

UNIVERSITY OF LATVIA  
FACULTY OF ECONOMICS AND MANAGEMENT



**Christoph Ernst Wilken Kisker**

IMPACT OF MOTIVATIONAL FACTORS OF NASCENT  
ENTREPRENEURS ON BUSINESS SURVIVING SUCCESS

DOCTORAL THESIS

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Supervisor Prof. Dr. Josef Neuert

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## ANNOTATION

Entrepreneurship is a significant factor for economic growth, innovation and job creation of countries. This positive influence of entrepreneurship is made by successful entrepreneurs. Government institutions actively influence the level of entrepreneurial activities in their countries by creating the right environment for entrepreneurship. In order to promote and encourage people to start a new business, it is necessary for government institutions to clearly understand the motivation for successful entrepreneurs. The aim of this work is to analyse the impact of various sophistications of motivational factors on the financial success of new founded businesses to create a framework that stimulates the motivation of successful entrepreneurs. So that more people, who have a high probability to establish a successful business, start their own business. The foundation of this research is a new definition for entrepreneurship. A new categorization for motivational variables was designed in order to deliver a new explanation of the motivational structure of successful entrepreneurs. The classification was tested by a factor analysis of the motivational factors from the PSED II (Panel study of entrepreneurial dynamics) secondary data set. The motivational factors can be classified as (1) independence, (2) financial reward, (3) social recognition and (4) need for achievement. Based on these findings, the four forces of entrepreneurial motivation model was developed to analyse the impact of motivational factors on a variety of indicators for business surviving success. The model is empirically tested based on the PSED II secondary data set which contains motivational factors and financial performance of entrepreneurs in the USA. The correlations were analysed by a multiple regression analysis for the model as well as for each of the motivational factors. The result is, that there is a significant and differentiated impact of motivational factors of the entrepreneur on the business surviving success. The influence is the strongest in the first year after the foundation. The desire for independence has the most significant and strongest influence on the financial performance. The motivation for financial reward has a negative influence on the financial performance. Striving for social recognition has a significant long-term influence. Need for achievement has an influence on the growth of sales but not on the return on sales. Based on these results, recommendations are made to the investment and development agencies, venture capitalists and other parties in the USA.

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# Introduction

## Actuality of the topic

Entrepreneurship is an important element for economic growth in countries. According to several authors, new business companies contribute between 1/4 to 1/3 of the economic growth of a country.<sup>1 2</sup> Therefore, the research on the motivations of people to start a business has a significant impact on the understanding of the economic development of a country.<sup>3</sup> In the OCED, the survival rate is only 60-70 percent of the new companies in the first two years. 40-50 percent still exist after seven years of operation.<sup>4</sup>

The relevance for the study of entrepreneurs is demonstrated by Kuratko and Hodgetts in their book with concrete numbers. In the US, there are 26 million enterprises, which have less than 500 employees. In comparison to this, only 15,000 companies have more than 500 employees. Over a 10 year period there were 600,000 businesses established per year.<sup>5</sup> Other statistics argue that there are 1.5 million new started companies in the US, when adding 900,000 companies which are operating from home.<sup>6</sup> Entrepreneurship has become an important appealing for people. Therefore, the understanding of the role of entrepreneurship in the development of economies has become increasable important.<sup>7</sup> Up until the time of retirement, almost half of all men in the United States started their own company.<sup>8</sup>

Schumpeter argues that entrepreneurship is important to transform technological advances in products and services. Entrepreneurship serves as a transformer of technological advances in products and services.<sup>9</sup> This is consistent with the opinion of Shane and Venkataraman who argue that through entrepreneurship, knowledge is converted into products and services.<sup>10</sup> Entrepreneurs use innovation to start a business, so that the market demands can be satisfied. They also connect various markets together and create, expand or modify

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<sup>1</sup> cf. Davidsson et al., 1994, p. 395-410

<sup>2</sup> cf. Reynolds et al., 1994, p. 343-346

<sup>3</sup> cf. Carter et al., 2003, p. 13-39

<sup>4</sup> cf. OECD, 2003, p. 145

<sup>5</sup> cf. Kuratko and Hodgetts, 2007

<sup>6</sup> cf. Li, 2007, p. 449-466

<sup>7</sup> cf. Zahra and Dess, 2001, p. 8-11

<sup>8</sup> cf. Reynolds and White, 1997

<sup>9</sup> cf. Schumpeter, 1934a

<sup>10</sup> cf. Shane and Venkataraman, 2000, p. 217-226

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the markets.<sup>11</sup> Entrepreneurial activity is the process through which supply and demand are kept in balance.<sup>12</sup> Schumpeter already wrote in 1934, that entrepreneurship promotes innovation and technical change and therefore generates economic growth and becomes a fundamental force for economic development. The economic development is also driven by a further effect of new enterprises. Through the creation of new firms, competitors as well as large and long existing companies have to improve themselves so that they do not disappear from the market.<sup>13</sup>

Governments and development agencies of countries can use this knowledge to provide framework conditions for new companies so that they can develop. These stimuli for innovation and entrepreneurship are good for the health and sustainable growth of economies.<sup>14</sup> According to Aldrich, society benefits greatly come from entrepreneurial activities, as they lead to a series of economic and social benefits such as the creation of jobs.<sup>15</sup> Schumpeter identified innovations in products and processes from entrepreneurs as a booster for change in society.<sup>16</sup> In addition to that, entrepreneurship also identifies and mitigates deficits and inefficiencies in societies.<sup>17</sup>

According to Rauch and Frese, most studies do not connect the entrepreneurial success with the motivation of the entrepreneur. As a result, the studies loose explanatory power in explaining the company's success. In the early years, the motivation and goals of the company founders have a greater impact on the development of the company, as they have in large organization. Therefore, the research of the first 3 years has a greater significance in the relationship between the goals of the entrepreneur and the success in the following years. In small companies, the relationships between the variables of the individual and the variables of the company are stronger than in large enterprises.<sup>18</sup> Shane, Locke and Collins found out that the motivation of entrepreneurs plays a crucial role when all environmental influences are held constant. The importance of motivation of the entrepreneur in relation to the establishment of a company is underlined by Shane, Locke and Collins in another

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<sup>11</sup> cf. Schumpeter, 1934b

<sup>12</sup> cf. Kirzner, 1997, p. 60–85

<sup>13</sup> cf. Schumpeter, 1934b

<sup>14</sup> cf. Schumpeter, 1934b

<sup>15</sup> cf. Aldrich, 1999

<sup>16</sup> cf. Schumpeter, 1934b

<sup>17</sup> cf. Kirzner, 1997, p. 60–85

<sup>18</sup> cf. Rauch and Frese, 2000, p. 101-142



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article. The authors argue, that the role of motivation of the company founder is important to understand entrepreneurship.<sup>19</sup> Baumol points out the relevance of the motivation for entrepreneurs within his book "Entrepreneurship in Economic Theory". He is convinced that the motivation of the founder of the company is one of the key elements in the process of business creation.<sup>20</sup>

In order to promote the economic development of a country by creating the right environment for entrepreneurship, the motivation of successful entrepreneurs must be understood to promote them in the environment. The given framework for entrepreneurship of a country stimulates the motivation of successful entrepreneurs and motivate more people to start their own business, who have a high probability to establish a successful business. In contrast, economic unsuccessful new ventures bind state resources as well as skilful workers in the labour market. Therefore, it is important that the support of the government and of the entrepreneurial investors promotes directly the motivation of people to start their own business who are likely to start a successful company. These entrepreneurs support the economic development of a country. Because of that, the creation of framework conditions for entrepreneurs should focus on entrepreneurs who are expected to have a high probability of starting a successful company.

Understanding the motivation of economically successful entrepreneurs can help governments and investors to create conditions for business involvement and thus promote the economic performance of a country. The support of the motivation of people is the premise that they take the risk and invest the energy to become an entrepreneur. In many countries, people's willingness to entrepreneurial activity lags behind other countries. As mentioned above, entrepreneurship creates jobs, stimulates innovation and leads to a country's economic development. The understanding of the entrepreneur motivation is important to reduce the number of collapses in new enterprises. Therefore, it is important to know how to avoid the failures of new ventures and how to support likely successful entrepreneurs.

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<sup>19</sup> cf. Shane et al., 2012, p. 257–279

<sup>20</sup> cf. Baumol, 1968, p. 64–71

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## **Research object and subject**

The object and subject of this research can be formulated as following:

- Object: Nascent entrepreneurs
- Subject: Motivational structure of nascent entrepreneurs

## **Aim of research**

The aim of this doctoral dissertation is to analyze the impact of the motivational structure of nascent entrepreneurs on the business surviving success in the USA.

## **Main tasks**

The results were achieved through the fulfilment of a number of main tasks:

- Review the literature in the scientific areas of entrepreneurship, motivation and financial performance of nascent enterprises.
- Review of management motivation theories and studies about motivational factors and the classification of these factors.
- Transfer the motivational models and classifications to the field of entrepreneurship. Identifying gaps of motivational models for the explanation of the motivation of entrepreneurs.
- Develop a new classification of motivational factors which reflect the fundamental kinds of motivational structures and can be used to link concrete recommendations.
- Build a model between the motivational factors and business surviving success of enterprises. This model shows the relationship between each motivational factor and key performance indicators for business surviving success of companies.

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- Prepare the PSED II (Panel Study of Entrepreneurial Dynamics) secondary data set to analyse the relationship between motivational factors and business surviving success. PSED II is a dataset about entrepreneurship from the University of Michigan. Out of 31,845 screening telephone interviews, 1214 nascent entrepreneurs were identified. The data set was filtered for all records where financial data was complete for 3 years after the company was founded. The PSED data are an indicator of 12.6 million nascent entrepreneurs in the US who found 7.4 million new businesses. The PSED II data set was also weighted based on US Census data to be nationally representative.
  - Extract motivational factors from the motivational variables of the PSED II secondary data set with a factor analysis.
  - Calculate distinct key performance indicators for the business surviving success of entrepreneurship based on the financial data of the companies from the PSED II data set.
  - Analyse the relationship between the motivational factors and the return on sales over 3 years with multiple regression analysis.
  - Support the findings by conducting several multiple regression analysis with the motivational factors and several financial statements and years.
  - Link concrete recommendations to the motivational factors of successful entrepreneurs in order to support the economic development and innovation rate of a country.

## Research hypothesis

The main research question to be explored in this dissertation is: Do various motivational structures of entrepreneurs have a differential effect on the business surviving success of new business companies?

In addition to that, the questions will be examined, which motivating factor has a significant impact on financial ratios of the founded company.

**H<sub>B</sub>:** The various motivational factors of the entrepreneur have a differential impact on the business surviving success of the nascent enterprise.

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## Thesis for defence

For further investigations, the impact of each motivational factor was analysed separately in order to develop more specific recommendations for specific groups. Therefore, the sub-hypotheses are as following:

**H<sub>2</sub>:** The more the entrepreneur is motivated by financial rewards when starting the enterprise, the better the business surviving success.

**H<sub>3</sub>:** The more the entrepreneur is motivated by need for achievement when starting the enterprise, the better the business surviving success.

**H<sub>4</sub>:** The more the entrepreneur is motivated by social recognition when starting the enterprise, the better the business surviving success.

**H<sub>5</sub>:** The more the entrepreneur is motivated by the desire for independence when starting the enterprise, the better the business surviving success.

Further thesis for defence:

- The motivational factors of entrepreneurs have a significant and differential impact on the business surviving success of the foundation in the USA.
- The motivation of the entrepreneur has the highest and most significant impact in the first year after the start of the new venture.
- The desire for independence of entrepreneurs is the only motivational factor which has a significant and positive impact on the return on sales of new ventures seen over 3 years.
- Entrepreneurs who are driven by need for achievement, have an opposed impact on the business surviving success of new ventures based on the revenue growth from year 1 to 2 and year 2 to 3.
- There is a significant relationship between entrepreneurs who start a business because of their desire for social recognition and the return on sales of the company founded in the 1st and in the 3rd year of existence.
- Financial rewards as the motivation to start a business has no significant effect on the business surviving success of new enterprises.

