on the companies above. The reference tool for the financial analysis of Belgian and Luxembourg companies is called Bel-First. Since this instrument covers Belgian companies, it was perfectly designed to collect data on mergers and acquisitions and market rumours.

Therefore, a sub-selection had to be made by adding a selection criterion. Two characteristics emerged during the research. The first was to restrict the list to INMLs that have already used M&A for some reason, whereas the second concerned INMLs that have been acquired by or merged with another company. After discussion and investigation, the second option was retained.

The main reason is that this restriction places more emphasis on HCs than the other. On the one hand, literature tells that INMLs are much less willing to outsource than traditional organizations. On the other hand, the advantage of the second option is that the interest of the acquisition may come from the nature of the acquired company and therefore from the characteristics that make INMLs special. This allows the research to take an additional direction: *Why do some companies have an interest in acquiring an INML? What is the purpose of this operation and what are the consequences for both parties?*

The additional criterion is formulated as follows. In order to be part of this research and meet its needs, the INMLs selected should additionally:

- Have undergone a merger-acquisition.

In that way, the table below shows the companies that were finally considered. On the left are the companies acquired by (or merged with) those on the right. The entities on the left are therefore considered as HCs, which will be demonstrated later, and were subject of acquisition or merger during the financial year mentioned.

Table 1: Belgian International Niche Market Leaders acquisitions

International Niche Market Leader	M&A external actor	M&A Year
Euro Heat Pipes	Airbus Defense and Space SAS	2018
IP Trade	British Telecom Group PLC	2017
DesleeClama	Bekaert Textiles - BekaertDeslee	2016
Pranarom (Inula)	Inula - Ardian	2014-2018
Société Anonyme Belge de Constructions Aéronautiques	Dassault	2019
Saluc – Aramith	Iwan Simonis	2012

Table 2 : Companies characteristics of the database (Bureau van Dijk, 2019; National Bank of Belgium, 2019)

Parameters Companies	Sales Turnover (€)	Staff (FTE)	Top	Competitors (market leaders)	Export	B2B
EHP (2001)	8.716.624	55,4	Y	3-4	World	Y
AD & SS	n.d.	-	-	-	-	-
IP Trade (2005)	8.022.040	35,4	Y	5	World	Y
BT	n.d.	-	-	-	-	-
Deslee (1929)	n.d.	-	N	-	World	Y
Bekaert Textiles	n.d.	-	-	-	-	-
BekaertDeslee	104.407.110	87,3	Y	-	World	Y
Pranarom (1991)	49.734.596	86,5	N	-	World	Y
Ardian	321.487.559,17	34	-	-	-	-
SABCA (1920)	186.151.000	939,6	Y	4	World	Y
Dassault	n.d.	-	-	-	-	-
Saluc (1923)	15.272.137	145,9	Y	3-4	World	Y
Iwan Simonis	11.856.717	64,1	Y	1-2	World	Y

FTE = Full Time Equivalent from the BNB

Although we have little information on the acquiring companies, this section highlights the main characteristics of the HCs considered for the comparison of theory with practice. The figures in the above table come from the NBB and the BvD. This data was sometimes reviewed and confirmed by the replies to the questionnaire sent to the companies and/or by published information on their own websites or relayed by the media.

A first important feature is obvious. The sales turnover of each INMLs is effectively under 1 billion dollars and thus corresponds to the previously chosen characteristic for these companies. Since this characteristic has been checked and for the sake of clarity, the euro is the only currency that will be used from now on. SABCA differs from the others by being one of the top quarter companies, among the 42 at the beginning, with revenues far above 100 million euros, while the others are largely part of the lower range.

These low revenues reflect the modest size of these companies. The number of their employees confirms it. Once again, it is the aeronautical manufacturer (SABCA) which seems to be the largest company at this level.

In addition to size, these figures attest to the discretion of these companies. Even if some of them are very old, they are limited in development due to the specificity of their market. In addition, they focus heavily on B2B, which does not expose them to the general public and end customers.

These various characteristics strengthen their desire to internationalize. They are almost all top performers in terms of market shares regarding their specific market and export their product extensively.

Finally, these ambitious and successful companies fulfil the pre-established conditions based on the literature. For these reasons, this table shows the figures illustrating the membership of these companies in the studied category: The International Niche Market Leaders.

2.2. Findings

2.2.1. Mergers and Acquisitions

The goal of this section is, from the literature, concretely to establish the mergers and/or acquisitions that the companies, covered by the empirical part, have undergone. In order to provide some insights for the research question, the findings will concentrate notably on the motivation that some companies may have to acquire successful businesses, in particular International Niche Market Leaders.

2.2.1.1. *Euro Heat Pipes*

In 2018, Euro Heat Pipes was acquired by Airbus Defense and Space SAS. The majority of the shares were bought over by Airbus from a private investors' fund. Thanks to serious time and energy investments, EHP quickly achieved a success that attracted the attention of companies in the sector. The high-quality technology developed has driven the company to quickly surround itself with an industrial partner like Airbus (Euro heat pipes, 2019; Wallonie Espace, 2017).

Thus, according to the survey of an EHP engineer and newspaper articles, the success of their business was also due to the interest shown by the sector of their company. Airbus wanted to acquire this business because it had become a major supplier of thermal management solution for spacecraft. This vertical acquisition was also motivated by a certain technological expansion.

Motives

In line with the internal source and what is available on the Internet, a first reason for agreement was the opportunities for rapid growth that this M&A offered to EHP. For Airbus, this was undoubtedly an opportunity to acquire, in addition to a flourishing business, new technologies that were already well established. Another wish was also to benefit from financial savings thanks to the bargaining power gained over other members of the distribution chain but also thanks to the combination of both companies' know-how. Airbus believes that the two combined businesses have more potential than they had separately (Belenger & Bouillez, 2017; Vincent, 2017).

The main concern with this acquisition, as stated in the survey, is ultimately the final and most important step in the long-term. Since the two companies used to work together before, due diligence and negotiation for the value of the business were easier and less time consumer. Right now, it is therefore the integration of the business within the Airbus entity that is more delicate. The analysis of the corporate performance may reflect these difficulties or already reveal positive outcomes.

2.2.1.2. IP Trade

IP Trade, a company whose business is trading floor communications solutions, has witnessed a significant increase in turnover since its foundation. This market, which is booming and very specific, requires the company to have a certain international credibility. In 2017, British Telecom, a global provider of communications services and solutions, announced the acquisition of IP Trade. On both sides, this transaction was positively perceived (Doucet, 2017).

Motives

There are many reasons that made it easier for both parties to reach an agreement. On the side of our hidden champion, a willingness to enjoy greater bargaining and conviction power was necessary for the company to be able to move forward. Didier Mattivi, former director of IP Trade, also argues that the company should be part of a larger group. The size of the business is a major boost. Thanks to this acquisition, IP Trade now benefits from enormous financial support, international credibility, serious economies of scale and a free broadening of its customer base (Ball, 2017; Doucet, 2017).

As for British Telecom, they have, in a way, managed to get rid of a competitor. The company also indicates the interest in acquiring a company whose product quality is recognized, the flexibility of the structure is sometimes advantageous and the enormous potential in R&D is no longer to be proven. BT aims to achieve better collaboration between the two businesses, develop a virtuous exchange of technology use and operational strategy, and help IP Trade to meet its stringent regulatory obligations (Ball, 2017; Doucet, 2017).

2.2.1.3. BekaertDeslee

These companies are surfing along on the current fashion over products promoting healthy sleeping patterns. The mattress market is constantly growing. On this market, Bekaert Textiles decided to acquire DesleeClama, in 2016, to form BekaertDeslee. Legally it is an acquisition, even though we are dealing with a merger between equals. This combination is bound to succeed. Both are internationally successful companies that have everything in common and should be able to strengthen their market positions through this merger. It is a horizontal merger with the objective of consolidating its market leadership (BekaertDeslee, 2016; Trends Tendances, 2016).

Motives

Besides the complementarity between these two companies, the reasons for this deal were related to strategic, economic and market opportunities. Since their customers remain loyal, this merger has no advantage in terms of customer base. However, thanks to the mutual reduction in competition management, they were willing to focus on improving their ecological footprint. This merger is also part of their common growth strategy. They believe they have become the world leader in the design and sale of mattresses. Finally, the combined company will be able to further improve the quality of its services (BekaertDeslee, 2016; De Standaard, 2016; Trends Tendances, 2016).

2.2.1.4. Pranarom (Inula)

This Belgian hidden champion is an aromatherapy laboratory whose qualities have spread its reputation all over the world. It is the world leader in scientific and medical aromatherapy. In order to grow even faster, in 2014, this company merged with HerbalGem to become Inula. By becoming the first Belgian group specialised in natural therapies, they merged with the aim of expanding their market and product knowledge (Baudoux, & Calandri, 2019).

In addition to this merger, Inula has recently (2018) been acquired by Ardian, a private equity investment house, for the majority stake. This private equity investment, undertaken by a company managing assets all over the world, should be able to support Inula's development and growth strategy (Vandermeulen, 2018).

Motives

Inula's objective was mainly expansion. Whether in terms of market or product, the combination of these two companies allowed them to assert their power. With the responses received to the survey, in addition to a desire for rapid growth, the possibility of diversifying and reducing the risks involved were some of Pranarom's objectives. Inula has also helped the combined companies to reach new geographic markets, probably operation fields acquired by the other.

According to an interview with Philippe Poletti, head of Ardian Buyout, their strategy is to maintain a regular investment activity and prospect niche market leaders. The company has recently emphasized its desire to be selective and invest in local champions with the potential to become global niche players. The firm intends to help these high-potential businesses to overcome the challenges they face (Ardian, 2019).

While in the recent case of the takeover, the motives for the acquisition were mostly financial, the issues encountered were, apparently, in both cases rather similar. The respondent indicated that due diligence and negotiation for valuation and deal price were more challenging. Indeed, on the one hand, the investment from Ardian is rather a sign of support and does not require any integration plan, whereas the preliminary analysis for the merger was very intense and quickly successful.

2.2.1.5. SABCA

53.8% - owned by Dassault, the Société Anonyme Belge de Constructions Aéronautiques is one of the main aerospace companies in Belgium. Unfortunately, this acquisition is not very recent. Despite the attempts to connect with members of the company, it was not possible to collect information about this acquisition activity. Moreover, the literature is not very complete concerning it. Similarly, financial figures are not available on the tools used to analyse the companies' performance. Therefore, the empirical study will not be carried on with this company (SABCA, 2017; S.A.B.C.A, 2019).

2.2.1.6. Saluc

Worldwide manufacturer and retailer of billiard balls, Saluc has a market share of 80%. In the meantime, the textile Iwan Simonis company is the market leader for snooker/pool table cloths. For these features, Iwan Simonis decided to acquire Saluc in 2012 (Iwan Simonis, 2019; Saluc, 2005).

Motives

Marc Simonis explained in an interview that this acquisition would enable his company to consolidate its position as a leader in the billiard industry. On the one hand, commercial synergies can accentuate the international expansion of both businesses. On the other hand, this acquisition offers an interesting opportunity for diversification. Indeed, the use of Saluc's technology has been greatly extended to other sectors (Dagonnier, 2012; L'Echo, 2012).

2.2.2. Corporate Performance

In order to analyse the performance of the companies considered, the findings will be based on financial ratios, since this is what was decided in the literature review. The objective is as follows: the figures collected will illustrate the success or failure of the identified M&As. A key year (N) will be considered and used as the central year for the financial analysis, namely the year on which the M/A activity took place.

As indicated in the literature analysis, the figures come mostly from the Bureau van Dijk (precisely from Orbis). The pairing aims to study this phenomenon and how it relates to a corporate performance over, at least, 3 years pre and 3 years post-merger. However, the various companies selected have experienced acquisitions rather recently, not giving the opportunity to analyse their impacts over the following three years. In order to provide additional results for the previous quantitative part of this empirical analysis and to enlarge the sample for a qualitative analysis of the business performance, the sample region will be extended outside Belgium. Thanks to this extension, the obtained sample should have a reasonable size and the conclusions should be more reliable.

However, the data available on the main tool used, Orbis, limits this study even more. Indeed, the BvD generally stops at the 2008 financial year, or even earlier. All these constraints make research more and more difficult. Moreover, the absence of a database for international niche market leaders hinders the conception of a sample. Here are the new characteristics used to elaborate this new sample:

- Not necessarily Belgian owned;
- Availability of financial data 3 years before and after the merger/acquisition.

As the playground of the hidden champions, Germany is home to many companies that meet the criteria which have been established earlier. In appendices 2 and 3, two lists from scientific articles will be the source of inspiration for this new sample. All companies included in these lists were subject to an in-depth study to determine if they could be included in the sample. Ten companies submitted to this in-depth study were finally selected.

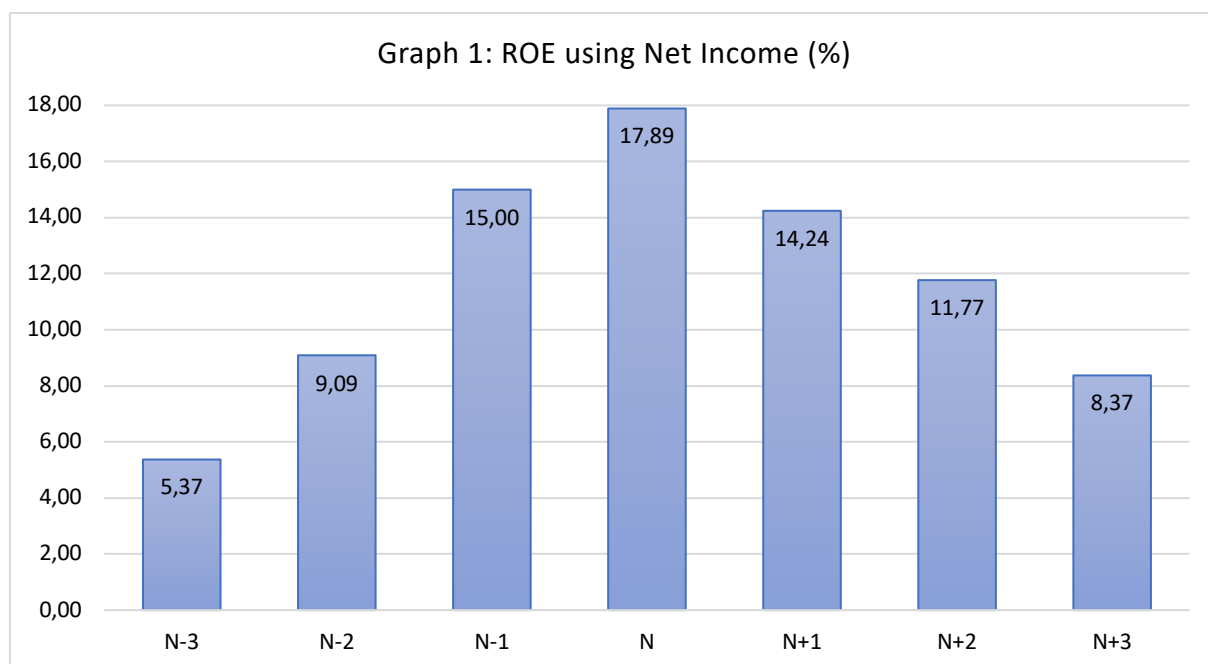
Table 3: International Niche Market Leaders acquisitions, 2nd sample

INMLs	Acquiring Companies	M&A Year
KACO	Zhongding Sealing Parts	2014
Kokinetics	AVIC	2014
Koki-Technik Transmission Systems	AVIC	2014
Renesas Electronics Europe	Tianma Microelectronics	2014
Schumag	Meibah International	2014
Putzmeister	Sany Heavy	2012
Kiekert	Hebei Lingyun	2012
Rohde	Hyeria Communications	2012
Preh	Joyson Investment	2011

In a second step, the evolution of the results of these different ratios will serve as an anchor point for addressing previously discussed companies. This may reveal similarities and lead to further analysis regarding the Belgian HCs.

In order to examine effectively the various graphs resulting from the sample of companies, it is necessary to establish a way of assessing the influence, significant or not, of the acquisition event on the financial ratios. Unfortunately, there are insufficient comparable studies to provide valuable benchmarks. As a consequence, the analysis has been limited to examining the evolution of financial ratios around the acquisition activity and describing its positive or negative impact, and whether or not it is significant according to a purely graphic perception.

