Mergers & Acquisitions
in the
Sporting Goods Industry

Master Thesis
Master of Science in Finance & international Business

Supervisor:
Margit Malmmose Peyton
Associate Professor in Management Accounting
Department of Business Studies
Aarhus School of Business
Aarhus University

Florian Jochum
Ellebjergvej 17
2450 Copenhagen

E-Mail: florian.jochum@web.de

Exam No.: 280902
August 31st, 2009
To my Mother
and in remembrance of my Father
# Contents

Contents ............................................................................................................................................................ iii
List of Tables ........................................................................................................................................................ v
List of Figures ...................................................................................................................................................... vi
Abbreviations .................................................................................................................................................... vii

1 **Introduction** ............................................................................................................................................. 1
   1.1 Object of Investigation ......................................................................................................................... 1
   1.2 Course of Analysis ................................................................................................................................ 2

2 **Sports and its industry** .............................................................................................................................. 4
   2.1 Definition of Sports ............................................................................................................................... 4
   2.2 The roots of Sports ............................................................................................................................... 5
   2.3 Beginnings of the Sporting Goods Industry ......................................................................................... 7
   2.4 Definition of the Industry ...................................................................................................................... 8
      2.4.1 Industry Codes ............................................................................................................................ 8
      2.4.2 Definition of the SGI in literature ................................................................................................. 13
      2.4.3 Definition by a Market Research Provider ................................................................................. 17
      2.4.4 Definition by the ‘World Federation of the Sporting Goods Industry’ . 17
   2.5 Issues with the definition of the industry ............................................................................................ 18
      2.5.1 Issue arising with Conglomerates ............................................................................................... 18
      2.5.2 Distinction between sport ‘functional’ goods and ‘sport’ fashion ......... 19
   2.6 Conclusion on the definition of the SGI ............................................................................................. 20

3 **Mergers & Acquisitions** .......................................................................................................................... 22
   3.1 Definition of Mergers & Acquisitions ................................................................................................. 22
   3.2 Categories of Mergers & Acquisitions ............................................................................................... 23
   3.3 Merger Waves in the past .................................................................................................................... 24
   3.4 Conclusion on the historic development of M&A ............................................................................ 27
   3.5 The purpose of Mergers & Acquisitions ............................................................................................ 28
      3.5.1 Increase Brand variety .................................................................................................................. 28
      3.5.2 Why acquire strong brands? ......................................................................................................... 29
      3.5.3 Reduction of Research and Development expenditures ......................................................... 30
      3.5.4 Keep up with technological Progress .......................................................................................... 30
      3.5.5 Reduction of the company’s exposure to cyclicality ................................................................. 31
List of Tables

Table 1: NAICS 2007 Hierarchical Structure................................................................. 9
Table 2: Industry Codes comprising companies assigned to the SGI ....................... 11
Table 3: Turnover of Top 10 companies in Mio. US$ .................................................. 49
Table 4: Rank in Market Share of Top 10 companies ...................................................... 50
List of Figures

Figure 1: Example of intersection of SGI with conventional NAICS 2007 code ........ 12
Figure 2: Definition of the SGI by Li et al. ................................................................. 15
Figure 3: Turnover development of the Top 30 companies from in Mio. US$ .......... 50
Figure 4: Percentage of Market Share of the Top 5 companies ............................ 51
Figure 5: Market Share development of the Top 5 companies .................................. 52
Figure 6: Asset Turnover Median .................................................................................. 53
Figure 7: Asset Turnover Average .................................................................................. 54
Figure 8: Profit Margin Median ...................................................................................... 55
Figure 9: Profit Margin Average ...................................................................................... 55
### Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANOVA</td>
<td>Analysis of Variance</td>
</tr>
<tr>
<td>BvDEP</td>
<td>Bureau van Dijk Electronic Publishing</td>
</tr>
<tr>
<td>COGS</td>
<td>Costs of Goods Sold</td>
</tr>
<tr>
<td>e.g.</td>
<td>for example</td>
</tr>
<tr>
<td>et al.</td>
<td>et alii</td>
</tr>
<tr>
<td>EBITDA</td>
<td>Earnings before Tax, Depreciation and Amortisation</td>
</tr>
<tr>
<td>IPO</td>
<td>Initial Public Offer</td>
</tr>
<tr>
<td>HH</td>
<td>Herfindahl-Hirschmann</td>
</tr>
<tr>
<td>KPI</td>
<td>Key Performance Indicators</td>
</tr>
<tr>
<td>M&amp;A</td>
<td>Mergers &amp; Acquisitions</td>
</tr>
<tr>
<td>NAICS</td>
<td>North American Industry Classification System</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>Research and Development</td>
</tr>
<tr>
<td>S/A</td>
<td>Sales over Assets</td>
</tr>
<tr>
<td>SGMA</td>
<td>Sporting Goods Manufacturer Association</td>
</tr>
<tr>
<td>SGI</td>
<td>Sporting Good Industry</td>
</tr>
<tr>
<td>SIC</td>
<td>Standard Industrial Classification</td>
</tr>
<tr>
<td>USA</td>
<td>United States of America</td>
</tr>
<tr>
<td>WFSGI</td>
<td>World Federation of the Sporting Goods Industry</td>
</tr>
</tbody>
</table>
1 Introduction

1.1 Object of Investigation

Nowadays, the expression ‘Sporting Goods Industry’ (SGI) is commonly used in the media and everyone seems to have a rough idea of what this industry comprises. Usually, it is brands of Sporting Goods Manufacturers that come to people’s mind. However, the mentioned names vary greatly. This depends heavily on the sports people are following actively or passively, their age and not least on their geographical location. Nevertheless, there are two truly global brands which are renowned like a multinational corporation headquartered in Atlanta is for its black soft drink. Those global players and giants in their industry are Nike and Adidas. This basically is due to two reasons. One is that at least either of them is involved in any major Sports Event on the planet which is of interest for the broad audience. The other one is that both competitors do provide footwear, apparel and equipment for almost any kind of sports which is not a niche sports.

Besides that, every generation in North America and Western Europe since the 1950s (at a later stage in the rest of the world depending mainly on political and economical development) grew up using sports shoes made by one of the two companies or bought a fabricate which was bought in stores where Nike and Adidas products were offered as well. Furthermore, it is difficult to not have these brands touch you through media. However, the SGI does not comprise only Nike and Adidas even though they are beyond doubt the two big antagonists in the segment of Sporting Goods Manufacturers. Besides them there is a huge variety of brands which are present in the market – some are as broadly positioned as Nike and Adidas, others are specialists in their own niche which they probably have even created themselves.

But is it only Sporting Goods Manufacturers which do belong to the SGI? And what is actually ‘Sports’? Does ‘Good’ mean that it is necessarily a manufactured good or can it be interpreted as a service as well? Looking into literature there are advocates that the industry does comprise a lot more than just the manufacturing side.

This paper is a general approach trying to gather information from different sources and potential stakeholders in order to find what the industry is and how its definition could look like.
Furthermore, it is known that there is a lot of market entrance by new brands which do offer products that do cross the imaginary line from the Sporting Goods Industry to the Fashion Industry and vice versa. This created quite some pressure for the established players in the market. In order to respond to that threat there are basically two options. One is to develop, produce and offer similar products oneself whereas the other option is to merge with or acquire a young company which counts with a major market share in the respective product area\(^1\). This gives rise to increased M&A activity in the industry. The question is whether these mergers – besides participating in a new business area – also do increase profitability and efficiency as theory does state.

### 1.2 Course of Analysis

This paper’s structure is as follows: In **Chapter 2** sports and its industry is set forth by approaching sports by different definitions. The roots of sports, its place in today’s society and the early days of the industry are explained in the following. Furthermore, different approaches of how the Sporting Goods Industry can be defined are presented. This includes Industry codes defined by the US Office of Management and Budget, models presented in literature, the point of view of a market research providers and the Sporting Goods Industry Federation WFSGI. The chapter concludes by presenting issues and problems which arise with the definition of the industry.

**Chapter 3** starts out by presenting basic theoretical background information about Mergers & Acquisitions. The different categories are set forth as well as different merger waves which have been experienced in the past. Following the historic development, different purposes of why companies do consider leaving the path of organic and steady growth in order to engage in M&A transactions are presented. After shedding light on the issue of cutting costs vs. unlocking growth options, findings of other research papers concerning M&A activities and their results are presented.

---

\(^1\) This does not necessarily apply just for the footwear, apparel and equipment manufacturing industry. One could also imagine owners of sports hosting facilities like a stadium or sports hall to either buy another facility of a trend sport in order to participate in the industry or to remodel a sports hall into a multifunctional HALLE in order to be able to host different events.
In **Chapter 4**, the problem definition is set forth. Originally intending to adopt a methodology by Gugler et al. which unfortunately did not work out due to insufficient data quality of the database, a second problem definition is presented.

In the following the two methodologies are presented whereas the first one is the one adopted by Gugler et al. It compares the development of certain Key Performance Indicators of a merged firm with the estimated Key Performance Indicators of the firms involved in the M&A transaction for the case they would not have merged. The estimation of the Key Performance Indicators is done by assuming that the companies’ figures would have followed the Key Performance Indicators mean of companies in the same industry which have not been involved in M&A transactions in the period investigated. The methodology actually set forth does apply the same criteria in order to select the population which then is split up into a group which has not been involved into M&A transactions and another one which has been involved. Upon these two groups, efficiency and profitability is tested.

**Chapter 5** named data description presents the data sources used in order to carry out the survey. The different requirements the data needs to fulfil complying with the methodology are described and the result of the data set specification is presented.

The analysis is set forth in the following **Chapter 6** and is subdivided into three separate sections. The first section is a descriptive analysis of the Sporting Goods Industry and presents the mayor players in the market. The turnover development over the period surveyed as well as the ranking of the companies following from the turnover analysis is presented. Furthermore, different measures of industry concentration are presented and applied to the data set. The second section analyses efficiency whereas the third section analyses profitability on the basis of the mean and average.

The concluding part of this paper, **Chapter 7**, summarizes the findings and is followed by **Chapter 8** which points out certain limitations, as well as providing an outlook and directions for future research.


2 Sports and its industry

2.1 Definition of Sports

Definitions can be found in various dictionaries or encyclopaedias and provide all somehow a ‘practical’ description of what ‘Sports’ is. Taking a closer look at two definitions, one by a professor at University and a second one by an Olympic Sports Association, it can be seen that the approach to define Sports is very different.

Prof. Dr. Claus Tiedemann, Professor of ‘Bewegungswissenschaften’ - formerly named ‘Sportwissenschaften’ - (Sport Science) at the University of Hamburg (Germany) defines Sports as follows:

‘Sport’ is a cultural field of activity, in which human beings voluntarily establish a real or only imagined relationship with other people, consciously intending to develop their abilities and accomplishments - particularly in the area of skilled motion - to compare themselves with these other people, according to rules set by themselves or adopted, without the intention to cause harm to them or themselves.

This means that there are several components which together form what we call ‘sports’. It is a cultural field which means that it is not a necessity to play Sports which makes it a voluntary involvement in an activity. It is either a competition between individuals or teams where certain rules are established among the participants or are adopted since they have been generally accepted. The phrase ‘skilled abilities’ points out that the activity which is carried out is a combination of physical and mental skills and only in combination lead - in the best case scenario - to success.

On the other side, the ‘Deutsche Olympische Sportbund’ DOSB (German Olympic Sports Confederation) provides a definition of ‘sports’ their members have to comply with in order to obtain the affiliation. The organisation starts out with a citation of a sports encyclopaedia by Prof. Dr. Peter Röthing et al. which clarifies that there is no exact fit for the word ‘sports’. From a scientific point of view the authors are close to the definition given by Prof. Dr. Claus Tiedemann. They amend that the phrase ‘sports’ is influenced by its everyday use as well as by historically grown and traditional
integration into social, economic, political and judicial actuality. Moreover, the fact of playing Sports changes, amends and differentiates the actual understanding of what is Sports. So here again the definition is partly based on historical development and through the different influencing areas it is clearly marked as a cultural activity.

In order to obtain the affiliation by the DOSB, the potential candidates (sport associations) have to comply with the following three requirements:

- The practice of the Sports has to have as an aim its own discipline defining physical activity.
- The practice of the Sports has to have its end in itself which means that the Sports / Discipline itself is the reason for playing the Sports.
- The Sports has to comply with ethical values like e.g. Fair Play, Equality of Opportunity, Sanctity of the Person or Team through rules and/or a system of arrangement into competition and classification groups (e.g. age, gender …).

From that follows that the definition of ‘sports’ consist of two main parts. The first one is the physical activity practiced as an individual or a team whereas the second part represents the cultural aspect of traditional influences, fair play and established rules amongst others.

2.2 The roots of Sports

Detecting the roots of what we nowadays call ‘Sports’ is rather difficult. Probably it is a bit risky to trace the origins back to early mankind. However, this is a viable approach to the topic.

Early humans have been hunters and gatherers and their survival depended upon success as a hunter. Being successful as a hunter is determined by a huge percentage of skill which is obtained by ‘practicing’ (the physical part) and ‘learning’ (the strategic part). When people started to settle down and began to form villages, they started to bring up cattle to cultivate the ground. Hunting became obsolete.