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## **Novelties**

The influence of the motivation of the entrepreneur on the success of the founded company was controversially discussed in the literature and various studies come to miscellaneous results. This study examines the relationship between individual motivational structures and their influence on the business surviving success in detail. Moreover, the study provides further contributions to science:

- 1. Motivational factors of nascent entrepreneurs are related and tested towards the business surviving success for the first time.
- 2. A new categorization for motivational variables was designed in order to deliver a new explanation of the motivational structure of successful entrepreneurs for a better understanding of the framework conditions for these entrepreneurs.
- 3. A new model was developed which includes motivational factors and business surviving success in the USA.
- 4. Management motivation models, content motivation models and motivational factors of a variety of studies are combined to provide explanations for the motivation of entrepreneurs to start a new business in the USA.
- 5. The insufficiency of the motivational models for explanation of the motivation of entrepreneurs is demonstrated in this study.
- 6. A new comparison of the distinct key business surviving indicators which are affected by the various motivational factors of entrepreneurs in differential ways.

## **Approbation of the research results**

Following are presentations in international conferences:

- International Conference for Business Research 'Innovative Approaches of Management Research for Regional and Global Business Development': "Procedure model for entrepreneurship", University of Applied Science KufsteinTirol, Kufstein, Austria, 2012, August 3rd - 5th of August

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- International Business and Economics Conference 'Current Approaches of Modern Management and Strategy Research': "Changes in growing organizations", University of Applied Science KufsteinTirol, Kufstein, Austria, 2013, 29th – 30th of November
  - International QUAERE 2013 Conference 'Interdisciplinary Scientific International Conference': "Transformational Leadership: How leaders can influence innovation within companies", Akademické sdružení MAGNANIMITAS, Československé armády 300, Hradec Králové, Czech Republic, 2013, 20th - 24th of May
  - International QUAERE 2014 Conference 'Interdisciplinary Scientific Conference for PhD students and assistants | Scientific Conference': "Personality traits of successful entrepreneurs", Akademické sdružení MAGNANIMITAS, Československé armády 300, Hradec Králové, Czech Republic, 2014, 26th - 30th of May
  - International Conference 'CzechSTAV 2014 - International conference': "Management in the building industry: Motivating low-paid employees", Akademické sdružení MAGNANIMITAS, Československé armády 300, Hradec Králové, Czech Republic, 2014, 08th - 12th of December
  - International Conference 'International Masaryk Conference for Ph.D. Students and Young Researchers': "Clustering motivational factors: An empirical evidence based on the PSED study" Masaryk University, Žerotínovo nám. 617/9, 601 77 Brno, Czech Republic, 2014, 15th - 19th of December

## Publications

- Kisker, Christoph: Transformational Leadership: How leaders can influence innovation within companies. In: 'International Conference Quaere 2013 - Interdisciplinary Scientific International Conference', Conference Proceedings. Akademické sdružení MAGNANIMITAS, Hradec Králové, 2013, p. 752 - 759, ISBN 978-80-905243-7-8, ETTN 085-13-13020-05-1, ID 429. SCIRESCO
- Kisker, Christoph: Personality traits of successful entrepreneurs. In: 'International Conference Quaere 2014 - Interdisciplinary Scientific Conference for PhD students and assistants | Scientific Conference', Conference Proceedings. Akademické sdružení

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- Kisker, Christoph: Model for testing the impact of motivational factors of nascent entrepreneurs on business surviving success. In: 'European Scientific Journal', Volume 12, Issue 4, 2016, p. 42 - 54, ISSN 1857-7431. EBSCO

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## Identification of limitations of the study

- The business surviving success of the entrepreneurship is exclusively examined by the financial success. Other goals that entrepreneurs want to achieve by starting a business are not considered.
- The influence of motivation on the long-term success was not considered because of the decreasing influence of the entrepreneur on the company.
- Changes of the motivations over time of the entrepreneur compared to the initial motivation are not included in the dissertation.
- The financial precondition of the company's founder, were not included in the model.
- The results of the study includes different sectors and industries. A separation of the results per sector or industry is not part of the study.
- The study focusses on the influence of the motivation of the entrepreneur on the financial success of the company. The study shows that other factors have an influence on the financial success but are not analysed in depth in this study.

## Structure of the dissertation

The dissertation is divided into the introduction, four main chapters as well as the conclusion and recommendation. The introduction demonstrates general information about the work and includes the actuality of the topic, research object and subject, aim and tasks of the work, research hypothesis, thesis for defence, novelties, approbation, structure and the used methods. The four main chapters are structured in a way that the first chapter delivers the theoretical framework for the relationship between motivation and entrepreneurship based on literature review. The second chapters builds up the models and explains how the parts of the models are derived. The thirds chapters describes how the model is tested. The results of the testing are demonstrated in the last main chapter. The results are further interpreted in the conclusion and recommendation as the last part of the dissertation.



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Chapter 1 reviews available literature in the field of motivation and entrepreneurship. The influences of the entrepreneurship are identified as social, demographic, environmental and opportunity factors as well as the influence of the entrepreneur. Motivation is one of several influences of the entrepreneur. Management motivation theories and content motivation theories are reviewed in order to develop a classification for motivational factors. The relationship between motivation and financial performance of the new ventures is created by reviewing literature about the influence of motivation, goals and intentions and the behaviour of human beings.

Chapter 2 combines the classification of motivational factors with the motivational factors from studies in the area of motivation. It is identified, that the motivational models are insufficient for the explanation of the motivation of entrepreneurs. Based on these findings, a new classification of motivation factors is developed. A model is developed for testing the relationship between the motivation of entrepreneurs and key performance indicators for business surviving success. The four forces of entrepreneurial motivation model is explained in detail and measurements of the variables are described in detail.

Chapter 3 describes how the model is tested with the PSED II secondary data set. The research design, methods, validity and reliability of the data set are described in detail. The motivational variables from the PSED II data are loaded into motivational factors through a factor analysis. The result of the factor analysis is consistent with the model. In the next step, the key performance indicators for business surviving success are calculated. The main indicator is the geometric mean of the return on sales over the first three years. Other performance indicators are calculated in order to get more differential findings on the relationship between motivation and business surviving success.

Chapter 4 describes the empirical testing of the relationship between the motivational factors and business surviving success indicators. The results are explained and set in context with findings from literature review. The used statistical tests are explained in detail. The findings are illustrated in the four forces of entrepreneurial motivation model. The influence of the motivation is demonstrated in context of all influence factors.

The results of the study are summarized in the conclusion and suggestion chapter. Conclusions are drawn from the results and interpreted. These findings and conclusions are the basis for concrete recommendations for specific target groups.

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## Methods used

The approach for answering the research question and to test the hypothesis is to develop a model with a new categorization of motivational factors as well as business surviving success key performance indicators. The development of the motivational factors for the model is based on a literature review of motivational management theories, content management theories as well as the classification of motivation from studies of other authors. The business surviving success key performance indicators are based on the evaluation of financial success from a wide variety of studies. The relationship between the motivation and development of companies is based on the literature of intentions which provides a linkage between motivation and behaviour of the entrepreneur. Based on these findings, a new model was designed to show the relationship between the motivation factors and the business surviving success. The model is a combination of conceptual and calculational models.

For the scientific testing of the relationship between the motivation and the business surviving success of new founded companies, a variety of secondary data sets were screened. The model is tested by the secondary data set PSED II based on entrepreneurs in the USA. The validity and reliability of the data set is explained in detail. Since the data set was recorded at the time of the financial crisis in the USA, the development of the companies is exceptional. In the first step, the motivational factors were extracted from the motivational variables of the PSED II data set with a factor analysis. The business financial success was calculated by the geometric mean of the return on sales from 3 years after the business was founded. In addition to that, other financial performance indicators such as the revenue growth, return on sales growth and the return on sales for each year after the foundation were calculated.

The correlation between the motivational factors and the business surviving success was analysed using a multiple regression analysis for the model as well as for each of the motivational factors. In order to test the hypothesis further and collect additional findings for interpretation, the relationship between the motivational factors and several financial statements was tested by several multiple regression analyses.

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## **Word of gratitude**

I would like to thank my doctoral supervisor Prof. Dr. Neuert for his passion for science, encouraging words and scientific leading. Furthermore, I would like to thank Prof. Dr. Savrina, Prof. Dr. Sumilo and Prof. Dr. Vilka for their support and guidance in the process of completing the dissertation within the last years. In addition to that, I would like to express my gratitude to everyone who participated in the development of my dissertation. Most importantly, I would like to address my cordial thanks to my parents Heidrun and Christoph Kisker as well as my sister Claudia for supporting me during this wonderful scientific journey.

# 1 Relationship between motivation and entrepreneurship

## 1.1 Field of entrepreneurship research

Richard Cantillon and Jean-Baptist Say have described the impact of entrepreneurship on the economy of a country in the 18th century, according to Van Praag.<sup>1</sup> Schumpeter established in his book "Das Wesen und Der Hauptinhalt der Theoretischen Nationalökonomie" that in the beginning of the twentieth century, that entrepreneurs are the driving force for the economic development of countries.<sup>2</sup> The first research in the area of business creation have focused on the general characteristics and motives of entrepreneurs.<sup>3</sup> The research of entrepreneurship was observed more closely at the end of the 20th century.<sup>4</sup> Entrepreneurship as a field gained importance in the late 1980 for explaining the economic development of countries.<sup>5</sup> According to Rauch and Hulsink in their article from 2015, the promotion of entrepreneurship generates economic growth and creates jobs.<sup>6</sup> The research in the area of entrepreneurship and the influence of the entrepreneur is an interdisciplinary research field which is covered by several departments. Through the explicit research question about the business surviving success of business foundations in relationship with the motivation of the entrepreneur, this work is part of management science research.

Research in the field of entrepreneurship is classified into three categories according to Stevenson and Jarillo. The first category is the behaviour of an entrepreneur and what they do. The second category consists of the question, what happens when entrepreneurs act and what is the result of these actions. The last category examines the fact, why people decide to become an entrepreneur and what motivates people to become an entrepreneur.<sup>7</sup> In research about entrepreneurship, the psychology of the entrepreneur is combined with organizational theory. Entrepreneurship is a wide research field with linkage to a high number of interdisciplinary research questions. According to Ripsas, it is still possible to identify the influences on the economic success of a business.<sup>8</sup> The Giessen-Amsterdam

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<sup>1</sup> cf. Van Praag, 1999, p. 311-335

<sup>2</sup> cf. Schumpeter, 1908

<sup>3</sup> cf. Brockhaus, 1980, p. 509-520

<sup>4</sup> cf. Carsrud and Braennback, 2011, p. 9-26

<sup>5</sup> cf. Santarelli and Pesciarelli, 1990, p. 677-696

<sup>6</sup> cf. Rauch and Hulsink, 2015, p. 187-204

<sup>7</sup> cf. Stevenson and Jarillo, 1990, p. 17-27

<sup>8</sup> cf. Ripsas, 1998, p. 103-115

entrepreneurial model of success is such an interdisciplinary model which includes all research fields that deal with entrepreneurship. This model consists of the relationship between the personality and goals of the entrepreneur as well as the human capital, strategies and environment of the entrepreneurship and the impact of these factors on the success of a business.<sup>9</sup> A holistic view of the various factors that have an impact on the business surviving success of the new venture, is presented in the chapter 1.3: External factors that influence new ventures.