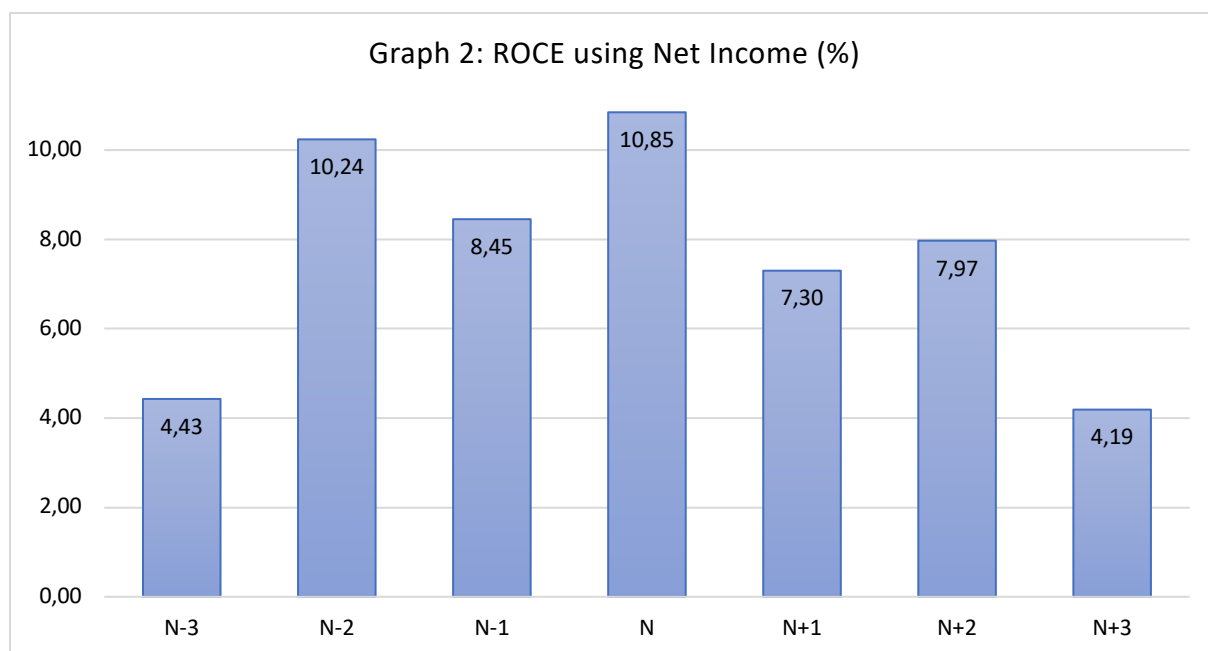
Then, within the first wholly Belgian sample, three companies (BekaertDeslee, Pranarom and Saluc) were finally analysed individually. These were the only cases of the first sample for which financial data were available. The purpose of this initiative is to provide more information on the relevance and accuracy of the model established by the larger sample, on the one hand, and to see how well these Belgian HCs are doing after having been acquired, on the other hand.



From this Return on Equity graph, we have an overview of the average proportions the measure can take among International Niche Market Leaders. We can also clearly imagine a tendency curve around the acquisition event that would look slightly Gaussian. In the years prior to the acquisition, the ROE of the acquired companies seems to increase significantly before decreasing afterwards. Overall, the evolution of the ratio is very symmetrical regarding the year of the acquisition. But companies seem to maintain the ROE at a given value, even if it falls only to 8.37, almost twice in three years before the acquisition.

This evolution is undoubtedly due to the decrease in shareholder equity. As the acquisition is approaching, cash flow increases and net profit (cfr net profit margin) as well. Based on this graph, we can consider that the acquisition has a positive impact if this event is anticipated. This anticipation greatly improves the ratio, which still tends to decline to more common values later on.

Concerning the first graph of Appendix 4, we can see that Saluc's ROE has an opposite variation compared to this model, although the ratio is better in N+3 than in N-3. Similarly, for Pranarom, its ROE declined throughout the 7 years. The impact of the acquisition therefore seems negative, although from year N onwards, its fall seems to stabilise slightly. The ROE of BekaertDeslee is not any better than the others, even if its profile is positive during the anticipation of the acquisition.

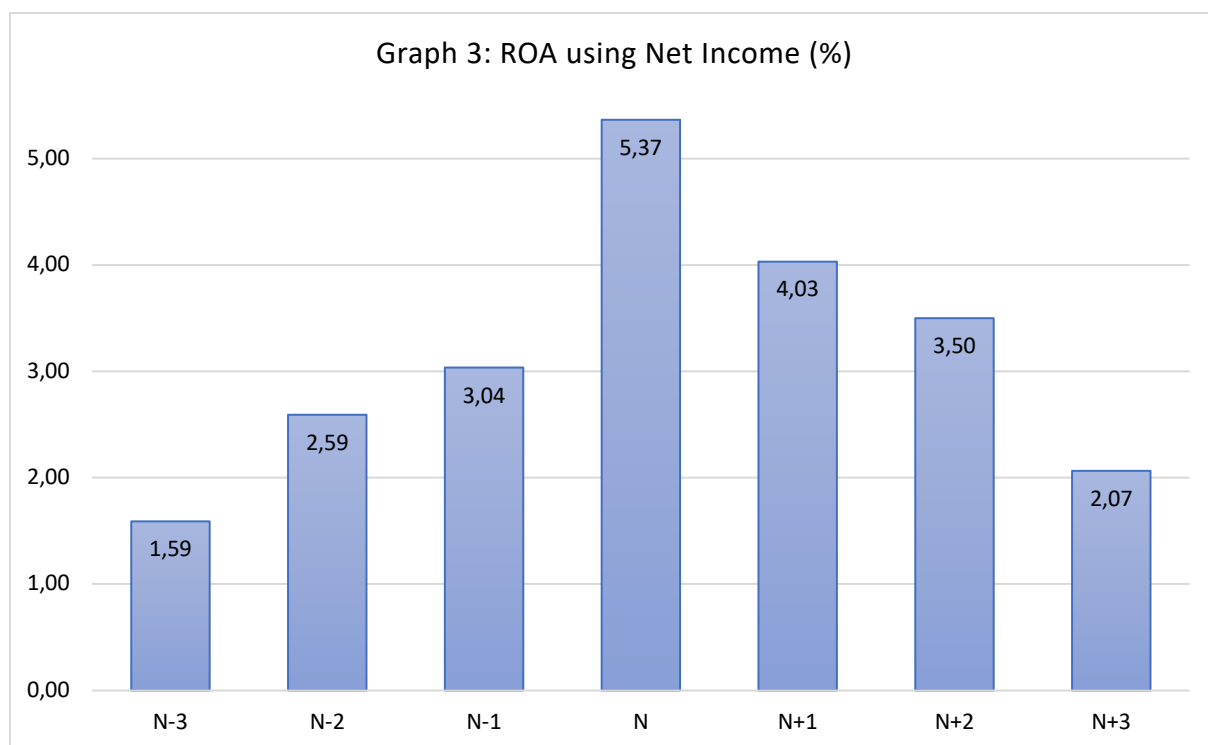


If a linear trend curve was to be drawn, it would show a slight decrease. Indeed, the Return on Capital Employed seems to have declined over the years. Moreover, the ratio is not very stable. It significantly improved until the acquisition, and then gradually felt back to 4.19% afterwards.

At best, in year N, the ROCE elements were quite healthy. Indeed, overall EBIT is better while shareholders' equity has decreased. We clearly notice a better ROCE in year N, yet the lack of stability in the evolution of this ratio after the acquisition does not allow us to assume a particular trend and impact due to the acquisition.

By the overall improvement in EBIT and the nature of the graph, it can be concluded that at the time of the acquisition, the companies have their best ROCE. It means that they have a better borrowing rate and distribute more profit to investors. However, investors will prefer a growing ROCE that is not too volatile.

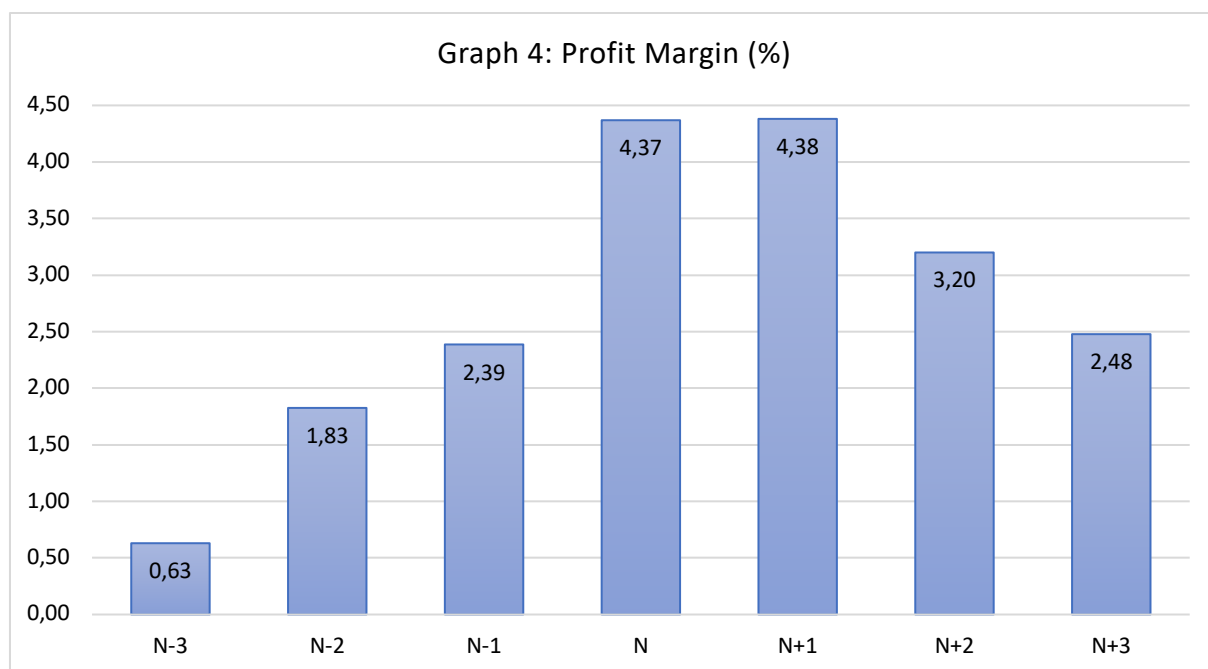
Regarding the Belgian INMLs, BekaertDeslee undergoes exactly the same development as the companies in the established model, although the variation is greater. On the other hand, both Pranarom and Saluc are experiencing a decline in this ratio. Indeed, it decreases sharply before the acquisition but then changes positively. Please see at the Appendix 4 in order to get a visual overview of this evolution.



This ratio gives an overall idea of the health of a company. Once again, what is obvious is the shape of the graph. It seems that this ratio is more attractive in the year of acquisition. This M&A event is again making the ratio very volatile: unfortunately, investors clearly appreciate stability.

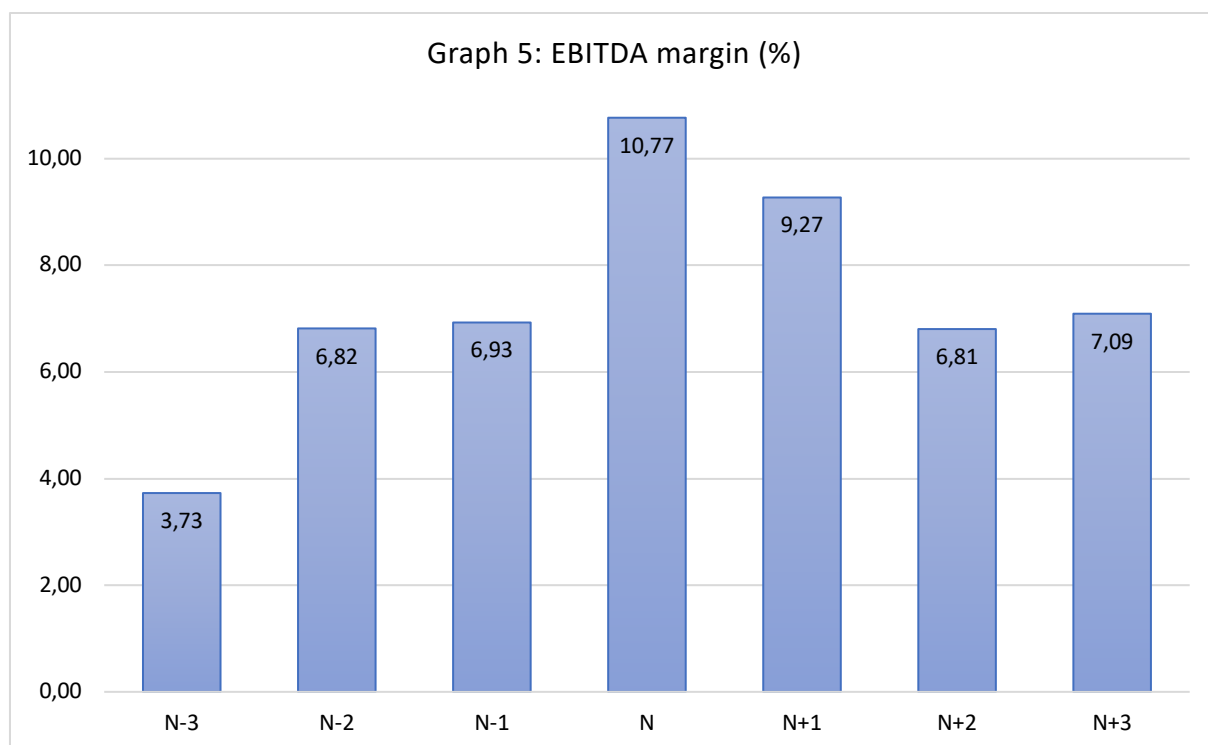
The chart is very symmetrical; however, a slight increase can be seen in the use of assets to generate profit after the acquisition. Still, there is room for improvement, although this ratio should be analysed over a longer term.

Once again, the shape of this graph looks like a Gauss curve. In the same way, illustrated in Appendix 4, the company BekaertDeslee is the most faithful to the model. As previously identified, the Return on Assets of the other two companies is not performing well in the pre-acquisition period. However, Saluc's ROA improved significantly after the acquisition, while Pranarom's one seems to remain constant at the level reached in the year in which the company was acquired.



Investors use this ratio to find out what percentage of net profit a company has earned at the end of the year. According to the graph, this margin is increasing sharply when anticipating the acquisition. We note that companies benefit more from their income after the acquisition than before. This is therefore a good point for the impact of the acquisition on the corporate performance.

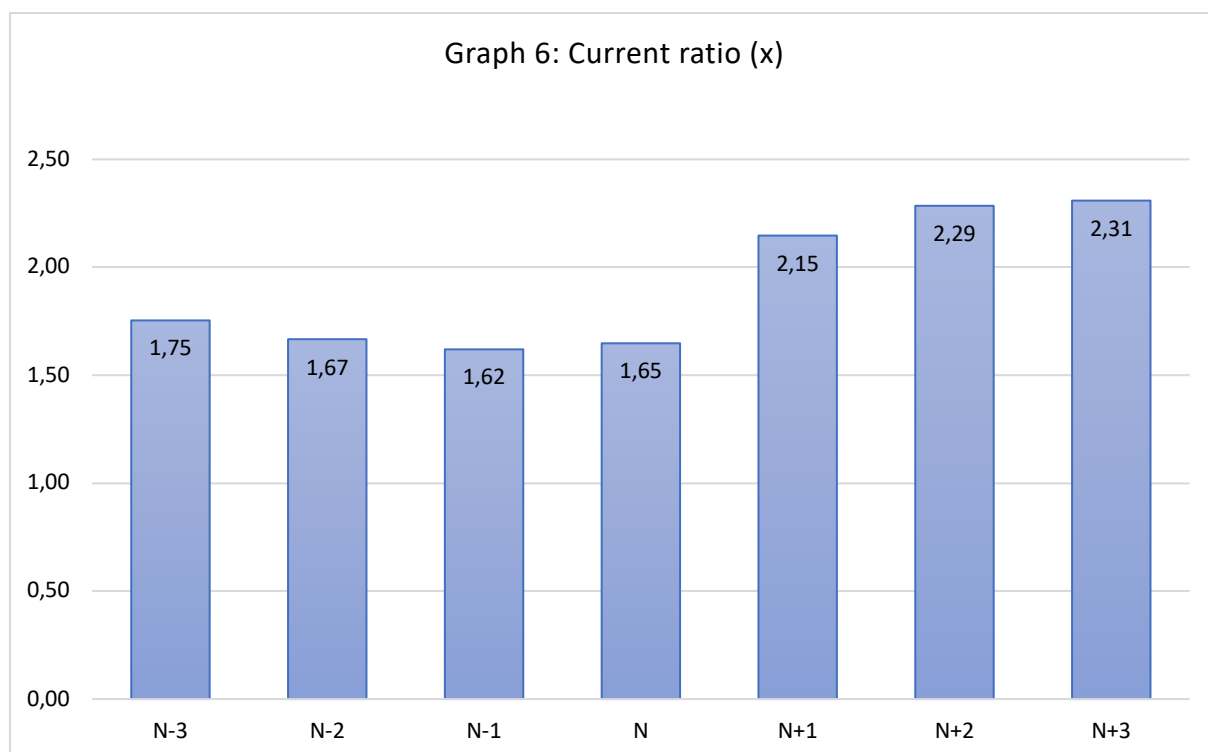
Since this appears to be true for each of the profitability graphs, the mattress company's profit margin evolves, in a more extreme way, in the same direction as our companies whose graph above is a reflection of. Its curve follows a trend of growth before the takeover, but then drops significantly to a value even lower than the sample one and lower than its values before being acquired. An interesting point is that, in the meantime, the ratio climbs to 38.65, much higher than the figures reached by the sample used as a model. The profit margin of Saluc fluctuates in the opposite direction to the chart above, but benefits from the acquisition since its margin is better in N+3 (19.48) than in N-3 (13.85). Finally, Pranarom has a really volatile profit margin which remains, three years after the acquisition, more or less identical to its starting point. These findings can be checked in the 4th graph of Appendix 4.



