



UNIVERSITY OF GOTHENBURG  
SCHOOL OF BUSINESS, ECONOMICS AND LAW

# DRIVING PROFITABILITY

*- A cross-sectional study of the profitability performance  
in the Swedish car sales industry.*

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**Institution:**

Business Administration

**Authors:**

Jon Lundblad  
Johan Lundblad

**Supervisor:**

Johan Åkesson

## **ABSTRACT**

Earlier research within the automotive industry has primarily focused on the car manufacturers, and very little on the companies with the closest connection to the consumers - the retailers. The purpose of this study is to describe the profitability performance of Swedish car dealers by adopting ideas from the field of retail research, economic theory and intra-industry discussions. Using a cross-sectional design and a quantitative research method, we developed our own unique database containing financial information and sales statistics from 215 Swedish car dealers. By analyzing the statistical measures of profitability performance and its relation to economies of scale, product assortment, corporate and used car sales, cost controls and customer loyalty, we were able to provide a better understanding of what characterizes a profitable car dealer. We could also conclude that the conduct of the used car sales, the brand strategy and loyal customers played an important role for the studied firms.

**Keywords:** automotive, car dealership, retail, economies of scale, product assortment, cost control, customer loyalty

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# CHAPTER 1 - INTRODUCTION

*In this first chapter, the background of the research problem is presented, followed by the problem statement and the purpose. Further, the scope and limitations are then presented as well as some of the key definitions and abbreviations that are used throughout this thesis.*

## 1.1 PROBLEM BACKGROUND

The sunlight from outside reflected on the metallic surfaces. A scent of new rubber and instant coffee lingered in the air, and the sound of my footsteps echoed as I walked across the polished floor. When reaching for the catalogue stand, a friendly voice from behind suddenly said:

-Isn't she beautiful?

I turned around and the smiling salesman continued:

-Why don't you take her for a test drive?

On the very same afternoon, I exchanged the biggest check I've ever signed for the keys to my brand new car.

The automotive industry employs around 20 million people worldwide and plays an important role in many nations' economies (Dicken, 2007). The only personal contact most consumers have with this industry is through the car dealerships. Just as the manufacturers, car dealers have been affected by the economic events of recent years (TT Reuters, 2009). The ups and downs of the car manufacturers have been subject to a great deal of research, but as to what characterizes and drives profitability in car retail, there is a void to fill.

The general idea of the retail business is that of selling goods directly to consumers (Encyclopædia Britannica, 2011). The price level of the goods and the fact that service and repair are parts of the business, distinguish the car dealership from the general retail firm. However, some ideas and models from the retail research field can be adopted in order to better understand why some car dealerships are more profitable than others.

In a recent study of Swedish grocery stores, Mikael Hernant (2009) concludes that profitability performance is a consequence of a complex network of relationships between various aspects of economic performance, scale of operation, local market conditions and supermarket conduct. Susan M. Broniarczyk and Wayne D. Hoyer (2009) have reviewed research that questions the conventional wisdom that a larger product assortment better satisfy customers needs. The authors claim that having an optimal rather than simply a large product assortment is critical for retailers. The discussion is similar within car sales industry, where the question is whether a single or a multi brand strategy will be a future key driver of success in the business (Nilsson, 2010 and Blomfeldt, 2008). Grewal et al. (2006) further discuss the current and future trends in the retail industry and identify consolidation, customer value, innovation and cost controls as the four major future trends that will be the great challenge retailers are facing in the 21st century. In order to remain viable as a retail firm, retailers must understand the key drivers of retail success, claim the authors.

This brief review of the previous research of profitability performance in retail sets scene for this study and leads us to the following problem statement.

**1.2 PROBLEM STATEMENT**

- *What characterizes a profitable car dealership?*

**1.3 PURPOSE**

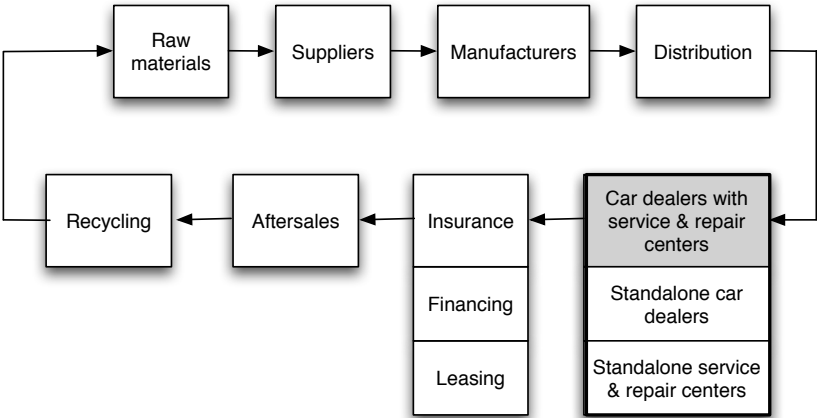
In order to answer this question, this thesis aims to describe and analyze the relationship between the profitability performance of a car dealership and the following factors:

- Economies of scale
- Product assortment
- Corporate sales
- Used car sales
- Cost controls
- Customer loyalty

**1.4 SCOPE AND LIMITATIONS**

**1.4.1 THE AUTOMOTIVE INDUSTRY**

As shown in figure 1.1, the value chain of the automotive industry encompasses a variety of different activities. The car sales industry is in this figure represented by three major sub-categories; car dealers with service and repair centers, standalone car dealers and standalone service and repair centers. The scope of this thesis is narrowed down to focus on the category of firms classified as car dealers with service and repair centers, leaving out the standalone car dealers and service and repair centers.



*Figure 1.1 The Automotive Industry (illustration by the authors)*

## **1.4.2 POPULATION DEFINITION**

The population of car dealers that we have chosen to study meet the following stated criteria regarding their financial situation:

- Total annual sales of at least SEK 50 million (reported in 2009)
- Ratio of equity to total assets exceeding 0% (reported in 2009)

## **1.4.3 STUDY LIMITATIONS**

The selected population of car dealers includes firms with both car sales and service and repair activities. Information inaccessibility given the time frame prevents us from taking the service and repair business into consideration.

## **1.5 KEY DEFINITIONS & ABBREVIATIONS**

Authorized car dealership = a legal authorization for buying wholesale goods from a manufacturer

EBIT = Earnings before interest and tax

ROA = Return on total assets

ROE = Return on equity

ROCE = Return on capital employed



## CHAPTER 2 - LITERATURE REVIEW

*This chapter consists of two main parts. In the first part (2.1), the reader is given a brief introduction to the key performance indicators that serve as a part of the tools used in the analysis. The second part of this chapter (2.2-2.8) then presents the theoretical models and concepts that together constitute the underpinnings of the stated factors in the purpose section.*

### 2.1 INTRODUCTION TO KEY PERFORMANCE INDICATORS

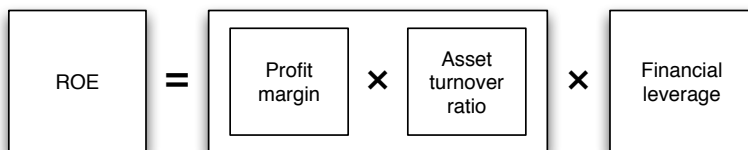
Almost every organization is looking to achieve some kind of success. Often, though, a strategy leading directly towards success is hard to find. Instead, most managers would try to identify and focus on factors with a causal relationship to success. The most basic form of such a relationship is expressed in microeconomics as the quantity of output (Q) equals a function (f) of the input of the resources capital (K) and labour (L) (Pindyck & Rubinfeld, 2005):

$$Q = f(K,L)$$

Such an expression would not, however, be sufficient in order to guide an organization towards success. To make use of it, the organization will have to find a way to better express what constitutes the resources capital and labour and also take the market demand into consideration (Catasús et al., 2008).