The initial research in the field of entrepreneurship is based on the study of the personality traits of successful entrepreneurs.<sup>10</sup> Researchers hoped to prevent failures of entrepreneurship and to reduce the waste of resources of countries by personality testing of entrepreneurs.<sup>11</sup> Garter argued in his work that on the other hand, the research should focus on the behaviour of the entrepreneur and not the personality when researching about successful entrepreneurs.<sup>12</sup> Reynolds has an unconventional explanation why there is such a big interest in the research field of entrepreneurship. The interest in the personality of the entrepreneur in the research is a result of the fact that entrepreneurs look focused and more occupied, compared to employees, according to Reynolds.<sup>13</sup> Another field of interest is the behaviour of entrepreneurs. Although behaviour of people may develop through the subconscious and unintentionally, research is focused on the awareness and intentional behaviour to start a business.<sup>14</sup> <sup>15</sup> For McClelland, even the fantasy of a person must be taking into account in order to understand the motives. The motivation of people come from the subconscious and are based on fantasy.<sup>16</sup>

Another focus of the research on entrepreneurship has largely focused on the characteristics of the environment of the new business.<sup>17</sup> In addition to that, great interest of research lies in the external environment of the entrepreneur. Researchers like Reynolds, Storey and Westhead analysed the variables of the environment in which the entrepreneur is

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<sup>9</sup> cf. Rauch and Frese, 2000, p. 101-142

<sup>10</sup> cf. McClelland, 1961

<sup>11</sup> cf. McClelland, 1965a, p. 389-392

<sup>12</sup> cf. Gartner, 1988, p. 11-32

<sup>13</sup> cf. Reynolds and Curtin, 2007b

<sup>14</sup> cf. Bird, 1988, p. 442-453

<sup>15</sup> cf. Krueger et al., 2000, p. 411-432

<sup>16</sup> cf. McClelland, 1961

<sup>17</sup> cf. Aldrich, 1999

situated.<sup>18</sup> Kaufmann and Dant argued in their article from 1988, that research focuses in majority on the environment of entrepreneurship as well as the opportunity of the business.<sup>19</sup> Christiansen agrees, that next to the research about the environment of the entrepreneur, the research about business opportunities and the capability to detect and exploit them is focussed by the entrepreneurial research.<sup>20</sup>

Previous empirical research on the role of motivation of entrepreneurs has been strongly criticized by several authors.<sup>21</sup> <sup>22</sup> But even authors such as Aldrich and Zimmer, who look critical on the role of motivation of entrepreneurs at the empirical research, emphasize the importance of motivation of entrepreneurs for the business entrepreneurship process. The authors define business creation as the identification of business opportunities and access to appropriate resources for entrepreneurs.<sup>23</sup> Shane, Locke and Collins emphasise that the lack of empirical research on the motivation of entrepreneurs is not an indication of the lack of relevance of this research area. They invoke in their article on developing a more realistic explanation for the influence of human motivation on the process of business creation. They consider the explanations of the recent literatures as inadequate.<sup>24</sup>

The field on entrepreneurship is a scientific field which is analysed by a variety of scientific areas. In the following, a definition is developed as the foundation of this study. Entrepreneurship is defined as the creation of a new company, according to Gartner. Gartner further argues at the same time, that this definition could be too short-sighted in some research questions, because it implies that entrepreneurship ends after the company is built.<sup>25</sup> Kaufmann and Dante take the attention to the fact, that a lack of established definition of entrepreneurship is a weakness in the research field of entrepreneurship.<sup>26</sup> According to Shane and Venkataraman, entrepreneurship is defined as the study by whom, how and what the opportunities of producing goods and services are investigated, evaluated and utilized.<sup>27</sup>

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<sup>18</sup> cf. Reynolds et al., 1994, p. 343-346

<sup>19</sup> cf. Kaufmann and Dant, 1988, p. 5-16

<sup>20</sup> cf. Christiansen, 1997

<sup>21</sup> cf. Aldrich and Zimmer, 1986, p. 3-23

<sup>22</sup> cf. Carroll and Mosakowski, 1987, p. 570-589

<sup>23</sup> cf. Aldrich and Zimmer, 1986, p. 3-23

<sup>24</sup> cf. Shane et al., 2012, p. 257-279

<sup>25</sup> cf. Gartner, 1988, p. 11-32

<sup>26</sup> cf. Kaufmann and Dant, 1988, p. 5-16

<sup>27</sup> cf. Venkataraman, 1997, p. 119-138

Another definition is provided by Hisrich. He defines entrepreneurship as a process of creating something new with value. In this process, the entrepreneur invests the necessary time and effort and takes financial, psychological and social risks. The entrepreneur tries to achieve financial rewards and personal satisfaction through this process.<sup>28</sup> A further definition of entrepreneurship as a process is delivered by Shane and Venkataraman. They define entrepreneurship as a process of understanding, evaluating and exploiting of business opportunities in order to convert them into goods and products. The authors also noted that through entrepreneurship, new knowledge is converted into products and services.<sup>29</sup>

Schumpeter wrote in his article of 1934, that entrepreneurship promotes innovation and technological progress of a country. Economic growth of a country is thus increased by entrepreneurship.<sup>30</sup> McClelland suggests that the definition of entrepreneurship should include responsibility for business decisions.<sup>31</sup> A simple definition provides Kirzner on entrepreneurship. For him, entrepreneurship is the equation of supply and demand.<sup>32</sup>

A lack of a common scientific definition of entrepreneurship is a weak point in the field of research on entrepreneurship. The existing definitions of entrepreneurship define different aspects of entrepreneurship. A comprehensive definition of entrepreneurship, which includes all aspects is lacking. For this work, the definition for entrepreneurship is inspired by Gartner.<sup>33</sup> In addition to define entrepreneurship as the creation of a new company, the definition is extended by the satisfaction of the personal needs of the entrepreneur. Definitions of entrepreneurship are reviewed by the authors Tomaa, Grigorea and Marinescu. Following their review of definitions, there is no suitable definition of entrepreneurship in the literature.<sup>34</sup> The only definition which comes close to the new definition for this work comes from Schumpeter who wrote in 1935: An entrepreneur is setting up their own business to reach her or his personal goals.<sup>35</sup>

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<sup>28</sup> cf. Hisrich, 1990, p. 209-222

<sup>29</sup> cf. Shane and Venkataraman, 2000, p. 218

<sup>30</sup> cf. Schumpeter, 1934b

<sup>31</sup> cf. McClelland, 1961

<sup>32</sup> cf. Kirzner, 1997, p. 60-85

<sup>33</sup> cf. Gartner, 1988, p. 11-32

<sup>34</sup> cf. Tomaa et al., 2014, p. 436 – 443

<sup>35</sup> cf. Schumpeter, 1935

Definition of entrepreneurship:

*Entrepreneurship is the creation of a new company to satisfy the personal needs of the entrepreneur.*

The definition of entrepreneurship implies that the personal needs of the entrepreneur is the primary force for the development of the founded company. Before analysing the needs of entrepreneurs, the field of research about entrepreneurs is reviewed in the next chapter 1.2: Classification of entrepreneurs, intrapreneurs and nascent entrepreneurs. The definition contains the company as the subject of the founding process. In this work, the words company and business are used interchangeable. For distinction from entrepreneurship, the company or business is the subject of the founding process whereas the entrepreneurship is the process of creation a new company or business. The entrepreneur is the person who is active in entrepreneurship in order to create a new business. In the next chapter, the entrepreneur is defined in detail.

Based on literature review in the field of entrepreneurship, the motivation of entrepreneurs is an important research field to explain the development of companies. At the same time, there is lack of research about the motivation of entrepreneurs. Other influence factors of the external environment as well as aspect from the entrepreneur are studied more intensify in the scientific field of entrepreneurship. This study has the aim to fill this scientific gap about the influence of motivation on the performance of founded companies.

## **1.2 Classification of entrepreneurs, intrapreneurs and nascent entrepreneurs**

One of the first definitions of entrepreneurs was defined by Mill in the year of 1848. He argued, that entrepreneurs are willing to take more risk than other people.<sup>36</sup> Another early definition of entrepreneurs comes from Schumpeter from the year 1934. He defines entrepreneurs generally as innovators and creators.<sup>37</sup> Baumol describes entrepreneurs as seekers, implementers of ideas and as sharing personalities for leading.<sup>38</sup> Another widely

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<sup>36</sup> cf. Mill, 1848

<sup>37</sup> cf. Schumpeter, 1934b

<sup>38</sup> cf. Baumol, 1968, p. 64–71



comprehensive definition of entrepreneurs comes from Khilstrom and Laffont, who define entrepreneurs as people who prefer an uncertain environment.<sup>39</sup>

For entrepreneurs, there is no generally accepted and used definition.<sup>40</sup> Gartner argues in addition to that, that researchers in the field of entrepreneurs use incorrect definition that would not stand up to the requirements from other research fields.<sup>41</sup> Entrepreneurs are a very heterogeneous group for which it is difficult to define a common definition.<sup>42</sup> Reynolds argues that 20 percent of the population are entrepreneurs. Therefore, it is difficult to find a common definition.<sup>43</sup> Other authors even assume that 50 percent of the population are entrepreneurs. Since up to 50 percent of the population are entrepreneurs, Aldrich argues that they cannot be defined by characteristics regardless of the situation in which they find themselves.<sup>44</sup>

In addition to that, there is an absence of a definition about which persons or group of persons is referred to as an entrepreneur. For example, McClelland already sees managers with a position that requires a high level of entrepreneurial thinking as entrepreneurs.<sup>45</sup> As early as 1961, McClelland argued that managers have a responsibility for business decisions and should therefore also be seen as an entrepreneurs.<sup>46</sup> Based on the reasoning of McClelland, some researchers have included managers as entrepreneurs in subsequent studies. Therefore, it is questionable whether the results of the various studies in the field of corporate entrepreneurship research can be compared at all. This difference in interpretation of entrepreneurs is, according to Shane, the result of a lack of a common definition of an entrepreneur.<sup>47</sup>

Entrepreneurs are defined through the fact that they are smart and find ways to maximize their own wealth, power and prestige, according to Baumol.<sup>48</sup> Jean Bertrand Say defined an entrepreneur, in his early work from the 18th century, as someone who strives for

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<sup>39</sup> cf. Khilstrom and Laffont, 1979, p. 719-748

<sup>40</sup> cf. Cunningham and Lischeron, 1991, p. 45-61

<sup>41</sup> cf. Gartner, 1988, p. 11-32

<sup>42</sup> cf. Gartner, 1985, p. 696-706

<sup>43</sup> cf. Reynolds, 1997

<sup>44</sup> cf. Aldrich and Zimmer, 1986, p. 3-23

<sup>45</sup> cf. McClelland, 1965b, p. 321-333

<sup>46</sup> cf. McClelland, 1961

<sup>47</sup> cf. Shane et al., 2012, p. 257-279

<sup>48</sup> cf. Baumol, 1990, p. 893-921

economic profit, according to Carsrud and Braennback.<sup>49</sup> In addition to the financial profit as the motivation for entrepreneurs, social motivations become important to research recent years and the term social entrepreneur was established. Another type of entrepreneur is the lifestyle entrepreneur. The lifestyle entrepreneur has the intention to become profitable, but does not want to maximize the profit.<sup>50</sup> In addition to the definition of the entrepreneur on who they are, they are defined by what they do.<sup>51</sup>

Many researchers see entrepreneurs as the owner of particular knowledge, with which they can identify business opportunities.<sup>52</sup> The diversity in the willingness and ability of people to take advantage of the business possibilities as an entrepreneur, is based on the diversity of the people.<sup>53</sup> Amit, Meuller and Cockburn show that the willingness to become an entrepreneur largely depends on the opportunity cost.<sup>54</sup> The definition of the entrepreneur as a person who founds a new organization makes the mistake, that it does not consider the events of the business opportunities the entrepreneurs tries to perceive.<sup>55</sup> Shane et al. agree in their article. An entrepreneur is able to exploit business opportunities.<sup>56</sup>

Entrepreneurs can be divided into different types of entrepreneurs according to Poutziouris. He thereby describes four kinds of types. These consist of people who are growth focused, exiteers, survivors and control types.<sup>57</sup> According to Basu, the types of entrepreneurs are divided through the priorities in their life. There are entrepreneurs who put their business first, before the family, the money or the lifestyle.<sup>58</sup> According to Ronstadt, entrepreneurs differ in the fact that they want to pursue a certain lifestyle or to start a business which should be growing.<sup>59</sup> Birch differs entrepreneurs whether they establish a business to make money or to serve the market and bring new technologies to the market.<sup>60</sup> According to Burch, entrepreneurs are people who strive for independence, wealth and exploitation of

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<sup>49</sup> cf. Carsrud and M. Braennback, 2009

<sup>50</sup> cf. Carsrud and Braennback, 2011, p. 9-26

<sup>51</sup> cf. Venkataraman, 1997, p. 119-138

<sup>52</sup> cf. Eckhart and Shane, 2003, p. 333-349

<sup>53</sup> cf. Shane et al., 2012, p. 257-279

<sup>54</sup> cf. Amit et al., 1995, p. 95-106

<sup>55</sup> cf. Gartner, 1988, p. 11-32

<sup>56</sup> cf. Shane et al., 2012, p. 257-279

<sup>57</sup> cf. Poutziouris, 2003, p. 185-214

<sup>58</sup> cf. Basu, 2004, p. 12-33

<sup>59</sup> cf. Ronstadt, 1984

<sup>60</sup> cf. Birch, 1987

business opportunities.<sup>61</sup>

The literature is focused on the nascent entrepreneur who is in the process of founding a new business.<sup>62 63</sup> Nascent entrepreneurs are defined as people who are active in the founding process or have been involved in business founding activities in the last twelve months. Moreover, it is expected that they own parts or the whole company and their business is not fully operational yet.<sup>64 65</sup>