To be able to engage in sports suddenly became a privilege of the noble and wealthy, which had no need to do manual labour in order to make a living. Soon, there were
rules established of how and when to hunt. Laws were passed disallowing subjects to hunt and declaring the forests property of the state.

Also in ancient Greece playing sports was a privilege of the upper class where men practiced and showed off their skills. The same happened in Rome whereas we at the present time unfortunately almost exclusively think of the Battles of the Gladiators in the arena. Nonetheless, surviving in the arena also depended on skill, practice and physical abilities – may the best win.

Besides that, also in Rome the nobility was the class which was trained since it was them who led the army of the emperor. Generally speaking, in ancient Rome and Greece, the area of training was mainly about martial arts in order to serve the person in power. This, however, contradicts with one point of what we understand today as sports: Practicing did not take place because of practicing itself but with the purpose to improve skills which were needed in the job which was the army.

During the industrial revolution starting in the late 18\textsuperscript{th} century in England and in the early 19\textsuperscript{th} century the picture didn’t change too much since it was still the nobility and wealthy which had time to hunt. Due to the miserable situation in most of the factories which meant long working hours, bad remuneration and no job security amongst others, the emergence of labour unions starting around 1850 had a huge impact on society. Working conditions were improved, the rights of the workers strengthened, the salaries rose and the long working hours were cut down.

This opened the field for increased leisure since people until then basically had no time to do anything besides work. Sports started to become popular as a spectator activity since many labour unions started to have their own teams. At the same time this meant that elitism was eliminated since not only the nobility and wealthy was involved into playing sports. Slowly, playing sports was picking up momentum. Especially team sports were popular.

With the upcoming of Radio and TV broadcasting, a new dimension was added. Suddenly, it was not necessary anymore to be right at the site where the competition was held in order to have up to date information. Through mass media and global communication systems like the internet, the commercialization of Sports started and paved to they to professionalism in Sports.

The latest development in Sports is the discovery of niches. Most of these sports are a combination of sports which already exist. For example, kite surfing is a combination
of surfing and paragliding. Also other young sports are developed. However, most of them are not typical team sports like white water rafting, canyoning, BASE jumping, and orienteering.

2.3 Beginnings of the Sporting Goods Industry

As difficult as tracing the roots of Sports, it is as well difficult to determine the origins of the SGI. However, many of the new sports come from the US, especially in the last decades. Since the SGI is trying to provide as soon as possible a new niche sports with its required equipment one might suspect that the origins of the industry which got built around sports also has its origins in the US.

Unfortunately, there is very scarce literature about this topic – especially from independent writers. Though, there are many companies especially in the SGI claiming to be ‘Pioneers’ in their field, running campaigns with slogans like ‘Since 18XX’, ‘Established 18XX’ or print those phrases on their goods.

Generally, there are two kinds of companies which are active today in the SGI. The first group consists of companies which existed long before Sports became a mass phenomenon. Those are the ones which have their roots e.g. in the textile or the footwear industry. When Sports became more popular and the market for specialized sporting goods like apparel and shoes slowly picked up, those companies started modifying their current products in order to adapt them to the requirements of the Sports. Vanity Fair Corporation (VFC) for example was founded in 1899 as ‘Reading Glove and Mitten Manufacturing Company’ in Reading, Pennsylvania as a manufacturer of knitted and silk gloves. Shortly after, the company expanded into the area of lingerie. Until becoming one of the biggest apparel manufacturers in the USA today, it was a long way to go which is paved by a huge amount of Mergers and Acquisitions (M&A) activities.

The second group is the younger group which can not look back at a long history of activity in its industry. Those are the companies which were founded in order to provide sportsmen with the specialized equipment for their sports – sometimes even founded by successful sportsmen themselves. The strongest European brand without doubt is Adidas. It goes back to the Dassler brothers which founded a footwear manufactory in the early 1920th by producing a running shoe made of linen. The
company’s success kicked in when Germany soccer team won the World Cup in 1954 playing in shoes by Adidas with exchangeable thorns which made it possible to quickly adjust to the condition of the field. Two years before at the Olympic Games in Helsinki, Finland, Adidas had already launched its first running shoe with exchangeable thorns. The majority of athletes at this competition preferred to wear Adidas shoes; among them Emil Zatopek who won three gold medals in Adidas shoes (Adidas Homepage). Other examples in the later development of the industry are companies which provide younger sports like Surfing, Skateboarding or Paragliding with their equipment.

2.4 Definition of the Industry

In order to define the Industry of Sporting Goods, different sources which are possible ways to define the industry will be presented in the following. One approach is to follow the Definition of the US Office of Management and Budget which has developed a classification system for North American industries. Another possibility is to have a look at how literature until now has approached the topic of defining the SGI. A third way is to see how a research company which sells industry specific data defines the industry. And finally, the definition of the ‘World Federation of the Sporting Goods Industry’ is discussed.

2.4.1 Industry Codes

In order to classify companies by the type of their activity in which they have primarily their focus and to achieve some comparability between them, the US Government introduced in the 1930s the Standard Industrial Classification (SIC) code. It is a four-digit code which counts with ten categories. The US Office of Management and Budget revised these codes periodically in order to adjust the system so that the economy's changing industry composition and organization are reflected in the most accurate way. The SIC codes were last updated in the 1987. Globalization made it necessary to develop a more general system to track the industries which now spread much more crossing boarders towards the north into Canada and the south into Mexico. In 1992, the ‘Economic Classification Policy Committee’ was established and it was concluded that a new system to classify the industries had to be established.
In 1997, the ‘North American Industry Classification System’ (NAICS) was introduced. The new system – in contrast to the SIC – differentiates between the industries by using a six digit code. The industries are split into twenty instead of ten broad sectors which allows further adjustment to today’s needs. The third digit determines the Industry sub sector, the fourth the Industry group and the fifth digit specifies the industry itself.

Whereas the first five digits are standardized, the sixth digit is some variable which each country can assign in order to further distinguish local industry. This allows local authorities to further adjust the generally accepted classification standard to their specific needs. The NAICS got adjusted again in 2007 in order to depict the industry adequately.

<table>
<thead>
<tr>
<th>XX</th>
<th>Industry Sector (20 broad sectors up from 10 SIC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>XXX</td>
<td>Industry Sub sector</td>
</tr>
<tr>
<td>XXXX</td>
<td>Industry Group</td>
</tr>
<tr>
<td>XXXXX</td>
<td>Industry</td>
</tr>
<tr>
<td>XXXXXXX</td>
<td>U.S., Canadian, or Mexican National specific</td>
</tr>
</tbody>
</table>

Source: NAICS Association

Table 1: NAICS 2007 Hierarchical Structure

Generally speaking there are two possible ways the classification can be achieved. One way is to cluster the companies depending on the similarity of products they manufacture which means that companies whose major economic activity e.g. lies in retailing electronic devices are considered to be in the same industry. Another way of clustering would be the criteria of similarity of economic activities. This would mean that companies are clustered depending on the market area they supply. The Economic Classification Policy Committee designed the NAICS system the way that it groups the companies following the first pattern which means that all companies, which are producing shoes get the same code assigned. The distinction of whether this is a sport shoe, a sandal or a business leather shoe does not matter.

Since Sports is not considered by NAICS as a major economic activity, the relevant companies therefore are not clustered underneath one single industry sub-sector or even industry group. When looking up companies which we believe are part of the SGI it becomes clear, that there is not just one or two categories which are relevant. Following
the specifications of NAICS 1997, Li et al. list the codes comprising companies which have their major economic activity in the SGI (written in Italics).

<table>
<thead>
<tr>
<th>Two-digit Code</th>
<th>Sub Code</th>
<th>Industry Categories and Sport-related Economic Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td></td>
<td>Agriculture, forestry, fishing, hunting</td>
</tr>
<tr>
<td>21</td>
<td></td>
<td>Mining</td>
</tr>
<tr>
<td>22</td>
<td></td>
<td>Utilities</td>
</tr>
<tr>
<td>23</td>
<td></td>
<td>Constructions</td>
</tr>
<tr>
<td>23499</td>
<td></td>
<td>Athletic field construction</td>
</tr>
<tr>
<td>31-33</td>
<td></td>
<td>Manufacturing</td>
</tr>
<tr>
<td>3152</td>
<td></td>
<td>Cut and sewed apparel manufacturing</td>
</tr>
<tr>
<td>3162</td>
<td></td>
<td>Footwear manufacturing</td>
</tr>
<tr>
<td>31621</td>
<td></td>
<td>Athletic footwear manufacturing</td>
</tr>
<tr>
<td>33992</td>
<td></td>
<td>Sporting goods manufacturing</td>
</tr>
<tr>
<td>41-43</td>
<td></td>
<td>Wholesale trade</td>
</tr>
<tr>
<td>45111</td>
<td></td>
<td>Sporting goods stores, sports gear stores</td>
</tr>
<tr>
<td>45331</td>
<td></td>
<td>Sporting good stores, used</td>
</tr>
<tr>
<td>48-49</td>
<td></td>
<td>Transportation and warehousing</td>
</tr>
<tr>
<td>51</td>
<td></td>
<td>Information</td>
</tr>
<tr>
<td>52</td>
<td></td>
<td>Finance and insurance</td>
</tr>
<tr>
<td>53</td>
<td></td>
<td>Real estate and rental leasing</td>
</tr>
<tr>
<td>53229</td>
<td></td>
<td>Sporting goods rental</td>
</tr>
<tr>
<td>54</td>
<td></td>
<td>Professional, scientific and technical services</td>
</tr>
<tr>
<td>55</td>
<td></td>
<td>Management of companies and enterprises</td>
</tr>
<tr>
<td>56</td>
<td></td>
<td>Administration and support and waste management and remediation services</td>
</tr>
<tr>
<td>61</td>
<td></td>
<td>Education services</td>
</tr>
<tr>
<td>61162</td>
<td></td>
<td>Sports and recreation instructions</td>
</tr>
<tr>
<td>62</td>
<td></td>
<td>Health care and social assistance</td>
</tr>
<tr>
<td>71</td>
<td></td>
<td>Arts, entertainment and recreation</td>
</tr>
<tr>
<td>71121</td>
<td></td>
<td>Spectator sports</td>
</tr>
<tr>
<td>71131</td>
<td></td>
<td>Professional or semi-professional sports teams and clubs</td>
</tr>
<tr>
<td>Industry Code</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>71121</td>
<td>Racetracks</td>
<td></td>
</tr>
<tr>
<td>71121</td>
<td>Independent professional or semi-professional athletes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(race car drivers, golfers, boxers), owners of racing participants (e.g. cars),</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and independent trainers</td>
<td></td>
</tr>
<tr>
<td>71131</td>
<td>Promoters of sports events</td>
<td></td>
</tr>
<tr>
<td>711310</td>
<td>Sports arena and stadium operators, sports event managers, organizers, and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>promoters</td>
<td></td>
</tr>
<tr>
<td>71132</td>
<td>Promoters of sports events without facilities</td>
<td></td>
</tr>
<tr>
<td>71132</td>
<td>Sports event managers, organizers, and promoters</td>
<td></td>
</tr>
<tr>
<td></td>
<td>without facilities</td>
<td></td>
</tr>
<tr>
<td>71211</td>
<td>Sports halls of fame</td>
<td></td>
</tr>
<tr>
<td>71391</td>
<td>Golf courses and country clubs</td>
<td></td>
</tr>
<tr>
<td>71392</td>
<td>Skiing facilities</td>
<td></td>
</tr>
<tr>
<td>71394</td>
<td>Fitness and recreational sports centers</td>
<td></td>
</tr>
<tr>
<td>71395</td>
<td>Bowling centers</td>
<td></td>
</tr>
<tr>
<td>71399</td>
<td>Recreational or youth sports teams and leagues</td>
<td></td>
</tr>
<tr>
<td>71141</td>
<td>Sports figures’ agents or managers</td>
<td></td>
</tr>
<tr>
<td>72</td>
<td>Accommodation and food service</td>
<td></td>
</tr>
<tr>
<td>81</td>
<td>Other services (except public administration)</td>
<td></td>
</tr>
<tr>
<td>81149</td>
<td>Sport equipment repair and maintenance</td>
<td></td>
</tr>
<tr>
<td>81391</td>
<td>Municipal sports authorities and councils</td>
<td></td>
</tr>
<tr>
<td>81399</td>
<td>Administrative or regulatory athletic associations (e.g. leagues)</td>
<td></td>
</tr>
<tr>
<td>92</td>
<td>Public Administration</td>
<td></td>
</tr>
</tbody>
</table>

Source: Li et al.

Table 2: Industry Codes comprising companies assigned to the SGI

The problem with these codes is that besides the companies which are considered to be part of the SGI, there are companies placed underneath these codes which are not related with the SGI. Looking into the two-digit code 11, its three-digit sub-codes comprise ‘Crop Production’, ‘Animal Production’, ‘Forestry and Logging’ and ‘Fishing, Hunting and Trapping’. Going further down in the tree following the branch of three-digit sub-code 114 ‘Fishing, Hunting and Trapping’, it again splits up into
‘Fishing’ and ‘Hunting and Trapping’. ‘Fishing’ is finally split up into ‘Finfish Fishing’, ‘Shellfish Fishing’ and ‘other marine Fishing’. Even if these categories comprise a few companies which produce e.g. Sport Fishing Equipment, the majority of these companies are not to be placed in the basket of SGI. So by simply picking the companies from these codes one will not obtain just the SGI but a lot of other by-catch.