EBITDA is a driver of the M&A activity. It is an approximation to determine a company's ability to generate cash flow. Since the greater the margin, the better, the aim is to achieve constant growth. Although it fluctuates a little, it can be assumed that the EBITDA margin is acceptable for the companies used in the sample. Indeed, its value does only increase as the acquisition approaches. It loses a little value just after the acquisition incident but seems to rise again later on. Furthermore, it is much higher 3 years after acquisition than 3 years before.

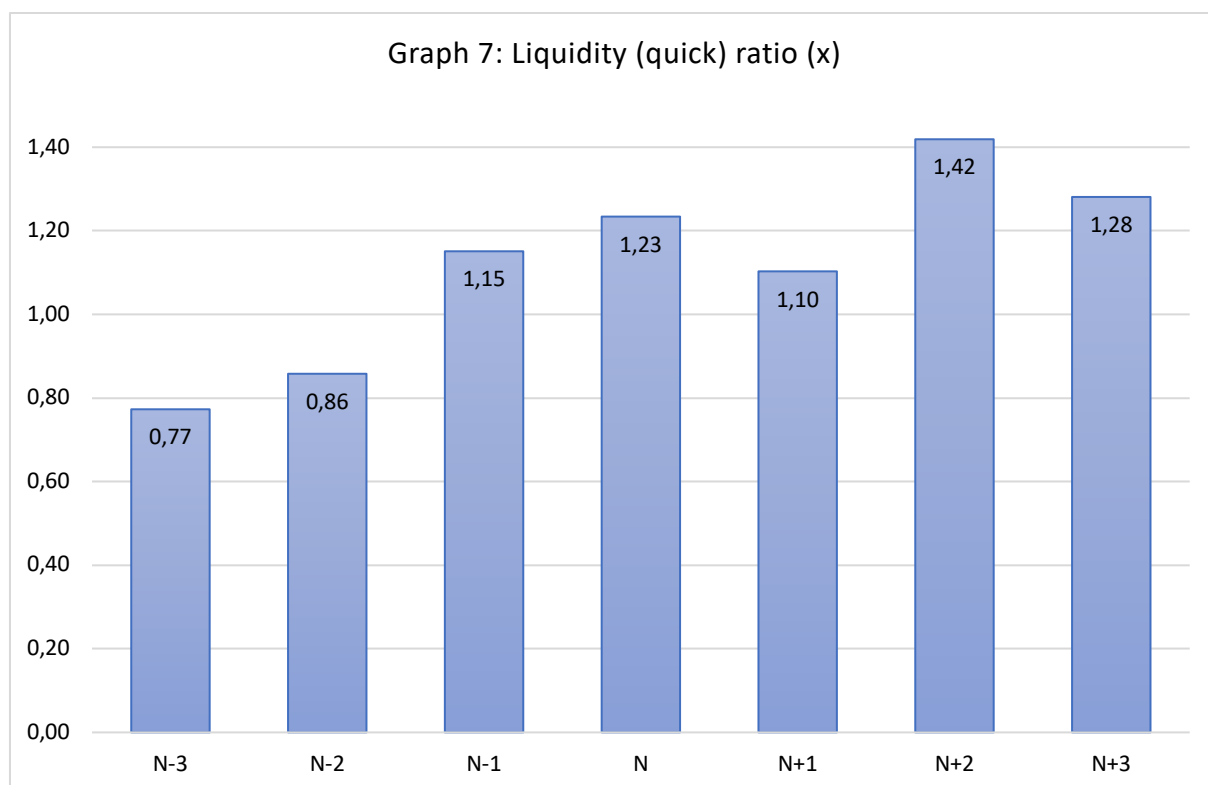
As the graphs may be confused, the evolution of the EBITDA margin is very similar to the profit margin one. The EBITDA margin actually takes into account both the profit margin and the cost of depreciation/amortization.

The three curves corresponding to the Belgian companies also show a trend over time identical to the profit margin (see in Appendix 4). However, it should be noted that their values are higher in the case of the EBITDA margin. Much as for Pranarom and Saluc the analysis, so identical to the previous page, can end there, for BekaertDeslee not. Indeed, its curve evolves in the same way in the case of the profit margin as in the case of the EBITDA margin. But, after the acquisition, in N+1 it falls below zero, probably the costs related to the sharp amortisation.



Within this sample, the general liquidity ratio seems to be fairly stable. However, it is much better in the post-acquisition phase than before. We observe that it rises and stabilizes above 2.0 after the acquisition and continues to slightly increase thereafter. Reading the graph, we can see that, as the transaction is approaching, the liquidity decreases before increasing, benefiting somewhat from a positive effect of this external contribution.

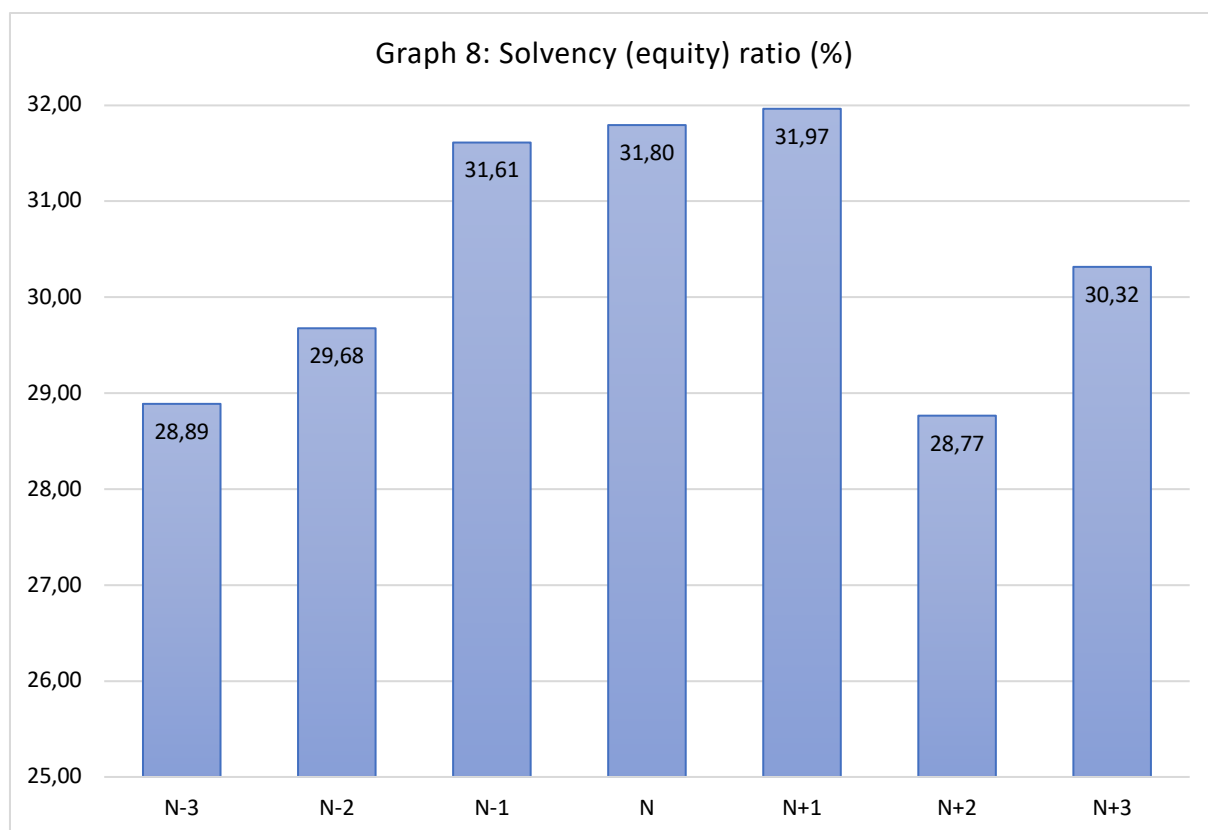
Individually, it is difficult to argue that this ratio is positively impacted by the merger/acquisition. However, the companies studied appear to be in a better position to meet their short-term commitments in the years following the targeted activity. As shown in the graph in Appendix 4, this is also the case for BekaertDeslee and Saluc. With exaggerated jumps in value, the BekaertDeslee line tracks the values of the benchmark companies. On the other hand, Saluc's current ratio does not stop growing. Note that, in the last year of sampling, both companies experienced a slight decrease in their current ratio, unlike the mean of the sample above. Finally, Pranarom is suffering from an almost continuously decreasing performance, reflecting a more negative impact of the acquisition than the two other companies.



The current ratio is sometimes biased by large amounts attributed to inventories. Because these items are very illiquid, the quick ratio is used to provide a better picture of short-term bonds coverage. This ratio is generally around 1, which means that we can directly assume, regarding the graph, that it is rather good for the HCs from our sample.

Despite a significant discrepancy between the values of two ratios identified, the result of this liquidity ratio remains fairly comfortable. It is undeniable that a significant amount of less liquid current assets inflates the current ratio. However, in addition to these disparities, the curves are following an identical curve for both ratios. Indeed, the quick ratio improved significantly over the three pre-merger years to reach a peak of 1.23 (in year N), but gently continues up to 1.28 in N+3. This trend is relatively similar to the one observed for the current ratio.

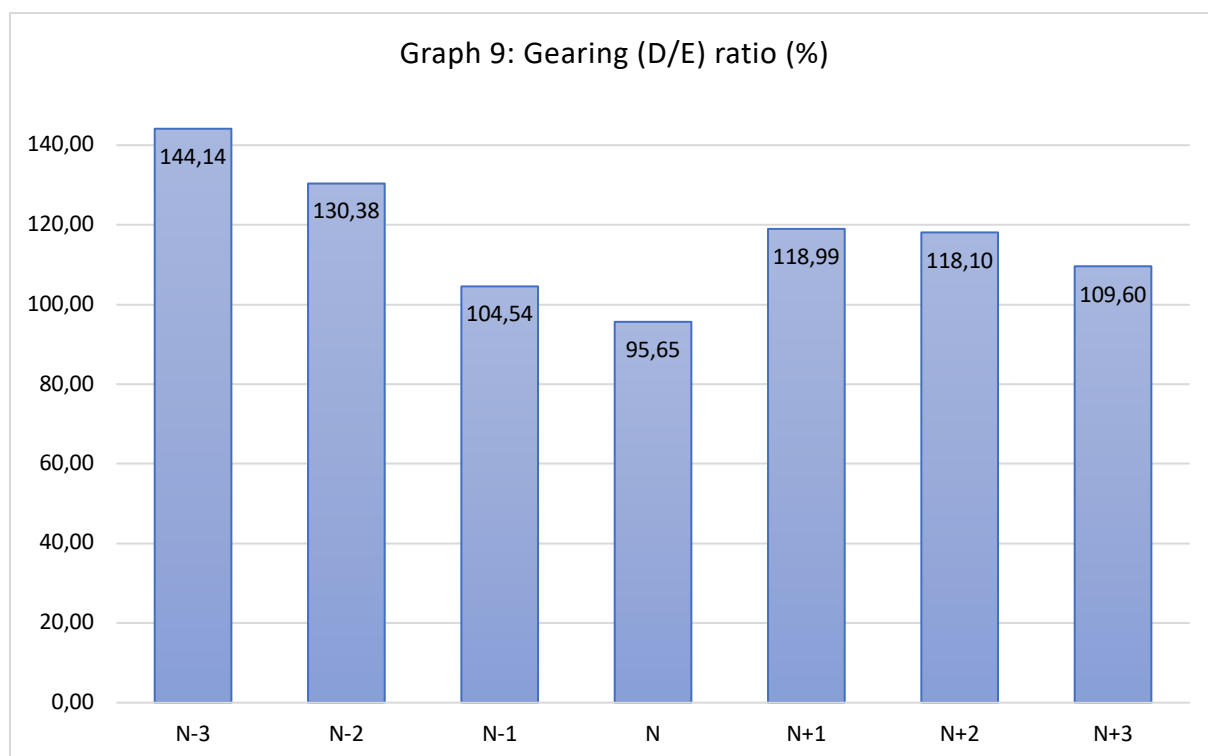
With regard to the three Belgian INMLs, the evolution of both ratios is also similar. Although the values are smaller for this liquidity ratio, it is increasing slightly in the case of Saluc and decreasing slightly as for Pranarom. BekaertDeslee reached a new all-time high in year N, and saw its ratio decreasing slightly afterwards, while remaining better than in the years before the acquisition (see Appendix 4).



The shareholder equity ratio is calculated by dividing the equity by the total company's assets. This ratio reveals the amount of assets which are financed by equity rather than debt. Actually, it corresponds to the amount on which investors have a right of claim.

The closer the result is to 100%, the less debt the company incurs to finance its assets. For example, the above INMLs have financed up to 70% of their assets through debt. In order to achieve a certain security in terms of debt payment, it is better to have a ratio above 50%. In the case of our business model, we are dealing with leveraged companies that have to pay interest/dividends whether or not the company makes a profit because the risk is higher for creditors. They will eventually have to pay more cash to pay off their interest and debts. We can observe that the acquisition has a positive impact on this ratio, although it goes down by 3% after the acquisition.

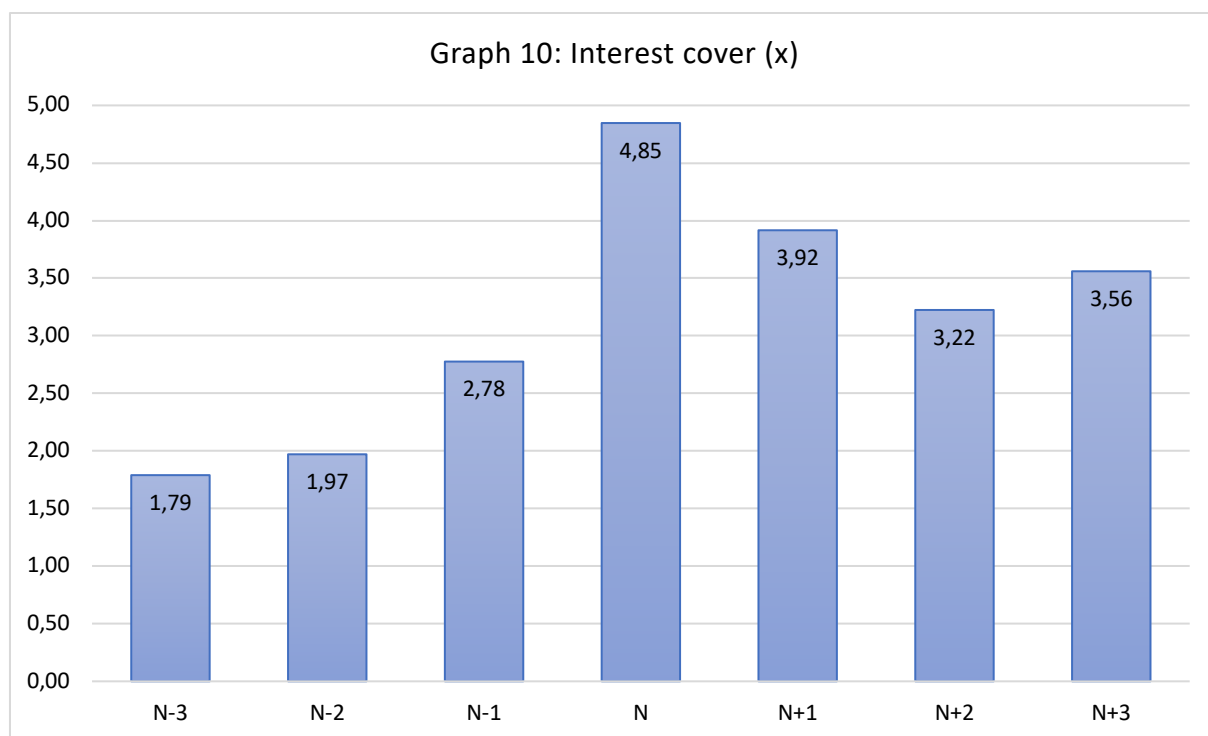
In contrast to the sample, the merger activity between DesleeClama and Bekaert Textiles appears to be beneficial for its equity ratio, which is well above 50% and is, in overall terms, growing. Appendix 4 shows that the other two companies are a little more in line with the values of the model. The Pranarom ratio increased modestly throughout the study period.