#### 2.1.1 RETURN ON EQUITY ANALYSIS

One of the most frequently used tools to measure profitability is the return on equity measure, ROE. It measures the profitability from the shareholders' point of view, thus explaining how well the firm has used the shareholders' capital (Ax et al., 2005). As a shareholder, financial leverage can be used to get a higher return on the investment. However, using more debt over equity is not making the business operations more efficient (Johansson & Runsten, 2005). Hence, when measuring the profitability of the business operations, the financial leverage should be taken out of consideration. As shown in figure 2.1, this can be done by simply isolating the center part of the ROE measure, i.e. the profit margin multiplied with the asset turnover ratio.

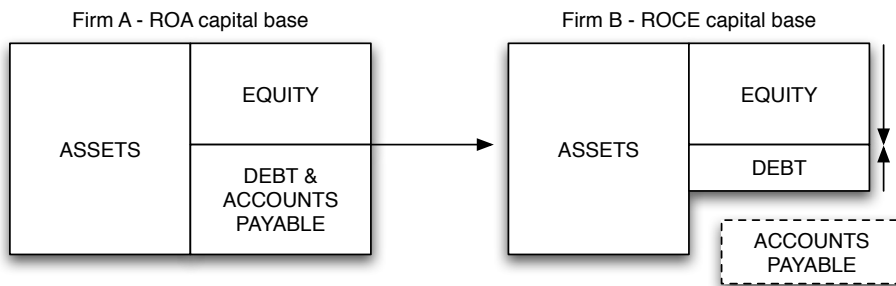


*Figure 2.1 The Return on Equity Analysis (illustration by the authors)*

#### 2.1.2 RETURN ON CAPITAL EMPLOYED

Return on capital employed (ROCE) and the return on total assets (ROA) are, similar to ROE, very common tools used to measure the profitability of a business firm. Contrary to ROE, these measures focus solely on the operational profitability, i.e. the profit margin and the asset turnover. The ROCE measure has lately experienced an increased popularity, notably in industries where the accounts payable make up for a significant amount of the capital base (Johansson & Runsten, 2005). An exact measure of

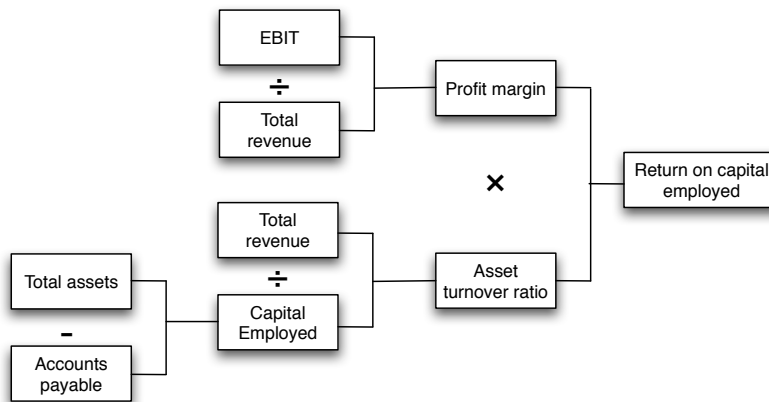
ROCE requires exact data of which debt that bears interest and which debt that is interest free. Since the public balance sheets do not provide this kind of information we have chosen to deduct the accounts payable as they are commonly considered interest free (Ax et al., 2005). Figure 2.2 illustrates the two different capital bases that are employed in the ROA measure and in the calculation of ROCE, according to this study.



**Figure 2.2** The ROA vs. ROCE Approach (illustration by the authors)

### 2.1.3 THE DUPONT MODEL

In order to better comprehend how ROCE is linked to the business operations, the ROCE measure can be decomposed into different key variables by using the DuPont model. Figure 2.3 presents a simplified analysis of the DuPont model using ROCE.



**Figure 2.3** The DuPont Model using ROCE (illustration by the authors)

Profit margin is calculated by dividing earnings before interest and tax with total revenue and describes how effective a company is in converting revenue into profits. The asset turnover ratio is calculated by dividing the total revenue of the firm with the chosen capital base, in our case the total assets minus the accounts payable (Ax et al. 2005).

## 2.2 MARKET CONCENTRATION

When discussing the degree of competition in the market there are two extremes defined in the micro-economic theory; perfect competition and monopoly. Perfect competition rests on three basic assumptions: (1) The firms have no influence on setting the prices - they are price takers, (2) the products are very similar - product homogeneity and (3) there are no costs for entering or exiting the market. In a

monopoly situation there is only one firm that has market power and can set the quantity of supply, thereby raising the price. Both of these situations are rare, but even if there is no perfect competition the degree of competition might be high enough so that the firms are practically price takers and vice versa in the monopolistic end (Pindyck & Rubinfeld, 2005).

To achieve a better understanding of the competitive environment of any industry it would be interesting to measure the degree of competition. This can be done in a few different ways. The Herfindahl - Hirschman index is obtained by determining the market share of each of the firms in the industry, squaring each value and adding them together (Baumol & Blinder, 2009). The index ranges from 1 in a monopolistic situation (100 percent market share squared) to a number near zero. Another approach is to use what is often referred to as the four-firm concentration ratio, the CR4-ratio. This measures the market share in sales of the four largest firms within an industry (Baumol & Blinder, 2009). If these firms' total sales account for 50 percent, the CR4-ratio equals 0.50.

### **2.3 ECONOMIES OF SCALE**

When a firm increases its output, the average cost of producing that output is expected to decline to some extent because of the following reasons: (1) Workers can specialize in their most productive activity. (2) Scale can provide flexibility in the sense that inputs can be combined variably hence enabling managers to organize the production more effectively. (3) Production input can be acquired at lower costs when larger quantities give the firm bargaining power. (Pindyck & Rubinfeld, 2005)

At some point though, the average cost will begin to increase along with the output. It will happen because: (1) Factory space and machinery may be crowded making it difficult to work effectively. (2) An increasing number of tasks can make the managing more complex and inefficient. (3) The prices of production inputs may rise when such quantities are reached that the sourcing may be drained, pushing the costs up (Pindyck & Rubinfeld, 2005).

The reasoning above leads us to ask the following question:

**Q1. How does the firm size relate to the profitability performance and bargaining power?**

### **2.4 PRODUCT ASSORTMENT**

A company makes decisions about what products and/or services to offer. The overriding definition of such decisions can be expressed as the company's product strategy. Armstrong & Kotler (2007) discusses the term further. They conclude that a product strategy also calls for a product line. This is a group of products that are closely related in the way they function, who they are sold to, how they are marketed etc. Within each line there are a number of items. The set of lines and items can be defined as the product mix. There are four dimensions to defining a company's product mix: width, length, depth, and consistency. Width refers to the number of product lines the company carries. Length refers to the number of items within each product line. Depth refers to the number of versions offered of each product in the line. Finally, the consistency of the product mix is how closely related the various lines are. New product lines can be added to attain new customer segments or as long as it increases profits. Nonetheless, they could also be deleted to increase profits.

Although Armstrong & Kotler (2007) did not aim at explaining the product mix of Swedish car dealers, their framework could be adopted. The width could be the number of different offerings in brands and

used cars. The length would then refer to the different categories within the lines: big cars, small cars etc. The depth would be the degree of customization of each category and the consistency would refer to how well the lines fit each other.