Although there are a large number of new entrepreneurs, research about nascent entrepreneurs is difficult for researchers. Since nascent entrepreneurs often do not show up in official and visible directories, it is difficult to detect them.<sup>66</sup> That's why the research on entrepreneurship largely relies on samples of students in its empirical investigations. Although students have similar characteristics as entrepreneurs according to Gee et al., these analyses have a lot of limitations.<sup>67</sup>

According to Gartner, nascent entrepreneurs are people who have the desire to establish a new businesses. They show an entrepreneurial attitude and engage in activities to be an entrepreneur.<sup>68</sup> For Aldrich and Martinez, aspiring entrepreneurs are people who do not just say that they want to be an entrepreneur but who are involved in at least two special entrepreneurial activities. These activities may include writing a business plan, investing money, or organising the founding team.<sup>69</sup> McGee et al. argues, that research on entrepreneurial behaviour should include people who are going to become an entrepreneur in order to get a better understanding of the prehistory on the motivation and intention.<sup>70</sup>

This study excludes students and entrepreneurs who exclusively participate in preliminary entrepreneurial activities. The focus is on nascent entrepreneurs, but the scope has been expanded to include establishing as well as the duration of the analysed period, over the

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<sup>61</sup> cf. Burch, 1986

<sup>62</sup> cf. Gatewood et al., 1995, p. 371–391

<sup>63</sup> cf. Reynolds, 1997, p. 449-462

<sup>64</sup> cf. Davidsson, 2006, p. 1-76

<sup>65</sup> cf. Parker, 2011, p. 19-34

<sup>66</sup> cf. Reynolds, 1997

<sup>67</sup> cf. McGee et al., 2009, p. 965-988

<sup>68</sup> cf. Carter et al., 1996, p. 151–166

<sup>69</sup> cf. Aldrich and Martinez, 2001, p. 41-56

<sup>70</sup> cf. McGee et al., 2009, p. 965-988

defined period for nascent entrepreneurs. The focus of this study includes the three years after the company was founded. This is an advanced viewing of nascent entrepreneurs as defined by the authors Reynolds, White, Gatewood, Shaver, Gartner, Davidsson and Parker.<sup>71 72 73 74</sup> Therefore in this study, the term nascent entrepreneurs is used to describe the entrepreneur up to 3 years after the foundation and does not include students or people who exclusively participate in preliminary work for entrepreneurship.

There is no common definition for entrepreneurs which this work could use as a foundation. Since entrepreneurs are a heterogeneous group, the definition should focus on what they do and why they are doing it and not who they are. This work focuses on the question, why entrepreneurs want to start a business. In this study, entrepreneurs are people who own at least 50 percent of a company that has been founded by them. Since this study focuses on nascent entrepreneurs, a more specific definition is needed. Nascent entrepreneurs are people who are actively involved in the process of founding a business which is not fully operational yet. The business has to be at least 50 percent owned by the nascent entrepreneur and the entrepreneur has to be already involved in the founding process in the last 12 months. This study involves nascent entrepreneurs. They are defined for this study as following:

*Nascent entrepreneurs are actively involved in the process of business creation up to three years after the company is founded and own at least 50 percent of the company.*

In contrast to the definition of entrepreneurs, several authors agree up on a common definition of intrapreneurs. The intrapreneurs are excluded from this study in order to define the differences between intrapreneurs and entrepreneurs. Intrapreneurs are people who set up a new company for their employer.<sup>75 76 77</sup> Amit, Müller and Cockburn argue, that establishing a new company for the employer is the same kind of business creation. They point out that entrepreneurship takes place in existing companies without founding a new company.<sup>78</sup> Monsen et al. found in their study, that companies are dependent on

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<sup>71</sup> cf. Gatewood et al., 1995, p. 371–391

<sup>72</sup> cf. Reynolds, 1997, p. 449-462

<sup>73</sup> cf. Davidsson, 2006, p. 1-76

<sup>74</sup> cf. Parker, 2011, p. 19-34

<sup>75</sup> cf. Antoncic and Hisrich, 2001, p. 495-527

<sup>76</sup> cf. Burgelman, 1983, p. 1349-1364

<sup>77</sup> cf. Marvel et al., 2007, p. 753-768

<sup>78</sup> cf. Amit et al., 1993, p. 815-834

the motivation of their intrapreneurs to grow.<sup>79</sup>

It is estimated, that intrapreneurs are responsible for about 22 percent of all new business companies.<sup>80</sup> According to Kacperczyk, the numbers are probably higher, since it is difficult to study intrapreneurship within organizations.<sup>81</sup> Therefore, research is very interested to identify the circumstances in enterprise environments that trigger intrapreneurship in order to support it positively.<sup>82</sup> Marvel, Griffin, Hebda and Vojak found out that the intrinsic motivation of intrapreneurs is an important part of successful foundations within companies.<sup>83</sup>

Although authors like Amit, Müller and Cockburn argue that intraentrepreneurship is the same kind of business creation like entrepreneurship, this research work excludes intrapreneurship from the focus of the work.<sup>84</sup> Entrepreneurs can be employed at the time that they start a new business, but the business must be at least 50 percent owned by the entrepreneur. Intrapreneurs on the other hand try to be entrepreneurs without owning the business by themselves. That is why they are excluded from this research.

This chapter defines entrepreneurs, nascent entrepreneurs as well as intrapreneurs. This study focusses on nascent entrepreneur who are actively involved in entrepreneurship activities up to 3 years after the company was founded. In comparison to intrapreneurs, the nascent in this study own at least 50 percent of the founded company. Based on the literature review, it is to expected that the needs of the entrepreneur does have on influence on the business surviving success. In addition to that, other factors have an influence on the entrepreneurship. In the next two chapters, the influences of the business surviving success of new companies are evaluated. The chapter 1.3: External factors that influence new ventures, describes the influence of external factors on entrepreneurship. The chapter 1.4: The influence of entrepreneurs on the new ventures, analyses the influence of the entrepreneur on the business surviving success of the founded company.

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<sup>79</sup> cf. Monsen et al., 2010, p. 105-130

<sup>80</sup> cf. Parker, 2011, p. 19-34

<sup>81</sup> cf. Kacperczyk, 2012, p. 484-521

<sup>82</sup> cf. Dess et al., 2003, p. 351-378

<sup>83</sup> cf. Marvel et al., 2007, p. 753-768

<sup>84</sup> cf. Amit et al., 1993, p. 815-834

### 1.3 External factors that influence new ventures

The factors which influence the entrepreneurship can be classified into two clusters, according to Carsrud and Johnson. The external and internal factors which have an influence on the company's founding process.<sup>85</sup> Baron agrees on the argumentation, that the success of new companies is based on various factors. The external include the state of the economic environment, in which the company was founded, competitors, government regulations and technological progress. In addition to the external circumstances, internal factors of the company founder play a role when starting a business. Baron names the chosen strategy of the company founder, the decisions taken and the management style as factors that will determine the success of a business.<sup>86</sup>

In addition to these factors, internal factors also include personality, cognitive skills, network, professional and industrial experience of the entrepreneur.<sup>87</sup> According to Bhide, the success of foundations depend more on the personal characteristics than on the characteristics of the products of the foundations.<sup>88</sup> Brush and Chaganti also show in their study, that the results of the new companies are significantly related to the characteristics and organizational skills of the founder.<sup>89</sup> The intention and the tendency to start a business are key variables for the business entrepreneurship process.<sup>90</sup> The authors Katz and Gartner show the properties of growing organizations in their model. One of these properties is also the intention which reflects the goals of the entrepreneur.<sup>91</sup>

Gartner created a framework of the different variables which influence the success of new companies. This categorization is divided in four dimensions. These include the individual characteristics of the entrepreneur, entrepreneurial behaviour, strategy and environment of a business.<sup>92</sup> In addition to that, other authors identified the vision of the company as a significant signpost for the development of the company.<sup>93</sup> Similarly Plehn-Dujowich

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<sup>85</sup> cf. Carsrud and Johnson, 1989, p. 21-33

<sup>86</sup> cf. Baron, 2004, p. 221-239

<sup>87</sup> cf. Short et al., 2010, p. 40-65

<sup>88</sup> cf. Bhide, 2000

<sup>89</sup> cf. Brush and Chaganti, 1999, p. 233-257

<sup>90</sup> cf. Learned, 1992, p. 39-48

<sup>91</sup> cf. Katz and Gartner, 1988, p. 429-441

<sup>92</sup> cf. Gartner, 1985, p. 696-706

<sup>93</sup> cf. Greenberger and Sexton, 1988, p. 107-118

argues, that the decision to found a company consists of rational factors and motivation.<sup>94</sup> Among the rational factors are circumstances under which the entrepreneur is currently working. These circumstances may promote or hinder the behaviour.<sup>95</sup>

It can be concluded that the entrepreneurship is affected by a variety of factors. These originate from the external environment of the creation of enterprises as well as the entrepreneurs themselves. In the literature, the influence of a variety of different factors was evaluated on the success of a business. Due to the large number of different factors, it can be assumed that each factor will have a relatively small impact on the company's success. In the investigation of motivation on the company's success, it is therefore expected, that any significant influence by the variety of different factors will be small. In the following paragraphs, the external factors that influences the entrepreneurship are described in detail.

Entrepreneurs can perceive opportunities in all sectors to start a business. According to Shane et al., entrepreneur can establish new industries by founding a company. The motivation of people to start new businesses is distributed equal across all industries. Since the average value of new companies are statistical significant different between sectors, Shane et al. assume that the value of the options to set up businesses in various sectors is different as well. These business opportunities also differ in industries and have a direct impact on the behaviour of the entrepreneur. Therefore, the economic value of the business opportunities should be considered in order to have a closer look at the motivation of the entrepreneur, according to Collins, Locke and Shane. Entrepreneurs differ in how they interpret the business opportunities.<sup>96</sup>

According to Locke, business opportunities are aspects of the environment that are considered by the entrepreneur from a certain perspective. Some entrepreneurs see this as a way to generate profit. The potential business opportunities in a market can be quantified by the limitation of the market. Limitations of the market could be a very low average income as well as the nature of the business opportunity. Also, historical data can be used for it. However, according to Locke, it cannot be quantified what the entrepreneur

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<sup>94</sup> cf. Plehn-Dujowich, 2010, p. 377-398

<sup>95</sup> cf. Skinner, 1987, p. 780-786

<sup>96</sup> cf. Shane et al., 2012, p. 257-279

makes of the business opportunity.<sup>97</sup>

According Gaglio and Katz, entrepreneurs have a mental framework in mind for successful business creation. The authors name this framework as entrepreneurial alertness. Through this framework, people become aware of business opportunities. This entrepreneurial alertness allows people to recognize market changes and imbalances in the market. These people have the flexibility to process information, which does not correspond to their scheme. They use this information effectively to their thought patterns to adapt flexibly. In summary, people with entrepreneurial alertness have the ability to absorb and adapt their mental framework flexibly to complex information on markets and environments. This mental framework allows them to develop unconventional solutions.<sup>98</sup> Bird showed in his article how entrepreneurs respond opportunistically to achieve their goals.<sup>99</sup>

The creation of new approaches to production led to faster changes in goods and services which could be offered in the market. According to Schumpeter, this is based on the idea of creative destruction.<sup>100</sup> The creation of new effective activities of companies led to the destruction of existing firms. The new companies could establish innovative approaches in order to produce goods more effectively. These innovations could also create new products and services which displace the old ones from the market.<sup>101</sup> The creation of new markets for products and services has led to the research on the identification of new business opportunities.<sup>102</sup> Shane and Venkataraman even plead for making the identification of new business opportunities to the central field of research on entrepreneurship.<sup>103</sup>

The entrepreneur's ability to recognize and exploit business opportunities is a much studied factor for the success of new ventures in the research field of business entrepreneurship. Researches indicate that the business opportunities of the environment and the ability of the company founder to discover and exploit them, have an impact on the company's success. Since the business opportunity is an aspect of the external environment, it is an external factor. The next factors from the external environment are the social and

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<sup>97</sup> cf. Locke, 2000a, p. 408–429

<sup>98</sup> cf. Gaglio and Katz, 2001, p. 95–111

<sup>99</sup> cf. Bird, 1988, p. 442–453

<sup>100</sup> cf. Schumpeter, 1934b

<sup>101</sup> cf. Reynolds and Curtin, 2007b

<sup>102</sup> cf. Penrose, 1959

<sup>103</sup> cf. Shane and Venkataraman, 2000, 217–226



demographic circumstances of the entrepreneurship.