On average, we can note that the debt-to-equity ratio has decreased since N-3. However, it increases once the company has been acquired. Debt is used to raise financing. Unlike a company whose future objective would be to acquire another one, the latter therefore seem inclined to reduce their debt when an external financing contribution is going to be made.

In relation to this ratio, this acquisition is therefore highly welcome. Even if a gearing ratio above 1.4 is not a concern, the acquisition allows the company to significantly reduce its debt (regarding the shareholders' fund). This evolution is therefore a good thing for the acquired INMLs, although it can be seen that the ratio has increased in comparison to year N. Nevertheless, this increase is slightly smoother than the decreasing slope experienced in anticipation of the acquisition.

In Appendix 4, we note that the three companies have a radically different debt ratio in terms of value. BekaertDeslee has a very low ratio that has even slightly decreased since the first year considered on the graph. The company called Pranarom, on the other hand, had a rather worrying debt ratio of premium on board, but it has radically decreased to finally only worth 154.09. Except just before the acquisition with a big boom, Saluc's ratio has only decreased too. Over all the years under study, this ratio is quite indicative of good vibes for these Belgian companies.



It is important to know if a company is able to pay the interest on its borrowings over time. Depending on internal policy, a company will maintain a higher ratio or not. It will also depend on the stability of the industry. It is the stability of the EBIT that comes into play: the more it is, the more easily its interest will be covered.

It is said that this ratio must be at least above 1.5. And since the acquisition time span makes EBIT more volatile, it is probably worthwhile to target an even higher ratio. In relation to the INMLs studied interest coverage ratio, we can say that their ratios are high and very moving.

As regard with the appendix 4, the mattress company had a huge fluctuation and its ratio dropped down to -5 in N+1. This means that it did not have enough earnings to repay its interest charges. On the other hand, the two other companies manage to maintain a ratio that guarantees them a degree of security.

2.3. Discussions

2.3.1. Mergers and acquisitions

In the first section of the discussions, a report of the elements collected on the selected Belgian International Niche Market Leaders will be provided. The table below shows the reasons why companies acquire hidden champions. In comparison with theory, this section focuses on the factors that benefit HCs after being acquired and factors that attract buyers.

Table 4: Motives to acquire Belgian International Niche Market Leaders

	EHP	IP Trade	Bekaert	Pranarom		Saluc	Tot
				Inula	Ardian		
Rapid growth	✓		✓	✓	✓	✓	5
Less competition		✓	✓				2
Increase entry barriers							0
Risk diversification				✓			1
Client base		✓	✓				2
Product mix			✓	✓			2
New geographical market			✓	✓		✓	3
Bargaining power	✓	✓		✓		✓	4
Unique capabilities	✓						1
Economies of scale	✓	✓	✓				3
Economies of scope			✓				1
Financial advantages		✓					1
International credibility		✓					
R&D potential		✓					
Virtuous exchange		✓					
Achieve great challenges					✓		

First of all, and in line with the theoreticians who have discussed the subject of mergers and acquisitions, the primary reason for engaging in acquisition activity is the opportunity for rapid growth. These transactions are profitable because companies acquire, after having assessed the potential of the target company, a business whose success has already been proven. At the same time, it is also valuable for the acquired company, which sees its capabilities being multiplied as a result of belonging to a much larger group.

Secondly, the fact that these companies are more convincing as a result of the merger is largely pinpointed by the global leaders on whom the survey was conducted. Indeed, being part of a larger entity offers greater control, both over suppliers and customers. The more market shares you hold, the more bargaining power you enjoy. This is even more attractive when the merger is horizontal.

The financial contribution is also highlighted. The acquisition allows the various parties to benefit from economies of scale. When production can be merged, it is clear that the economic potential is interesting, since synergies are created, and duplicate operations can be eliminated. As a player in a very specific market, some companies also mention the simple financial support that can be provided by an entity with greater resources.

As strongly supported by the Deloitte study, geographical expansion is also supported by our surveyed companies. The merger of two companies makes it easy to enter a new market if the new partner entity has already conquered the target market. Therefore, this collaboration supports the development and expansion of the distribution markets for both the acquiring and the acquired entity. Moreover, a company talks about international credibility acquired through this external support.

While the diminution of competition has been mentioned twice, no one seems to be interested in increasing barriers to entry. Some sources suggest that the decrease in competitiveness allows companies to focus more on improving their products/services. In relation to this, and one of the most obvious motivations for acquiring a hidden champion, is the high quality of their offer. Foreign acquirers therefore purchase not only a successful business, but also an exceptional know-how. However, this reason has only been ticked by EHP, and by IP Trade which insists more on the acquisition of an enormous R&D potential.

When the sectors of companies are strongly linked, we notice that the acquisition also serves to strengthen, or even broaden, a customer base and to offer a broader product mix. That said, the main objective is to strengthen a leadership position and diversify a portfolio, more than diversifying the risks faced. Moreover, risk diversification only appeared once and seems to be an additional motivation to the primary ones.

Despite the small number of companies surveyed, it is possible to identify trends and have a clearer idea of the motivations that drive INMLs to engage in acquisition activities. It is clear that this synthesis of empirical contributions is in line with the literature reviewed. These findings broadly confirm the interest of potential buyers towards hidden champions. This investigation confirms the importance of four specific reasons. The first is that the pursuit of rapid growth is often driven by an acquisition activity. As the theory confirms, market expansion is a second important reason why companies rely on the acquisition of external businesses. These externalization activities also seem to respond to a desire for better bargaining power through the acquisition of a business holding market shares, customers and suppliers. Finally, our sample confirms the willingness to achieve economies of scale. These financial reasons were already strongly developed in the literature.

However, one point was mentioned very rarely by respondents and in the publications used for the practical part. The authors insist on the high product range of INMLs. This characteristic, according to the experts, makes companies envious. There is no doubt that foreign companies are attracted to the know-how and technology that HCs possess. Nevertheless, this reason is not unanimously acknowledged by the surveyed companies. Two elements qualify this finding, the first being the limit of our sample, which is not especially a complete picture of reality. Secondly, this reason also seems to be implicit, as it is obvious that it is important for the examples discussed. In the case of mergers, for instance, the knowledge mix is clearly essential, the greater the mutual quality, the more the combination will be effective.

2.3.2. Corporate Performance

As a reminder, the corporate performance has been analysed from a financial point of view, and more particularly from the perspective of financial ratios. First of all, two graphs support what the theory states. According to the literature, hidden champions appreciate a good return on equity, particularly thanks to exceptional know-how that improves incomes through intermediaries but also thanks to less external investment compared to other industries. As a shortcut, it is said that a ROE below 10% is poor. Although this is the case for our sample, acquisition results in a positive evolution of the INML ratio.

Secondly, Simon Hermann claims that HCs have a very low debt-to-equity ratio. On this subject, we can see that the acquisition improves the situation. The ratio falls to a value almost equal to 1, reducing the risks for investors to a minimum.

For greater precision about the Belgian companies, three redundant events were analysed regarding their evolution. Concerning BekaerDeslee, the appendix 1.3.2. shows that the net income is much better in the year of acquisition than throughout the period studied. In the same way, cash flows are good at this precise moment as well. On the contrary, Saluc's key financial figures (appendix 1.5.2) reveal a net income and cash flows at the lowest level of the time span during the year N. These two trends are particularly noticeable on the various graphs of the ratios and explain the look of the curves for both companies.

Pranarom's balance sheet, available in appendix 1.4.2, explains why its D/E ratio is improving significantly. There has been a significant decrease in non-current liabilities and loans. In addition, equity capital is increasing at the same time. This results in a better D/E ratio. Although one cannot conclude much from this, it can be seen that the acquisition allows the three Belgian companies to maintain their gearing ratio at a healthy value. For the other ratios, we must stick to the second sample, as the curve of these companies is so volatile and not very meaningful.

In order to provide added value, we have performed a statistical student test. This means testing two samples to compare their average. For this study, the parametric statistical tests are used to compare the average of the 3 pre-acquisition years of the 9 sampled companies with the average of the 3 post-acquisition years. As a result, the student test rejects or not the H_0 hypothesis telling that the difference between the averages is equal to 0. If the calculated

p-value is lower than the alpha significance level, the test will support the alternative hypothesis. In such a case, the test will return key information on the impact of M&A on the concerned ratio.

Let Z be a standard normal random variable and let W be a χ^2 distributed variable with v degrees of freedom. Then if Z and W are independent,

$$T = \frac{Z}{\sqrt{\left(\frac{W}{v}\right)}},$$

is said to have a t distribution with v df (Wackerly, Mendenhall, & Scheaffer, 2014).

The student test has been conducted one time for each ratio. The null hypothesis was H0 - the difference between the two means is equal to zero, whereas the alternative hypothesis was Ha - the difference is greater than zero. It consists of a test of two independent and one-sided samples. Each variable is composed of 27 observations (1 value for each of the 3 years and for the 9 companies, N = 27). Here is a table with the result of the p-values, compared to the level of significance alpha = 0.05.

Table 5: Student test p-values with Ha = the post-acquisition average is higher than the pre-acquisition

Ratio	p-values
ROE	0,034***
ROCE	0,103*
ROA	0,047***
Profit Margin	0,110*
EBITDA	0,267
Current	0,557
Liquidity	0,553
Solvency	0,181*
Gearing	0,517
Interest	0,248*

From this statistical test come two important insights. We can reject two null hypotheses and therefore retain the alternative one. Indeed, with a p-value below the alpha threshold value, we must reject the null hypothesis with an estimated error probability of less than 5%. Thanks to this test, it is possible to conclude that the impact of mergers and acquisitions on the ROE and ROA ratios is significantly positive, at least in the case of the nine concerned International Niche Market Leaders.

By widening the margin of error to 10 percent, we cannot add any ratio that has been positively impacted. However, with less than a one-in-four chance of being wrong, it can be noted that M&As also have a positive effect on the following ratios: ROCE, Profit Margin, Solvency and Interest cover.

In contrast, we note a p-value greater than 0,5 for the gearing ratio. This is in line with the theory, stating that it is more interesting to keep it low in order to reduce its debts. Nonetheless, this p-value shows that HCs have a slight tendency to reduce their debt/equity ratio after having undergone an acquisition, even if far from being significant.

Finally, it can be seen that, in general, despite a lack of significance, mergers and acquisitions have a positive impact on the financial ratios discussed in this thesis. In the next section, and before concluding, some limitations will be presented to challenge the findings.

Limitations

At this point, let us once again specify the purpose of the approach undertaken throughout this thesis. The investigated concerns are about the fact that the impact of a merger or acquisition is significantly positive or negative on the performance of the International Niche Market Leaders' financial ratios. This section discusses the various shortcomings of the study.

The specificity of the scope of the study, Belgian Hidden Champions which have been acquired, is very restrictive. This greatly reduces the possibility of cases and is reflected in the sample sizes. Due to time constraints, it was difficult to find more cases corresponding to the criteria used. In addition, when a case met the expectations of the study, it was necessarily part of it. However, the analysis was only carried out considering the single acquisition occurrence, without imagining that there may have been other M&As during the period studied.

Secondly, there is no doubt that the model used could be challenged. Financial ratios can be influenced by many factors, such as industrial drivers or market movements. In a further research study, it would be interesting to address this subject by managing to separate the impact of mergers and acquisitions from external disruptions. It would be necessary to build a model able to highlight individually the impact of M&As on corporate performance. Moreover, it is important to be careful not to analyse a ratio alone because they can be artificially inflated. Indeed, the ratios can be manipulated.

Regarding the reasons for acquisition, a few points could have been further studied. The difference between an acquisition and a merger is significant in terms of the operational objectives. Similarly, the character of the acquiring company may influence its choices. Identifying the difference between industrial companies and investment funds can be important. In this paper, these distinctions have been only slightly taken into account.

Finally, the objective of an acquisition is not always financial. The research question can be tackled from different angles. Although we have chosen to focus on financial ratios, we must remain aware of the existence of other means of evaluation. The business performance could have been assessed using organizational, social or societal indicators as well.

Conclusion

Following two observations, the issue that jointly interested a supervisor and his mastering student emerged. This thesis aims to answer the research question below:

How do the Mergers and Acquisitions impact the International Niche Market Leaders' Corporate Performance?

Focusing closely on the hidden champions, which are small companies with a global leadership position in their specific (often niche) markets, this question was broken down into two parts. The first one was oriented towards M&A motives. This paper identifies the reasons why external companies are looking for HCs. The research results emphasize the importance of rapid growth. Behind this acquisition, many entities are expecting to accelerate their business expansion. For both acquiring and acquired companies, the scope of bargaining power is very frequently mentioned. This reason is not negligible considering that it is commonly found in the literature and the cases studied. Another important point is the quest for geographical expansion. This is one of the most important reasons nowadays why companies undertake acquisition activity. It seems that HCs are also a reason for this trend. This is noticeable, for instance, with the migration of many Chinese companies to the German market. The practical examples in this thesis confirm it. Lately, scale economies are also highly valued. Research results show that this is influenced by the similarity of the companies involved in this acquisition activity. Indeed, both businesses are often very complementary.

Thereafter, the thesis attempts to assess the financial performance of HCs following an acquisition. To do so, the financial ratios and their evolution over time were analysed. Overall, our sample is performing well. Nevertheless, two ratios seem to stand out. The first is the return on equity. Tending to keep a high ROE, HCs do not deviate from this principle if they have undergone an acquisition. These companies are even doing better since acquisitions have a positive and significant impact on their return on equity. Similarly, the results are conclusive as to the rate of return on invested assets. M&As have a positive and significant effect on the evolution of ROA.

In order to better understand M&As and their impact on corporate performance, this study needs to be investigated deeper. It could be considered to continue the research and target it further on Belgium. INMLs are impressive companies and deserve special attention.