Figure 1: Example of intersection of SGI with conventional NAICS 2007 code

Similar examples can possibly be drawn by looking into the sub-branches of the two-digit codes 21 (Mining), 22 (Utilities), and 91 (Public Administration).

Furthermore, one huge industry does not appear in the definition by NAICS which is Sports Media. This comprises companies which provide consumers with all kind of sport-related products. Those are web pages, television and radio broadcasting as well as cable and magazines, journals and newspapers. The reason for that again lays in the definition NAICS applies in order to categorize the companies: Each company is assigned the Industry code where its major economic activities are placed in. So many web pages which provide sports news actually are part of a newspaper or magazine which has gone online. The core economic industry of this company then most likely is not the Sport segment but maybe economics or politics. In any case, sports does most often not account for the major economic activity.

But there are other companies like ‘ESPN Classic Sport LTD’ which clearly is a company that provides information about sports as their major economic activity. The same applies to the webpage of ‘Bet and Win’ which is a major European page for
Betting and Gaming on any kind of Sports. How do they get recognized in the classification system NAICS? ESPN e.g. is placed in the Industry Sector 51 which is labelled ‘Information’, Industry Sub sector 515 ‘Broadcasting (except Internet) and Industry Group 5151 ‘Radio and Television Broadcasting’ (Orbis). Further specifications are not made so that ESPN is accompanied in this industry group by Walt Disney Co., Bertelsmann AG and CBS Broadcasting Inc. Also private cable companies – which are often the ones who pay immense amounts for the exclusive rights to live broadcast major sport events - are listed in this sub-category. A differentiation into different areas like Sports, Entertainment and Economics e.g. is not made which leads to the point that when the industry is to be defined by using the NAICS codes, usually, media is underrepresented or the data misinterpreted.

2.4.2 Definition of the SGI in literature

Literature about the SGI is quite scarce when it comes to define it. However, it is a term which is broadly used. In the following, three definitions are presented which stem from 1994 until 2001. A historic development based upon these three definitions however can’t be assessed.

Definition by Pitts et al.

Pitts et al. present a three-sector model of what they call the ‘Sport Industry’. They define the industry as ‘a market in which the products offered to its buyers are sport, fitness, recreation, or leisure related and may be activities, goods, services, people, places, or ideas’. The segmentation takes place by breaking the industry down into the ‘Sports Performance segment’, the ‘Sport Production segment’ and the ‘Sport Promotion segment’. The sports performance segment comprises products where the consumer is either offered to participate actively or attend passively by e.g. watching a match as a spectator. The second segment sport production includes companies offering products which are needed in order to play sports or improve its performance. This is the traditional segment of the Sporting Goods Manufacturers and Producers of Sports Equipment. The third segment labelled Sport Promotion is defined as products that promote sports which is a cluster of companies in different areas like Advertisement and Media amongst others.
**Definition by Meek**

In 1997, an article by Meek is published in the journal ‘Sport Marketing Quarterly’ with the title ‘An estimate of the size and supported economic activity of the sports industry in the United States’ where he depicts the SGI in a three-sector model. The foundation of the model is no solely based upon the economic activity but considers generally spending. The sectors he describes are parallel and can not be separated entirely from each other, which means that there are interdependencies. The sectors are ‘Sports Entertainment & Recreation’, ‘Sports Products & Services’ and ‘Sports Support Organizations’. ‘Sports Entertainment’ comprises the areas of Professional and Amateur Sports Teams which are subdivided into sport events, media and sport-tourism-related areas like e.g. High Ropes Course. The second sector ‘Sports Products & Services’ consists of companies which could be described mainly as the Sporting Goods Manufacturer of footwear, apparel and equipment with their areas of design, research and development, procurement, manufacturing, distribution and retailing. Besides that the provisions of services like e.g. maintenance of equipment is allocated to this sector. The third sector of ‘Sports Support Organizations’ embraces all professional and amateur organizations like national sports associations, clubs and leagues but also marketing organizations and law and consultancy firms.

**Definition by Li et al.**

A totally different approach in order to define the industry of Sporting Goods is chosen by Li et al. The SGI is divided into just two sectors whereas the secondary sector consists of six sub-sectors. The primary sector is labelled ‘sport activity-producing sector’ and the secondary sector is named ‘sport-supporting sector’. However, there is a huge interdependency between these two sectors since each sector is fostered by the success of the other one.

The primary sector comprises all kind of companies and organizations which actually produce sport games, events and services. This is all professional and semi-professional teams, athletic departments, municipalities and country/state recreation departments, sports and fitness clubs, independent professional athletes, sports trainers and instructors, and owners of race participants (e.g.: race cars and horses).

The secondary sector is – as mentioned before – split into six sub-sectors which are all somewhat overlapping with the primary sector. This is due to the fact that sometimes
companies and organizations which are located in the secondary sector act as a sponsor of an event or even do organize them themselves. The group of companies which are allocated to the secondary sector fall into the following six sub-sectors: ‘Administration and Regulatory Athletic Associations’, ‘Sporting Goods Manufacturers, Wholesalers and Retailers’, ‘Sports Facilities and Buildings’, ‘Sports Media’, ‘Sports Management Firms’ and ‘State, Municipal and County/Country Sports Councils and Authorities’.

![Figure 2: Definition of the SGI by Li et al.](image)

The first sub-sector ‘Administration and Regulatory Athletic Associations’ comprises administrative associations like national sports associations e.g. the DOSB as mentioned before and regulatory athletic associations like the National Basketball Association (NBA) which is the organisation providing the framework of the sports in the USA.

The second sector is the one which is typically known as the industry of sporting goods. Sporting Goods Manufacturers, Wholesalers and Retailers, however, are not in the position to provide sport activities. Their role is to support the ones providing sports-activities by providing corresponding equipment, gear, functional footwear and apparel.
Sports Facilities and Buildings form the third supporting sector and are primarily used to host sports events. Those facilities include e.g. stadiums, arenas, sports complexes and racetracks but as well skiing facilities and bowling alleys. The criterion again is that the major activity what the facility is used for needs to be sports-related. Huge convention centers which host e.g. a football team are often owned by the municipality and are used also to host other major events. In this case the main purpose of these multipurpose facilities is not necessarily sports-related. However, in Europe, many of the top clubs in popular sports do own their stadium and facilities which makes it possible to e.g. sell the right of the name of the facility or hold other major (sports) events in the facility and reap the (economic) benefits associated. The Veltins-Arena e.g. is home of the German Bundesliga team Schalke which sold the name of the facility to a local brewery (Veltins). Besides that, other sport (events) are hosted in the arena throughout the year.

The fourth sector representing Sports Media combines channels of distribution for information. Among them there is Television, Radio and Cable Networks, Internet, Magazines and other Periodicals. Here again, the reason why media is a supportive sector becomes very clear since games and competitions produced by professional sports teams and athletes provide the sport media with the input of their programmes. This e.g. is news, statistics about a player or a team, a retrospect of how a certain events went the years before and of course the live broadcasting and comments and analysis provided by experts after the event. Hence, sports media depends on the sports producing sector since this is what they sell to the public.

Sub-sector five comprise the areas of organizing, promoting and managing sports events, representing and managing processional athletes and the provision of legal and financial consultancy services to sport firms, organizations and individual athletes. The major areas of activity therefore are Marketing, Public Relations, Event Management, Athletic Representation and Financial and Juridical Consultancy.

The sixth sub-sector labelled ‘State, Municipal and County/Country Sports Councils and Authorities’ is a sector which initiates and fosters sports facilities and partly also activities offered for the broad public. Subdivisions usually are sport commissions and sports authorities. Whereas the former’s function is to promote and develop sports in the respective field, the latter’s tasks are securing funds and investments to construct sports facilities and manage them.
2.4.3 Definition by a Market Research Provider

Another viable approach in order to define the industry of Sporting Goods is to have a look at how Market Research Providers define the industry. The NPD Group (National Purchase Diary) is one of the leading global providers of consumer and retail market research information. Within their portfolio there is also the sector which is labelled ‘Sports’. It counts with the sub-categories ‘Athletic Footwear’, ‘Sports Apparel’ and ‘Sports Equipment’. However, more compelling data is of course held back for sale. Of great interest would be to see how the industry is defined; which companies they count into the segment even though it is a very narrow definition due to the limitation on consumer and retail market information. So, even buying a set of data will most likely not reveal the underlying criteria the NPD Group established in order to selects the companies which form the industry they label ‘Sports’.

Excluded right from the start due to the consumer and retail market research information approach are e.g. the sectors of Sport Media, Sport Events, Sport Clubs and Sports Associations amongst others.

2.4.4 Definition by the ‘World Federation of the Sporting Goods Industry’

The World Federation of the Sporting Goods Industry (WFSGI) was founded in 1978 by a committee of nine members which were representatives from different geographical regions and industrial sectors. The WFSGI is the world authoritative body for the sports industry officially recognized by the International Olympic Committee (IOC) as the industry representative within the Olympic family. It is an independent Non-Profit-Organisation (NPO) with no objective of economic character for its own gains.

The WFSGI is formed by sports brands, manufacturers, suppliers, retailers, national federations and all sporting goods industry related businesses.

This description at the same time defines what the Federation considers the Sporting Goods Industry to comprise. Unfortunately, although having contacted the Federation several times, I did not receive any information requested upon this topic to date.
2.5 Issues with the definition of the industry

Besides the general problem of what is considered part of the SGI, there are at least two serious problems which have to be faced. One problem concerns the issue which arises from the existence of conglomerates; the other one emerged through the latest development on the retail market for footwear and apparel.

2.5.1 Issue arising with Conglomerates

A conglomerate by definition is a firm which is formed by the acquisition of several others, each of which is engaged in an activity that generally differs from that of the original (Encyclopaedia Britannica). Granted that there is a conglomerate which is active in various economic sectors but has its major economic activity represented by one of its companies defined to be part of the SGI, both the company and the conglomerate will be – when it comes to industry codes – listed with the same NAICS code. Consequently, when collecting data, the company’s data will appear once under the designation of the company and a second time in disguise by the conglomerate. These latter figures then represent the total conglomerate data which means that all other sectors the conglomerate is active in will be designated to this NAICS code as well even though the other sectors have nothing to do with the SGI.

Keeping in mind that it has to be the ‘companies’ major economic activity’ and not the majority of its activities which are determining where it is listed, a fictitious numerical example reveals the consequences. Let’s assume a conglomerate owns three companies which are active in three different industries – one of them being the industry of manufacturing apparel. This company itself is active in the areas of sporting apparel and general apparel with the respective percentages of 51 and 49. So the major economic activity for this company lies in the SGI. Now, assuming that this company in the apparel manufacturing industry accounts for 34% of the conglomerates major economic activity (33% e.g. each of the other two remaining companies), the overall percentage of why the conglomerate is listed underneath a certain NAICS code in this example is:

\[0.51 \times 0.34 = 0.1734\]
In this case the conglomerate would be listed underneath a NAICS code belonging to the SGI because 17.34% of its economic activity lies within this area. Since certain key performance indicators (KPI) may vary greatly from industry to industry, financial information of a conglomerate can lead to an intense distortion of the numbers when investigating the industry.

This fact might occur especially in the industry groups Manufacturing (NAICS code 31-33), Wholesale Trade (NAICS code 41-43) and Retail Trade (NAICS code 44-46).

2.5.2 Distinction between sport ‘functional’ goods and ‘sport’ fashion

Over time, the ‘industry’ of sporting goods has changed a lot and lately developed quite fast. Not only in the sense that there are a whole new variety of sports, especially niche sports no one would have ever thought about two decades or probably even one ago but also in the sense of how people deploy the goods from the industry.

What used to be an equipment-based industry providing primarily balls and racquets has grown to include footwear and later apparel which has been back then still very sports specific. Then, however, a trend was born which can be described as ‘street wear’. It started out in the 1980 when kids started to wear basketball boots not just in sports but as an everyday shoe. The same happened to tricots and in general the sector of sports apparel. From that stage it was a small step for the manufacturers to take advantage of this trend and adjust their goods to the demand. Street wear still had the looks of sports shoes or apparel, however not necessarily the function anymore. These products can be labelled as "lifestyle" products that are today amongst the most recognizable in the global marketplace. This development has been foreseen already in 1993 by John Duerden, former CEO of Reebok, when he said that ‘the production of sports clothing is likely to become ever more important, and could expand from 20 per cent of our business at present to around 50 per cent in the future’ (Foster p. 142).