It was found that education has a positive influence on the decision to work entrepreneurial. Education helps to collect knowledge and experience in building a business. This experience helps an entrepreneur to set up a company. Although it is not clear whether the specific education as an entrepreneur has an impact on the personal ability to start a successful business. Souitaris et al. was able to demonstrate that there is an influence of education on the motivation to become an entrepreneur.<sup>104</sup> Davidsson and Honig have found, that the experience as an entrepreneur has a positive influence on further entrepreneurships.<sup>105</sup> <sup>106</sup> On the other hand, Oosterbeek et al. found that education reduces the likelihood that people will start a business.<sup>107</sup>

The role of the social status of entrepreneurs has different influences on the decision to become an entrepreneur, according to Goss. On the one hand, high social status facilitates founding a company through money and contacts. On the other hand, people with low social status want to improve their situation. This motivates them to become an entrepreneur.<sup>108</sup> Bhide on the other hand has found, that people from middle classes are more willing to start a business than people from the upper and lower classes.<sup>109</sup>

The social circumstances have an influence on the motivation to start a business as well as the financial performance of the company. On the one hand, experienced people from the upper social class are motivated by role models from the environment. On the other hand, people from lower social classes want to escape the conditions of life and strive for a high position in the society. Both categories of people are driven by different types of motivation. Although the demographic background of the founder is not directly investigated in this work, the circumstances have an influence on the motivation of the entrepreneur which is investigated in this work.

The social environment, in which a person is involved, has a great influence on the behaviour and choices of individuals. If a person has a social circle that is also involved in entrepreneurial activities, this increases the change that the individual also seeks to

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<sup>104</sup> cf. Souitaris et al., 2007, p. 566-591

<sup>105</sup> cf. Davidsson and Honig, 2003, p. 301-331

<sup>106</sup> cf. Delmar and Davidsson, 2000, p. 1-23

<sup>107</sup> cf. Oosterbeek et al., 2010, p. 442-454

<sup>108</sup> cf. Goss, 2005, p. 617-636

<sup>109</sup> cf. Bhide, 2000

become an entrepreneur. The group makes the individual aware that it is possible to set up a company. Also the group helps to come up with new ideas. Entrepreneurs get support, encouragement and ideas for their business from their social network.<sup>110</sup> According to Hills, Lumpkin and Singh, most ideas come from a social network. The ratio of ideas, which come from a social network, make up 50 percent of the ideas for new businesses.<sup>111</sup> The environment can encourage people to do business by training opportunities, role models, institutions, etc. A good example for a positive environment for entrepreneurs is the Silicon Valley.<sup>112</sup>

People with similar experiences and living conditions also have similar characteristics.<sup>113</sup> Thus, entrepreneurial activity can be predicted by properties such as age, education, social status, gender and living and working experience. For example, it was previously demonstrated that men often act more entrepreneurial than women.<sup>114</sup> It can be concluded, that in addition to business opportunities, social and demographic factors have an influence on the entrepreneurship.

The last category of external variables that influences entrepreneurship are the factors of the environment. According to Shane, these include political factors, market factors and resources. The political factors include the law, politics, monetary stability and corruption. The circumstances of the market are factors that play an important role for business entrepreneurship. These factors include the type of industry, technological factors and barriers to market entry and market size. The third type of factor is the availability of resources. Resources are the investment of capital, labour, infrastructure for logistics and appropriate technology.<sup>115</sup> Xie supports the first two factors in his article. He argues, that the geographic conditions of the enterprise have an influence on the entrepreneurship which includes the political situation of the country as well as the economic and cultural factors.<sup>116</sup> Tan added to this discussion in his article, that the level of entrepreneurial activities differ more among countries than among cultures.<sup>117</sup>

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<sup>110</sup> cf. Elfring and Hulsink, 2003, p. 409-422

<sup>111</sup> cf. Hills et al., 1997

<sup>112</sup> cf. Nijkamp, 2003, p. 395-405

<sup>113</sup> cf. Robinson et al., 1991, p. 13-31

<sup>114</sup> cf. Crant, 1996, p. 42-49

<sup>115</sup> cf. Shane et al., 2012, p. 257-279

<sup>116</sup> cf. Xie, 2014, p. 25-38

<sup>117</sup> cf. Tan, 2002, p. 95-111

In a study of Okamuro, it can be summarized as a result, that there is no higher density of entrepreneurial companies in regions with high expected revenue.<sup>118</sup> The role of culture in the business of new companies was also investigated. Based on the four cultural dimensions of Hofstede, Mitchell et al. have found that all dimensions are relevant for entrepreneurship. The strength of the influence of each dimensions has not yet been evaluated so far.<sup>119</sup> <sup>120</sup> According to Gnyawali and Fogel, in particular the legal requirement of a country has a great influence on the decision of people to start a business. Entrepreneurial activities can be suppressed by the government regulations and bureaucracy.<sup>121</sup>

The importance of resource as an influential factor is supported by Gnyawali and Foge. For them, the decision to become an entrepreneur is influenced by available support of scientific, economic and public facilities. This can be in the form of training, financial support, networking events, advisers and equipment, such as incubators in which entrepreneurs find favourable opportunities to found their company.<sup>122</sup> Another aspect of this category is the support of scientific and public institutions.<sup>123</sup> In contrast, Evans and Leighton wrote, that the willingness to start a business depends on financial opportunities. In addition to that, social ties to investors and professional experiences play a role.<sup>124</sup> <sup>125</sup>

The environment of the entrepreneurship has an influence on the success of the founded company. Based on the literature, the environmental factors can be divided into three subcategories. political factors, market factors and resources. Overall, there are four external factors which have an influence on the founded company. Social factors, demographic factors, business opportunities and environmental factors. These factors are illustrated in the figure 1.1 in chapter 1.4: The influence of entrepreneurs on the new ventures. The factors can be divided into a variety of sub factors and stated in the last chapter. The focus of this study is on the impact of motivation on the business surviving success which is a aspect of the entrepreneur. An influence of external factors and sub factors are expected, but will not be analysed in the following. Therefore, the figure 1.1 gives an overview of the

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<sup>118</sup> cf. Okamuro, 2008, p. 199-215

<sup>119</sup> cf. Hofstede, 1980

<sup>120</sup> cf. Mitchell et al., 2000, p. 974-993

<sup>121</sup> cf. Gnyawali and Fogel, 1994, p. 43-62

<sup>122</sup> cf. Gnyawali and Fogel, 1994, p. 43-62

<sup>123</sup> cf. Xie, 2014, p. 25-38

<sup>124</sup> cf. Evans and Leighton, 1989, p. 519-535

<sup>125</sup> cf. Carroll and Mosakowski, 1987, p. 570-589

areas of influences on the business surviving success, but not stated in detail the different sub factors. Next to the four external factors, the fifth factor, which has an expected influence on the business surviving success is the entrepreneur. In the next chapter, the literature about the impact of entrepreneurs on entrepreneurship is reviewed.

## 1.4 The influence of entrepreneurs on the new ventures

One of the aspects how an entrepreneur influences the entrepreneurship is their cognitive ability. Cognitive abilities allow entrepreneurs to gather information, to organize, to transform and to use it in a profitable manner. According to Forbes, cognitive factors such as perception and interpretation of relevant information, play an important role in the process to start a business.<sup>126</sup> Bieri define cognitive structure as the connection between a pulse and the evaluation of a situation.<sup>127</sup>

This structure is the framework for a person to assess situations and consists of experiences, knowledge and relationships. Based on this foundation, people make predictions about the change of the environment. Also, people make predictions about their own behaviour and the behaviour of other people.<sup>128</sup> Thereby the structure depends on the environment. It is created from the experiences of the entrepreneur in certain situations and is not given from birth but by learning from the interaction with the environment.<sup>129</sup> According to Mitchell et al., it can be assumed that entrepreneurs have a similar cognitive structure. He found, that the willingness to start a business, actions and skills can be summarized in a cognitive structure which is similar among entrepreneurs.<sup>130</sup> In particular, the bias of a person to associate a situation negatively or positively plays an important role in the process of founding a company. For example, some people see unsafe or unpredictable situations as something positive and worthwhile.<sup>131</sup>

Baron describes cognitive biases as important factors in the decision to work as an entrepreneur. These tendencies have a great influence on the decisions of the company

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<sup>126</sup> cf. Forbes, 1999, p. 415-439

<sup>127</sup> cf. Bieri et al., 1966

<sup>128</sup> cf. Busenitz and Lau, 1996, p. 25-39

<sup>129</sup> cf. Abelson, 1976

<sup>130</sup> cf. Mitchell et al., 2000, p. 974-993

<sup>131</sup> cf. Robinson et al., 1991, p. 17

founder. These biases help the entrepreneur in unpredictable environments to process information and to make the right decisions.<sup>132</sup> One of the most valuable biases is the heuristic bias, according to Tversky and Kahneman. This bias can help to evaluate situations better. Thus, the entrepreneur has internalized a direction in which decisions are made automatically.<sup>133</sup> Other researchers have discovered other important biases. One of these biases is overconfidence.<sup>134</sup> <sup>135</sup> Simon et al. on the other hand have found in their study among 191 MBA students that overconfidence has no positive influence on the decision to work in an entrepreneurial manner.<sup>136</sup>

It is expected that the cognitive abilities and certain biases have an impact on the financial success of a business. The cognitive ability has been studied extensively in research. In addition to the cognitive abilities, the characteristic traits of the entrepreneur have an influence on the founded company.

According to Baron, entrepreneurs and non-entrepreneurs differ in several personality traits. The author summarized 17 psychological characteristics which are most associated with entrepreneurs. According to Baron and Kuratko, the most important characteristics for the motivation to start a business are commitment, perseverance, achievement motivation, drive and focus on business opportunities.<sup>137</sup> <sup>138</sup> <sup>139</sup> In addition to this summary, there are 3 characteristics which were studied more closely. These are the need for achievement, locus of control and risk-taking propensity.

People with an internal locus of control have faith that their personal activities have a direct impact on the desired result. In contrast, people with an external locus of control believe that the result depends on factors other than their own actions.<sup>140</sup> Several authors have demonstrated the direct relationship between the behaviour of entrepreneurs and the internal locus of control.<sup>141</sup> <sup>142</sup> Shapero was able to prove that entrepreneurs have a

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<sup>132</sup> cf. Busenitz and Lau, 1996, p. 25-39

<sup>133</sup> cf. Tversky and Kahneman, 1974, p. 1124-1131

<sup>134</sup> cf. Busenitz and Barney, 1997, p. 9-30

<sup>135</sup> cf. Busenitz and Lau, 1996, p. 25-39

<sup>136</sup> cf. Simon et al., 1999, p. 113-134

<sup>137</sup> cf. Baron, 1998, p. 275-294

<sup>138</sup> cf. Baron, 2000, p. 79-92

<sup>139</sup> cf. Kuratko and Hodgetts, 1995

<sup>140</sup> cf. Rotter, 1966, p. 1-28

<sup>141</sup> cf. Brockhaus, 1982

<sup>142</sup> cf. Perry, 1990, p. 22-31

higher locus of control than other people.<sup>143</sup> In contrast, Koh found no difference between entrepreneurial working people and people who are not entrepreneurial active in the expression of the characteristic of internal locus of control.<sup>144</sup>

The second main characteristic that entrepreneurs share is the risk-taking propensity. Entrepreneurs strive intentionally for uncertain situations and try to bring the uncertainty under their control.<sup>145</sup> This is one of the characteristics that differ entrepreneurs from other people. Other people will not work entrepreneurial because they feel unwillingness towards an unknown situations.<sup>146</sup> Already Knight stated in his book from 1921, that entrepreneurs have a preference for risk.<sup>147</sup>