“Success is a science; if you have the conditions you get the result.” Oscar Wilde

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Appendices

European Ratios from Bureau van Dijk (Van Dijk, 2019) – First sample of the 6 Belgian companies (excluding SABCA)

Appendix 1.1: Euro Heat Pipes ratios

Local registry filing/Unconsolidated	31/12/2018		31/12/2017		31/12/2016		31/12/2015	
	USD		USD		USD		USD	
	12	months	12	months	12	months	12	months
	Local	GAAP	Local	GAAP	Local	GAAP	Local	GAAP
Exchange rate: EUR/USD	1.14500		1.19930		1.05410		1.08870	
Profitability ratios								
ROE using P/L before tax (%)	0.56		-180.28		6.12		1.44	
ROCE using P/L before tax (%)	2.76		-63.02		7.06		4.72	
ROA using P/L before tax (%)	0.08		-21.70		0.53		0.14	
ROE using Net income (%)	0.56		-180.28		6.12		5.45	
ROCE using Net income (%)	2.76		-63.02		7.06		8.26	
ROA using Net income (%)	0.08		-21.70		0.53		0.52	
Profit margin (%)	0.11		-32.34		3.09		0.71	
Gross margin (%)	n.a.		n.a.		n.a.		n.a.	
EBITDA margin (%)	7.70		-26.49		10.88		10.03	
EBIT margin (%)	2.23		-31.63		3.80		2.65	
Cash flow / Operating revenue (%)	5.59		-27.20		10.17		10.08	
Enterprise value / EBITDA (x)	n.a.		n.a.		n.a.		n.a.	
Market cap / Cash flow from operations (x)	n.a.		n.a.		n.a.		n.a.	
Operational ratios								
Net assets turnover (x)	1.29		2.06		1.54		1.78	
Interest cover (x)	1.09		-18.74		2.52		1.37	
Stock turnover (x)	1.72		1.57		0.19		0.22	
Collection period (days)	117		125		86		48	
Credit period (days)	121		209		222		168	
Export revenue / Operating revenue (%)	n.a.		n.a.		n.a.		n.a.	
R&D expenses / Operating revenue (%)	n.a.		n.a.		n.a.		n.a.	
Structure ratios								
Current ratio (x)	1.69		1.07		1.06		1.04	
Liquidity ratio (x)	0.81		0.44		0.05		0.06	
Shareholders liquidity ratio (x)	0.35		0.58		3.45		7.48	
Solvency ratio (Asset based) (%)	14.05		12.03		8.59		9.53	
Solvency ratio (Liability based) (%)	16.34		13.68		9.40		10.54	
Gearing (%)	340.32		270.04		53.16		49.21	
Per employee ratios								
Profit per employee (th USD)	0		-64		6		1	
Operating revenue per employee (th USD)	202		196		179		190	
Costs of employees / Operating revenue	36.58		43.66		38.38		37.56	
Average cost of employee (th USD)	74		86		69		71	
Shareholders funds per employee (th USD)	41		35		91		94	
Working capital per employee (th USD)	115		79		876		801	
Total assets per employee (th USD)	291		293		1,054		985	
Local registry filing/Unconsolidated								
	31/12/2014		31/12/2013		31/12/2012		31/12/2011	
	USD		USD		USD		USD	
	12	months	12	months	12	months	12	months
	Local	GAAP	Local	GAAP	Local	GAAP	Local	GAAP
Exchange rate: EUR/USD	1.21410		1.37910		1.31940		1.29390	

Profitability ratios				
ROE using P/L before tax (%)	6.10	2.44	1.13	2.73
ROCE using P/L before tax (%)	7.79	4.61	3.42	4.34
ROA using P/L before tax (%)	0.66	0.28	0.14	0.36
ROE using Net income (%)	3.43	5.71	15.28	14.11
ROCE using Net income (%)	5.62	7.10	13.21	11.43
ROA using Net income (%)	0.37	0.65	1.95	1.88
Profit margin (%)	2.96	1.32	0.62	1.34
Gross margin (%)	n.a.	n.a.	n.a.	n.a.
EBITDA margin (%)	14.04	14.25	13.20	12.98
EBIT margin (%)	4.62	3.39	2.72	3.44
Cash flow / Operating revenue (%)	11.08	13.96	18.88	16.50
Enterprise value / EBITDA (x)	n.a.	n.a.	n.a.	n.a.
Market cap / Cash flow from operations (x)	n.a.	n.a.	n.a.	n.a.
Operational ratios				
Net assets turnover (x)	1.68	1.40	1.26	1.26
Interest cover (x)	2.76	1.72	1.30	1.64
Stock turnover (x)	0.26	0.26	0.30	0.37
Collection period (days)	48	113	80	38
Credit period (days)	216	279	193	190
Export revenue / Operating revenue (%)	n.a.	n.a.	n.a.	n.a.
R&D expenses / Operating revenue (%)	n.a.	n.a.	n.a.	n.a.
Structure ratios				
Current ratio (x)	1.05	1.04	1.05	1.03
Liquidity ratio (x)	0.06	0.09	0.11	0.11
Shareholders liquidity ratio (x)	4.44	3.18	2.25	1.65
Solvency ratio (Asset based) (%)	10.77	11.42	12.73	13.33
Solvency ratio (Liability based) (%)	12.07	12.89	14.58	15.38
Gearing (%)	84.50	80.69	74.35	82.91
Per employee ratios				
Profit per employee (th USD)	7	3	2	3
Operating revenue per employee (th USD)	238	262	241	231
Costs of employees / Operating revenue	35.33	37.31	36.36	35.72
Average cost of employee (th USD)	84	98	88	82
Shareholders funds per employee (th USD)	115	142	132	114
Working capital per employee (th USD)	802	887	724	522
Total assets per employee (th USD)	1,070	1,244	1,040	854

Appendix 1.2: IP Trade ratios

Local registry filing/Unconsolidated	31/03/2018	<u>2017</u>	31/12/2016	31/12/2015
	USD		USD	USD
	15 months		12 months	12 months
	Local GAAP		Local GAAP	Local GAAP
Exchange rate: EUR/USD	1.23210		1.05410	1.08870
Profitability ratios				
ROE using P/L before tax (%)	-75.60		16.44	6.20
ROCE using P/L before tax (%)	-64.34		n.a.	n.a.
ROA using P/L before tax (%)	-11.47		8.20	2.77
ROE using Net income (%)	-152.52		16.40	6.10
ROCE using Net income (%)	-105.47		n.a.	n.a.
ROA using Net income (%)	-18.51		8.18	2.73
Profit margin (%)	-22.44		10.89	4.62
Gross margin (%)	n.a.		31.51	41.94
EBITDA margin (%)	-12.34		11.28	9.88
EBIT margin (%)	-21.55		9.45	8.05
Cash flow / Operating revenue (%)	-27.00		12.70	6.38
Enterprise value / EBITDA (x)	n.a.		n.a.	n.a.
Market cap / Cash flow from operations (x)	n.a.		n.a.	n.a.
Operational ratios				

Net assets turnover (x)	2.99	1.48	1.02
Interest cover (x)	-24.30	n.a.	n.a.
Stock turnover (x)	1.47	9.80	13.81
Collection period (days)	169	244	253
Credit period (days)	66	85	50
Export revenue / Operating revenue (%)	n.a.	n.a.	n.a.
R&D expenses / Operating revenue (%)	n.a.	n.a.	n.a.

Structure ratios

Current ratio (x)	0.79	1.33	1.42
Liquidity ratio (x)	0.37	1.17	1.31
Shareholders liquidity ratio (x)	7.78	54.99	3.11
Solvency ratio (Asset based) (%)	15.17	49.88	44.74
Solvency ratio (Liability based) (%)	17.88	99.50	80.96
Gearing (%)	18.91	3.25	38.43

Per employee ratios

Profit per employee (th USD)	-64	44	11
Operating revenue per employee (th USD)	287	403	232
Costs of employees / Operating revenue (%)	40.78	19.13	30.22
Average cost of employee (th USD)	117	77	70
Shareholders funds per employee (th USD)	85	267	173
Working capital per employee (th USD)	277	219	148
Total assets per employee (th USD)	561	535	387

Local registry filing/Unconsolidated	31/12/2014	31/12/2013	31/12/2012	31/12/2011
	USD	USD	USD	USD
	12 months	12 months	12 months	12 months
	Local	GAAP	Local	GAAP
Exchange rate: EUR/USD	1.21410	1.37910	1.31940	1.29390

Profitability ratios

ROE using P/L before tax (%)	-12.39	13.22	10.29	-917.49
ROCE using P/L before tax (%)	n.a.	n.a.	n.a.	n.a.
ROA using P/L before tax (%)	-5.71	6.29	1.03	-33.49
ROE using Net income (%)	3.80	21.60	12.39	n.s.
ROCE using Net income (%)	n.a.	n.a.	n.a.	n.a.
ROA using Net income (%)	1.75	10.28	1.24	90.10
Profit margin (%)	-9.72	6.21	0.99	-45.95
Gross margin (%)	31.58	34.10	37.15	1.10
EBITDA margin (%)	-10.07	7.35	8.33	-27.91
EBIT margin (%)	-13.61	4.36	4.56	-37.68
Cash flow / Operating revenue (%)	6.52	13.14	4.96	n.s.
Enterprise value / EBITDA (x)	n.a.	n.a.	n.a.	n.a.
Market cap / Cash flow from operations (x)	n.a.	n.a.	n.a.	n.a.

Operational ratios

Net assets turnover (x)	1.16	1.76	3.18	1.65
Interest cover (x)	n.a.	n.a.	n.a.	n.a.
Stock turnover (x)	8.66	6.70	8.78	8.89
Collection period (days)	291	165	117	151
Credit period (days)	126	65	93	113
Export revenue / Operating revenue (%)	n.a.	n.a.	n.a.	n.a.
R&D expenses / Operating revenue (%)	n.a.	n.a.	n.a.	n.a.

Structure ratios

Current ratio (x)	1.24	2.06	1.12	1.09
Liquidity ratio (x)	1.11	1.70	0.94	0.94
Shareholders liquidity ratio (x)	10.01	4.82	0.44	0.09
Solvency ratio (Asset based) (%)	46.09	47.60	10.04	3.65
Solvency ratio (Liability based) (%)	85.50	90.85	11.16	3.79
Gearing (%)	28.35	35.79	336.48	n.s.

Per employee ratios

Profit per employee (th USD)	-20	21	3	n.s.
Operating revenue per employee (th USD)	207	333	289	262
Costs of employees / Operating revenue	35.86	24.63	24.19	27.30
Average cost of employee (th USD)	74	82	70	71
Shareholders funds per employee (th USD)	163	156	28	13
Working capital per employee (th USD)	119	142	52	58
Total assets per employee (th USD)	353	328	276	359

Appendix 1.3.1: BekaertDeslee ratios

Local registry filing/Unconsolidated	31/12/2018		31/12/2017		31/12/2016		31/12/2015	
	USD		USD		USD		USD	
	12	months	12	months	12	months	12	months
	Local	GAAP	Local	GAAP	Local	GAAP	Local	GAAP
Exchange rate: EUR/USD	1.14500		1.19930		1.05410		1.08870	
Profitability ratios								
ROE using P/L before tax (%)	3.16		0.75		44.15		27.76	
ROCE using P/L before tax (%)	3.71		1.14		42.61		25.88	
ROA using P/L before tax (%)	2.14		0.51		34.99		18.25	
ROE using Net income (%)	2.43		0.67		44.03		27.98	
ROCE using Net income (%)	3.02		1.07		42.50		26.09	
ROA using Net income (%)	1.65		0.46		34.90		18.40	
Profit margin (%)	2.52		0.93		38.65		17.50	
Gross margin (%)	n.a.		n.a.		n.a.		n.a.	
EBITDA margin (%)	1.43		-1.50		37.35		6.03	
EBIT margin (%)	0.35		-2.78		36.32		3.90	
Cash flow / Operating revenue (%)	3.02		2.11		39.59		19.77	
Enterprise value / EBITDA (x)	n.a.		n.a.		n.a.		n.a.	
Market cap / Cash flow from operations (x)	n.a.		n.a.		n.a.		n.a.	
Operational ratios								
Net assets turnover (x)	1.20		0.77		1.09		1.46	
Interest cover (x)	0.61		-5.06		106.91		15.20	
Stock turnover (x)	18.61		12.48		22.78		16.48	
Collection period (days)	50		89		29		41	
Credit period (days)	33		46		21		22	
Export revenue / Operating revenue (%)	n.a.		n.a.		n.a.		n.a.	
R&D expenses / Operating revenue (%)	n.a.		n.a.		n.a.		n.a.	
Structure ratios								
Current ratio (x)	1.82		1.98		2.95		0.92	
Liquidity ratio (x)	1.66		1.82		2.72		0.69	
Shareholders liquidity ratio (x)	23.28		22.39		22.16		11.35	
Solvency ratio (Asset based) (%)	67.85		68.68		79.25		65.74	
Solvency ratio (Liability based) (%)	n.s.		n.s.		n.s.		n.s.	
Gearing (%)	4.37		4.54		4.51		8.81	
Per employee ratios								
Profit per employee (th USD)	37		17		800		180	
Operating revenue per employee (th USD)	1,468		1,851		2,069		1,028	
Costs of employees / Operating revenue	5.26		7.03		5.96		12.75	
Average cost of employee (th USD)	77		130		123		131	
Shareholders funds per employee (th USD)	1,169		2,291		1,812		648	
Working capital per employee (th USD)	149		367		139		116	
Total assets per employee (th USD)	1,724		3,336		2,286		986	
Local registry filing/Unconsolidated								
	31/12/2014		31/12/2013		31/12/2012		31/12/2011	
	USD		USD		USD		USD	

	12 months Local	12 months GAAP	12 months Local	12 months GAAP
Exchange rate: EUR/USD	1.21410	1.37910	1.31940	1.29390
Profitability ratios				
ROE using P/L before tax (%)	9.31	8.87	-12.81	12.67
ROCE using P/L before tax (%)	9.25	8.05	-10.02	12.92
ROA using P/L before tax (%)	5.75	4.38	-6.30	7.20
ROE using Net income (%)	20.85	4.64	-13.62	0.43
ROCE using Net income (%)	19.68	4.59	-10.68	2.66
ROA using Net income (%)	12.89	2.29	-6.70	0.24
Profit margin (%)	6.56	5.17	-7.99	8.68
Gross margin (%)	n.a.	n.a.	n.a.	n.a.
EBITDA margin (%)	8.54	7.65	-6.80	-5.41
EBIT margin (%)	6.29	6.02	-7.40	-5.70
Cash flow / Operating revenue (%)	16.95	4.33	-7.90	0.58
Enterprise value / EBITDA (x)	n.a.	n.a.	n.a.	n.a.
Market cap / Cash flow from operations (x)	n.a.	n.a.	n.a.	n.a.
Operational ratios				
Net assets turnover (x)	1.28	1.40	1.31	1.22
Interest cover (x)	9.67	10.67	-21.01	-3.03
Stock turnover (x)	14.35	12.65	11.52	13.22
Collection period (days)	52	42	58	54
Credit period (days)	46	29	50	24
Export revenue / Operating revenue (%)	n.a.	n.a.	n.a.	n.a.
R&D expenses / Operating revenue (%)	n.a.	n.a.	n.a.	n.a.
Structure ratios				
Current ratio (x)	0.84	0.66	0.64	0.84
Liquidity ratio (x)	0.65	0.49	0.47	0.65
Shareholders liquidity ratio (x)	9.39	4.51	4.50	5.19
Solvency ratio (Asset based) (%)	61.80	49.39	49.16	56.83
Solvency ratio (Liability based) (%)	n.s.	97.59	96.68	n.s.
Gearing (%)	11.11	23.09	23.56	20.76
Per employee ratios				
Profit per employee (th USD)	63	48	-60	67
Operating revenue per employee (th USD)	962	930	748	773
Costs of employees / Operating revenue	14.71	16.47	17.75	16.00
Average cost of employee (th USD)	142	153	133	124
Shareholders funds per employee (th USD)	678	542	466	530
Working capital per employee (th USD)	83	108	83	123
Total assets per employee (th USD)	1,097	1,097	948	932

Appendix 1.3.2: BekaertDeslee key financial figures

Local registry filing/Unconsolidated	31/12/2018 USD	31/12/2017 USD	31/12/2016 USD	31/12/2015 USD
	12 months Local GAAP	12 months Local GAAP	12 months Local GAAP	12 months Local GAAP
Exchange rate: EUR/USD	1.14500	1.19930	1.05410	1.08870
Operating revenue (Turnover)	127,694,294	88,827,249	109,660,338	91,491,536
P/L before tax	3,211,048	821,478	42,384,285	16,007,558
P/L for period [=Net income]	2,475,475	739,772	42,277,021	16,137,992
Cash flow	3,854,322	1,874,484	43,414,959	18,083,171
Total assets	149,960,471	160,125,482	121,142,934	87,726,733
Shareholders funds	101,745,909	109,974,602	96,009,694	57,673,826
Current ratio (x)	1.82	1.98	2.95	0.92
Profit margin (%)	2.52	0.93	38.65	17.50
ROE using P/L before tax (%)	3.16	0.75	44.15	27.76
ROCE using P/L before tax (%)	3.71	1.14	42.61	25.88

Solvency ratio (Asset based) (%)	67.85	68.68	79.25	65.74
Price earning ratio (x)	n.a.	n.a.	n.a.	n.a.
Number of employees	87	48	53	89