Whether to adopt multi-brand strategies or not is a topic for discussion within the Swedish car sales industry. It takes more marketing costs, new tools for the repair center, new IT-systems and education of staff. Benefits could come from cyclical effects between brands, smothering environmental economic effects. It might also be the most accessible way to expand or to use its resources more efficiently (Blomfeldt, 2008). Advocates of single-brand strategies claim that in order to be successful it takes salesmen that are well educated in each brand. They further emphasize the advantages of one brand when it comes to the building and interior design where the conditions for each brand authorization could entail large costs (Nilsson, 2010).

The theories and the intra-industry discussions presented above leads to the following question:

**Q2. How does the product assortment width relate to the profitability performance?**

## **2.5 CORPORATE SALES**

A market segment is a sub-set of a market consisting of consumers sharing the same characteristics, making them eligible to similar offerings. Apart from sharing at least one variable, the segment must - in order to be worth segmenting: (1) Be measurable, (2) be large enough to yield an economic profit, (3) be accessible i.e. easy to distribute and serve, (4) be differentiable i.e. react differently to the products, prices, location etc. Further it should (5) be actionable, i.e. respond to programs tailored to attract their attention (Moore & Pareek, 2010).

As for most businesses, within car sales there are numerous ways of segmenting your business. By gender, demography, geography, lifestyle, values etc. We have chosen to study one form of segmentation - the corporate customers, which is a segment with different priorities in payment, service and delivery (Drakenfors, 2010). To better understand this segment and its impact on the dealers' profitability, we find it interesting to ask the following question:

**Q3. How does the share of corporate sales relate to the profitability performance?**

## **2.6 USED CAR SALES**

Industry representatives claim that the used car activity of the business has different characteristics than retailing new cars. It gives the dealer more pricing flexibility in both purchasing and selling. And it is also in many ways a more complex deal to handle. Since the value of used cars normally decreases with time it is also important not to have your cars too long in stock (Motorbranschens Riksförbund 2010). Further, the sales process of a used car involves a chain of events from selecting what cars to purchase, have them reconditioned and marketing them to the customer (Fahlgren, 2008).

With such a distinctively different business within a business we find it interesting to investigate if focusing on used car sales raises the profitability:

#### **Q4. How does the share of used car sales relate to the profitability performance?**

### **2.7 COST CONTROLS**

As illustrated in chapter 2.1, one must in order to maximize the company value, consider the output produced based on what is put in. To achieve that quota it is essential to use one's resources efficiently. There are different ways of controlling such efficiency. Merchant & Van der Stede (2007) discusses four types of management controls that can be used in steering an organization: results-, action-, personnel- and cultural controls. Results controls are based on defining the desired results, measuring them, setting performance targets and providing encouraging rewards. Action controls involves behavioural constraints. It is a negative form of control that includes physical constraints such as locks, and administrative constraints such as levels of decision making authority. Another form of action control is pre-action reviews which involves pre-approval or disapproval of plans. Action accountability is an action control including holding employees accountable for their actions by using pre-set rules. The final type of action control discussed by Merchant & Van der Stede (2007) is redundancy which involves assigning more employees to a task than is strictly necessary, increasing the probability that the task will be satisfactorily accomplished. Personnel controls is based on the employees' ability to control and motivate themselves, and also on selecting the correct employee, training and correctness of job design and provision of necessary resources. Cultural controls is based on group norms and values and are most effective when there are emotional ties within a group.

In car trading the main current asset that attracts attention is obviously the cars. Some dealers handle these assets by using control systems making sure that the process from attaining the car to recondition and selling it is as short as possible (Fahlgren, 2008). Whatever system (or no system) that is to be used, we find it interesting to examine whether that process relates to the firm's profitability performance.

#### **Q5. How does the average age of the used car inventory relate to the profitability performance?**

### **2.8 CUSTOMER LOYALTY**

In the 1970s a major study (the PIMS) concluded that one of the most important determinants of profitability was market share. It contributed to the 1980s rash of mergers when managers competed to become number one. Those unable to attain such high rates of market share were often labeled "dogs" (Heskett et al., 1997). Reichheld and Sasser (1990) observed how, for a number of business firms, the statement that market share equals profit did not hold. They concluded that customer loyalty was a more important determinant of profitability. Heskett et al. later developed the service profit chain model which links employee satisfaction and loyalty to customer satisfaction and loyalty (Heskett et al., 1997). The model has been tested with differing results within retail. Silvestro & Cross (2000) even found a strong correlation between employee dissatisfaction and profitability within one of UK's leading grocery retailers. Armstrong & Porter (2007) also stress the importance of retaining customers in the quest for success. Altogether we find it interesting to look at this parameter within car retailing.

#### **Q6. How does customer retention rate relate to the profitability performance?**

## **CHAPTER 3 - RESEARCH DESIGN AND METHOD**

*This chapter begins with a presentation of the research design that defines the general research approach of this study. Further, we describe the empirical and analytical methods that we have used in order to select and analyze our data.*

### **3.1 RESEARCH DESIGN**

Before conducting research of any kind, it is of great importance to first define the design of the research (De Vaus, 2001). This allows the researcher to better understand what kind of data is needed and what methods that should be used, just as the architect first needs to finish the design of a building before ordering the materials and tools for the construction.

#### **3.1.1 DESCRIPTIVE RESEARCH**

Researchers in social sciences ask two fundamental types of research questions; “what is going on?” and “why is it going on?” (De Vaus, 2001). Descriptive research deals with the “what-questions” and can be both abstract or concrete. A concrete description could be asking the question “what is the age structure among employees in the car sales industry?”, while a more abstract description would rather be formulated as “is the average age among employees in the car sales industry declining or increasing?”. Descriptive research often precedes explanatory research, which instead focuses on the “why-questions”. To continue on the earlier example, explanatory research would instead be asking the question “why is the average age among employees in the car sales industry relatively high compared to other industries?”. Answering these “why-questions” usually involves developing explanations to causal relationships. This means that a certain phenomenon, let’s call it Y (income level), is somehow affected by the factor X (education). Casual relationships can be either direct, indirect or of a more complex model (De Vaus, 2001).

The main focus of this will be on answering the “what-questions” regarding profitability performance in the Swedish car sales industry.

#### **3.1.2 CROSS-SECTIONAL DESIGN**

A cross-sectional design entails the collection of a body of quantitative or quantifiable data on relevant variables, usually from more than one subject, within a short time frame. This data is then examined in order to detect patterns of association (Bryman & Bell, 2007).

One of the major advantages of the cross-sectional design is that we are able to collect data on many variables and from a large number of subjects (Saint-Germain, 2001). In our case this regards the variety of different financial ratios and the number of firms that we have included in this study. Further, other advantages of the cross-sectional design are that the design helps the researchers to answer questions such as who, what, when and where. The collected data also generate hypotheses for further research and can be useful to many other researchers (Saint-Germain, 2001).

However, the cross-sectional design also carries some disadvantages. Increased chances of error when handling substantial amounts of data, the limitation of not being able to measure change and difficulties

when trying to rule out rival hypotheses, are all disadvantages of the cross-sectional design (Saint-Germain, 2001). In addition to this, the cross-sectional design does not provide data and results that can be used to establish cause and effect (Bryman & Bell, 2007).