The problem arising from this development of the sporting goods manufacturer industry is that companies which formerly have been clearly classified as sporting good manufacturers are entering the sector which is fashion. So e.g. on sports apparel, they are not just competing with other manufacturers of sporting goods anymore but also with companies active in the fashion industry. A good example here is Puma which over the years has – maintaining their engagement in the manufacturing of high
performance footwear like athletic and soccer footwear – also entered the area which is commonly named ‘leisure’ and contributes quite an important fraction of the turnover generated. Consequentially, Zeitz – CEO of Puma AG – in an interview lately defined the company as a ‘sports and lifestyle brand’ (Zeit). Other companies are going the opposite way. They have their roots in the fashion industry and try to enter the SGI by offering a sports line like e.g. Ralph Lauren does. For companies in both industries this offers a great possibility to extend their market and reach new clients which before probably have not considered buying a certain brand since it did not offer products in the segment they were looking for. Besides that, especially the new companies which have established themselves in a small niche and have been growing their market share significantly over the years do position their products in the areas of apparel and footwear the way that it becomes a great blend between sportswear and fashion which allows them to address customers from both groups: those who are interested in the brand because of its heritage and functionality (e.g. skater apparel and footwear) and those who are interested because of certain features of the cloth like durability and comfort and ease. It becomes clear that the definition of ‘sports’ and its industry does matter a lot.

2.6 Conclusion on the definition of the SGI

There are different approaches of how to define the SGI. As discussed above, there is the North American Industry Classification System which got established by the Economic Classification Policy Committee in 1997 and reviewed in 2007. Its criteria upon the decision is taken into which category the company belongs is solely the fact in which industry the company has its major economic activity. Different sub-categories have been established but somehow still some sectors e.g. sports-related media is missing on the definitions.

The definitions in literature are somehow similar to each other when it comes to which companies are active in the SGI. However, the approach of the three presented authors or group of authors differs greatly. Whereas Pitts et al. and Meek’s models are still somewhat similar dividing the industry into three sectors and therefore also coincide to some extend as regards content; Li et al. consider the industry to comprise just two sectors whereas they classify them hierarchically into a primary and a secondary sector.
with the latter one still being subdivided into smaller sub-sectors. Pitts et al. and Meek, in contrast, see the three sectors hierarchically all equally emancipated next to each other. This is the most evident difference between Pitts et al. and Meek’s model and the one presented by Li et al. The two-sector model clearly shows that the SGI is not an industry which has different players in the field where all are equal. The authors clearly stress the fact that the sport-producing sector is the reason for the existence of the secondary sector with its sub-sectors where manufacturers, media, associations, services and others are located. In the end, the approach differs greatly of how the industry is seen, nevertheless, there is no criteria mentioned or developed of how a company should be assessed in order to be placed into the basket of the SGI or not.

The same basically applies to the research institute. The problem with their point of view onto the SGI is that they are – by the definition of the literature presented just as the Federation which will be assessed afterwards – part of the industry itself. The institute therefore just focuses on the collection of market data which basically comes from the market participants itself whom again at the end are part of the clients buying the aggregated data in order to draw their conclusions. Due to the fact the institute has formed a narrower definition of the industry which reflects their area of business.

The World Federation of the Sporting Goods Industry up to date unfortunately was not able to provide me on request with a definition of how they see their industry. Following what is stated on the homepage, they apply the broader definition of the industry as literature does, yet excluding the media.

So, apart from differences in structure, the definition of the industry with its stakeholders just differs in breadth where some narrow it down to manufacturers, others to the sport-producing entities. A solution to the one and only problem which is the definition of the criteria a company needs to comply with in order to say that it is active in the SGI is only provided by NAICS: a company has to have its major economic activity in one of the fields considered to be part of the SGI.

It is important to note that the definition of ‘major’ does not necessarily mean ‘majority’. This might have a huge impact on numbers imagining a big manufacturing company which has its ‘major economic activity’ e.g. in the area of athletic footwear. This major economic activity, however, might be just a share of e.g. twenty percent. Nevertheless, the company’s data is published entirely underneath the category of athletic footwear even though the other activities might be located in totally different
areas which are all smaller than twenty percent. The issue with conglomerates is another example where the company is classified by the major economic activity of the biggest company incorporated.

The issue of the development of the SGI has to be taken care of carefully since companies probably will drop out sometime when their major economic activity shifts from sports to leisure. Two possible alternatives can be taken into consideration: One is to try to split up the companies into those which are still primarily active as a manufacturer of sporting goods and equipment and those which have moved into the sector of fashion. This would mean that the faster the industry develops, the more often the NAICS definitions have to be reviewed. The other possibility is to acknowledge that the manufacturers of sporting goods and equipment are moving into the sector of fashion as well and hence, don’t change existing classification systems.

Another fact has become very clear throughout this discussion: In the NAICS system, there does not exist an industry called SGI. Therefore, it will always be the way that it has to assembled by combining various codes and sub-codes from the NAICS.

3 Mergers & Acquisitions

3.1 Definition of Mergers & Acquisitions

A transaction is known as an acquisition when a buyer acquires all or part of the assets or businesses of a selling company. In case the target company is purchased despite its active resistance the transaction is also know as ‘hostile takeover’. A merger, in contrast, is the corporate combination of two or more independent business corporations into a single enterprise, usually the absorption of one or more firms by a dominant one (Encyclopaedia Britannica). The majority of transactions, however, are handled as acquisitions (Bragg p.1).
3.2 Categories of Mergers & Acquisitions

In literature different categories of M&A are distinguished. Generally, authors agree on three categories (Lipczynski et al. p. 258) where there is a fourth one (Borghese et al. p. 10) which can be considered a subcategory.

But, before starting out with the different categories, it has to be clarified that there are two ways of entering into a M&A transaction. One possibility is to literally merge the two companies, in which case on company automatically assumes all the assets and liabilities of the other. In this case, the merger must have the approval of at least 50 percent of the stockholders of each firm concerned. The alternative is to simply acquire the sellers stock by purchasing it on the stock market or in exchange for shares (cf. Brealey et al. p. 887).

Horizontal mergers are transactions where a company tries to strengthen its own position by acquiring a competitor within the same industry and on the same level of in the value chain. This might be on the same geographical market or abroad and usually the reduction of competition is a primarily aim (Lipczynski et al. p. 634). The acquisition of Reebok by Adidas in 2005 (Stolowy et al. p 116) is a good example for a horizontal merger. Generally, market-extension (merging with a company in a different market) or product-extension (target is located in the same market and active in the same industry and rounds off the product portfolio of the new company) are the most common reasons to involve in a horizontal merger or acquisition (Encyclopaedia Britannica).

Vertical M&A refers to transactions of a company trying to incorporate within the same industry parts of the value chain. In the case of the SGI it might be e.g. Nike purchasing a supplying company or trying to get control over a company active in the sales and distribution of sporting goods like Foot Locker (Li et al. p.174). The establishing of Nike town, however, is not a vertical integration since the stores where not bought but build up by the company itself.

The hybrid of the two previously described transactions is called ‘diagonal integration’ (Borghese et al. p. 10). Here, a company merges or acquires another company which is already active in two parts of the value chain like production and distribution. This way the new company can benefit horizontally by the increase of its market share and a loss of competition and at the same time gain control over the distribution of the goods produced. As an example Borghese et al mention the AOL Time Warner merger.
A conglomerate transaction is a merger or acquisition of a company which are not related to each other with regards of industry affiliation. It was a common technique in the 1960s to benefit from shear size and diversification in order to secure the industry against industry-specific fluctuations. This can be seen as an early way of active risk management and avoidance of uncertainty (Lipczynski et al. p. 597). Through the diversity, cross-subsidization was a tool to strengthen the position of the conglomerate against a specialized rival. Another reason to form conglomerates was the fact that by incorporating many companies from totally divers industries, an internal capital market was formed.

3.3 Merger Waves in the past

Mergers and Acquisitions are not a new phenomenon; however, the topic has gained a lot more attention in public and also by researchers starting around 1980. This is partly due to the fact that information technology was evolving fast. The computer found its way into the offices and made it a lot easier to calculate the aftermath of a potential merger or acquisition. Generally, researchers agree that the past has seen five big merger waves (Brealey et al. p. 896) each of them having its own characteristics (Cassiman et al. p.11).

First Wave

The first wave of M&A activities is described to have started around 1887 and ended in 1906. The industries involved were mainly mining including petroleum products, chemicals and metals (Borghese et al. p.4) and manufacturing comprising transportation equipment and fabricated metal products. This first wave was characterized by horizontal mergers and acquisitions with the attempt to achieve economies of scale. It was expected that per-unit costs could be driven down drastically and lead to greater efficiency overall. US Steel, Du Pont and General Electric are prominent examples in the US, in Europe especially the UK and Germany were affected forming e.g. in Germany the two competitors Thyssen and Krupp. This wave was as well the initiation of the first antitrust regulations in the USA named ‘the Sherman Antitrust Act’. The act declared that the formation of monopolies and other efforts to control or delimit trade were unlawful and punishable as criminal
offenses under federal law. However, the Department of Justice did not count with the necessary resources to enforce that act properly which led to the name ‘monopolistic mergers’ for that first merger wave.

**Second Wave**

Mergers and Acquisitions taking place between approximately 1918 and 1929 are named the second merger wave which falls into the post World War I period. This wave was restricted a lot more by antitrust legislation since the Congress in the USA had passed the Clayton Act (Brealey et al. p.886) which strengthened the Sherman Act established earlier. Also the Federal Trade Commission Act was passed which established the Federal Trade Commission (FTC). Unlike before these two acts were now enforced by the FTC which was granted the authority to investigate antitrust violations and enforce the respective laws.

Since the laws on M&A activities were stricter and actually did get enforced as well, fewer horizontal mergers and acquisitions took place. The sectors involved in this second wave, however, stayed the same as in the first wave: metal, chemicals, petroleum products and transportation equipment.

But, in order to achieve growth which was the key to unlock the desired economies of scale, companies now enforced their engagement in vertical mergers in order to participate and control the entire value chain (Cassiman et al. p.11). This period of growth was stopped abruptly on October, 29\textsuperscript{th} 1929 which is known as the ‘Black Thursday’ and constitutes the starting point of the ‘Great Depression’.

The most renown companies which emerged from this wave are General Motors, IBM and John Deere amongst others (Borghese et al. p.5).

**Third Wave**

The third wave of mergers took place in the 1960s whereas some sources state it started in 1958 and ended in 1971 (e.g. Cassiman et al.), others narrow it down to the ‘mid to late 1960s’ (e.g. Borghese et al.). Nevertheless, the characteristic of this wave are clearly the fact that companies considered more and more the feasibility to merge with companies lying totally out of scope of their original industry which is known as diversification. Those mergers are known as conglomerate mergers and had the advantage by then that legislation was not as strict on them as it was on horizontal and
vertical mergers. In Europe, yet antitrust legislation is said to not have been that strict in order to prevent horizontal and vertical mergers to the same extend. It was believed that European companies were still disadvantaged compared to their American competitors.

For the management of these emerging conglomerates, the issue of diversification was double-edged. A great benefit was that the company was less dependent on the performance of its core business which probably has even been a cyclical business. This way it was possible for the conglomerate to straighten-out the revenue flow. Another upside – at least at the beginning was that shareholders also appreciated the fact of diversification; their investments became less risky since they bought some kind of portfolio by buying just one stock instead of investing into just one very specific industry. This, however, soon turned out to be a downside since it became clear that the costs for a company to manage the conglomerate and thereby the diversification was very costly. The individual shareholder was able to diversify at a much lower cost and was more flexible at adjusting her portfolio.

Due to the high costs a conglomerate brings along, many of the acquired companies which got incorporated into a conglomerate got sold again in the following years. It also became clear that the acquirers had overpaid for their targets. Generally speaking the creation of conglomerates and the capability to manage them was made possible by the introduction of computers (Copeland et al. p. 753). Financial planning and control systems got implemented and paved the way for more complex company structures.

**Fourth Wave**

The second last merger wave to date started out in the late 1970s and lasted a decade. It was characterized by hostile takeovers and leveraged buyouts. This was owed to the development of more efficient capital markets and new financing instruments like e.g. the junk bonds (Cassiman et al. p.12).

Generally, at this period a lot of cross-boarder M&A took place, especially the British bought themselves into the American market. However, these M&A were not that much strategic M&A anymore as they have been before: achieving growth, economies of scale or take control of the distribution channels or supply lines. It was a wave which made it possible to act as a financial buyer (Borghese et al. p.6). The aim was to
acquire a certain part of a company, a technology or a brand name and sell of the rest. Also big companies became targeted since acquirers saw the possibility of huge benefits especially by breaking up conglomerates and selling the different companies. For many companies, however, acquiring others was somehow seen as an insurance against becoming a target themselves. It was believed that by becoming bigger it was more unlikely to become targeted. The consequences were that many companies acquired in a rush without proper preparation which led to the situation that many of these M&A failed badly.

The largest deals of this merger wave are Kohlberg, Kravis, Roberts (KKR) purchasing RJR Nabisco, Chevron buying Gulf Oil, Philip Morris taking over Kraft and du Pont Conoco.

**Fifth Wave**
The last of the five waves identified in literature started out in the early 1990s. Due to strict antitrust legislation it has become difficult for big companies to take over another big player no matter if it would be a horizontal, vertical or conglomerate merger. M&A activities have been increasingly high-value and cross-border mergers and have returned to strategic investments compared to the fourth wave which was dominated by financial buyers and their interests. Prominent examples for cross-border activities are – some more successful than others – British Vodafone buying German Mannesmann in Telecommunication and German Daimler Benz merging (or acquiring – depending on a national point of view) American Chrysler. National deals to be mentioned are Thyssen and Krupp in Germany forming one of the leading steel producers, Disney acquiring Cities Capital, Chemical Bank merging with Chase Manhattan, Citicorp merging with Travelers forming Citigroup and AOL merging with Time Warner.