At the same time Aldrich et al. found, that entrepreneurs of businesses with good performance show a weak relationship in need for achievement, locus of control and risk-taking propensity.<sup>148</sup> Therefore, Carsrud and Krueger consider the traits need for achievement, risk-taking prosperity and internal locus of control for the wrong character to explain success of new started companies.<sup>149</sup> In contrast, new venture capitalists and entrepreneurs themselves consider the personal traits of entrepreneurs as one of the dominant factors for the success of business foundations.<sup>150</sup> Baum et al. argue that research, which concludes an insufficient connection between the personality of entrepreneurs and their success in business foundations, does not consider indirect effects.<sup>151</sup> The role of human action and reasons for decisions were investigated insufficiently. Shane, Locke and Collins argue, that entrepreneurship is highly dependent on the decisions of entrepreneurs. The authors argue that the characteristic of the entrepreneur has an influence on the decisions in the process of establishing the company.<sup>152</sup>

Carsrud and Johnson state in their article, that it is difficult to establish a relationship between psychological traits and entrepreneurial activities. First, the environment of the

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<sup>143</sup> cf. Shapero, 1975, p. 83-88

<sup>144</sup> cf. Koh, 1996, p. 12-25

<sup>145</sup> cf. Mitton, 1989, p. 15

<sup>146</sup> cf. Bhide, 2000

<sup>147</sup> cf. Knight, 1921

<sup>148</sup> cf. Aldrich and Wiedenmayer, 1993, p. 45-195

<sup>149</sup> cf. Carsrud and Krueger, 1995, p. 73-96

<sup>150</sup> cf. Sexton, 2001, p. 40-48

<sup>151</sup> cf. Baum et al., 2001, p. 292-303

<sup>152</sup> cf. Shane et al., 2012, p. 257-279

starting business has an influence on the character of an entrepreneur and shapes the character of the entrepreneur over time. Furthermore, it is not proven that exclusively personal characteristics have an impact on the behaviour of the entrepreneur. According to Carsrud and Johnson, no systematic research in this area occurred so far.<sup>153</sup> Gartner claims, that the research of personal character traits for explaining entrepreneurial success is a dead end.<sup>154</sup>

Science is divided in the evaluation of the influence of personality traits of the founder on the success of the company. Some authors such as Koh have found no difference in personality between entrepreneurs and non-entrepreneurs. In contrast, Baron lists a large number of personality traits in which entrepreneurs differ from other people. Authors such as Baum et al. and Carsrud describe personality traits as inappropriate factors to the success of new companies. No final conclusion can be made about the influence on characteristics of the entrepreneur.

Baum et al. showed that the characteristics of an entrepreneur have an influence on the motivation to start a business. Furthermore he argues that the character is an important prediction of the growth of the company. The relationship between the character of the entrepreneur and business growth is established over the strategy, skills and motivation of the entrepreneur.<sup>155</sup>

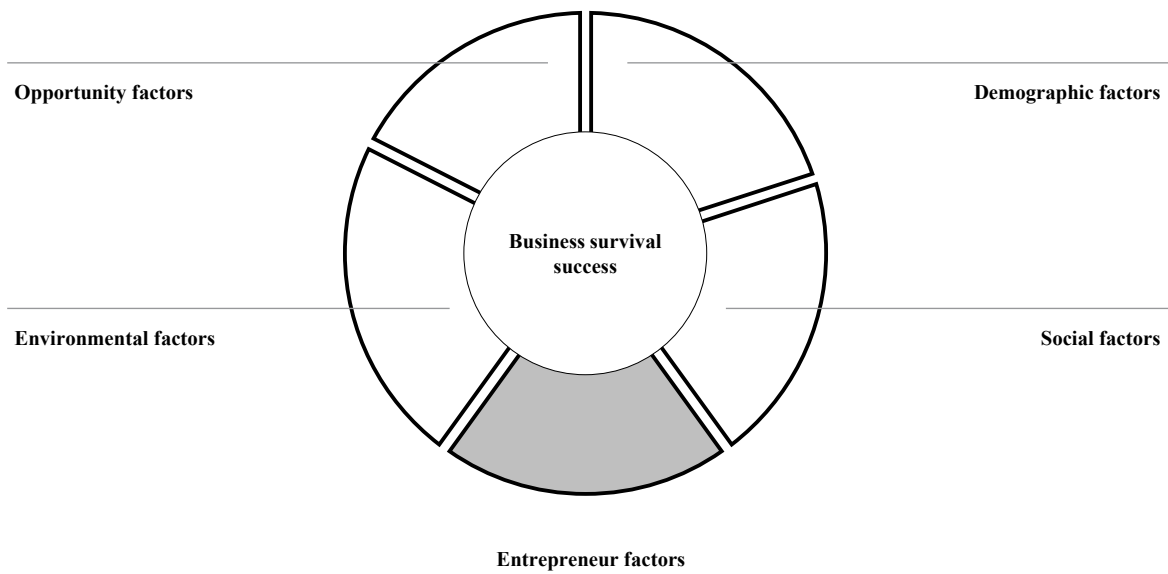
Different authors come to different conclusions in their research about the influence of the characteristics on entrepreneurship. An impact of the character of the entrepreneur as well as the cognitive ability is expected. Unlike the motivation, these aspects of the entrepreneur were analysed sufficiently in the literature.

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<sup>153</sup> cf. Carsrud and Johnson, 1989, p. 21-33

<sup>154</sup> cf. Gartner, 1989, p. 47-68

<sup>155</sup> cf. Baum et al., 2001, p. 292-303



*Figure 1.1: Influential factors on business surviving success. Own figure.*

Figure 1.1 shows the different influences on the business survival success. The entrepreneurship is influenced by social, demographic and environmental factors, business opportunities as well as aspects of the entrepreneur. This study focusses on the influence of the entrepreneur on the new company. The aspects of the entrepreneur can be divided into the characteristics, cognitive abilities and the motivation of the entrepreneur. The characteristics of an entrepreneur are analysed in research literature in detail. The different characteristics of entrepreneurs are not part of this study and therefore the influence of the characteristics of an entrepreneur is not divided furthermore in the figure. The focus of this study lies on the impact of the motivation on the business surviving success. The motivation of the entrepreneur and the impact on the entrepreneurship is analysed in detail in the following chapters.

## 1.5 Field of management motivation research

In the literature, there are many different definitions of motivation used by authors. A definition that is used as a common basis for motivation research has not been enforced so far. Despite the differences in the definitions of motivation, there are some properties that



are contained by all definitions. For example, motivation is an individual characteristic within people that differs between people. Research in the area of motivation has the purpose to explain and predict human behaviour.<sup>156</sup> According to Russell, there are 3 characteristics that occur in most definitions of motivation. Researchers agree on the fact, that motivation is an internal force. Motivation encourages specific action and motivation determines the direction of the action.<sup>157</sup> Motivation is the core of the biological, cognitive, and social regulation. Motivation includes the energy, direction, persistence of activation and intention.<sup>158</sup> Motivation for success is constant in a human and has a driving effect. The incentive effect is greater when a difficult goal was pursued and achieved.<sup>159</sup>

York defines motivation in 1976 as the force that drives an individual to satisfy the basic needs.<sup>160</sup> Mitchell defines motivation as the degree of individual choice and pursuit of a specific behaviour.<sup>161</sup> Motivation is often associated in relationship with the action of people, as it is in the definition of Mitchell. The relationship between the motivation and behaviour of people was established by the authors Kast and Rosenzweig in their work from 1970. The authors argue that a motive causes a person to behave in a certain way. Moreover, people develop a passion for a certain behaviour.<sup>162</sup> Mitchell defines motivation as the intrinsic and extrinsic forces that move people to action. He argues here, that the action is to be distinguished from the motivation.<sup>163</sup>

The psychologist Dessler describes in his article "Organization Theory, Integrating Structure and Behavior" how the motivation is generated from the tension in a human. The tension arises from the important needs that are currently not satisfied.<sup>164</sup> Burke agrees with this in his article of 1987. He argues that only unmet needs can be the source of motivation. A satisfied need cannot create tension and thus no motivation.<sup>165</sup> Carl Menger described the relationship between needs and motivation already in 1871 and ordered the needs of people in the theory about marginal utility. The needs of people are in a hierarchy where a lower

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<sup>156</sup> cf. Mitchell, 1982, p. 80-88

<sup>157</sup> cf. Russell, 1971

<sup>158</sup> cf. Ryan and Deci, 2000, p. 68-78

<sup>159</sup> cf. Carsrud and Braennback, 2011, p. 9-26

<sup>160</sup> cf. Yorks, 1976

<sup>161</sup> cf. Mitchell, 1982, p. 80-88

<sup>162</sup> cf. Kast and Rosenzweig, 1970

<sup>163</sup> cf. Mitchell, 1982, p. 80-88

<sup>164</sup> cf. Dessler, 1986

<sup>165</sup> cf. Burke, 1987

need has to be satisfied before the next higher needs becomes the motivation for behaviour. For Menger, economic behaviour is explained based on the relationship between human needs and the availability of goods which satisfied these needs. Based on this foundation, Menger developed principles in the field of economics which are based on the perception that any economic activity satisfies individual human needs. These economic activities are generated by the individual activities who are striving for satisfying their needs. In the end, the products and services which are generated by a company and all activities of a company are inferred to the satisfaction of the entrepreneur's wants and needs. The satisfaction of needs influences economic activities by entrepreneurial activities.<sup>166</sup>

It can be concluded, that founding a company and entrepreneurship activities are ways to satisfy the needs of the entrepreneur. Carl Menger concluded that all human activities are routed in these needs and the actions are self-centered. Therefore, the interests of the individuals are the root for economic activities. According to Carl Menger, all concepts in the field of economics are based on the strive of individuals for satisfying the personal needs. The needs of people which motivates for certain steps and actions, are organised in a hierarchy of needs. This hierarchy is subjective and different in every person. Menger does not define objective criteria for ranking the needs. Based on the principles of Menger it can be concluded, that any actions a person does can be rooted back to the motivation of satisfying the individual needs. Based on these findings, the motivation to start a own business is a way to satisfy the needs of the entrepreneur.<sup>167</sup>

A different approach to explain the root of motivation comes from the fundamental works of Freud about instincts.<sup>168 169 170</sup> Further research in the field of motivation has been developed based on the findings of Freud. The best-known findings in research on motivation originates from Maslow.<sup>171</sup> Moreover, the authors Deutsch and Krauss also based on the findings of Freud, and provide the basics of behavioural theories in their work.<sup>172</sup> These three works are the basis for theories in motivation research and have a great impact on future research in this area. There are two different directions

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<sup>166</sup> cf. Menger, 1871

<sup>167</sup> cf. Menger, 1883

<sup>168</sup> cf. Freud, 1900

<sup>169</sup> cf. Freud, 1915, p. 60–83

<sup>170</sup> cf. Freud, 1924

<sup>171</sup> cf. Maslow, 1943, p. 370–396

<sup>172</sup> cf. Deutsch and Krauss, 1965

of motivation theories. One comes here from the economic department and the other comes from psychology.<sup>173</sup> Several authors plead to create a common framework from the theories of both disciplines to take advantage of the similarities of both disciplines.<sup>174</sup>

According to Carsrud and Braennback, the field of research on motivation should focus on three central questions. What a person activates to do something. What motivates a person to choose one behaviour over another. Why do people react differently to motivational stimuli.<sup>175</sup> This results in three different aspects of motivation research. Activation of people, the direction of action and the preparedness of response.<sup>176</sup> The understanding of motivation has changed over the years and also the concept of motivation changed. The various scientific fields which deal with motivation have not agreed on a general accepted definition of motivation. Despite different definitions which changed over time, motivation was defined by the authors as the drive for action. This drive gives action a strength and direction. Therefore, the motivation is defined in the following way for this work: Motivation is the drive of a person to perform certain behaviours in order to reach a specific goal.

The motivation theories can be divided into drive theories and incentive theories. These theories distinct from each other that in drive theories, there is an internal stimulus which drives people to act. People want to solve the stimulus through a certain action. The need to reduce this tension is the motivation for a certain action.<sup>177</sup> <sup>178</sup> The other type of motivation is the pull motivation. In incentive or pull motivation, there is a specific goal or final condition which pulls people towards it. One example for this kind of motivation is the achievement motivation.<sup>179</sup> <sup>180</sup> In summary, the drive theories are the push motivations and the incentive theories are the motivation where the pull motivation is dominant.