### **3.1.3 QUANTITATIVE METHOD**

A quantitative research method is characterized by the use of numerical values and emphasizes the quantification in the collection and analysis of data (Bryman & Bell, 2007). The method also usually involves accumulating previous theoretical and empirical knowledge which is then formulated into comprehensive theoretical models (Sverke, 2007). Each new study can therefore be considered as another piece of the puzzle, thus presenting a clearer picture within the given field of research (Sverke, 2007). However, one of the main drawbacks of using this method may be that the researcher ends up overlooking some potential explanations. This suggest therefore that quantitative research in some case should be followed by qualitative research (Sverke, 2007).

The main reason why we decided to use a quantitative method is because most of the previous research that had been done within this field were of a qualitative nature. In addition to this, reliable financial data and various sales statistics regarding the firms were easy to access. Yet, the disadvantage of using the method is that we may overlook some potential explanations, just as discussed in the previous section.

### **3.1.4 DEDUCTIVE RESEARCH APPROACH**

A quantitative method is commonly accompanied by a deductive research approach to the relationship between theory and research (Bryman & Bell, 2007). Adopting this approach, means that we are testing developed theories within our chosen field of study .

## **3.2 EMPIRICAL METHOD**

We have put together our own unique database containing information from various sources. This has been the centre point from which our study has emanated and the following sections present how the collection of data was carried out.

### **3.2.1 SELECTION OF POPULATION**

The scope of this thesis focuses on a specific category of car dealers within the car sales industry. By using the population definitions stated in 1.4.2 and the Swedish standardized industry codes 45110 (car sales) and 45201 (car service and repair), we were able to scan through a national database containing financial statements of all Swedish firms, from which we then selected the firms that met these criteria. Using this method, we ended up with a total population of 215 firms.

### **3.2.2 SELECTION OF KEY PERFORMANCE INDICATORS**

In order to define and measure profitability among the selected firms, we applied the key performance indicators ROCE, profit margin and asset turnover ratio, using the DuPont model. We were able to directly extract the profit margin by firm together with the all the other data from the database export.

However, the asset turnover ratio and the ROCE had to be calculated manually, which was done according to the models presented in section 2.1.2 and 2.1.3.

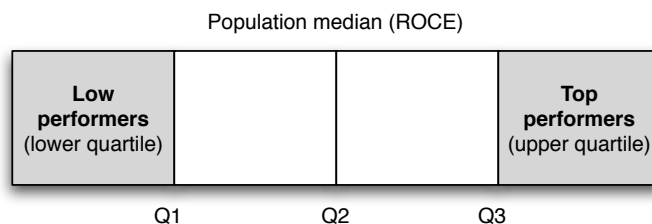
### 3.2.3 SELECTION OF TIME PERIODS

We chose to study the population's performance in 2009 since it was the most recent year with available income statements and balance sheets. To safeguard against wrongly drawn conclusions based on occasional yearly fluctuations we also calculated an average ROCE for the period 2006-2009 for each firm. A few companies within our population had started up their businesses later than in 2006, hence data was not available for that year(s). The average was then based upon the number of financial statements released.

### 3.2.4 SELECTION OF TOP AND LOW PERFORMERS

In order to facilitate comparisons within the population, we have chosen to define two groups according to their median ROCE performance. By dividing the population (data set) into four equal groups (figure 3.2), we are able to distinguish the upper and lower quartiles from the population average. The lower quartile of the data set represents the low performers while the upper quartile represents the top performers. These two groups enable us to compare the median and mean values among the firms within our population. However, apart from comparisons within the population, we cannot determine to what extent these firms are successful on a more general level. These two groups are therefore solely for benchmarking purposes.

*Figure 3.2 Top and low performers – quartiles*



### 3.2.5 DATA SOURCES

Our source of data from income statement and balance sheets was Affärsdata, a Swedish Internet database containing financial information from all firms registered in Sweden in the form of "aktiebolag". Our source of car sales information was Vroom AB, a Swedish company specialized in car sales statistics and analysis. Information about which brand each firm represented was collected from each firm's website.

## 3.3 ANALYTICAL METHOD

This section presents the different statistical and analytical tools that were used in our findings and analysis chapter.



### **3.3.1 CORRELATION ANALYSIS**

As a measure of relationships between variables we have chosen the Pearson correlation coefficient. It describes linear relationships and is usually illustrated in a scatter diagram. By dividing the covariance with the factor of each variable's individual variance, we get a coefficient ranging from -1 to 1. If the coefficient is negative, the two variables move in opposite direction. This means that an increasing x will lead to a decreasing y. If the coefficient is positive on the other hand, the variables move together, i.e. an increasing x will lead to a increasing y. Further, the closer the coefficient is to the end values (-1 and 1), the stronger the relationship (Anderson et al. 2009).

### **3.3.2 DESCRIPTIVE STATISTICS**

This section describes a set of general tools for descriptive statistics according to Anderson et al. (2009). To describe our data set we have chosen to use the following statistical measures: *mean*, *median*, *skewness*, *quartiles*, and *frequencies*. The *mean* and the *median* provide two different measures of the central location for the data. The *skewness* of a distribution tells us which of the mean and the median value that best describes the typical value of a data. When the mean is higher than the median the distribution is positively skewed, or skewed to the right. The median is then a better measure for the typical value since there are a few individuals within the population with higher values that raise the mean. *Quartiles* are used to divide data into four equal groups, the first quartile (Q1) cuts off the lowest 25 percent of the observations and the third quartile (Q3) cuts off the highest 25 percent. Our final descriptive instrument is *frequencies*, which is simply a summary of data showing the number of items in several non-overlapping classes.

### **3.3.3 DATA ANALYSIS**

Microsoft Excel 2008 was used to compile our database and to calculate our key performance indicators and other factor measurements. IBM Statistical Package for the Social Sciences (v. 19) was used for data analysis to obtain correlation coefficients and descriptive statistics.

## **3.4 RESEARCH VALIDITY**

In order to ensure that the results of a study are correct, it is essential to review the validity of the study, i.e. are the tools measuring what they are supposed to do (internal validity) and can the results be transferred onto other objects apart from those that were measured (external validity) (De Vaus, 2001)? In a quantitative, cross-sectional study such as this one, it is primarily the tools that are used for measuring that play a very critical role. Are the tools "used car sales share", "firm size" and "retention rate" really measuring what we actually look for? To ensure the validity of this study we have consulted industry representatives and reviewed several business articles from industry periodicals that all together have helped in the selection of the tools that are used throughout this study.

## CHAPTER 4 - FINDINGS AND ANALYSIS

Chapter 4 combines a presentation of the findings with an analysis, applying the models and concepts presented in chapter 2. A brief summary of all findings is given towards the end of this chapter.

### 4.1 PROFITABILITY PERFORMANCE

Table 4.1.1 presents the average profitability performance of the 215 firms that were included in this study. The performance is presented by the measures ROCE, profit margin and asset turnover ratio and by the two time periods 2006-2009 (average) and 2009. As shown in the same table, the mean ROCE for all firms amounts to 8,37 percent in 2006-2009 and 7,97 percent in 2009. The median ROCE for the same time periods are however slightly lower; 6,86 percent and 7,60 percent respectively. The mean profit margin in 2006-2009 reaches 2,08 percent while the median profit margin for the same period settles at 1,91 percent. The mean asset turnover ratio amounts to 4,79 times in 2006-2009 and a median of 4,33 times for the same time period. The differences in the mean and median values indicate that the distribution of these data values is slightly skewed to the right (positive skew), meaning that the spread is wider among the values to the right of the median than for those to left.