### 3.4 Conclusion on the historic development of M&A

Merger & Acquisition activities and their purposes have taken an interesting development over the last 100 years. Whereas in the first merger wave at the end of the 19th century growth and consequentially economies of scale were the main reason for a company to undertake a merger or acquisition, history shows that over time besides the pure aspect of growth and its economies of scale was not the predominant reason
anymore. This was due to the fact that the antitrust legislation became more and more enforced which made it difficult for companies in the same industry to pool their activities. Besides growth, other reasons to involve in M&A became more predominant. Those are e.g. the buy-into a new technology, a new geographic or demographic market, increase or protect its own market share and gain control over a supply chain or even entire value chain.

3.5 The purpose of Mergers & Acquisitions

Mergers and Acquisitions (M&A) are – as explained before – not a new phenomenon to the economy. But why are companies actually merging their business with the one of others and why do they acquire other businesses? Many companies have come a long way to become what they are today. This development usually takes place by increasing slowly but surely revenues over time in the market or niche the company has organically grown into. Knowing the clients needs products get adjusted, differentiated and new products get launched. However, there are different reasons why companies actually decide to engage in M&A activities. In the following, a selection of them will be described.

3.5.1 Increase Brand variety

Companies around the world invest a lot in Marketing and thereby in the reputation of their brand(s). The reason to do so is the attempt to differentiate the brand as much as possible from other brands active in this segment so that the product polarizes and the customer intuitively ‘knows’ upfront what kind of shoe she wants to buy. Some companies place their brands more in the sport-functional segment, others more in the area of leisure, fashion or street wear. A potential customer when about to purchase a running shoe would probably go for a pair of Nike since advertisements have build the image that this brand is traditionally strong in this field in contrast to some other brand which is probably more known for sneakers. Since it is difficult for a company to place a brand in different categories, it might pay off to purchase a company whose brand(s) is (are) some kind of amendment of the purchasing company’s portfolio (Bender et al. p.187).
Another reason especially with regards to kids, youth and young adults to diversify into different brands is the fact that certain brands are considered ‘in’ or ‘cool’. This means that a company which is not considered part of this group has basically two options. Since it does not make much sense to imitate the shoe which is en vogue since it is the combination of the looks and the brand which is en vogue and not just the product itself, the company can choose to either not participate in this market and invest into a different product or merge with or acquire the former company partly or entirely in order to participate.

3.5.2 Why acquire strong brands?

One very characteristic quality of the Sporting Goods Industry is that huge amounts of money which is put into Sponsorships. This includes Sponsorships of events like the soccer world championships in Germany 2006 or the one to come in South Africa 2010 where Adidas was one of the main sponsors, act as the official outfitter of teams and to sign long lasting contracts with individual athletes in certain sports in order to associate the athletes success with the brand. Latest examples therefore are Puma and Usain Bolt (Athletics), Nike and Tiger Woods (Golf) and Adidas and Kobe Bryant (Basketball). Another factor which contributes greatly to the reputation and thereby to success is the heritage and fame of the brand. Each commercial does show – besides the product advertised – either recent victories (e.g. Puma in the Volvo Ocean Race or the America’s Cup) or parts of their heritage and early beginnings (e.g. Adidas).

The intention of the companies is to differentiate their products (Li et al. p.74) from those of their competitors in order to sharpen the brands profile. This leads to the situation that products objectively are still comparable but subjectively for the clients become more difficult to substitute one against each other since it is not just any shoe you buy. This way, clients won’t purchase a pair of shoes from the competitor just because it costs a few dollars more. The consequence it that each company is able to charge prices which are higher than they would be if they would compete directly against each other without the image and reputation the company sells together with the product. This phenomenon is known as ‘monopolistic competition’ (Krugman et al. p. 179) and does work out because of the ‘price elasticity of demand’ (Li et al. p. 49f)
which adds the little but important something to the product and the SGI and secures higher than average profit margins for the company behind the brand.

### 3.5.3 Reduction of Research and Development expenditures

Usually, Research and Development (R&D) expenditures are quite costly basically due to two reasons. First of all it takes quite an amount of time to develop a product from scratch until it can be sold in the market since there are different stages the product has to go through before. During this time, the company has expenses but no revenue generated yet. Secondly, once the product is developed and produced, there is no guarantee that the clients will buy it in the quantities projected. These are two threats a company faces each time it is about to develop a new product.

Since the market of sporting goods is diversified very well, it is rather difficult at the moment to increase revenue significantly by launching one new product since it is not for sure that it will have an impact on the market. That is the reason why many companies – especially the bigger ones – tend to buy up smaller, sometimes even start-up companies, which have successfully passed the hurdles of product development, production, and marketing and reached a high level of acceptance in the market. Those are predominantly niche products like surfing gear, kiting equipment and alike. Established companies that way buy themselves into a niche market of products which have not been represented in the company's portfolio by then. For the acquiring company an acquisition therefore is also known as an alternative to internal development.

### 3.5.4 Keep up with technological Progress

The SGI is a fast growing and especially fast developing industry. When it comes to the development of special materials e.g. in the apparel industry, it might be a big disadvantage to not count with a certain material. Best example of the recent past is the new material which was used to fabricate the swimsuits for the athletes at the world championship in Swimming in Rome 2009. One world record after the other was improved and this mainly by swimmers which had been provided by their sponsors with the suit made out of a new material. So at this event – besides the personal
preparation and training to compete – it mattered a lot which material you have been provided with. For the companies to have the material or not did not have a huge direct financial impact yet since they are providing the athletes with the suits and even pay them for doing so. However, the reputation of the companies which have not been able to provide their athletes with the state of the art material was affected.

3.5.5 Reduction of the company’s exposure to cyclicality

Many companies are active in sports which do heavily depend on seasons. This is mainly because many sports are played during summertime since they are outdoor sports. The same applies to exercising. In spring people decide to buy a new golf club, a new bicycle or soccer shoes.

A possibility to smoothen out the revenue flows over the year is to engage into a different area of products which are predominantly consumed in the off-season of the actual business area. This might be e.g. the winter sports industry. This way a company would be able to keep on generating its profits during summer in its traditional segment and increase its revenues in the winter time. A very good example is acquisition of Salomon in 1997. However, it turned out that the new business did not fulfil the expectations which had been defined beforehand. Consequently, Adidas sold Salomon again in 2005.

3.5.6 Elimination of a competitor

One reason to acquire or merge with a company in the same industry might be to eliminate a competitor. This action can bring a company active in a highly consolidated market in a position where competition is reduced significantly which would make it possible to reduce the output and rise sales prizes which are typical characteristics of monopolistic competition. However, anti-trust charges are most likely to be brought.
3.5.7 Defending action

When companies are about to be taken over by a competitor and this takeover is of hostile nature, some companies decide to acquire another company in order to become less attractive (Meeks p. 11). Usually, companies which hold a lot of cash are targets of (hostile) acquisitions since the acquiring company can pay the acquisitions at least partly with the cash of the target. When this target company now decides to acquire another company itself then these cash holdings are reduced significantly which makes the company less attractive for an acquisition.

Besides the reduction of cash by acquiring another company when the company itself is a potential target candidate, the effect of a sudden increase of market share by an acquisition might make it much more difficult for the acquiring company to takeover the target since the to be combined company probably will face anti-trust charges. This is especially an effective way to prevent a hostile takeover when the buyer already possesses a high market share and the acquisition of the company – which has recently increased its market share by an acquisition – would make it the or on of the predominating companies within this industry.

Additionally, common defence tactics are poison pills and proxy fights, golden parachutes for the management of the target company and the search for a white knight (Berk et al. p. 888f).

3.5.8 Increase purchasing power

By acquiring or merging with another company, the size which the newly formed company now counts with can be deployed e.g. in the negotiations with contractors up- and as well downstream. The position of a company is strengthened significantly when it is able to negotiate higher volumes. This comes true when negotiating conditions with a manufacturer of sportswear or sports gear or as well when negotiating terms in the different distribution channels.
3.5.9 Acquire intellectual property

Besides fashion and the looks of a sporting good product, especially its functionality is very important; especially when it comes to high performance gear, equipment, footwear or apparel. Intellectual property can include patents, brands, production processes and others. Also IT databases can belong to intellectual property. This is what gives the company a competitive advantage and constitutes a very good reason to acquire or merge with this company. In the sporting good industry examples of M&A in order to acquire intellectual property, however, are rather scarce.

3.5.10 Increase market share

Companies usually strive to grow and become a predominant player in its market. However, there are several reasons why this might be a difficult mission. A huge market usually is saturated with companies who offer the relevant products potential customers ask for. To increase market share in a saturated market therefore can be reached by either inventing a product which outperforms the competitor’s current products or by acquiring one of the companies which has a significant market share. Best example for is the case Adidas and Rebook. Headquartered in Germany, Adidas plays a predominant role in the European market whereas Nike is by far the leading sporting goods manufacturer in North America. Nike managed to reach a certain market share in Europe behind Adidas whereas the German manufacturer had a significantly smaller market share in North America. In order to keep up with its major competitor, Adidas decided in 2005 to acquire Rebook which by then was the number two in the North American market (Foster p.133). This way Adidas improved its position drastically and closed the gap towards Nike which has been growing bigger over the last years.

3.5.11 Make use of new successful sales channels

A potential target may posses a very successful sales channel which the buyer considers very valuable since it has huge potential to increase sales. Applied to the SGI sales channels are rather well developed. Those have been traditionally primarily wholesalers
and retailers; lately the internet has been discovered as a platform for sales as well but did not capture a major stake in the overall sales statistics. Another sales channel, however, has been growing fast over the last decade within the industry which is the opening of flagship stores like e.g. ‘Planet Reebok’ (Foster p. 141) or ‘Nike Town’. In contrast to Factory Outlets, these stores offer the latest products of the brand in an environment the company can create itself. Especially the stores of Nike, Adidas and Rebook are very popular and successful but also Puma has been successful opening its own shops lately. Besides the fact that companies this way boost sales by providing the customer with a unique shopping experience, they are also able to charge retail prizes which increases the margin companies earn on their products (Li et al. p. 221). The costs which arise by operating an own shop however are rather high which explains the fact that these kind of stores are operated basically in the bigger cities in North America and Europe where besides locals especially tourists contribute a huge share of the revenue.

3.5.12 Vertical integration

Acquiring a company which is either a producer/manufacturer or a distributer and thereby integrating vertically does not make a lot of sense for the SGI. The acquisition of a manufacturer would reduce the company’s flexibility concerning volume and location of production a lot. Also the possibility to re-negotiate certain conditions is not given anymore if the producer was to become an internal stakeholder. When it comes to vertical integration into the distribution sector, it has been shown that consumer products in the areas of ‘food & beverages’ and ‘clothing’ has the best market penetration when it is diversified to a high degree. This means that most of the companies which are active in the SGI – besides the big ones which run a few flagship stores – do rely on distributors like Footlocker, Dickies’, Walmart and others.

3.5.13 Bypass barriers to entry

In some industries, barriers to entry manifest a huge hurdle companies need to overcome before being able to enter a certain market. These can be high upfront investments, taxes or legislative reasons as e.g. in China where M&A between Chinese
and foreign companies are welcome but the foreign company is not allowed to hold the majority of the stakes.

With regards to the SGI industry the situation is as follows. Most of the companies which are today active in this industry with their brands are actually not producing themselves anymore meaning that they do not operate their own production plants in South East Asia. They are contracting with companies which are manufacturers of footwear and apparel and do operate production plants in different locations. Contracts usually do comprise just one product; terms for a new product are negotiated every time.

Most of the companies with their brands the customers have been ‘conditioned’ to by marketing, advertisements and the media in general, have reduced their corporate activities and focus now on the design of the products, the research and development of new products, the marketing and the distribution of the goods. Barriers to entry in the common sense therefore do not really exist in the SGI. Proof for this is the matter of fact that every year there are new small companies entering the market quite successfully. This particularly is true for companies which are not producing highly sport functional goods but are located somewhere in between sports and fashion.

An excellent example is the brand ‘Napapijri’ which since 2004 belongs to VF Corporation. It was founded in 1987 in Italy and originally established as a brand providing high performance outdoor apparel. Nowadays, most people buy apparel by this brand not daily use. The company has increased its customer basis successfully from a very small niche to a broad market. A similar story is the one by The North Face which also got incorporated by the VF Corporation.

These examples show that barriers to entry are not really an issue in the SGI. Huge investments into production facilities do not play a predominant role anymore, however, the art is to gather and increase market share which can be reached almost solely by clever Marketing and Distribution.

### 3.5.14 Other reasons

Other possible reasons of why companies generally consider to merge or acquire respectively are to gain entry to a new market or to acquire local market expertise. Yet, those are reasons which do not play a major role in the SGI.
Markets in the SGI are very well developed and companies are usually not very keen to take over a no-name brand but want to sell their own brand. This is especially true for the companies which invest a lot in marketing and advertisement in order to establish their brand.