Local registry filing/Unconsolidated	31/12/2014 USD	31/12/2013 USD	31/12/2012 USD	31/12/2011 USD
	12 months Local GAAP	12 months Local GAAP	12 months Local GAAP	12 months Local GAAP
Exchange rate: EUR/USD	1.21410	1.37910	1.31940	1.29390
Operating revenue (Turnover)	84,674,650	92,022,820	78,494,286	79,620,971
P/L before tax	5,555,236	4,756,309	-6,271,455	6,911,942
P/L for period [=Net income]	12,441,747	2,486,556	-6,667,629	234,398
Cash flow	14,348,270	3,987,974	-6,200,070	459,149
Total assets	96,556,732	108,632,424	99,581,391	95,984,348
Shareholders funds	59,675,198	53,652,596	48,951,108	54,543,792
Current ratio (x)	0.84	0.66	0.64	0.84
Profit margin (%)	6.56	5.17	-7.99	8.68
ROE using P/L before tax (%)	9.31	8.87	-12.81	12.67
ROCE using P/L before tax (%)	9.25	8.05	-10.02	12.92
Solvency ratio (Asset based) (%)	61.80	49.39	49.16	56.83
Price earning ratio (x)	n.a.	n.a.	n.a.	n.a.
Number of employees	88	99	105	103

Local registry filing/Unconsolidated	31/12/2010 USD	31/12/2009 USD
	12 months Local GAAP	12 months Local GAAP
Exchange rate: EUR/USD	1.33690	1.44060
Operating revenue (Turnover)	77,450,356	93,545,323
P/L before tax	-8,168,861	-14,659,329
P/L for period [=Net income]	1,469,726	-13,121,896
Cash flow	1,745,329	-12,792,810
Total assets	96,358,592	105,644,453
Shareholders funds	24,554,389	28,280,445
Current ratio (x)	0.42	0.40
Profit margin (%)	-10.55	-15.67
ROE using P/L before tax (%)	-33.27	-51.84
ROCE using P/L before tax (%)	-21.50	-35.94
Solvency ratio (Asset based) (%)	25.48	26.77
Price earning ratio (x)	n.a.	n.a.
Number of employees	109	180

Appendix 1.4.1: Pranarom International (Inula) ratios

<i>Local registry filing/Unconsolidated</i>	31/12/2017 USD	31/12/2016 USD	31/12/2015 USD	31/12/2014 USD
	12 months	12 months	12 months	9 months
	Local GAAP	Local GAAP	Local GAAP	Local GAAP
Exchange rate: EUR/USD	1.19930	1.05410	1.08870	1.21410
Profitability ratios				
ROE using P/L before tax (%)	44.48	64.25	55.92	90.21
ROCE using P/L before tax (%)	28.36	23.30	13.44	20.39
ROA using P/L before tax (%)	9.26	10.22	6.69	11.53
ROE using Net income (%)	28.98	43.11	37.03	45.49
ROCE using Net income (%)	19.81	16.61	9.78	14.57
ROA using Net income (%)	6.03	6.86	4.43	7.75
Profit margin (%)	15.96	18.94	11.46	16.87
Gross margin (%)	n.a.	n.a.	n.a.	n.a.
EBITDA margin (%)	19.26	21.63	13.86	19.91
EBIT margin (%)	18.40	20.40	12.87	18.56
Cash flow / Operating revenue (%)	11.26	13.94	8.58	12.69
Enterprise value / EBITDA (x)	n.a.	n.a.	n.a.	n.a.
Market cap / Cash flow from operations (x)	n.a.	n.a.	n.a.	n.a.
Operational ratios				
Net assets turnover (x)	1.54	1.07	0.95	1.05
Interest cover (x)	7.40	7.39	4.68	7.46
Stock turnover (x)	2.47	2.63	2.68	2.63
Collection period (days)	63	54	53	53
Credit period (days)	54	42	46	49
Export revenue / Operating revenue (%)	n.a.	n.a.	n.a.	n.a.
R&D expenses / Operating revenue (%)	n.a.	n.a.	n.a.	n.a.
Structure ratios				
Current ratio (x)	0.60	0.66	1.31	1.19
Liquidity ratio (x)	0.23	0.25	0.74	0.45
Shareholders liquidity ratio (x)	1.23	0.46	0.24	0.25
Solvency ratio (Asset based) (%)	20.82	15.91	11.96	12.78
Solvency ratio (Liability based) (%)	26.29	18.92	13.58	14.65
Gearing (%)	154.09	333.50	488.58	463.04
Per employee ratios				
Profit per employee (th USD)	115	113	61	91
Operating revenue per employee (th USD)	721	595	536	540
Costs of employees / Operating revenue	10.49	10.66	11.83	12.99
Average cost of employee (th USD)	76	63	63	70
Shareholders funds per employee (th USD)	259	175	110	101
Working capital per employee (th USD)	309	247	211	211
Total assets per employee (th USD)	1,242	1,103	919	789
Local registry filing/Unconsolidated				
	31/03/2014 USD	31/03/2013 USD	31/03/2012 USD	31/03/2011 USD
	12 months	12 months	12 months	12 months
	Local GAAP	Local GAAP	Local GAAP	Local GAAP
Exchange rate: EUR/USD	1.37880	1.28050	1.33560	1.42070
Profitability ratios				
ROE using P/L before tax (%)	138.27	350.95	338.14	433.91
ROCE using P/L before tax (%)	16.10	55.39	43.67	42.72
ROA using P/L before tax (%)	11.31	18.43	16.76	19.25
ROE using Net income (%)	70.49	219.34	208.80	259.55
ROCE using Net income (%)	9.02	36.54	28.90	26.99
ROA using Net income (%)	5.77	11.52	10.35	11.52
Profit margin (%)	17.88	14.29	14.91	16.53

Gross margin (%)	n.a.	n.a.	n.a.	n.a.
EBITDA margin (%)	21.31	18.05	19.87	22.03
EBIT margin (%)	19.35	15.13	15.94	17.51
Cash flow / Operating revenue (%)	11.08	11.85	13.13	14.40
Enterprise value / EBITDA (x)	n.a.	n.a.	n.a.	n.a.
Market cap / Cash flow from operations (x)	n.a.	n.a.	n.a.	n.a.
Operational ratios				
Net assets turnover (x)	0.81	3.52	2.59	2.37
Interest cover (x)	9.41	10.39	8.14	11.56
Stock turnover (x)	3.45	3.27	2.78	2.83
Collection period (days)	29	56	70	55
Credit period (days)	32	38	44	26
Export revenue / Operating revenue (%)	n.a.	n.a.	n.a.	n.a.
R&D expenses / Operating revenue (%)	n.a.	n.a.	n.a.	n.a.
Structure ratios				
Current ratio (x)	1.36	1.22	1.33	1.40
Liquidity ratio (x)	0.51	0.60	0.62	0.59
Shareholders liquidity ratio (x)	0.12	0.17	0.13	0.10
Solvency ratio (Asset based) (%)	8.18	5.25	4.96	4.44
Solvency ratio (Liability based) (%)	8.91	5.54	5.21	4.64
Gearing (%)	962.98	738.60	n.s.	n.s.
Per employee ratios				
Profit per employee (th USD)	96	63	60	70
Operating revenue per employee (th USD)	536	442	405	421
Costs of employees / Operating revenue	16.10	17.15	17.53	16.66
Average cost of employee (th USD)	86	76	71	70
Shareholders funds per employee (th USD)	69	18	18	16
Working capital per employee (th USD)	152	157	175	183
Total assets per employee (th USD)	848	343	360	362

Appendix 1.4.2: Pranarom Balance sheet

Local registry filing/Unconsolidated	31/12/2018 USD	31/12/2017 USD	31/12/2016 USD	31/12/2015 USD
	12 months Local GAAP	12 months Local GAAP	12 months Local GAAP	12 months Local GAAP
Exchange rate: EUR/USD	1.14500	1.19930	1.05410	1.08870
Balance sheet				
Assets				
Fixed assets	64,164,733	67,527,633	59,336,561	37,223,028
Intangible fixed assets	30,755	54,561	70,292	656,633
Tangible fixed assets	399,054	715,695	591,254	378,021
Other fixed assets	63,734,925	66,757,376	58,675,015	36,188,374
Current assets	46,859,422	40,504,386	28,911,727	37,200,331
Stock	25,055,860	25,392,602	18,128,835	16,227,091
Debtors	8,158,421	10,960,255	7,170,057	6,384,644
Other current assets	13,645,142	4,151,529	3,612,835	14,588,597
Cash & cash equivalent	1,206,051	2,771,153	1,891,438	4,288,177
TOTAL ASSETS	111,024,157	108,032,018	88,248,288	74,423,359
Liabilities & Equity				
Shareholders funds	28,272,429	22,491,856	14,039,295	8,898,061
Capital	189,374	198,355	174,340	180,062
Other shareholders funds	28,083,055	22,293,502	13,864,955	8,717,999
Non-current liabilities	5,650,952	18,280,216	30,320,165	37,011,256
Long term debt	5,525,375	18,148,684	30,269,732	37,011,256

<i>Other non-current liabilities</i>	125,577	131,532	50,433	0
<i>Provisions</i>	125,577	131,532	50,433	0
<i>Current liabilities</i>	77,100,776	67,259,946	43,888,828	28,514,042
<i>Loans</i>	5,959,514	16,376,318	16,501,432	6,463,132
<i>Creditors</i>	11,740,393	9,458,330	5,541,221	5,535,072
<i>Other current liabilities</i>	59,400,870	41,425,297	21,846,174	16,515,837
TOTAL SHAREH. FUNDS & LIAB.	111,024,157	108,032,018	88,248,288	74,423,359

Memo lines

<i>Working capital</i>	21,473,888	26,894,527	19,757,671	17,076,662
<i>Net current assets</i>	-30,241,353	-26,755,560	-14,977,101	8,686,289
<i>Enterprise value</i>	n.a.	n.a.	n.a.	n.a.
<i>Number of employees</i>	96	87	80	81

<i>Local registry filing/Unconsolidated</i>	31/12/2018 USD	31/12/2017 USD	31/12/2016 USD	31/12/2015 USD
	12 months Local GAAP	12 months Local GAAP	12 months Local GAAP	12 months Local GAAP
<i>Exchange rate: EUR/USD</i>	1.14500	1.19930	1.05410	1.08870

Profit & loss account

<i>Operating revenue (Turnover)</i>	64,819,558	62,692,324	47,626,114	43,426,097
<i>Sales</i>	61,544,258	59,646,680	45,275,189	41,066,293

<i>Local registry filing/Unconsolidated</i>	31/12/2014 USD	31/03/2014 USD	31/03/2013 USD	31/03/2012 USD
	9 months Local GAAP	12 months Local GAAP	12 months Local GAAP	12 months Local GAAP
<i>Exchange rate: EUR/USD</i>	1.21410	1.37880	1.28050	1.33560

Balance sheet

Assets

<i>Fixed assets</i>	37,150,899	41,919,205	5,213,635	5,950,294
<i>Intangible fixed assets</i>	640,975	675,875	591,757	662,673
<i>Tangible fixed assets</i>	2,337,048	2,435,569	2,573,225	3,147,901
<i>Other fixed assets</i>	34,172,877	38,807,761	2,048,653	2,139,721
<i>Current assets</i>	26,793,820	17,432,028	17,740,986	18,190,722
<i>Stock</i>	16,598,823	10,882,336	9,065,684	9,758,949
<i>Debtors</i>	6,386,036	3,076,318	4,572,883	5,276,938
<i>Other current assets</i>	3,808,961	3,473,374	4,102,419	3,154,835
<i>Cash & cash equivalent</i>	1,612,190	1,456,956	974,704	942,911
TOTAL ASSETS	63,944,719	59,351,233	22,954,622	24,141,016

Liabilities & Equity

<i>Shareholders funds</i>	8,171,902	4,855,425	1,205,204	1,196,318
<i>Capital</i>	262,865	298,524	277,241	289,171
<i>Other shareholders funds</i>	7,909,037	4,556,901	927,963	907,147
<i>Non-current liabilities</i>	33,308,029	41,627,673	7,210,772	9,284,874
<i>Long term debt</i>	33,298,469	41,615,472	7,197,777	9,249,549
<i>Other non-current liabilities</i>	9,560	12,201	12,996	35,325
<i>Provisions</i>	0	0	0	20,034

<i>Current liabilities</i>	22,464,787	12,868,135	14,538,645	13,659,824
Loans	4,531,033	5,129,136	1,690,880	3,017,781
Creditors	5,915,053	3,332,700	3,089,270	3,330,029
Other current liabilities	12,018,701	4,406,299	9,758,495	7,312,014
TOTAL SHAREH. FUNDS & LIAB.	63,944,719	59,351,233	22,954,622	24,141,016

Memo lines				
<i>Working capital</i>	17,069,805	10,625,954	10,549,297	11,705,859
<i>Net current assets</i>	4,329,032	4,563,893	3,202,341	4,530,898
<i>Enterprise value</i>	n.a.	n.a.	n.a.	n.a.
<i>Number of employees</i>	81	70	67	67

<i>Local registry filing/Unconsolidated</i>	31/12/2014 USD	31/03/2014 USD	31/03/2013 USD	31/03/2012 USD
	9 months Local GAAP	12 months Local GAAP	12 months Local GAAP	12 months Local GAAP
<i>Exchange rate: EUR/USD</i>	1.21410	1.37880	1.28050	1.33560
Profit & loss account				
<i>Operating revenue (Turnover)</i>	32,776,456	37,542,981	29,609,192	27,134,363
<i>Sales</i>	30,984,094	34,474,060	27,493,548	25,085,464

<i>Local registry filing/Unconsolidated</i>	31/03/2011 USD	31/03/2010 USD
	12 months Local GAAP	12 months Local GAAP
<i>Exchange rate: EUR/USD</i>	1.42070	1.34790

Balance sheet		
Assets		
<i>Fixed assets</i>	6,624,602	4,238,795
Intangible fixed assets	403,786	21,452
Tangible fixed assets	3,947,860	4,056,319
Other fixed assets	2,272,957	161,024
<i>Current assets</i>	16,172,640	12,893,454
Stock	9,391,338	6,576,343
Debtors	4,033,744	3,192,825
Other current assets	2,747,558	3,124,286
Cash & cash equivalent	817,896	1,629,477
TOTAL ASSETS	22,797,242	17,132,250

Liabilities & Equity		
<i>Shareholders funds</i>	1,011,349	6,236,751
Capital	307,596	291,834
Other shareholders funds	703,754	5,944,917
<i>Non-current liabilities</i>	10,203,503	3,103,040
Long term debt	10,159,644	3,047,539
Other non-current liabilities	43,858	55,501
Provisions	21,310	20,218
<i>Current liabilities</i>	11,582,390	7,792,459
Loans	3,545,993	4,334,189
Creditors	1,883,705	1,391,403

Other current liabilities	6,152,692	2,066,867
TOTAL SHAREH. FUNDS & LIAB.	22,797,242	17,132,250
Memo lines		
Working capital	11,541,377	8,377,765
Net current assets	4,590,250	5,100,996
Enterprise value	n.a.	n.a.
Number of employees	63	59
Local registry filing/Unconsolidated	31/03/2011	31/03/2010
	USD	USD
	12 months	12 months
	Local GAAP	Local GAAP
Exchange rate: EUR/USD	1.42070	1.34790
Profit & loss account		
Operating revenue (Turnover)	26,548,906	23,662,050
Sales	25,737,018	23,103,704

Appendix 1.5.1: Saluc ratios

Local registry filing/Unconsolidated	31/12/2017	31/12/2016	31/12/2015	31/12/2014
	USD	USD	USD	USD
	12 months	12 months	12 months	12 months
	Local GAAP	Local GAAP	Local GAAP	Local GAAP
Exchange rate: EUR/USD	1.19930	1.05410	1.08870	1.21410
Profitability ratios				
ROE using P/L before tax (%)	42.77	50.82	81.07	45.79
ROCE using P/L before tax (%)	23.68	21.54	50.61	30.79
ROA using P/L before tax (%)	14.86	11.98	23.64	15.83
ROE using Net income (%)	28.02	34.71	62.09	32.34
ROCE using Net income (%)	16.04	15.35	39.40	22.55
ROA using Net income (%)	9.74	8.18	18.11	11.18
Profit margin (%)	22.61	18.89	19.48	13.26
Gross margin (%)	n.a.	n.a.	n.a.	n.a.
EBITDA margin (%)	25.19	25.33	22.32	14.42
EBIT margin (%)	22.87	23.55	20.64	12.70
Cash flow / Operating revenue (%)	17.13	14.69	16.60	11.08
Enterprise value / EBITDA (x)	n.a.	n.a.	n.a.	n.a.
Market cap / Cash flow from operations (x)	n.a.	n.a.	n.a.	n.a.
Operational ratios				
Net assets turnover (x)	0.98	1.03	2.46	2.11
Interest cover (x)	14.47	12.11	18.46	9.72
Stock turnover (x)	3.34	3.39	3.67	3.88
Collection period (days)	42	34	45	80
Credit period (days)	26	24	38	30
Export revenue / Operating revenue (%)	n.a.	n.a.	n.a.	n.a.
R&D expenses / Operating revenue (%)	n.a.	n.a.	n.a.	n.a.
Structure ratios				
Current ratio (x)	1.06	0.99	1.90	2.24
Liquidity ratio (x)	0.46	0.51	1.25	1.53
Shareholders liquidity ratio (x)	1.07	0.62	1.44	1.58
Solvency ratio (Asset based) (%)	34.75	23.57	29.16	34.56
Solvency ratio (Liability based) (%)	53.25	30.84	41.16	52.81
Gearing (%)	135.30	232.74	95.93	110.76
Per employee ratios				
Profit per employee (th USD)	35	26	30	26