**Table 4.1.1** Profitability performance (%) – all firms

N = 215	ROCE		Profit margin		Asset turnover ratio	
	2006-2009	2009	2006-2009	2009	2006-2009	2009
Time period						
Mean	8,37	7,97	2,08	2,13	4,79	4,99
Median	6,86	7,60	1,91	2,22	4,33	4,35
Minimum	-29,15	-141,16	-27,82	-7,36	1,17	1,00
Maximum	46,07	40,40	29,52	11,83	13,45	43,30

Moving on to tables 4.1.2 and 4.1.3, which present the average profitability performance by top (upper quartile Q3) and low (lower quartile Q1) performers among the 215 firms. As shown in the two tables, the mean ROCE among the top performers amounts to 19,26 percent in 2006-2009, while the mean ROCE for the low performers hit bottom at -1,23 percent during the same period. Mean profit margin in 2006-2009 amounts to 3,71 percent among the top performers, compared to 0,21 percent among the low performers. The two tables clearly indicate that there is a notable difference in ROCE and profit margin between the top and low performers. However, asset turnover ratio remains relatively stable between the two categories. These results show that it is mainly the variations of the profit margin that distinguish the top performers from the low performers.

**Table 4.1.2** Profitability performance (%) – top performers Q3 (upper quartile)

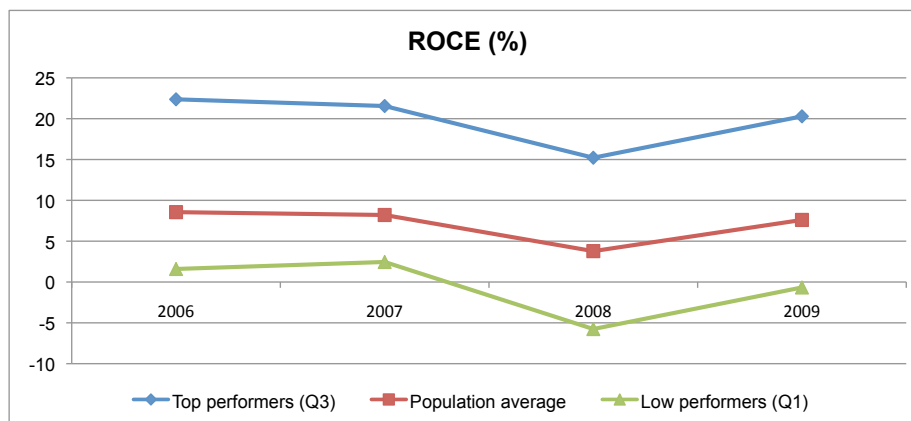
N = 54	ROCE		Profit margin		Asset turnover ratio	
	2006-2009	2009	2006-2009	2009	2006-2009	2009
Time period						
Mean	19,26	22,29	3,71	4,13	5,55	6,13
Median	16,83	20,29	3,50	3,90	5,60	5,99
Minimum	13,45	14,75	1,80	1,77	1,32	2,46
Maximum	46,07	40,40	10,31	9,00	11,98	11,69

**Table 4.1.3** Profitability performance (%) – low performers Q1 (lower quartile)

N = 54	ROCE		Profit margin		Asset turnover ratio	
	2006-2009	2009	2006-2009	2009	2006-2009	2009
Time period	2006-2009	2009	2006-2009	2009	2006-2009	2009
Mean	-1,23	-7,24	0,21	-0,77	4,79	5,65
Median	1,14	-0,67	0,27	-0,16	4,36	4,33
Minimum	-29,15	-141,16	-27,82	-7,36	1,62	1,15
Maximum	4,43	3,94	29,52	2,91	13,26	43,30

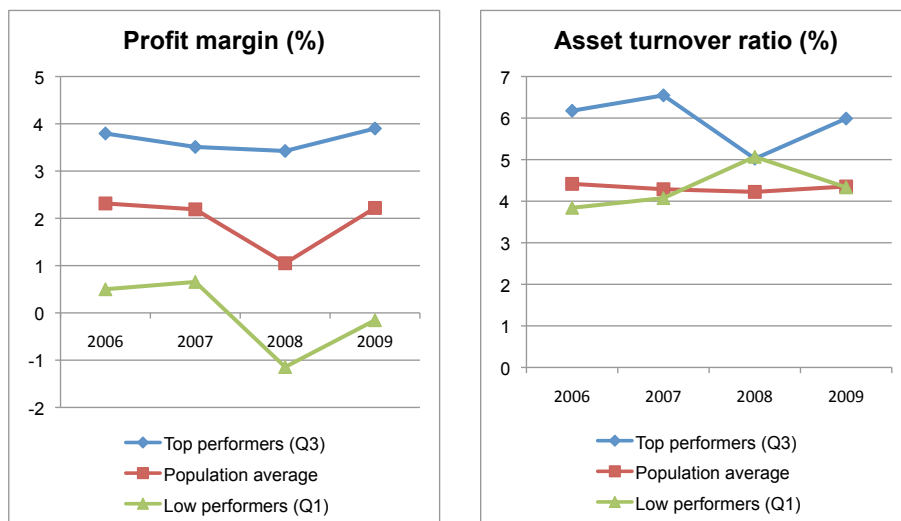
Graph 4.1.1 presents a summary of the ROCE evolution from 2006 to 2009 by population average and by top and low performers. The graph shows that 2009 was a relatively representative year for the average 2006-2009 period. The graph also shows that all categories experienced a significant sudden downturn in 2008. This event hit especially hard on the low performers who went from a barely positive ROCE in 2007 to less than -5 percent in 2008, and they were still struggling to keep their head above water in 2009.

**Graph 4.1.1** ROCE evolution 2006-2009 (median values)



Graph 4.1.2 presents a complementary picture to the previous graph. The graph presents the evolution of the profit margin and the asset turnover ratio from 2006 to 2009 by each category: population average, top performers and low performers. As illustrated in the graph, the profit margin expresses a significant downturn in 2008 in all categories, similar to what we observed in graph 4.1.1. However, the downturn is significantly stronger among the low performers than among the top performers. A closer look at the asset turnover ratio illustrates a rather different picture compared to what we could observe in the evolution of the profit margin. In 2008, the top and low performers show an opposite reaction where the ratio among the top performers drops at the same time as the ratio is increasing among the low performers. By applying the DuPont model as discussed in section 2.1.3, a possible explanation to this phenomenon could be developed from the variables that link the firm's profit margin and asset turnover ratio to its business operations. Therefore, it is possible that during this period low performers sold out their stock at the cost of a reduced profit margin, while the top performers instead maintained a higher profit margin at the cost of reduced sales.

**Graph 4.1.2** Profit margin and asset turnover ratio evolution 2006-2009 (median values)



## 4.2 MARKET CONCENTRATION AND ECONOMIES OF SCALE

Table 4.2.1 presents two types of measures for market concentration in a selected number of Swedish retail industries. A higher HH-index or CR4-share indicates a higher market concentration and thus a lower market competition. The table shows that the pharmacies represent the most concentrated industry in this comparison, while the car sales (incl. service and repair centers) represent the industry with the lowest concentration.

**Table 4.2.1** Market concentration (2009)

SNI-code	Retail industry	HH-index	CR4-share	N
47730	Pharmacy	0,538	0,924	106
47430	Home electronics	0,070	0,497	757
47112	Supermarkets	0,052	0,398	3356
47711	Apparel and fashion	0,052	0,399	1942
47591	Furniture	0,051	0,307	989
45110/45201	Car sales, car service and repair centers	0,017	0,224	6312

The table above clearly demonstrates that the car sales industry represent, in this comparison, an industry with a considerably high level of competition and a high number of firms. However, this study concentrates on a specific category containing 215 firms within this industry and the market situation, as shown above, may therefore not fully be applicable in all aspects. Yet, it is important to point out that the 6312 firms within this industry are all firms with similar business activities and therefore closely related to each other.