The acquisition of market experience does not really play a major role anymore since most countries have opened themselves economically and politically so that it is rather easy to gain local experience. Another matter of fact is that the SGI is highly influenced by North American and European tastes and trends which are most often followed in other regions of the world. Besides that, there numerous Market research institutes which provide first hand information of the consumer markets. So the necessity of gathering information nowadays has declined a lot.

3.6 Conclusion on Mergers & Acquisitions

The reason for a company to engage in a merger or acquisition is always in order to improve its position in the market against competitors, round off its portfolio concerning products and get access to innovation. This usually is summarized underneath the header ‘synergies’. The reason for companies to form a combined firm is that they believe – and hopefully also to have analyzed carefully – that the consolidation will benefit the former two companies and the equation $1 + 1 > 2$ becomes true. These synergies are manifold and are seen in all areas of the entities.

Most often, synergies effects are equated with cost savings which are the most reliable areas of were to cut costs. Expenses can be driven down by cutting down administrative expenses, reduce duplicate management and duplicate research & development, consolidate duplicate sales and duplicate field staff and pool marketing (Bragg p. 187ff). Process improvements by adopting the more efficient process for the newly formed entity can increase performance over time significantly. Product overlap might be a motive to have certain products disappearing and the increase in size might lead to an in augment in purchasing power upstream. This might lead to massive lay-offs resulting in further cost savings.

Other areas to realize synergies is the area of financial engineering which could take place in the area of pooling the foreign currency positions for receivables and payables
or taking advantage of the better credit rating of one of the two companies in order to refinance cheaper.

However, Habeck at al. criticize that these synergies are just one side of the medal and are unfortunately predominantly in the focus when M&A take place. The authors therefore subdivide synergies further into two sub-categories which are ‘efficiency synergies’ and ‘growth synergies’ (p.51). Besides the above described synergies concerning efficiency synergies, growth synergies are to be found in the areas where the combination of the two companies and their resources offer added value. This might take place e.g. in the area of knowledge sharing, research & development and the possibility for cross-selling. Cost cutting synergies are a one-time event whereas growth opportunities kick in later but have a longer lasting effect (cf. Habeck et al. p. 52).

Another common mistake companies often make when engaging in M&A activities is to underestimate the time it takes for two companies to form one new entity. This becomes clear when key performance indicators (KPI) and financial results do not show the expected results by the time expected. Recently, Hainer, CEO of Adidas, stated at the annual meeting that the expected results from the merger between Adidas and Reebok still do not show entirely the effect expected back in 2005 when the Acquisition was completed (Finanznachrichten.de).

It can be concluded that the measure of success of a Merger or Acquisition must not be the amount of money saved by cutting down costs but has to be sought in the possibility to unlock growth opportunities which have to be identified in advance during the due diligence process.

### 3.7 Research on M&A in Literature

The area of Mergers and Acquisitions is a field of great interest to researchers. The will of companies to acquire or merge with another entity is not a new phenomenon as already clearly argued above. There are diverse reasons why a company looks for external opportunities of growth instead of concentrating on its own capabilities of growing organically. Over time, two different tracks of research have developed investigating different aspects and consequences of merger and acquisition transactions.
One track is focusing on stock prizes and their fluctuations. This track usually investigates the short term consequences of mergers and acquisitions around a certain event which gives it its name: event study. The event can be the announcement of a transaction or the actual transaction date when the deal has not been announced publically before. After all, it does not matter which of the two events will be studied since it is actually the information which is of importance and priced into the stock and not the event in time like announcement or the actual completion of the deal. The price of the stocks will change the moment investors do change their expectations and take respective actions like going short or long in the securities concerned (lecture slides: Advanced Corporate Finance).

Generally, the results of these event studies are that the bidding firms stock prize does fall at the time of the announcement but then recovers shortly after. The stock price of the target firms, in contrast, usually does benefit from the takeover due to the premium which is normally paid by the acquiring company. Jensen and Ruback (1983) investigate a dozen researches which are examining event studies during 1956 and 1981. Their overall conclusion is that in those studies the bidding firm does loose while target firms benefit from takeovers. On average, targets do earn 20% when a merger has been announced and up to 30% in case of a tender offer. In contrast, the companies which are to acquire do earn just 4% on average in abnormal returns on a tender offer and nothing from merger announcements.

The second track is a group which deals with the development of profits, profitability, market power and antitrust legislation, efficiency and other KPI in the long run. Most surveys investigate the performance of companies pre-merger and post-merger with both periods being five years. The KPIs in focus are compared to some industry benchmark in order to account for volatility due to some global event out of the equation.

Using the cash flow as a measure of economic performance of the investigated companies, Healy et al. study the performance post acquisition of the fifty largest companies in the United States between 1979 and 1984. They compare the performance after the merger of the combined new entity with the addition of performance of the companies prior to the merger. Their result is that the more related the two companies
prior to the merger have been, the more likely it is to have significant performance improvement.

Switzer uses a larger sample than Healy et al. did and surveys 324 transactions in the US between 1967 and 1987. The performance of the companies involved is measured as well by the cash flow and is adjusted by the industries average. The author finds that targets and bidders are outperforming its industry benchmarks before and after the merger respectively.

Examining the operating performance of a sample of companies involved in transactions in the retail sector between 1977 and 1992, Burt et al. used as measure the operating cash flow. In contrast to the findings of the authors mentioned before, their result suggests that neither the operating performance of the acquirer prior to the transaction nor the target’s operating performance is significantly different to the performance of the benchmark group. However, post-bid performance of the combined entity seems to have improved compared to the control group adjusted performance. Furthermore, Burt et al. experience that both acquirers and targets on average earn a lower operating margin on sales prior to the bid. However contrasting to that, they survey that targets and acquirers obtain a higher rate of sales turnover on total assets in the five years prior to the year of acquisition and control. Also, sales-turnover on total assets improves significantly after the transaction.

Mergers and Acquisitions pay on average is what Bruner (2005) concludes from his research having reviewed several studies using large samples of observations. For shareholders of targeted firms this conclusion holds for sure. Another result of his for bidders is that two thirds of the studies he reviewed concluded that value is at least conserved if not created. After all, benchmark adjusted returns in M&A is close to zero.

After all, there exist many surveys investigating M&A activities which focus on different geographic locations, different industries or both. Healy et al. and Switzer e.g. focus on major transaction undertaken in the USA. In contrast to that, Burt et al. limit their research on transaction and their consequences to the retail sector in the U.K. However, results do vary greatly whereas a pattern of when an involvement in a merger or acquisition transaction pays or not can’t be identified clearly.
4 Problem definition and Methodology

4.1 Problem Definition

Previous research offers no rationale that there is a clear relationship of an improvement of KPI for companies which participate in M&A transactions when comparing the figures of the newly merged company with those the involved companies would have probably counted with in case the transaction would not have taken place.

The various purposes explained before of why companies engage in merges or acquisitions, however, give rise to the presumption that there are positive effects companies benefit from when combining their businesses with those of another carefully selected entity.

The assumption is that companies which are engaging in M&A activities thereby do foster the company’s situation. This needs to be true regardless of a company’s role in a transaction. As a bidder, the company’s management believes that the newly formed company will perform better as before. As a target, this also needs to hold true since the target will become part of the newly formed company whose bidding company’s management is convinced of the advantages of the combination of businesses. And lastly, the company which acts as the vendor – in case the targeted company has not been independent beforehand – also is supposed to benefit from the sell-off or spin-off since otherwise, the transaction would not be carried out.

Hypothesis:

Companies which are engaged in M&A transactions are increasing their Asset Turnover (efficiency) and Profit Margin (profitability).

4.2 Key Performance Indicators

In order to survey this assumption the following KPI are selected (cf. Stolowy et al. p. 562f).
**Asset Turnover**
This KPI measures the firm's efficiency in managing its assets in relation to the revenue generated.

\[
\text{Asset Turnover} = \frac{\text{Sales}}{\text{Total Assets}}
\]

The higher this ratio, the smaller is the investment required in order to generate sales revenue and therefore, the higher the profitability of the firm.

**Gross Profit Margin**
It is a measure which sheds light on how much a company earns on its products per unit.

\[
\text{Profit Margin} = \frac{\text{Gross profits}}{\text{Sales}}
\]

The higher the percentage the higher the margin a company earns on a per unit base on their product. The ratio was preferred over the Net Profit Margin since individual financing and local taxation which makes it difficult to compare the latter ratio across different companies.

### 4.3 Methodology following Gugler et al.

With the purpose of determining whether a Merger or Acquisition transaction has increased the new entities, Asset Turnover and Gross Profit Margin – the ratios of the newly formed company – need to be compared to ratios the two separate entities would have dealt without the transaction taking place.

E.g. assuming that the newly merged company would have increased the profitability by ten percent we can’t tell by now if the merger was a success since it might have been that the two companies without having been combined to one new entity would have increased their profitability by more than that. The solution to the issue that there is no way to obtain these ratios is to estimate them.
In order to be able to predict the respective figures, I am following the methodology applied by Gugler et al. In their research paper they investigate whether companies formed by Mergers and Acquisitions actually increased their efficiency and market power.

With the purpose of studying whether a merger actually has increased these KPIs, the authors solve the problem by choosing a benchmark group of firms assuming that the performance of the companies involved in the M&A activities would have developed the way the benchmark group did. In order to track the development of the companies involved in the merger or acquisition as closely as possible, the firms in the benchmark group have to be chosen from the same industry the merging companies belong to. The assumption is that the merging company’s KPIs would have changed in the same way as the median firm’s KPIs in their respective NAICS 2007 industry codes.

The NAICS code is chosen since it is the code which is the most refined when it comes to subcategories. Furthermore, it is the one which has been revised most recently (2007) by the responsible committee. This is the reason of why it promises the most exact fit in an industry which is rather difficult to border as it has been pictured beforehand. In order to be able to predict how the merging companies KPIs would have developed if they would not have been involved in the transaction, the assumption is that they would have changed in the same way as the median firm’s KPI in the respective NAICS 2007 code.

As seen before when the issue with the NAICS code has been discussed in order to define the SGI, the industry is scattered across many different NAICS sub-codes. This makes it difficult to obtain a set of data large enough in order to carry out a valid research. Going down until the industry level (five digit code) also means that many different industry branches will be investigated and treated equally.

Besides that, the relevant benchmark groups would be too small. Therefore I chose the four digit level of aggregation which represents an industry group. Another limitation of the data was applied with regards to the different sub-groups the SGI is scattered into. Many of these sub-groups do not hold many companies which makes it difficult to have a solid basis. This lead to the decision that the industry group surveyed was limited further down to the mayor categories when it comes to turnover which is the manufacturing industry.
The consequence from stepping up to the four digit code is that e.g. the industry code 31621 (Athletic footwear manufacturing) will be aggregated to the industry group 3162 which is footwear manufacturing. This of course means that the results obtained are not just containing figures of the SGI but also of other manufacturers active in the footwear industry. However, due to the fact that the SGI industry reaches out to become more and more a Sports Fashion industry and that the production of sport shoes does not differ too much from the production of other footwear, I believe that it is even a better measure in order to account for the recent developments in the SGI.

What actually gets compared with each other is on the one side the KPI of the merged firm which is the figure which can be obtained easily from the database. On the other side it has to be found out what the development of this KPI would have been of the two companies if they would not have merged. Predicting the Sales of the merging companies, let

\[ S_{\text{At} + n} \] be the Sales of the acquiring firm in year \( t + n \),
\[ S_{\text{T} t} \] the Sales of the target company in year \( t \),
\[ S_{\text{C} t + n} \] the predicted Sales of the combined company in year \( t + n \),
\[ S_{\text{IAt} + n} \] the Sales of the median firm in the industry of the acquiring company in year \( t + n \) and
\[ S_{\text{ITt} + n} \] the Sales of the median firm in the industry of the target company in year \( t + n \).

Then the predicted Sales following Gugler et al. for the combined company in year \( t + n \) is estimated as follows:

\[
S_{\text{C} t + n} = S_{\text{At} - 1} \frac{S_{\text{IAt} + n}}{S_{\text{At} - 1}} + S_{\text{T} t} \frac{S_{\text{ITt} + n}}{S_{\text{T} t}} + S_{\text{T} t + 2} \frac{S_{\text{ITt} + n}}{S_{\text{T} t + 2}} - S_{\text{T} t + 3} \frac{S_{\text{ITt} + n}}{S_{\text{T} t + 3}}
\]

The second last term in this case accounts for the possibility of a second acquisition made two years after the first one. The last term of the equation in contrast adjusts the formula in order to account for Spin- and Sell-offs in \( t + 3 \).

More complex models are feasible; however, complexity does not necessarily lead to a better result. An option to refine the used methodology by Gugler et al. might be e.g. to
take a rolling forecast into account whose impact on the figures has to decrease the further the event lies in the past.