The Theory of achievement motivation found its way into scientific research by Atkinson.<sup>181</sup>

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<sup>173</sup> cf. Fisher, 1930

<sup>174</sup> cf. Steel and Koenig, 2006, p. 880–913

<sup>175</sup> cf. Carsrud and Braennback, 2011, p. 9-26

<sup>176</sup> cf. Perwin, 2003

<sup>177</sup> cf. Murray, 1938

<sup>178</sup> cf. Freud, 1924

<sup>179</sup> cf. Carsrud and Olm, 1986

<sup>180</sup> cf. Carsrud and Johnson, 1989, p. 237–244

<sup>181</sup> cf. Atkinson, 1957, p. 359–372

<sup>182</sup> Winter and McClelland proposed the motivation as a one-dimensional approach.  
<sup>183</sup> This approach was expanded by Spence and Helmreich by several dimensions in 1978.<sup>184</sup> This approach has been used as the basis for motivation research in the field of entrepreneurship by some authors.<sup>185</sup> <sup>186</sup> Another field of motivation research deals with the cognitive dissonance and the willingness to take risks in entrepreneurship.<sup>187</sup> A different field of research motivation is the motivation that takes care of the behaviour in the work environment.<sup>188</sup> In the literature, there are a number of different approaches to explain the motivation of an individual. These approaches have different perspectives on motivation with different attempts to explain motivation. A common understanding on motivation has not been established in the literature yet. The focus on the review of motivational theories lies in the theories in the field of management science.

The field of management motivation theories can be led back to the author Fayol. He argues that people get motivated by discipline by a strict hierarchy of commands. Motivation is achieved by the applying of penalties. Based on the findings of Fayol, it can be argued that entrepreneurs get motivated by necessity motivation. First of all, it is the drive for the power to influence an organization. Secondly, entrepreneurs try to avoid the disadvantages of a low position in society and are pulled by climbing up the social hierarchy through entrepreneurship.<sup>189</sup> Based on the scientific work of Taylor, people are motivated by regular work and financial incentives. One of his assumptions is that human beings are lazy and that they can only be motivated by financial incentives. This reflexes the ideas of the theory X of McGregor. According to Taylor, reducing of the flexibility of the work did decrease the motivation of a part of the workers. In addition to that he assumed, that the more employees get paid, the more efficient they work.<sup>190</sup>

The approaches for the next step of management motivational theories were the human relations theories. These theories became popular in the years 1923 to 1924 and include

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<sup>182</sup> cf. Akinson, 1964

<sup>183</sup> cf. McClelland and Winter, 1969

<sup>184</sup> cf. Spence and Helmreich, 1978

<sup>185</sup> cf. Carsrud and Olm, 1986, p. 147–162

<sup>186</sup> cf. Carsrud and Johnson, 1989, p. 237–244

<sup>187</sup> cf. Cohen and Zimbardo, 1969, p. 23–41

<sup>188</sup> cf. Pinder, 1998

<sup>189</sup> cf. Fayol, 1949

<sup>190</sup> cf. Taylor, 2006

the human beings and their needs as key elements for management. In these years, Elton Mayo undertook a study with textile mill workers in Philadelphia about the motivation of workers to see if they can decide about their rest times. The result was, that people who can have the flexibility and independence to schedule their work, become more motivated and are less likely to quit their jobs.<sup>191</sup> These findings were supported by the Hawthorne studies in the years 1927 to 1932. People, who have control over the length of their workdays as well as the rest periods in between, are more motivated and productive.<sup>192</sup> Based on the results of studies of Mayo, the importance of social needs increase for the management science.

Based on the findings of Fayol, Taylor and Mayo, more sophisticated motivational factors were developed in different scientific areas. The management motivations theories of McGregor, Likert, Ackoff and Davis are analysed in detail in the following in order to develop a deeper understand of motivational factors.

**McGregor: Theory Y and Theory X** In theory X, McGregor argues that people are motivated to earn money by necessity. The economic demands of everyday life must be covered by financial exchanges or other services. In theory X McGregor argues moreover, that people generally do not want to work and do not think about the needs of the organization. Therefore, the actions of a person must be controlled and monitored. Furthermore, according to the hypothesis of McGregor, people are basically lazy and they must be motivated by rewards and worthwhile goals. In contrast to Theory X, Theory Y says that working is a natural state for people. They are active and feel no resistance to work. According to Theory Y, people want to take responsibility. Thus, people can be motivated by the right circumstances for their development. These circumstances and available tools from the environment help them to achieve their goals. The circumstances must help people to identify their potential and use this to achieve the intended objectives.

The motivation is coming from two opposite directions. On the one hand, people are motivated by financial incentives. On the other hand, they are motivated by the possibility of self-realization. The factors of Theory X are the external control of human behaviour

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<sup>191</sup> cf. Mayo, 1924, p. 273-281

<sup>192</sup> cf. Mayo, 1933

while theory Y refers to inner aspects of self-control and self-determination.<sup>193</sup> Maslow accepted the Theory of McGregor and extended it another dimension based on his hierarchy of needs. With theory Z, Maslow introduced the view of employee to strive for growth and self-realization. With theory X, Y and Z, Maslow transferred his hierarchy of needs to management science.<sup>194</sup>

**Likert Systems** The four systems of Likert describe the interactions between management and employees in organizations. These systems reflect different motivations of employees and how managers can meet the needs of these employees to increase performance. In the system I, exploitative authoritative, employees are motivated by an environment of fear and penalties. The decisions are taken solely by top management. The employees are not involved in decisions and have to follow the instructions from management. In addition to the penalties of system I, employees are motivated with rewards in system II. This system is called Benevolent authoritative and management has more confidence in the employee. The employees have limited possibilities to make their own decision and may propose measures independently.

In the consultative system, the management has a higher confidence in their workforce. Employees are motivated more by rewards than punishments and are closely involved in the decision making process of management. In a given context from management, employees are encouraged to make decisions independently. Employees in System IV, which is named participative system by Likert, are motivated by an independent work approach. They can achieve their goals by their own creativity. The employees constantly making their own decisions.<sup>195</sup>

**Ackoff** According to Greig the planning process is based on the motivation and personality of employees.<sup>196</sup> Here Ackoff distinguishes four different approaches of the planning process for people in companies.<sup>197</sup> The focus of the reactive approach lies on the past and the belief that the future will be worse than the past. The employees try to prevent any

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<sup>193</sup> cf. McGregor, 1960

<sup>194</sup> cf. Maslow, 1972

<sup>195</sup> cf. Likert, 1961

<sup>196</sup> cf. Greig, 1984, p. 31-41

<sup>197</sup> cf. Ackoff, 1981

changes and the status of the past should be kept upright. Inactivists assess the present state better than the past and the future. Changes get prevented in order to maintain the current status. Changes from the past will no longer be reversed.

The planning of Preactivists is based on the external influences on the company. The future is seen as an improvement and any changes are driven by external factors. The desire arises to compare the company in the market and take market opportunities to actively pursue opportunities in the market. Interactivists are planning the future regardless of external factors. The employees can actively influence the future and set the objectives independently. The gap between the desired future of the company and the current status is constantly reduced.<sup>198</sup>

**Keith Davis** Davis described four different models for organizational behaviour which have an implication on the motivation of the employees. The autocratic model describes the motivation of employees as the obedience and dependence of the management. Employees are motivated by satisfying their physical needs. In the custodial model, the employees get more motivated by material rewards than it is in the autocratic model. The management satisfies the security needs of its employees. Moreover, the employees are put in a dependency of the company.

Employees are motivated by receiving support from the management in the supportive model. Employees are oriented on job performance and participation in the development of their own objectives. The need for social status and recognition of the employee is met. In the collegial model, the employees are motivated by the satisfaction of the need for self-realization. They take responsibility in the company and achieve their goals independently. Cooperation between management and employees is carried out as a partnership teamwork. The need for self-realization of the employees are satisfied in this model.<sup>199 200</sup>

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<sup>198</sup> cf. Ackoff, 1974

<sup>199</sup> cf. Davis, 1967

<sup>200</sup> cf. Davis, 1968, p. 27-38

	<b>Ackoff</b> Organisation attitude	<b>Davis</b> Level of organisation	<b>Likert</b> Organisation system	<b>McGregor</b> Views of management
Self-actualization	Interactive	Collegial	Participative group	Theory Z
Esteem of others	Preactive	Supportive	Consultative	Theory Y
Social recognition	Inactive	Custodial	Benevolent	
Survival, Security	Autocratic	Autocratic	Exploitive authoritative	Theory X

**Table 1.1:** Management motivational theories. Own table.

Table 1.1 shows each element of the classification of the classical management motivational models. The table is based on the findings of Greig.<sup>201</sup> The autocratic attitude from Ackoff, the autocratic level of organisation as well as the exploitive authoritative system from Likert are comparable. These three aspects as well as theory X from McGregor aim to satisfy the survival need of employees. Inactive attitude, custodial level of organisation and benevolent system can be categorized as a social motivation of employees who are looking for belonging and acceptance. The elements of the next stage can be summarized as the esteem of others. The motivational factor "Esteem of Others" is introduced by Greig. The interactive attitude of Ackoff, collegial level of organisation and participative group of Likert are categorized as the motivation to growth and self-actualization. This is similar to Theory Z of Maslow.

The categorization of motivational factors from management science shows a clear classification of these factors. Whereas the classical management theories from Fayol, Taylor and Mayo were one-dimensional, the research of management science in later years from Davis, Ackoff, Likert and McGregor were more sophisticated. These classifications from the management motivation research are compared with findings from other research areas

<sup>201</sup> cf. Greig, 1984, p. 31-41



and studies in chapter 2.2: Main hypotheses on how entrepreneurial motivation impacts the surviving success of new ventures. In order to get a more sophisticated picture of the classification of motivational factors, content management motivation theories are analysed in the next chapter.

## 1.6 Content motivation theories

Among the models, a distinction between content and process theories is made. Content theories show the motivation of people for a certain behaviour. Process theories define motivation as a rational cognitive process. People are motivated by a goal. The behaviour is a result of a conscious decision-making process.<sup>202</sup> In this study, content motivation theories are shown for the classification of motivation factors. Process theories are shown to predict the relationship between motivation of the entrepreneur and financial performance of companies.

**Maslow: Hierarchy of needs** The Pyramid of Maslow consists of five categories. The needs on the bottom of the pyramid must first be met so that the higher levels come into play. The individual needs are in hierarchical order. Unmet needs motivate behaviour. Lower needs must first be satisfied so that higher needs are relevant for motivation.<sup>203</sup> From the work of Maslow, two basic assumptions can be derived. (1) A contented need is not a motivation for behaviour. (2) At the time that a need is satisfied, the higher level need becomes the driver of behaviour. The desire of a person is closely associated with the hierarchy of needs. The attitude determined the individual path to satisfy the needs. The drive for people is never fully satisfied because after one need is satisfied, the next higher need becomes the primary driver for behaviour.<sup>204</sup> The pyramid of Maslow consists of the physiological need at the bottom. The other needs in hierarchical order are the striving for safety, desire for love and belonging, desire for attention and recognition within the community as well as the striving for self-respect, self-esteem and a high opinion of

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<sup>202</sup> cf. Seiler et al., 2012, p. 60 – 72

<sup>203</sup> cf. Maslow, 1943, p. 370–396

<sup>204</sup> cf. Haimann, 1973

themselves. The self-actualization is the topic of the pyramid of Maslow. People, who are in this state, are already satisfied according to Maslow.<sup>205</sup>

The model of Maslow explains the difference in the motivation of entrepreneurs with necessity and opportunity motivation. Entrepreneurs with the need to survive are motivated by the first level of the pyramid of Maslow. In contrast the motivation of entrepreneurs with opportunity motivation arise from the satisfaction of the top level of the pyramid of Maslow. These entrepreneurs want to realize themselves. Reynolds describes the difference between opportunistic and necessity entrepreneurs. The opportunistic entrepreneur is driven by the prospect of success of his business and the personal goals which the entrepreneur can achieve with it. These goals motivate the entrepreneur to take a business opportunity. In contrast, other people are motivated to become an entrepreneur in order to survive. These entrepreneurs are called necessity entrepreneurs. The main motivation here is to earn enough money to be able to support themselves and their own families. They must pay close attention to avoid mistakes. They focus on short-term business opportunities in order to not starve in the near future.<sup>206</sup>

**Alderfer: ERG - Theory** Human behaviour is controlled by three basic needs, according to Alderfer. Based on the theory of Maslow, Alderfer has further developed the theory of hierarchical needs. Between the theories of Maslow and Alderfer, there are some commonalities and differences. Both theories are content theories. The basic needs overlap completely, the structure of the categories is similar and the logic of the relationship between the needs are the same.