The results presented in table 4.2.1 along with the models of market concentration discussed in section 2.2, suggest that the current market situation in the car sales industry should lead to firms with significantly less influence over price, making them so called “price-takers”. This, in turn, would instead force them to rely on lowering costs and increasing sales in order to achieve a better profit margin.

Next, we move on to whether the size of the firm may relate to the profitability performance and bargaining power. As discussed in section 2.3, the scale of the operation in a business firm gives rise the following question:

**Q1. How does the firm size relate to the profitability performance and bargaining power?**

Table 4.2.2 presents the correlation coefficients between firm size and profitability performance and bargaining power. The total revenue of the firm measures the firm size and the bargaining power is measured by the accounts payable ratio, which represents the share of the accounts payable in total assets. The following results show a very weak negative correlation in 2006-2009 between total revenue and profit margin, asset turnover ratio and accounts payable ratio. In 2009 the situation is very similar except from a very weak positive correlation between total revenue and profit margin.

**Table 4.2.2 Economies of scale – correlations (all firms)**

Time period: 2006-2009		Profit margin	Asset turnover ratio	Accounts payable rate
Total revenue	Pearson Correlation	-0,03	-0,05	-0,09

Time period: 2009		Profit margin	Asset turnover ratio	Accounts payable rate
Total revenue	Pearson Correlation	0,02	-0,04	-0,09

Furthermore, table 4.2.3 presents the average total revenue by top and low performers. As shown in the table, the mean values are higher among the top performers in both 2006-2009 and 2009, indicating that top performers are of greater size in average. On the contrary, the median values for the same time periods show instead that the average size of the firm is greater among the low performers. These results indicate that the distribution of the data values in both categories is skewed to the right (positive skew).

**Table 4.2.3 Total revenue (TSEK) – top vs. low performers**

	Top (Q3)	Low (Q1)	Top (Q3)	Low (Q1)
Time period	2006-2009	2006-2009	2009	2009
Mean	402 680	346 459	458 158	318 849
Median	124 505	178 985	132 756	163 548
Minimum	34 308	31 174	50 467	50 059
Maximum	8 383 764	2 002 329	7 962 755	1 901 267

The results in the previous tables provide no support for a positive relationship between firm size and profitability performance, indicating that no economies of scale are prevalent, as suggested by Pindyck and Rubinfeld (2005). There is even a vague indication of an opposite relationship. The median total revenue in table 4.2.3, which better reflects the typical value, indicates that the average firm size among the low performers is greater. This would imply that firm size is negatively related to profitability performance.

Furthermore, the results also show that no relationship between firm size and bargaining power can be found in these tests. However, bargaining power may not only result in increasing accounts payable ratios, but also in lower purchase prices. Yet, lower purchase prices would possibly lead to improved profit margins, which is also something that has been tested but not provided any supporting results.

Another possible explanation for these results may be the fact that, as indicated by table 4.2.1, the size of these firms are not great enough in order to achieve bargaining power.

### 4.3 PRODUCT ASSORTMENT

As discussed in section 2.4, the product assortment width and the single vs. multi-brand strategies gave rise to the following question:

#### Q2. How does the product assortment width relate to profitability performance?

Table 4.3.1 below is made by summing up how many brands each company holds, then calculating the average ROCE for each number of brands. To hold a brand in this sense means being an authorized dealer for that brand. The six firms with zero number of brands have no authorization and those firms are specialized in used cars and/or imported cars and in some cases they have other main activities such as motorhome- or tractor retailing. Table 4.3.1 shows a pattern of diminishing profitability with increasing number of brands. Notice though, the positively skewed distribution (a significantly higher mean than median) in the >6 category indicating that within that category there are also some successful firms.

**Table 4.3.1** Profitability performance by number of brands (2009)

Brands	ROCE (median %)	ROCE (mean %)	N
0	17,35	18,21	6
1	11,61	11,37	50
2	7,73	4,84	42
3	9,07	7,39	47
4	6,41	6,80	34
5	6,13	5,79	13
6	4,94	5,01	12
>6	5,45	10,73	11
<b>all</b>	<b>7,60</b>	<b>7,97</b>	<b>215</b>

The table shows that having an unauthorized dealership, i.e. not being bound to a certain brand, seems to be the most profitable way to go. However, this category represents only 6 firms out of a total 215 firms with in some cases different main activities than the regular car dealership. But, the pattern still remains – generally; more brands seem to lead to diminishing profitability. The results may support that the costs of adding another product line is often higher than the benefits. It may also stem from the lost focus of adding more brands, such as proposed by Blomfeldt (2008) and Nilsson (2010). One must bear in mind though, that, if those brands were added recently, they might show a different effect in the coming years.

Table 4.3.2 presents the profitability performance among the dealers holding a certain brand. The top (Q3) and low (Q1) columns represent how frequent the brands are within the top and low performers. The N column shows the total number of dealers holding each brand. One needs to hold in mind that many firms represent multiple brands and that the ROCE is therefore not separated by brand within each firm. But, when cross-examining the profitability over 215 firms it does give an indication of the most successful brands among the dealers.

**Table 4.3.2 Profitability performance by brand dealership (2009)**

Brand	ROCE (median %)	ROCE (mean %)	Top (Q3)	Low (Q1)	N
ferrari	27,91	27,91	1	0	1
maserati	27,91	27,91	1	0	1
hummer	19,02	19,02	1	0	1
smart	19,02	13,53	2	1	3
bmw	12,71	17,35	6	1	13
citroen	12,71	7,17	4	4	15
mercedes	12,43	8,34	8	7	20
chrysler	11,83	11,83	5	4	11
jeep	11,83	11,83	5	4	11
toyota	11,36	11,40	5	3	18
subaru	9,44	7,46	4	8	24
dodge	8,68	11,40	4	4	10
mitsubishi	8,34	6,06	4	3	14
vw	7,63	7,64	6	9	33
audi	7,58	7,17	5	7	28
skoda	7,54	6,58	5	9	31
saab	7,21	8,78	8	7	27
peugeot	6,67	7,53	3	6	19
mazda	6,67	2,61	7	7	27
hyundai	6,55	3,83	3	3	14
<b>average</b>	<b>7,60</b>	<b>7,97</b>			

**Table 4.3.2 continued**

Brand	ROCE (median %)	ROCE (mean %)	Top (Q3)	Low (Q1)	N
ford	6,54	2,09	7	12	42
seat	6,52	7,35	1	1	4
suzuki	6,52	6,11	2	2	8
porsche	6,44	6,44	0	0	2
opel	6,43	8,58	7	8	27
dacia	6,38	7,22	3	6	23
land rover	6,25	9,32	2	2	8
volvo	6,13	6,71	5	11	41
renault	6,13	6,63	5	11	41
cadillac	6,12	7,53	1	1	3
nissan	5,64	7,45	3	7	15
alfa romeo	5,55	12,39	4	3	9
chevrolet	5,55	8,22	5	8	21
honda	5,45	7,15	3	3	11
isuzu	4,98	4,27	1	5	10
fiat	4,76	10,69	4	5	12
kia	4,16	6,02	5	8	18
corvette	3,97	6,81	1	1	3
jaguar	3,38	2,17	1	3	6
<b>average</b>	<b>7,60</b>	<b>7,97</b>			

The four top brands are all more or less exclusive to the reseller with only one or a few authorizations within our population. Among the more higher volume brands, BMW stands out. Their retailers are the fourth most profitable according to the median values. A closer look at how frequent each brand is among the top and low performers, their success becomes even more apparent. Out of the 13 BMW dealers in our

population, six are within the top performers and only one among the low performers. This relationship stands out also when looking at other brands like Mercedes, Jeep and Citroen, whose dealers are more evenly spread over the population.