Unfortunately, the data quality in the database at hand does not allow applying this methodology by Gugler et al. The problem in general in this industry is that usually a major player does acquire one or more companies which are producing in their niche and are rather small. Their data most often is not in the database or at least not completely and continuously over the period of time investigated. What really complicates the problem is that the industry of Sporting Goods is relatively active in M&A. This means that a company in a five years period might not acquire or merge with just one other company but with five or even more. This means that, in order to obtain one entire dataset of a company which merges with or acquires other companies, data from all companies involved has to be available in the database. That is the only way possible to predict what the merged companies’ Sales would have been without the transactions undertaken. If only one company does not provide data over the entire period investigated, the dataset is lost for this survey.

The result of my investigation when combining the information needed from the two databases concerned (Orbis holding company data and Zephyr holding data on M&A) shows that there are less than five transactions within the two industry group codes 3152 (Cut and Sew Apparel Manufacturing) and 3162 (Footwear Manufacturing) which provide the data needed in order to calculate the companies’ KPIs for the companies in the case the transactions would not have been undertaken. This is unfortunately not a representative amount of companies in order to draw general conclusions on the population.

Since the methodology originally thought of did not work out with the data available in the database, there are two possible ways to go from here. One is to widen the horizon again and step up another or even two digits in the NAICS code, the second option is to set forth a different hypothesis.

From the former option would follow that the picture of the SGI would become even more diluted since besides other producers of ‘Cut and Sew Apparel Manufacturing’ (3152) and ‘Footwear Manufacturing’ (3162) other industry groups would be gathered underneath the more aggregated three or probably even two digit NAICS 2007 code.
This would lead to a situation where this survey would resemble another study on M&A transactions in the manufacturing industry, conclusions on the SGI would not be possible anymore. The latter option of setting forth a different hypothesis therefore will be pursued.

4.4 Alternative Methodology

This methodology does follow the one presented in 4.3 until the point where the formula is introduced. The arguments for and selection of the NAICS 2007 four digit code companies within Footwear Manufacturing (3162) and Cut and Sew Apparel Manufacturing (3152) are therewith adopted completely.

In order to test for efficiency and profitability of companies which have been involved in Merger & Acquisition transactions and those which haven’t, the companies representing the industry are split up respectively. For both groups and both KPIs, the average and the mean of the KPIs are calculated and presented.

Furthermore, the industry will be characterized by presenting the Top ten companies in the industry, providing information on their turnover development from 2003 to 2007 and indicating the their rank and how it has been developing over the period investigated. Additionally, industry measures of concentration are calculated in order to test whether the SGI is a highly concentrated industry or not.

5 Data Description

The principal sources of data for this survey are two databases which are provided and administrated by Bureau van Dijk Electronic Publishing (BvDEP) headquartered in Amsterdam, The Netherlands. The company does provide a wide range of Databases whereas the two utilized in this survey are Orbis and Zephyr.
Orbis is a global database which has information on 60 million companies worldwide stemming from many different information providers. As well as descriptive information and the company financials, the database contains further detail such as news, market research, ratings and country reports, scanned reports, ownership and M&A data.

Zephyr, in contrast, is a database containing information about mergers and acquisitions, initial public offers (IPO) and venture capital deals with links to detailed financial company information. By December 2008, Zephyr contained information on over 600,000 transactions and up to 100,000 new deals are added per year. The global coverage extends to over the last nine years and includes deals involving European companies going back to 1997 (BvDEP webpage).

The dataset which has been extracted from Orbis contains information on companies which belong to the two NAICS 2007 industry sub-codes 3152 (Cut and Sew Apparel) and 3162 (Footwear). The period investigated runs from 2003 to 2007. Furthermore, the following requirements have been applied in order to get the dataset. The Operating Revenue (Sales) had to exceed at least in one of the years 10 Mio. US Dollars. In order to be able to separate the dataset into the two groups namely the group which will act as the benchmark group and the group of companies which have been involved in M&A transactions, the obtained filtered dataset was refined further by the following requirements. A company had to be either an Acquirer, a Target or a Vendor, has had to be involved in at least one completed deal within the mentioned period and the type of transaction was either an Acquisition, a Management buy-out, a Merger or a Demerger. Stock buybacks e.g. have not been taken into account. Lastly, the requirement was that the transaction had to trespass the 50% hurdle in order to be recognized in the survey (Brealey et al. p.887).

The total amount of companies which matched the first set of requirements concerning the industry code and minimum Turnover representing the entire industry accumulated to 6,517 companies. When adjusting the figures by taking out companies which do not count with data over the entire period in all the KPI required, a total of 678 companies are left. This group representing the industry falls into the before mentioned benchmark
group with 545 companies and the group of companies which have been involved into M&A transactions over the period summing up to 133 companies.

6 Analysis

The analysis in this paper is subdivided into three separate sections. There first one presents the Sporting Goods Industry with its major players, turnovers and the hence resulting market shares. Also concentration measures which are used e.g. by the Department of Justice and Federal Trade Commission in the US in order to evaluate upon antitrust issues are presented and applied to the market data at hand.

The second section assesses the efficiency of the industry comparing the ratio Asset Turnover of companies which have been involved in M&A transactions over the period of time surveyed with the ratio of companies which have not been involved in deals.

The industries profitability is evaluated in section three by comparing the profit margin of the two above mentioned groups with each other.

6.1 Industry Description

The industry in this survey is composed of 678 Manufacturers active in the area of Footwear and Cut and Sewed Apparel following the NAICS 2007 code. This means, that 678 companies do have their major field of economic activity in this area. Out of those, 133 companies have been active in transaction of mergers or Acquisitions which is roughly about twenty percent of the population.

Knowing that the companies have not been drawn solely from the SGI, nevertheless it is difficult to tell companies which have their major economic field of activity in SGI from those which are active in the Fashion industry.

LVMH Moet Hennessy Louis Vuitton SA can be most likely labelled a conglomerate which holds brands like Luis Vuitton, Kenzo, Moët & Chandon, Hennessy, Dior Watches amongst others. Nike and Adidas are probably the two companies which do belong here definitely without doubt. The Inditex Group is one of the largest fashion distributors holding brands like Zara, Massimo Dutti and Zara Home. The V.F. Company is as well a conglomerate whereas the focus lies definitely on apparel and
outdoor apparel in particular. The firm itself is not very renown, which contrasts to the brands they own. To mention just a few of them: Lee, Nautica, JanSport, Wrangler, The North Face, Reef, Napapijri, Eastpack and Vans is just half of their selection. This company definitely walks the line between SGI and Fashion. The Pou Chen Corporation is one of the biggest manufacturers in the SGI. As discussed before, many Brands nowadays to not produce their products themselves anymore but have then produced by Manufacturers in Asia. An interesting fact is that its largest company is Yue Yuen Industrial which is found on number nine in the table of the Top ten companies. Hanesbrands Inc. does own brands like Hanes, Champion, Playtex and Wonderbra amongst others and again is a company which is mingling Sports and Fashion. Claiborne Liz is a company active in the fashion industry holding brands like DKNY Jeans and Mexx. Number nine in the table is Yue Yuen Industrial (Holdings) Ltd. which is a conglomerate headquartered in Hong Kong. Major clients of the Corporation are Nike, Adidas, Reebok, New Balance, Asics and Puma amongst others. And lastly the Jones Apparel Group does hold a huge variety of brands which can be almost exclusively categorized as Fashion Apparel. From this it becomes clear that it is rather difficult to border an industry which has not been named an industry of its own by the Committee responsible for the NAICS 2007 codes. Since it is rather difficult to decide upon which of the companies do belong to the SGI and which don’t, I decided to work with the dataset as it is.

Table 3 shows the turnover of the Top ten companies in the industry in Million US dollars. The highest turnover did LVMH Moet Hennessy Louis Vuitton SA have with 24,3 billion US$ in Turnover in 2007. The number itself is quite high, but becomes still more surprising when comparing the figure with the turnover of the following companies. Nike Inc and Adidas AG are close together which hasn’t been this way until Adidas AG in 2005 acquired Reebok which is a big player especially in the North American Market. Remarkably, however, is the fact that the number one company in the industry has almost three times as much turnover as the industry’s number five, in this case V.F. Corporation. Comparing the turnover figures of Adidas from 2005 to 2006, the acquisition of Reebok can be identified clearly in the figures.
Also remarkable is the fact that Turnover growth from 2003 to 2007 amounts to 50 to 60 percent (Nike and V.F. Corporation) and up to more than 90 percent in the case of Adidas which is can be tracked back again to the Acquisition of Reebok.

Another interesting fact is to check which of the Top ten companies have been involved in M&A activities. Surprisingly, it is all of them but the conglomerate Pou Chen Corporation and its mayor company Yue Yuen Industrial (Holdings) Ltd. This means, that all companies which are dominant players in the SGI have not just pursued growth organically but have acquired or merged with smaller companies in order to either round off their portfolio as Nike did by purchasing Bauer Golf or to get a bigger share in a market where the own company so far is not as successful as wished. This was the reason why Adidas decided to acquire its competitor Reebok.

Comparing the rank on Turnover of the Top ten companies and their development over the years with each other it is noticeable that the top five have rarely swapped ranks. Just Hanesbrands has had a rank worse than ten in this group (cf. Table 4).

Table 3: Turnover of Top 10 companies in Mio. US$

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>24.262</td>
<td>20.158</td>
<td>16.414</td>
<td>17.000</td>
<td>15.108</td>
<td>LVMH Moet Hennessy Louis Vuitton SA</td>
</tr>
<tr>
<td>15.311</td>
<td>13.399</td>
<td>7.884</td>
<td>8.040</td>
<td>7.968</td>
<td>Adidas AG</td>
</tr>
<tr>
<td>7.219</td>
<td>6.216</td>
<td>5.654</td>
<td>5.218</td>
<td>4.413</td>
<td>V.F. Corporation</td>
</tr>
<tr>
<td>6.115</td>
<td>5.853</td>
<td>4.653</td>
<td>3.999</td>
<td>3.168</td>
<td>Pou Chen Corporation</td>
</tr>
<tr>
<td>4.236</td>
<td>3.777</td>
<td>3.240</td>
<td>2.849</td>
<td>2.613</td>
<td>Yue Yuen Industrial (Holdings) Ltd.</td>
</tr>
</tbody>
</table>

49
Table 4: Rank in Market Share of Top 10 companies

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td>7</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>14</td>
<td>6</td>
<td>8</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>8</td>
<td>7</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>9</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>8</td>
<td>9</td>
<td>6</td>
<td>7</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

The table displaying the turnover of the Top ten companies already revealed the fact that the industry counts with all sizes of companies. This becomes clearer in Figure 3 which displays the development of Turnover of the Top 30 companies in the industry with the red line representing the Turnover as of 2003 and the black line the Turnover as of 2007. The shape of the curves therefore recalls the shape of an asymptote. The industry as defined in this survey does count with just a few very large companies and conglomerates which together dispose of a huge market share. Furthermore, there do exist many small companies which are those servicing clients with their niche products and in the graph do represent a long tail.

Figure 3: Turnover development of the Top 30 companies from in Mio. US$
Figure 4 shows the distribution of market share in 2007. It is quite remarkable that 5 companies have a market share of almost 40 percent whereas the other 60 percent is divided amongst 673 companies.

If just summing up the market share of the three companies belonging for sure to the SGI namely Nike, Adidas and V.F.Corporation, the share of these three predominant companies amounts to 19.13%. This means that almost a fifth of the revenue in the industry goes to the top three Sporting Goods Manufacturers.

![Market Share Top 5 companies 2007 in the entire industry](image)

**Figure 4: Percentage of Market Share of the Top 5 companies**

### 6.1.1 Concentration Measures

Concentration measures originally have been developed by independent researchers in the 1950s. Most renowned individuals are Hirschmann and Herfindahl which – working independently – both suggested a concentration measure on the sum of squared market shares of all the companies in the industry (Perloff et al. p. 20). The scale ranges from $HH = 1$ (the exception of a monopoly) to $HH = 1 / N$ with N being the amount of firms in the industry. Applying this measure to the industry in this survey, the result is $H = 0.0376$. This is a rather low value keeping in mind that around 38 percent of the market share is dominated by just 5 companies. Responsible for the
rather low HH Index is the long tail of small companies dragging the index down by their small market share squared.

Another way to measure concentration is the n-firm concentration ratio. It measures the market share of the n largest firms compared to the market share of the entire industry. Among the most widely quoted concentration ratio is also the CR(5) (Lipczynski et al. p. 215) which is shown in Figure 5.

![Market Share Development of the Top Five Companies in the Industry](image)

Figure 5: Market Share development of the Top 5 companies

Especially the HH Index is used by the Department of Justice and Federal Trade Commission since the early 1980 when it started to use the measure in order to evaluate mergers with regards to antitrust legislation violations (Perloff et al. p. 20). The biggest problem here again does not arise from the calculations which need to be carried out. The major obstacle is the definition of the industry and thereby the definition of the total market size which influences the HH Index strongly (Sawyer p. 29).

### 6.2 Total Asset Turnover (efficiency)

As mentioned in the precious section, the market with its participants depicts the shape of an asymptote meaning that there are a few big companies in the market – in the
present case representing around 40 percent of the market – and a lot of small companies. This issue raises the question of which measure to use in order to evaluate the data. Using the median which represents the company lying in the middle of the population in this case underestimates the model due to the asymptotical shape of the market. In contrast, using the average neglects the fact of the asymptote; one could assume that the companies are distributed more evenly. In the following Figures depicting both measures will be presented.