Operating revenue per employee (th USD)	154	138	152	194
Costs of employees / Operating revenue	36.82	36.37	30.57	26.07
Average cost of employee (th USD)	57	50	46	50
Shareholders funds per employee (th USD)	81	51	37	56
Working capital per employee (th USD)	53	45	45	77
Total assets per employee (th USD)	234	217	125	162

Local registry filing/Unconsolidated	31/12/2013		31/12/2012		31/12/2011		31/12/2010	
	USD		USD		USD		USD	
	12 months	12 months	12 months	12 months	12 months	12 months	12 months	12 months
Exchange rate: EUR/USD	Local	GAAP	Local	GAAP	Local	GAAP	Local	GAAP
	1.37910		1.31940		1.29390		1.33690	

Profitability ratios				
ROE using P/L before tax (%)	41.79	31.66	36.03	40.06
ROCE using P/L before tax (%)	24.07	14.97	41.65	45.22
ROA using P/L before tax (%)	11.33	5.63	14.94	15.18
ROE using Net income (%)	30.53	20.21	23.60	26.22
ROCE using Net income (%)	18.57	10.72	29.34	31.60
ROA using Net income (%)	8.28	3.59	9.79	9.93
Profit margin (%)	9.04	5.10	11.07	11.48
Gross margin (%)	n.a.	n.a.	n.a.	n.a.
EBITDA margin (%)	13.25	8.80	15.76	15.20
EBIT margin (%)	11.26	6.88	13.82	13.20
Cash flow / Operating revenue (%)	8.59	5.18	9.19	9.52
Enterprise value / EBITDA (x)	n.a.	n.a.	n.a.	n.a.
Market cap / Cash flow from operations (x)	n.a.	n.a.	n.a.	n.a.

Operational ratios				
Net assets turnover (x)	2.26	2.31	3.22	3.43
Interest cover (x)	7.01	4.94	7.47	7.80
Stock turnover (x)	3.48	3.36	3.43	4.29
Collection period (days)	56	72	62	70
Credit period (days)	22	40	30	39
Export revenue / Operating revenue (%)	n.a.	n.a.	n.a.	n.a.
R&D expenses / Operating revenue (%)	n.a.	n.a.	n.a.	n.a.

Structure ratios				
Current ratio (x)	2.15	1.85	1.64	1.55
Liquidity ratio (x)	1.35	1.22	0.97	1.05
Shareholders liquidity ratio (x)	0.96	0.59	103.56	60.74
Solvency ratio (Asset based) (%)	27.11	17.77	41.46	37.89
Solvency ratio (Liability based) (%)	37.19	21.60	70.84	61.00
Gearing (%)	187.05	294.73	61.49	84.38

Per employee ratios				
Profit per employee (th USD)	19	10	22	24
Operating revenue per employee (th USD)	209	199	200	210
Costs of employees / Operating revenue	28.22	29.58	29.56	27.93
Average cost of employee (th USD)	59	59	59	59
Shareholders funds per employee (th USD)	45	32	62	60
Working capital per employee (th USD)	80	77	76	67
Total assets per employee (th USD)	167	181	149	159

Local registry filing/Unconsolidated	31/12/2009		31/12/2008	
	USD		USD	
	12 months	12 months	12 months	12 months
Exchange rate: EUR/USD	Local	GAAP	Local	GAAP
	1.44060		1.39170	

Profitability ratios		
ROE using P/L before tax (%)	59.17	77.27

ROCE using P/L before tax (%)	62.04	86.40
ROA using P/L before tax (%)	16.88	18.19
ROE using Net income (%)	39.14	51.01
ROCE using Net income (%)	42.55	61.02
ROA using Net income (%)	11.17	12.01
Profit margin (%)	13.85	13.59
Gross margin (%)	n.a.	n.a.
EBITDA margin (%)	18.17	18.67
EBIT margin (%)	15.81	16.15
Cash flow / Operating revenue (%)	11.52	11.49
Enterprise value / EBITDA (x)	n.a.	n.a.
Market cap / Cash flow from operations (x)	n.a.	n.a.

Operational ratios

Net assets turnover (x)	4.16	5.49
Interest cover (x)	14.78	7.57
Stock turnover (x)	4.32	4.72
Collection period (days)	58	61
Credit period (days)	38	41
Export revenue / Operating revenue (%)	n.a.	n.a.
R&D expenses / Operating revenue (%)	n.a.	n.a.

Structure ratios

Current ratio (x)	1.34	1.25
Liquidity ratio (x)	0.95	0.88
Shareholders liquidity ratio (x)	36.52	28.86
Solvency ratio (Asset based) (%)	28.54	23.54
Solvency ratio (Liability based) (%)	39.93	30.79
Gearing (%)	119.45	174.69

Per employee ratios

Profit per employee (th USD)	27	27
Operating revenue per employee (th USD)	198	201
Costs of employees / Operating revenue (%)	31.29	30.34
Average cost of employee (th USD)	62	61
Shareholders funds per employee (th USD)	46	35
Working capital per employee (th USD)	57	54
Total assets per employee (th USD)	162	150

Appendix 1.5.2: Saluc key financial figures

Local registry filing/Unconsolidated	31/12/2018 USD	31/12/2017 USD	31/12/2016 USD	31/12/2015 USD
	12 months Local GAAP	12 months Local GAAP	12 months Local GAAP	12 months Local GAAP
Exchange rate: EUR/USD	1.14500	1.19930	1.05410	1.08870
Operating revenue (Turnover)	19,985,863	22,347,982	20,106,654	20,970,884
P/L before tax	4,510,855	5,052,280	3,798,089	4,085,835
P/L for period [=Net income]	3,543,281	3,309,634	2,594,225	3,129,343
Cash flow	3,997,621	3,828,175	2,952,919	3,481,094
Total assets	33,638,696	33,997,462	31,711,993	17,284,296
Shareholders funds	14,821,333	11,812,889	7,473,759	5,039,702
Current ratio (x)	1.17	1.06	0.99	1.90
Profit margin (%)	22.57	22.61	18.89	19.48
ROE using P/L before tax (%)	30.44	42.77	50.82	81.07
ROCE using P/L before tax (%)	20.89	23.68	21.54	50.61
Solvency ratio (Asset based) (%)	44.06	34.75	23.57	29.16
Price earning ratio (x)	n.a.	n.a.	n.a.	n.a.
Number of employees	146	145	146	138

<i>Local registry filing/Unconsolidated</i>	<i>31/12/2014 USD</i>	<i>31/12/2013 USD</i>	<i>31/12/2012 USD</i>	<i>31/12/2011 USD</i>
	<i>12 months Local GAAP</i>	<i>12 months Local GAAP</i>	<i>12 months Local GAAP</i>	<i>12 months Local GAAP</i>
<i>Exchange rate: EUR/USD</i>	<i>1.21410</i>	<i>1.37910</i>	<i>1.31940</i>	<i>1.29390</i>
<i>Operating revenue (Turnover)</i>	<i>29,243,008</i>	<i>32,666,308</i>	<i>32,513,939</i>	<i>32,268,780</i>
<i>P/L before tax</i>	<i>3,876,447</i>	<i>2,953,987</i>	<i>1,657,841</i>	<i>3,573,498</i>
<i>P/L for period [=Net income]</i>	<i>2,737,169</i>	<i>2,158,256</i>	<i>1,058,122</i>	<i>2,340,942</i>
<i>Cash flow</i>	<i>3,239,715</i>	<i>2,806,346</i>	<i>1,683,309</i>	<i>2,965,905</i>
<i>Total assets</i>	<i>24,493,603</i>	<i>26,076,095</i>	<i>29,471,132</i>	<i>23,922,924</i>
<i>Shareholders funds</i>	<i>8,465,102</i>	<i>7,068,873</i>	<i>5,235,800</i>	<i>9,919,486</i>
<i>Current ratio (x)</i>	<i>2.24</i>	<i>2.15</i>	<i>1.85</i>	<i>1.64</i>
<i>Profit margin (%)</i>	<i>13.26</i>	<i>9.04</i>	<i>5.10</i>	<i>11.07</i>
<i>ROE using P/L before tax (%)</i>	<i>45.79</i>	<i>41.79</i>	<i>31.66</i>	<i>36.03</i>
<i>ROCE using P/L before tax (%)</i>	<i>30.79</i>	<i>24.07</i>	<i>14.97</i>	<i>41.65</i>
<i>Solvency ratio (Asset based) (%)</i>	<i>34.56</i>	<i>27.11</i>	<i>17.77</i>	<i>41.46</i>
<i>Price earning ratio (x)</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>
<i>Number of employees</i>	<i>151</i>	<i>156</i>	<i>163</i>	<i>161</i>

<i>Local registry filing/Unconsolidated</i>	<i>31/12/2010 USD</i>	<i>31/12/2009 USD</i>
	<i>12 months Local GAAP</i>	<i>12 months Local GAAP</i>
<i>Exchange rate: EUR/USD</i>	<i>1.33690</i>	<i>1.44060</i>
<i>Operating revenue (Turnover)</i>	<i>33,168,405</i>	<i>32,264,325</i>
<i>P/L before tax</i>	<i>3,806,153</i>	<i>4,469,600</i>
<i>P/L for period [=Net income]</i>	<i>2,491,334</i>	<i>2,956,896</i>
<i>Cash flow</i>	<i>3,156,096</i>	<i>3,717,171</i>
<i>Total assets</i>	<i>25,078,937</i>	<i>26,472,572</i>
<i>Shareholders funds</i>	<i>9,501,514</i>	<i>7,553,954</i>
<i>Current ratio (x)</i>	<i>1.55</i>	<i>1.34</i>
<i>Profit margin (%)</i>	<i>11.48</i>	<i>13.85</i>
<i>ROE using P/L before tax (%)</i>	<i>40.06</i>	<i>59.17</i>
<i>ROCE using P/L before tax (%)</i>	<i>45.22</i>	<i>62.04</i>
<i>Solvency ratio (Asset based) (%)</i>	<i>37.89</i>	<i>28.54</i>
<i>Price earning ratio (x)</i>	<i>n.a.</i>	<i>n.a.</i>
<i>Number of employees</i>	<i>158</i>	<i>163</i>

Appendix 2: Acquisitions and participations of Chinese investors in Germany, 2014 (Jungbluth, 2016).

Zielunternehmen	Branche	Chinesischer Investor	Überwiegende Eigentums- und Kontrollrechte des Investors	Anteil (Prozent)	Transaktions-/ Firmenwert (Mio. Euro)
2014 (32)					
Hilite International (Teil der Hydraulik-Sparte von Siemens)	Automobil	AVIC	staatlich (SASAC)	k. A.	473,00
KACO	Automobil	Zhongding Sealing Parts	privat	80,00	64,00
Kokinetics	Automobil	AVIC	staatlich (SASAC)	100,00	k. A.
IMA Automation Amberg	Automobil	Joyson Electronics	privat	100,00	20,00
Koki Techni Transmission Systems	Automobil	AVIC	staatlich (SASAC)	100,00	k. A.
Boge Elastmetall	Automobil	Zhuzhou Times New Material Technology	k. A.	100,00	315,00
Alterprodia	Automobil	Ningbo Huaxiang Electronic	privat	75,00	1,00
KS Aluminium-Technologie	Automobil	Huayu Automotive Systems / SAIC	staatlich	k. A.	k. A.
Cybox	Einzelhandel	Goodbaby International Holding (Hongkong)	privat	100,00	82,00
Renesas Electronics Europe (Displaysparte)	Elektronik	Tianma Microelectronics	k. A.	100,00	k. A.
Solutronic	Energie- und Umwelttechnik	Shanghai ChuRui Energy Technology	privat	100,00	k. A.
Avancis	Energie- und Umwelttechnik	China National Building Group (CNBM)	staatlich (SASAC)	100,00	k. A.
S.A.G. Solarstrom	Energie- und Umwelttechnik	Shunfeng Photovoltaik International	privat	100,00	65,00–153,00
Sunways AG (Solar Inverter und BIPV Sparte)	Energie- und Umwelttechnik	Shunfeng International Clean Energy	privat	k. A.	k. A.
BHF Bank	Finanz	Fosun International	privat	k. A.	513,60
Penta Hotel Holdings	Hotel und Gastronomie	New World China Land (Hongkong)	privat	100,00	13,50
Wilbert Turmkrane	Industrie und Maschinenbau	Nanyang Guoyu Seal Development	k. A.	100,00	k. A.
ZF Friedrichshafen (Gummi- und Klebstoff-Sparte)	Industrie und Maschinenbau	Zhuzhou Times New Material Technology	k. A.	k. A.	k. A.
TLT-Turbo (Teil der Ventilatoren-Sparte von Siemens)	Industrie und Maschinenbau	Power Construction Corporation of China	staatlich (SASAC)	100,00	k. A.
Schumag	Industrie und Maschinenbau	Meibah International	privat	54,60	2,80
Deutsche Mechatronics	Industrie und Maschinenbau	Tri Star Holding	k. A.	54,50	k. A.
Zenith Maschinenfabrik	Industrie und Maschinenbau	Fujian Quangong Machinery	privat	100,00	k. A.
M-Tec Mathis Technik	Industrie und Maschinenbau	Zoomlion Heavy Industry	staatlich	k. A.	41,00
Künkel-Wagner Prozesstechnologie	Industrie und Maschinenbau	QME Qingdao Machinery Industry	staatlich	100,00	k. A.
WACO	Industrie und Maschinenbau	Jiangsu Hengli Highpressure Oil Cylinder	privat	51,00	0,25
Heidelberger Druck (Postpress Packaging Sparte)	Industrie und Maschinenbau	Masterwork Machinery	privat	100,00	17,00
Columbus Holding	Konsumgüter	Goodbaby International Holding (Hongkong)	privat	100,00	70,70
Weingut Diehl-Blees	Landwirtschaft	Jiangsu GPRO Group	privat	100,00	k. A.
Peine	Textilien und Bekleidung	Shandong Ruyi Sciences & Technology	privat	51,00	k. A.
Tom Tailor Holding	Textilien und Bekleidung	Fosun International	privat	23,16	87,50
Falcom Wireless Communications	TMT	Maestro Wireless Solutions Ltd (Hongkong)	privat	k. A.	k. A.
Lübeck Airport	Transport und Logistik	Puren Group	privat	100,00	k. A.