In the bottom half, one finds Volvo and Renault, whose 41 dealers are below average in profitability performance and are asymmetrically distributed towards the low performers with five dealers among the top and eleven among the low performers. Others with similar relationships are Nissan, Chevrolet and KIA dealers.

#### 4.4 CORPORATE SALES STRATEGY

Section 2.5 discussed the importance of understanding the needs and behavior of corporate customers, which gave rise to the following question:

##### Q3. How does the share of corporate sales relate to the profitability performance?

Table 4.4.1 below presents how the corporate sales ratio, i.e. how many of total cars sold that were sold to corporate customers, correlates with profit margin and asset turnover ratio. The table shows a very weak negative correlation in both 2006-2009 and 2009.

**Table 4.4.1** Corporate sales share – correlations (all firms)

Time period: 2006-2009		Profit margin	Asset turnover ratio
Corporate sales share	Pearson Correlation	-0,06	-0,06

Time period: 2009		Profit margin	Asset turnover ratio
Corporate sales share	Pearson Correlation	-0,08	-0,07

In table 4.4.2 the pattern is the same - very vague but slightly negative. A higher share of corporate customers gives somewhat lower profitability.

**Table 4.4.2** Corporate sales share (%) – top vs. low performers

	Top (Q3)	Low (Q1)	Top (Q3)	Low (Q1)
Time period	2006-2009	2006-2009	2009	2009
Mean	20,78	21,91	19,75	22,82
Median	18,98	21,71	17,76	21,33
Minimum	0,00	6,10	0,93	0,00
Maximum	77,31	43,26	56,44	74,10

The results above show a very weak correlation between corporate sales and profitability performance and a slight difference in the share of corporate sales among top and low performers. From that we can conclude that a corporate customer is not more profitable than a private customer. However, it is probable that some firms handle its corporate sales in a more profitable way than others, but in those cases it is rather the firm than the customer that makes the difference.



## 4.5 USED CAR SALES STRATEGY

Section 2.6 discussed the business of used cars and also stressed the question whether focusing on used car sales rather than new car sales could improve the profitability performance:

### Q4. How does the share of used car sales relate to the profitability performance?

Table 4.5.1 presents correlation coefficients between the used cars sales ratio, i.e. how many of the total cars sold that were used cars and the two parts that form profitability, profit margin and asset turnover ratio. Over the 2006-2009 period there were no notable correlation but in 2009 the correlation between used cars sales ratio and profit margin stands out, yet at the very low level of 0,146.

**Table 4.5.1** *Used car sales share – correlations (all firms)*

Time period: 2006-2009		Profit margin	Asset turnover ratio
Used car sales share	Pearson Correlation	0,02	-0,07

Time period: 2009		Profit margin	Asset turnover ratio
Used car sales share	Pearson Correlation	0,15	-0,03

Table 4.5.2 shows that the average used car sales ratio is high among both top and low performers. However, the mean and median values show a slightly higher ratio among top performers than among low performers for both time periods.

**Table 4.5.2** *Used car sales share (%) – top vs. low performers*

	Top (Q3)	Low (Q1)	Top (Q3)	Low (Q1)
Time period	2006-2009	2006-2009	2009	2009
Mean	58,06	56,58	62,15	58,46
Median	57,55	56,03	62,18	59,30
Minimum	20,69	35,90	22,53	0,00
Maximum	100,00	87,27	95,08	86,47

In the previous tables we can see that the used car sales ratio's connection to profit margin was stronger in 2009 than over the 2006-2009 period, indicating that the used car sales in 2009 played a more important role than in the average year. However, similar to what we could observe in the corporate sales correlations, we can in this part conclude that it is not the used car sales in itself that drives profitability. Rather it is probable that the top performers do something different in the way they handle that deal. As claimed by Motorbranschens Riksförbund (2010), the used car deal is in many ways a more complex deal than the new car deal. This combined with our results would stress that it is rather the conduct of the firm than the choice of mix between new and used cars that determine profitability. In the following part we will take a look at one factor within the process of handling used cars and investigate if it can explain the differences.

## 4.6 COST CONTROLS

Section 2.7 discusses different management controls in order to improve efficiency within the firm and stresses the importance of reducing the average age of the used car inventory. This discussion gave rise the following question:

### Q5. How does the average age of the used car inventory relate to the profitability performance?

Table 4.6.1 presents the correlations between profit margin and asset turnover ratio and the average age of the used car inventory. The average age represents the day count on stock for each sold used car. As shown in the table, in 2006-2009 there is a weak negative correlation between day count for used cars and profit margin and asset turnover ratio. In 2009 however, we can detect a stronger negative correlation, yet weak, of -0,17. This relationship is further supported by table 4.6.2, which shows that the top performers needed roughly 27 days less to sell their cars according to the mean values and 17 days less according to the median values.

**Table 4.6.1** Used car stock ratio – correlations (all firms)

Time period: 2006-2009		Profit margin	Asset turnover ratio
Used car stock ratio	Pearson Correlation	-0,01	-0,05

Time period: 2009		Profit margin	Asset turnover ratio
Used car stock ratio	Pearson Correlation	-0,17	-0,06

**Table 4.6.2** Used car stock ratio (days) – top vs. low performers

	Top (Q3)	Low (Q1)	Top (Q3)	Low (Q1)
Time period	2006-2009	2006-2009	2009	2009
Mean	134	121	100	128
Median	83	111	101	117
Minimum	9	38	11	0
Maximum	1625	229	242	365

A closer look at table 4.6.2 might also explain why the correlation coefficient for the 2006-2009 period was so low. When looking at the median values for the 2006-2009 period the pattern is the expected - fewer days in stock gives a higher profitability. But, neither the mean nor the correlation gives no support to the expectation that selling the cars faster would increase profitability. This might be true but it is probably explained by the extreme maximum value in this group that affects the mean, which in turn affects the correlation coefficient.

As we saw in section 4.6 the used car sales represent a major part of the industry and also that for both top and low performers this share accounts for about 60 percent of total sales. We concluded that it was not the used car sales in it self that made the deal successful but rather how the deal was taken care of. As described in section 2.7 the belief within the business is that there are many negative effects of having a car in stock too long (Fahlgren, 2008). That belief is supported in our results, it does not give a complete explanation of the differences in profitability but it seems to be an important parameter in the used car sales process. This would also stress the importance of having your stock under control, something which

could be done by applying the types of controls described by Merchant & Van der Stede (2007). Further it emphasizes a focus on the process described by Fahlgren (2008).

## 4.7 CUSTOMER LOYALTY

In section 2.8, we reviewed previous research about customer loyalty as determinant of profitability in many businesses. This gave rise to the following question:

### Q6. How does the customer retention rate relate to the profitability performance?

Table 4.7.1 shows the correlation between new and used car retention rate and profit margin and asset turnover ratio. New and used car retention rate represents how many of the total number of cars sold during the period that was sold to a retained customer. The results show a 0,30 correlation between the new and used car retention rate and profit margin over the 2006-2009 period and a 0,21 correlation in 2009. Furthermore, the results also show a weak negative correlation between the retention rate and the asset turnover ratio in 2006-2009.