Figure 6 shows the Median of Asset Turnover of the time span investigated. The Asset Turnover of the reference group (RG) is a decreasing curve which as well applies to the Asset Turnover of the group which has been involved in M&A activities (MA). However, it can be shown clearly that the group which actually has been involved in M&A activities does have a lower asset turnover than the group which has not been involved.

![Asset Turnover Median](image)

**Figure 6: Asset Turnover Median**

The same actually applies for the Average of the Asset Turnover which is shown in Figure 7. Here as well, it is downward sloping curves, however, as expected using the average and knowing the shape of the curve, the values are a little bit higher. The result stays the same showing that the companies which have been merging with or acquiring other companies actually do have an asset turnover which is worse than the one of the average company relying on organic growth.
This result contradicts the general assumption of Mergers & Acquisitions that companies which are merging do so in order to increase their efficiency.

Figure 7: Asset Turnover Average

6.3 Profit margin (profitability)

Measuring profitability is done the same way as done with asset turnover. Again, the median and the average are plotted in two graphs showing that the group involved in M&A transactions have a higher profit margin on average and on the median as well.
Figure 8: Profit Margin Median

What is interesting when comparing Figure 8 with Figure 9 is the fact, that the ratios do not vary that much as they do on asset turnover. After all this result is in accordance with the theory on Mergers & Acquisitions which states that companies which are involved in transactions do so in order to increase profitability.

Figure 9: Profit Margin Average
7 Conclusion

To conclude on the definition of the Sporting Goods Industry it can be stated that it is a rather difficult endeavour. Literature, as discussed, has totally different approaches to the topic, practitioners like banks, consulting companies and independent research institutes do have their own view on the topic as well and follow a more practical approach defining the industry most often as those who are producing footwear, apparel or equipment since this is their clients again buying the surveys in order to adjust themselves to what the market after this survey is.

The problem is that there is no general convention of what the industry comprises. Some practitioners might have an interest in harmonizing the definition, others probably don’t. The general question is whether it is possible to define an industry by industry codes like the NAICS 2007 or not. Since these codes have been established from a different point of view than the one necessary to apply when investigating the SGI, the result is doubtful. On the other side, it is the only way to obtain semi-objective results. Semi-objective, since one still needs to select all the sub-categories which oneself considers to belong to the SGI.

The impact of the rapid growth in the Sports Fashion sector does make the selection even more complicated recalling that Mr. Zeitz, CEO Puma, e.g. considered his company to be a ‘sports and lifestyle brand’. It is a rather critical issue since drawing the line has a major impact on results of studies and comparability with other surveys.

Due to the weak data quality a more profound survey is rather difficult to set forth. However, the poor data quality is also an indicator that the SGI is an area with constant market entrance of new participants.

The analysis of the data showed that the market of the SGI is shaped asymptotically which means that there are a few companies with a huge market share and many other small ones which are servicing a niche. The results of the calculations on concentration measures, however, does not indicate that the market is highly concentrated at all; mergers between a big player and a small company are most likely not going to be prohibited by the authorities due to antitrust legislation violation.
The studies on efficiency and profitability show contradictory results. Whereas the numbers on efficiency do violate the M&A theory, the values for profitability confirm the predicted results. Comparing the results to the ones literature provide it can be stated that the findings concerning profitability are in line with the research done by Switzer.

After all, it seems to be the case that the companies’ interest of merging with or acquiring another company does not necessarily lie in increasing efficiency or profitability. Stronger motives, at least for companies like Nike and Adidas, are to be present in new markets and M&A is a cheaper and less risky way in order to participate in a new market. This argument holds for Nike acquiring Bauer and Adidas Reebok.

8 Limitations and Outlook

Industry Definition
The definition of the industry is one of the major problems. The industry can be defined for manufacturers as for example the World Federation of the Sporting Goods Industry (WFSGI) does. The horizon can be broadened by integrating all companies which are providing facilities (like sporting clubs and arenas) and end events or even wider in order to include Sports media which is the tenant of licenses for the broadcasting of major sporting events. Having this definitional issue in mind, the outcome of an analysis can result very distinct which makes comparability in this field close to impossible.

NAICS Definitions
Then there is the issue with the NAICS codes which owed to the fact that the Economic Classification Policy Committee does not consider the SGI to be an own industry. From this follows that what is considered to be part of the SGI is scattered over many sub-codes or – as in the case of media – is not specified more into detail which makes it impossible to evaluate on this category.
Limitation to two sectors
In order to obtain a reasonable set of data the investigation carried out in this paper is limited to the NAICS codes 3152 (Cut and Sew Apparel Manufacturing) and 3162 (Footwear Manufacturing). This means that this research focuses on two areas out of the SGI but includes also data from other companies active in the fashion industry. Other areas are not investigated due to even less data consistency.

Data consistency
After having entered the above described requirements for the dataset, 6,715 companies have been extracted. Unfortunately, after checking for data consistency, more than 6,000 datasets did not meet the requirement to hold data in every category chosen over the entire period. This means that the dataset got reduced by more than 90% having big companies like CHRISTIAN DIOR SA and VALENTINO FASHION GROUP S.P.A. dropping out which doubtlessly have a stake in that industry.

Asymmetry of the industry
Another difficult issue as a matter of fact is that the industry as defined in this paper counts with a few major players like Nike, Adidas and Quiksilver and many small ones. Knowing that the top four companies account for more than 35% of the market, the validity of the drawn conclusions can be challenged.

When comparing an industry on the basis of its mean and given the above described situation in the industry, the numbers suggest a linear distribution depicting an average company which does not exist that way.
Comparing the industry on the basis of its median with respect to the given distribution, the majority of the companies will be represented adequately. However, the big players are totally not represented in these figures.
From this follows that the average does present a picture of an industry with an average company which does not exist at all and the numbers provided by the median represent probably 98% of the companies in the industry but does not account for the top companies which have a market share of more than one third.
Validity of the reference group doubtful

Having split this industry into companies which have been involved into M&A activities and the ones which haven’t, the result is that eight out of the top ten companies have been active in M&A activities. This means that almost all the big companies have been active in M&A activities in the investigated period of time and therefore have been allocated into one group whereas the reference group does represent mainly the right tail of the distribution – which is the small companies – which most likely have different characteristics than the big ones. However, the idea to estimate on this basis figures for the big players is not adequate.

Development

The Sporting Goods Industry today still is a growing industry and through the development of new sports will stay a young industry with new upcoming companies servicing the practitioners with the relevant equipment. Taking into account the fact that Sports is growing more and more from Sports into ‘Sports-Fashion’, especially the manufacturers have a bright future ahead.

The typical company does not really exist which will most likely stay that way due to the fact that there will be coming up new sports and new manufacturers entering the market and at the same time the big companies will be there developing their own products and acquiring every now and then a small company in order to round off their portfolio.

It seems as if this field is an area of interest especially for banks, consultancy companies and research institutes since it is an industry which covers great parts of private consumption: casual and professional footwear and apparel, the holding of sport events and the marketing and broadcasting through Sports Media. This is exactly the market in which a lot of young consumers are participating in and are willing to spend their money.

Regrouping NAICS codes

This above sketched development might one day have the committee of NAICS consider thinking their categories over. However, it would mean to break the present scheme where companies get allocated after the way they produce and not after what
they produce for. Also comparability would be lost if a restructuration of the NAICS codes would take place making studies like this impossible.

Industry Definition by other Stakeholders
The task to find a definition of the industry might be taken over by other organisations or companies which have an interest in this. Those are e.g. banks which are building some kind of index comprising leading companies within the SGI (Adidas in its yearly report compares the development of its stocks with the development of the ‘MSCI World Textiles, Apparel & Luxury Goods’ in order to measure performance), consultancies which are active in this area and have SGI companies as clients (e.g. KPMG and Deloitte) or Research Institutes (e.g. National Purchase Diary Group) who sell their data back to the SGI companies so that they can adjust their portfolio of products. No doubt that each one of them will define the industry the way it suits her business best.

A crucial difference between these companies and the committee is that the latter one does not have any economic interests involved when deciding about a definition.

Further Research
The SGI opens a wide field for further research whereas the definitional issues have to be reviewed carefully in order to classify the obtained results. The consequences are that the scope of each analysis will most likely differ quite drastically and might even lead to the point that comparability of results is not given anymore.

The dynamic of the industry is quite interesting especially in the context of M&A. Particularly with regards to industry consolidation, the definition of the industry once again plays a major role when industry concentration measures have to be applied because of potential antitrust violation.

However, I do not expect that academic research will focus on this industry since the outcome is not of great interest. The focus will most likely continue to lie on a more global view concerning the manufacturing industry which is tracking more or less what the public does consider the SGI namely brands active in the apparel and footwear manufacturing.
However, it becomes clear that information about the SGI is of great interest to consulting companies and research institutes. Besides Deloitte, KPMG and the NPD Group also banks like HSBC, Credit Suisse and the Mercanti Group are increasing their activity in the area of Sporting Goods and its industry.

The topic of this survey is very special in the sense that it does not deal with an entire industry like Manufacturing, Banking or alike but with a combination of sub-categories scattered across different industries.
References


Bender, Ruth; Ward, Keith; Corporate Financial Strategy; Second Edition, Butterworth Heinemann 2002

Berk, Jonathan; DeMarzo, Peter; Corporate Finance; Pearson International Edition, Pearson Addison Wesley 2007

Bruner, Robert F.; Deals from Hell, M&A Lessons that rise above the ashes; John Wiley & Sons, Inc; 2005

Borghese, Robert J.; Borgese, Paul F.; M&A from Planning to Integration, Execution Acquisitions and Increasing Shareholder Value; McGraw-Hill 2001

Bragg, Steven M.; Mergers & Acquisitions – A condensed practitioner’s guide; John Wiley & Sons, Inc. 2009


Burt, Steve; Limmack, Robin; The operating performance of companies involved in acquisitions in the U.K. retailing sector, 1977 – 1992, Advances in Mergers and Acquisitions; Volume 2; edited by Cooper, Cary; Gregory, Alan; Elsevier Science Ltd. 2003

BvDEP webpage: http://bvdep.com
Cassiman, Bruno; Colombo, Massimo G.; *Mergers & Acquisitions: The Innovation Impact*; Edward Elgar Publishing Limited 2006


Deutscher Olympischer Sportbund; Definition of ‘Sports’
http://www.dosb.de/de/organisation/philosophie/sportdefinition/

Encyclopaedia Britannica; Online resource; Definition of ‘conglomerate’


Foster, Timothy R.V.; *Winning ways for business in Europe*; Kogan Page Limited 1993

Gugler, Klaus; Mueller, Dennis C.; Yurtoglu, Burcin B.; Zulehner, Christine; *The effects of Mergers: an international comparison*; International Journal of Industrial Organisation 21 (2003) p. 625 - 653

Habeck, Max M.; Kröger, Fritz; Träm, Michael R.; *After the Merger, Seven strategies for successful post-merger integration*; Financial Times – Prentice Hall, Pearson Education Limited 2000


Li, Ming; Hofacre, Susan; Mahony, Dan; *Economics of Sports*; Fitness Information Technology Inc. 2001

Lipczynski, John; Wilson, John; Goddard, John; *Industrial Organisations*; Prentice Hall Financial Times, Second Edition, 2005

Meek, Alfie; *An estimate of the size and supported economic activity of the sports industry in the United States*; Sport Marketing Quarterly 1997

Meeks, Geoffrey; *Disappointing Marriage: A study of the gains from mergers*; Cambridge University Press 1977

NAICS Association: http://www.naics.com/info.htm

NPD Group (National Purchase Diary): www.npd.com


Perloff, Jeffrey M.; Karp, Larry S.; Golan, Amos; *Estimating Market Power and Strategies*; Cambridge University Print 2007

Pitts, Brenda Gail; Fielding, Lawrence W.; Miller, Lori K.; *Industry Segmentation theory and the sport industry: Developing a sport industry segment model*; Sport Marketing Quarterly 1994

Röthing Prof. Dr., Peter.; Becker Dr, Hartmuth.; Carl Dr, Klaus; Kayser, Dietrich; Prohl Prof.Dr., Robert; *Sportwissenschaftliches Lexikon*, Hofmann Schorndorf 6th Edition 2003

Sawyer, Malcolm C.; *Economics of Industries and Firms: Theories, Evidence and Policy*; Florence, KY: Routledge, 1991
Sporting Goods Manufacturer Association (SGMA) http://www.sgma.com/about/

Stolowy, Hervé; Lebas, Michel J.; *Financial Accounting and Reporting, a global perspective*; Second Edition; South Western CENGAGE Learning 2006


Tiedemann Prof. Dr., Claus; Professor of Sport Science at the University of Hamburg; Definition of ‘Sports’: http://www.sportwissenschaft.uni-hamburg.de/tiedemann/documents/sportdefinition.html

World Federation of the Sporting Goods Industry: www.wfsgi.org


Zephyr, Database provided by ‘Bureau van Dijk Electronic Publishing (BVDEP):’
Declaration of independent work

Hereby I confirm that I composed this work on my own, and that I did not use any other than the quoted material and resources.

(Florian Jochum)
Aarhus, August 31st 2009