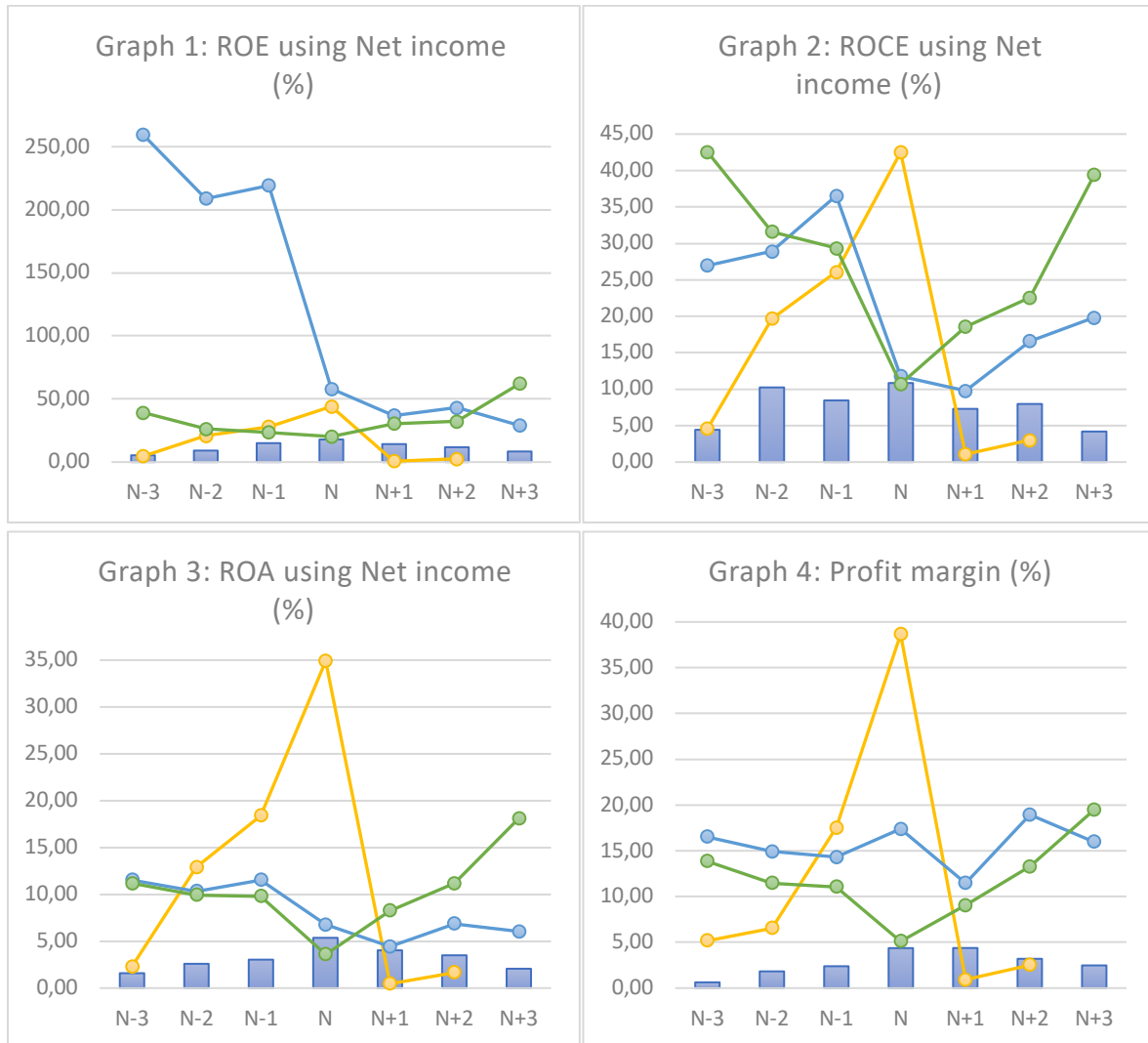
Appendix 3: How and why Chinese investors are taking over German world market leaders – M&A in Germany between 2011 and 2012 (Emons, 2013).

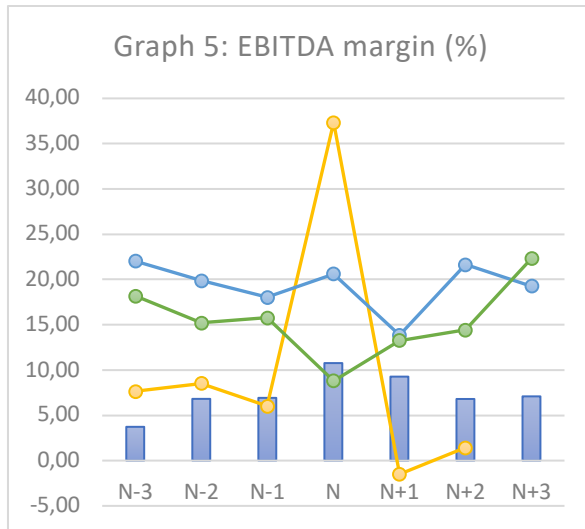
Jahr	Erworbener Anteil	Akquisitionsziel	Branche	Chinesische Käufer	Transaktionswert
2011	54,60%	Celesio AG	Cemie/Pharma	Shanghai Pharmaceuticals Company Limited	nicht offengelegt
2011	18,80%	Hiltex Hirschfelder Leinen und Textilien GmbH	Textil	D'Long International Group	nicht offengelegt
2011	74,90%	Preh GmbH	Automobilzulieferer	Joyson Investment Holding Co., Ltd.	nicht offengelegt
2011	50,00%	Ineos AG	Chemie/Pharma	PetroChina International Company Limited	nicht offengelegt
2011	100,00%	SaarGummi AG	Chemie/Pharma	CQLT Chongqing Light Industry & Textile	nicht offengelegt
2011	k.A.	Medion AG	Computerindustrie/Telekommunikation	Lenovo	nicht offengelegt
2011	k.A.	Sunways AG	Anlagenbau/Stahl/Umwelttechnik	LDK Solar GmbH	nicht offengelegt
2011	100,00%	United Power Technology AG	Elektrotechnik/Medizintechnik	Orchid Asia	nicht offengelegt
2011	100,00%	KSM Casting Gruppe AG	Anlagenbau/Stahl/Umwelttechnik	CITIC Dicastal Wheel Manufacturing Co. Ltd.	nicht offengelegt
2011	k.A.	Sellner Holding GmbH	Automobilbau	Ningbo Huaxiang Electronic Co.	nicht offengelegt
2011	100,00%	Siemens Electronics Assembly Systems	Elektrotechnik	ASM Pcfic Technology Ltd.	nicht offengelegt
k.A.	10,00%	Jauch Optics	k.A.	New Land Group	10 Mio. USD
k.A.	k.A.	Korona GmbH & Co. KG	Elektrotechnik	Bonso Electronics. Inc.	< 5 Mio. USD
k.A.	k.A.	Wirth Tunnelbohrmaschinen	Maschinenbau	Shenyang Hevy Industry	nicht offengelegt
2012	k.A.	Solibro GmbH	Photovoltaik /Dünnschichtsolarmodule	Hanergy Holding Group Ltd. (Beijing)	nicht offengelegt
2012	100,00%	Putzmeister AG	Bau-/Baustoffindustrie	Sany Heavy Industry Co. Ltd	500 Mio. EUR
2012	33,30%	Sunways AG	Anlagenbau/Stahl/Umwelttechnik	LDK Solar GmbH	nicht offengelegt
2012	100,00%	Drossbach GmbH & Co. KG	Anlagenbau/Stahl/Umwelttechnik	Dalian Sunlight Machinery Co., Ltd.	nicht offengelegt
2012	100,00%	Rhode & Schwarz Professional Mobile Radio GmbH	Elektrotechnik/Medizintechnik	Hytera Communications Corp Ltd	nicht offengelegt
2012	70,88%	Sunways AG	Anlagenbau/Stahl/Umwelttechnik	LDK Solar GmbH	nicht offengelegt

Appendix 4: Financial ratios – Graphs with Belgian INMLs curves

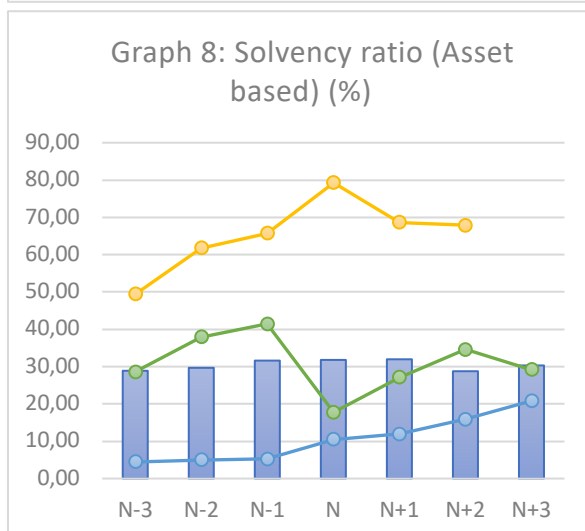
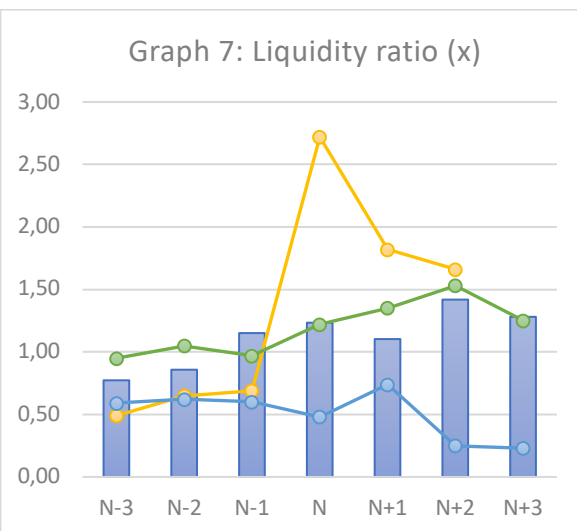
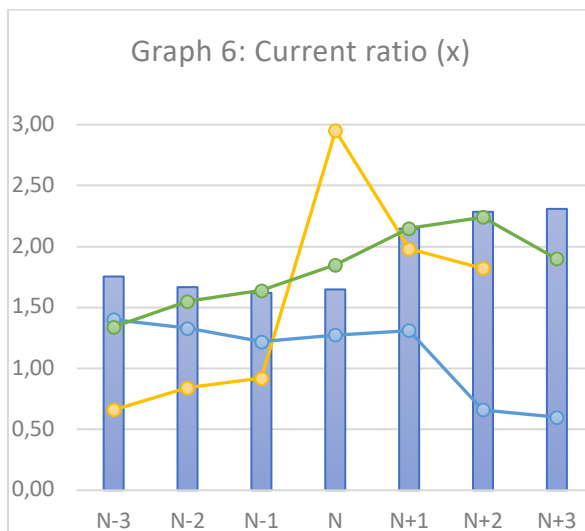
	BekaertDeslee
	Pranarom
	Saluc

Profitability parameters

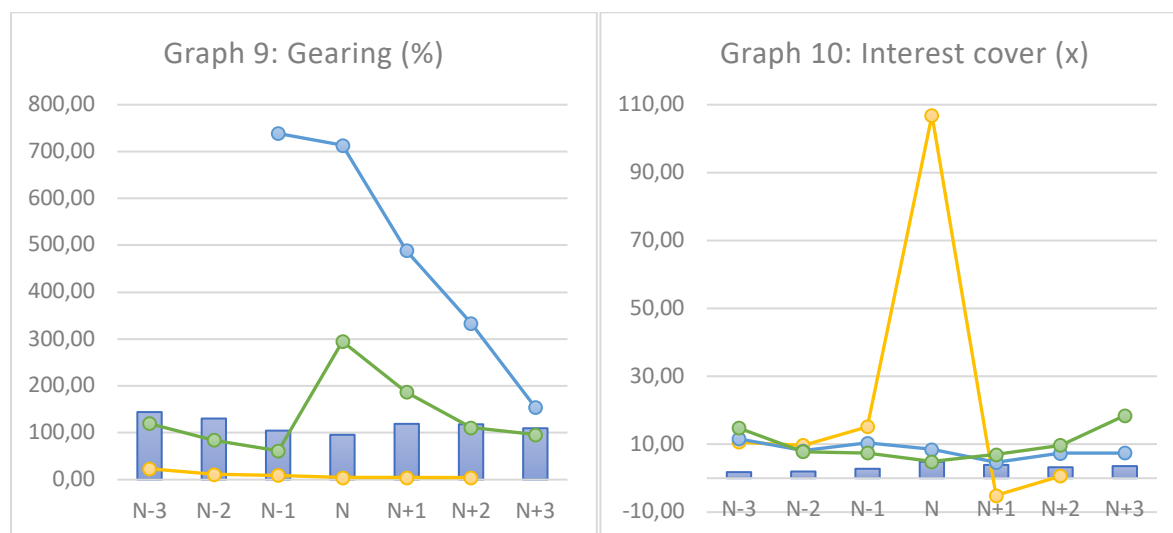




Liquidity parameters



Leverage parameters



Appendix 5: Survey (Open & Multiple-Choice Questions) - Impact of M&A on INMLs Corporate Performance

Section 1: About your company

1. Which company are you working for?
2. What is your name?
3. What is your position in the company?
4. A. Does your company offer a specific product or service that is highly successful internationally?
 B. If yes, can you point out what the product/service in question is? (If your company has more than one of such products/services, please select one item).
 C. Under which brand name is this product/service offered to the market?

From here on, we will take the former product/service as the focal one. (If your answer to Q.4a. was negative please get directly down to section 2).

5. Can you estimate the market share that your company has either worldwide or on the European continent for your focal product/service? (Please, specify whether you refer to European or global market share).
6. What are the main market segments (main client/user groups) that you target with this focal product/service? (please, indicate maximum 3 user groups or market segments).

Section 2: Further questions about the company

7. In terms of market share - Is your company the number 1 in Europe for the focal product or service?

8. In terms of market share - Does your company form part of the top 3 worldwide for the focal product or service?
9. How much competitors do you face on the European market with a minimum market share of 10%?
 - 0
 - 1-2
 - 3-4
 - 5-6
 - 6+
10. How much competitors do you face on the global market with a minimum market share of 10%?
 - 0
 - 1-2
 - 3-4
 - 5-6
 - 6+
11. From a buyer perspective, in what kind of market do you chiefly operate?
 - B2B
 - B2C
 - B2A (public administration)
12. In terms of general public awareness of your focal product or service and the brand it goes by, would you say this awareness is:
 - High (the average citizen is highly acquainted with it) - think of "Intel inside"
 - Medium/high
 - Medium (there is a specific segment of the population that knows us) - think of "Brembo disk brakes"
 - Medium/low
 - Low (only very few persons are aware of it) - think of "airbags produced by KSS"
13. In which continent(s) do you sell?
 - Africa
 - Asia
 - Europe
 - North America
 - South America
 - Oceania
14. In how many countries do you sell?
 - 1-20
 - 21-40
 - 41-60
 - 61-80
 - 81-100

- 100+
15. Which percentage of your turnover stems from sales outside of your domestic market?
- less than 50%
 - 51-60%
 - 61-70%
 - 71-80%
 - 81-90%
 - 91-100%
16. If you divide your company's annual expenditure on R&D by the annual turnover it achieves, what is then the average percentage you arrive at?
- less than 1%
 - 1-2%
 - 2-3%
 - 3-4%
 - 4-5%
 - 5-6%
 - 6-7%
 - 7-8%
 - 8-9%
 - 9-10%
 - more than 10%

Section 3: Mergers and Acquisitions (Reasons for M&A)

17. A. Has your company been involved in any merger or acquisition in the past 5 years?
 B. If yes:
 Was your company the acquiring actor?
 Was your company the acquired actor?
 Was it a merger between equals?
18. Can you inform in which year(s) your company was involved in a merger or acquisition and who was/were the other companies involved? (maximum 3 cases, including the last M&A please).
19. Was this other company in the same industry/segment?
20. What was the type of Merger/Acquisition?
- Horizontal: take over or merge with companies in a similar market sector and at the same stage of production, with a competitor.
 - Vertical: acquiring or merging with suppliers or members of the distribution channel.
 - Conglomerate: merger of firms that are involved in economically unrelated business activities.
 - Product/technology extension: a company acquires another firm to gain access to complementary products.

- Market extension: a company acquires another firm to gain access to complementary markets.
- Cross-border: acquisition in different geographic markets.

21. What were the primary motives behind this M/A?

- Achieve a rapid growth
- Acquire and eliminate a competitor
- Increase entry barriers
- Diversify/Spread risks
- Expand customer/client base
- Reach a new product market/Expand product mix
- Reach a new geographic market
- Gain bargaining power by gaining market shares (financial synergies)
- Acquire unique capabilities (new technologies, qualified employees and so on)
- Economies of scale
- Economies of scope
- Another financial advantage (company acquired below its replacement cost, tax reduced thanks to M&A, use excess of free cash, gains from breakup value of the acquired firm)
- Others

22. As a result of this M&A, have you discovered synergies that allow you to increase revenues or reduce costs, or other unexpected synergies? If so, what were these?

23. Which were the largest concerns when orchestrating this M&A?

- Due diligence
- Integration plan
- Negotiation for valuation and deal price
- Others

24. What approval processes have you encountered? Which bodies regulate mergers and acquisitions in Belgium and Europe?

25. Since this M&A, you have perceived any positive

- Market share evolution
- R&D budget evolution
- Change in innovation strategy
- Correlation between R&D expenses and market share evolution
- Correlation between any innovation and market share evolution
- Impact on sales growth

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