**Table 4.7.1** *New and used car retention rate – correlations (all firms)*

Time period: 2006-2009		Profit margin	Asset turnover ratio
New and used car retention rate	Pearson Correlation	0,30	-0,10

Time period: 2009		Profit margin	Asset turnover ratio
New and used car retention rate	Pearson Correlation	0,21	-0,04

For the top performers in 2006-2009, the retention rate was 27 percent according to the median as well as the mean, compared to 23 percent respectively among the low performers (see table 4.7.2).

**Table 4.7.2** *New and used car retention rate (%) – top vs. low performers*

	Top (Q3)	Low (Q1)	Top (Q3)	Low (Q1)
Time period	2006-2009	2006-2009	2009	2009
Mean	26,95	22,58	26,21	20,71
Median	26,90	22,55	25,74	19,61
Minimum	0,00	2,22	5,25	0,00
Maximum	50,06	38,89	50,12	45,71

When it comes to the retention rate for new cars only, table 4.7.2 shows that the correlation with profit margin is still notable over the 2006-2009 period. In 2009 however, the correlation between the new car retention rate and profit margin proves to be weaker than in 2006-2009.

**Table 4.7.3** *New car retention rate – correlations (all firms)*

Time period: 2006-2009		Profit margin	Asset turnover ratio
New car retention rate	Pearson Correlation	0,23	-0,05

Time period: 2009		Profit margin	Asset turnover ratio
New car retention rate	Pearson Correlation	0,09	0,03

Table 4.7.4 presents the new car retention rate among the top and low performers. As shown in the table, there is a difference in retention rate between the categories in both 2006-2009 and in 2009. This difference is strongest in 2009, when top performers had a 10 percentage points better retention rate according to the mean and a 12 percentage points according to the median.

**Table 4.7.4** *New car retention rate (%) – top vs. low performers*

	Top (Q3)	Low (Q1)	Top (Q3)	Low (Q1)
Time period	2006-2009	2006-2009	2009	2009
Mean	48,08	41,68	49,63	39,93
Median	51,95	48,77	54,64	42,52
Minimum	0,00	0,00	0,00	0,00
Maximum	81,25	75,00	86,21	80,00

A conclusive analysis of the retention rates would be that the higher up the profitability rank, and especially the profit margin rank - the higher is the degree of retained customers. This is in line with previous research of the importance of customer loyalty within other businesses done by Reichheld and Sasser (1990). Wherever the relationship between loyalty and profitability stems from, whether it is from satisfied employees as proposed by Heskett et al. (1997) or not, it shows the importance of retaining rather than attaining customers, just as described by Armstrong & Porter (2007). However, this thesis does not seek to explain the process of retaining customers, but the correlation with profit margin shows that firms with a higher degree of recurring customers have a wider gap between revenues and costs. The reason for that could be that a loyal customer pays a higher price, that a larger share of loyal customers generates lower costs or that a larger share of loyal customers generates more sales without raising costs. Due to the design of this study we are not able to establish the direction of causality. Hence, the loyal customer could possibly stem from the happy face of the successful salesman.

## **4.8 A SUMMARY OF FINDINGS**

Section 4.1 presented an overview of the average profitability performance among the 215 firms included in this study. The results showed that the average ROCE (median) in 2006-2009 was 6,86 percent. Moreover, the average profitability performance among top and low performers showed that there was a significant difference in performance between the two categories. This also showed that it was mainly the variations in profit margin that distinguished the population's top from the low performers.

Section 4.2 concluded that the car sales industry is characterized by a large number of small firms and a low level of market concentration, indicating a high level of market competition. The correlation coefficients between firm size and performance and bargaining power provided no support for any economies of scale.

Section 4.3 concluded that a wider product assortment, i.e. more brands, in general decreased profitability performance. However, niche strategies such as unauthorized dealerships and extensive multi-brand dealerships also seemed to be positively related to the profitability performance. Moreover, the results also showed that dealerships with close to exclusive authorization for a specific brand proved to be more profitable than the average. Among the more frequently represented brands, the one that stands out as the one with the most successful dealers is BMW.

Section 4.4 and 4.5 presented the share of corporate sales and used car sales in relation to the profitability performance. The results showed, in both cases, that the share itself does not relate to the profitability.

Section 4.6 continued to investigate whether the average age of the used car inventory could be related to the profitability performance. The results showed that there was a notable difference in the stock day count ratio between the top and low performers, indicating that there is something in the conduct of the used car sales that distinguish the top from the low performers.

Lastly, the results in section 4.7 showed that the retention rate in both the categories proved to be positively related to the profit margin, i.e. a higher degree of recurring customers leads to a wider gap between revenues and costs.

## CHAPTER 5 – CONCLUSION

*This chapter synthesizes the previous chapters in this thesis and presents a conclusion of the findings and analysis.*

In the beginning of this thesis we set out to investigate what characterizes a profitable car dealership. By adopting a cross-sectional design and a quantitative research method, we developed our own unique database containing a population of 215 firms.

In this thesis we have pointed out connections between customer retention and the conduct within the used car sales. We have also seen that the chosen brand strategy plays an important role in determining profitability. After having answered the six questions connected to the different factors we can also conclude that to answer explanatory questions such as what drives profitability is very complex. However, the contribution of this thesis lies most in its descriptive nature. We have seen how the fluctuations in ROCE lie in changes in profit margin rather than the asset turnover ratio. Further, this study has described the market situation and concluded that it is characterized by low concentration and many actors. We have also seen the differences in profitability between firms adopting different strategies regarding which brand(s) and how many to take on. The share of used car sales is high at a group level, which emphasizes the importance of that part of the dealership. We could also conclude that the successful firms sold their used cars more quickly than the less prosperous ones. That could indicate a better conduct in the selection, preparation or marketing of the cars. Lastly, a high degree of loyal customers was positively linked to the firms' profit margin, an indication of the importance of caring for your customers.

As a descriptive study we leave it to further research to more profoundly explain the relationships described in this thesis. However, this thesis might serve the individual firm itself in better understanding the context in which it operates. It may also be useful as a starting point for further research on this topic.

## CHAPTER 6 - DISCUSSION

*In this chapter we propose areas for further research in order to gain a deeper understanding of the profitability performance in the car sales industry. Lastly, we present, in more speculative manner, our own ideas of the profitable car dealership.*

### 6.1 FURTHER RESEARCH

In the course of this descriptive research study, we have come across interesting areas for further research that could provide new pieces to the puzzle. Below, we list a summary of our suggestions on this topic:

- A case study of BMW and KIA that focuses on the franchise concept of each brand and how it related the profitability performance in both ends.
- A cross-sectional study of the performance in the service and repair business within a car dealership and its relation to the firm's overall profitability performance.
- A case study of whether innovation and differentiation in conventional car sales could be linked to the firm's overall profitability performance.
- A case study of whether the implementation and use of results and action controls would improve the overall profitability performance among the firms in the car sales industry.

### 6.2 THE SUCCESSFUL CAR DEALERSHIP

In this section we develop our own idea of the characteristics of the profitable car dealership, given the context of this study.

Firstly, according to what this study has shown regarding the product assortment, we believe that the successful car dealer adopts a **single brand strategy**. However, the specific brand in this case, would rather be "large" in terms of market share in order to potentially generate significant new car sales. The chosen brand would also be associated with a manufacturer or importer that is characterized by long-term thinking and stability.

Secondly, the successful car dealer also places a great emphasis on the **used car business**. This meaning that the firm actively strives to improve the whole chain of events regarding the used car sales business. This also incorporates having a used car sales manager as well as a strategy for the used car stock, both in terms of size and selection.

Lastly, the successful car dealership also focuses on **retaining the customers** rather than increasing sales by obtaining new customers.

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