The importance of each individual need in the current situation is related to the possibility to satisfy the need. The need "existence" E is similar to the physiological and security needs of Maslow. "Relatedness" R can be compared with the social status and self-esteem of Maslow. The need "growth" G is comparable to the need of self-actualization in the pyramid of Maslow.<sup>207</sup> In contrast the two theories differ in the way that Maslow hierarchy focused on the needs and Alderfer on the context of the needs. The needs of Maslow are more strictly separated than the needs at Alderfer. In theory of Alderfer, the development

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<sup>205</sup> cf. Maslow, 1943, p. 370–396

<sup>206</sup> cf. Reynolds et al., 2002

<sup>207</sup> cf. Alderfer, 1972

of higher needs and lower needs is taken into account. Moreover, Alderfer considered the personal background of a person as well as the natural environment of the person.<sup>208</sup>

**Herzberg: Two Factor Theory** The theory of Herzberg is also known as the two-factor theory and discusses the motivators that are relevant to the execution of the work.<sup>209</sup> Satisfaction is thus based on two groups of factors, the motivating factors and the hygiene factors. A factor cannot simultaneously belong to both categories. Herzberg, Mausner and Snyderman have divided the needs of the pyramid of Maslow into hygiene factors and motivators. Similarities between the motivators and the top of the pyramid of needs from Maslow can be found.<sup>210</sup>

The psychological basis of hygiene needs is the avoidance of pain from the environment. If a person does not feel dissatisfied, these factors cannot increase the satisfaction further. For a further increase in satisfaction, motivation factors must be satisfied. The psychological basis of motivators on the other hand is the need for personal growth. The motivators can increase the satisfaction when present, while hygiene factors result in dissatisfaction in their absence.<sup>211</sup> According to Herzberg, the factors which lead to more satisfaction are primarily intrinsic. In contrast, factors which lead to dissatisfaction are primarily extrinsic.<sup>212</sup> In the cluster of intrinsic factors are the factors achievement motivation, recognition and responsibility.<sup>213</sup> The cluster of extrinsic factors include interpersonal relationships, working conditions, salary, company policy, administration and supervision. Herzberg implies that intrinsic factors do not lead to satisfaction if the extrinsic factors are deficient.<sup>214</sup> The authors Vroom and Deci doubt that a person's behaviour comes from their inherent character. The same authors also criticize the fact that a satisfied need is no motivation for behaviour. If a need is satisfied, a person strives for the fulfilment of another need. Moreover, Vroom and Deci also criticized how easy the model explains motivation. They assume that motivation is a very complex process.<sup>215</sup>

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<sup>208</sup> cf. Banerjee, 1995

<sup>209</sup> cf. Hall and Williams, 1986

<sup>210</sup> cf. Herzberg et al., 1959

<sup>211</sup> cf. Herzberg, 1966

<sup>212</sup> cf. Herzberg et al., 1959

<sup>213</sup> cf. Pardee, 1990

<sup>214</sup> cf. Caston and Braoto, 1985, p. 269-284

<sup>215</sup> cf. Vroom and Deci, 1970, p. 310

In the model of Herzberg, the sources of intrinsic and extrinsic motivation are discussed in detail. The model shows, that entrepreneurs are motivated by extrinsic motivations only as long as they are no longer dissatisfied. If entrepreneurs are no longer dissatisfied, they lose the motivation to develop their new venture. This suggests that entrepreneurs, who have a financial motive to start a business, are just motivated till they are financially satisfied. To further enhance the satisfaction and thus to maintain motivation, the entrepreneur must be driven by internal motivation. From this assumption, the hypothesis can be assumed that entrepreneurs with extrinsic motivation as financial reward have a stronger desire to satisfy this dissatisfaction of their financial situation and therefore to strive stronger in the starting phase of the venture for financial success. After meeting the financial needs, intrinsic motivation could be a stronger driver for financial success.

**McClelland: Need for Achievement Theory** The theory of McClelland says that the motivation of people leads to the satisfaction of a need, when the necessity is only strong enough. The needs in a person are learned through interaction with the environment. People learn their needs from dealing with society. The needs vary characterized in membership, power and need for achievement.<sup>216</sup> Since these needs are trained, the conduction is repeated at a high frequency when it is rewarded.<sup>217</sup> Murray defines achievement motivation as the desire to do things as fast as possible and as well as possible. Achievement motivation also includes the desire to create something difficult.<sup>218</sup> McClelland was influenced by Murray's theories.<sup>219</sup> A Need for achievement is, according to Durand and Shea, one of the most important factors for entrepreneur founders.<sup>220</sup> McClelland believes that countries with a higher level of need for achievement have more entrepreneurial activities in their economy. According to McClelland, there is a significant relationship between the average of level of need for achievement in a country and the economic growth of the country.<sup>221</sup> Some authors, however, have questioned the results of McClelland. Frey, for example, has found problems with the test conducted by

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<sup>216</sup> cf. McClelland, 1961

<sup>217</sup> cf. Gibson et al., 1979

<sup>218</sup> cf. Murray, 1938, p. 140–154

<sup>219</sup> cf. Fineman, 1977

<sup>220</sup> cf. Durand and Shea, 1974, p. 57-63

<sup>221</sup> cf. McClelland, 1961

McClelland.<sup>222</sup>

According to McClelland, people with a high need for achievement rather accept activities with a high degree of responsibility towards the result. In addition, these people are engaged in activities that require a higher level of risk, individual effort and capabilities. This type of activity corresponds, according to McClelland, to the work as an entrepreneur. This suggests that people with a high need for achievement are more likely pursue entrepreneurial activities.<sup>223</sup> Begler and Boyd could prove this scientifically. In their study, they found that entrepreneurs have a higher need for achievement than other people.<sup>224</sup> In a meta-analysis of 63 studies on the topic of need for achievement and entrepreneurship, Collins, Locke and Hanges have found that there is a significant relationship between need for achievement and starting their own business. The degree of need for achievement differs between entrepreneurs and people who engage in other activities with a mean of  $r = .21$ . The performance of new ventures have been prepared with a mean of  $r = .28$ .<sup>225</sup> The meta-analysis by Johnson found, that need for achievement is the most significant predictor of the success of new businesses. 7 percent of the variance for a company's success is explained by need for achievement.<sup>226</sup> Some authors such as Hull et al. could find out that there is no relationship between the need for achievement and starting a business.<sup>227</sup> Kohl has found that entrepreneurs do not have a higher need for achievement compared to managers.<sup>228</sup>

Starting a company satisfies the need for power from the entrepreneur through the drive for a higher social status. In addition to that, it also satisfies the need for achievement by achieving something difficult. Based on the findings of McClelland, two basic motivating factors can be derived for entrepreneurs, the desire for social recognition and the need for achievement. In this case, the desire for power can be achieved within an organization. The dependence of the employees within the founded company as well as the freedom of decision adds to the satisfaction for the need for power.

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<sup>222</sup> cf. Frey, 1984, p. 125–134

<sup>223</sup> cf. McClelland, 1961

<sup>224</sup> cf. Begley and Boyd, 1987, p. 79-93

<sup>225</sup> cf. Collins et al., 2004, p. 95-117

<sup>226</sup> cf. Johnson, 1990, p. 39–54

<sup>227</sup> cf. Hull et al., 1980, p. 11–18

<sup>228</sup> cf. Koh, 1996, p. 12-25

	<b>Maslow</b> Hierarchy of needs	<b>Alderfer</b> ERG – Theory	<b>Herzberg</b> Two factor theory	<b>McClelland</b> Need for Achievement
Self-actualization	Self Actualization Self-Esteem	Growth	Motivator	Achievement Power
Social recognition	Belonging	Relatedness		Affiliation
Financial reward	Security Physical needs	Existence	Hygiene	

**Table 1.2:** Content motivational theories. Own table.

Figure 1.2 shows the content management motivational models. The motivational factors from each model can be categorized. Self Actualization and Self-Esteem from Maslow, the motivational factor Growth from Alderfer, Motivator from the two factor theory of Herzberg as well as Achievement and Power fore the motivational factor self-actualization. The next motivational factor is social recognition and consists of Belonging, Relatedness and Affiliation from the models. The desire for security, physical needs, existence and hygiene factors are the need for survival. This is related to financial reward.

The theories of management motivation as well as the content motivation theories provide the foundation for the classification for motivational factors of human beings. In the next chapter, the influence of the motivation on the business surviving success is analysed.

## 1.7 Relationship between motivation and entrepreneurship

The motivations of entrepreneurs come from different sources which are explained by several theories and models in the last chapter. In the next section, the motivation is set in relationship with the success of new ventures. In order to analyse this relationship, the connection between the motivation and the behaviour of entrepreneurs is investigated. A relationship between motivation and behaviour of the entrepreneur may indicate a relationship between the motivation of the entrepreneur and financial success of entrepreneurship.

In the first step, the impact of a goal on the behaviour is analysed.

Goals activate the relationship between intentions and actions, according to Nuttin.<sup>229</sup> Carsrud and Braennback agree with this relationship. They also state that goals and motives can predict human behaviour.<sup>230</sup> This relationship between intentions and actions as well as the role of goals and motivation will be examined in detail in the following. Goals are a mental idea of what the future will look like according to Perwin.<sup>231</sup> A similar definition is used by Locke and Latham. For the authors, goals are mental projections of the future as it could be. Goals are part of the social cognitive theory in which self-confidence partially determines what people want to achieve and what goals they set themselves. Goals activate people as they steer them in a certain direction, power and cause tenacity. Goals can lead the way to the discovery and development of strategies in order to reach these goals. The influence of goals on the motivation and the intensity, was studied by Locke and Latham.<sup>232 233</sup>

The Goal setting theory of Locke and Latham is a theory of motivation that put human action together with the goals in relationship. By the discrepancy between the current state and the desired state which is defined by the target, a tension within a person is generated, which results in the motivation that leads to the achievement of the target. The Goal setting theory underlines the importance of specific and challenging goals for motivation. For Locke, measurable and challenging goals are greater motivation than imprecise goals that are easy to reach. In particular, five factors play a role. This is partly binding of the goal, the complexity of the task, the feedback on the results, the participation in decision-making and self-efficacy. Self-efficacy is the own assessment of a person whether he has the ability to perform the action.<sup>234</sup> Rauch and Frese argue that the success of entrepreneurs depends on certain actions. These actions arise from the goals of the company founder and the strategy. According to Rauch and Frese, the strategy and tactics are the key points through which the success of entrepreneurship can be explained. This strategy and tactics based on the goals of the company founder. That's why Rauch

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<sup>229</sup> cf. Nuttin, 1984

<sup>230</sup> cf. Carsrud and Braennback, 2011, p. 9-26

<sup>231</sup> cf. Perwin, 2003

<sup>232</sup> cf. Locke and Latham, 2002, p. 705–717

<sup>233</sup> cf. Locke and Latham, 2004, p. 388–403

<sup>234</sup> cf. Locke, 1968, p. 157–189

and Frese argue, that research of the success of business foundations must start with the goals of the company founder.<sup>235</sup>

The relationship between the goals of entrepreneurs and business foundations is established by the authors Gatewood, Shaver, Powers and Gartner in their article "Entrepreneurial Expectancy, Effort and Task Performance". The authors argue that entrepreneurs invest their time and energy to develop an entrepreneurship in order to achieve a desired goal.<sup>236</sup> Duttweiler sees goals as the motivators for behaviour. He notes that these motivators lead to an increased performance. This performance is directed through the motivators towards a destination.<sup>237</sup>

The model of Naffziger, Hornsby and Kuratko states that entrepreneurs consider the probability of achieving their goals. They continue the entrepreneurship as long as they feel that their behaviour helps to achieve their own goals. If they can no longer achieve their goals through the establishment of a new company, they will depart from founding a new company.<sup>238</sup> Schumpeter argued in 1935, that an entrepreneur is setting up their own business to reach her or his personal goals.<sup>239</sup> This also supports the definition of entrepreneurship for this work, that entrepreneurship is the creation of a new company to satisfy the personal needs of the entrepreneur. Carter et al. came in their study with the data of the Panel Study of Entrepreneurial Dynamics to the conclusion that there are only small differences between the goals of entrepreneurs and people who are not working entrepreneurial.<sup>240</sup>

The strength of motivation depends on how much the person has been activated. By a weak motivation, intentions are not transformed into action. This is especially true, if the goal is considered to be difficult feasible or not desirable. Motivation is an important link between the intention and action.<sup>241</sup> Motivation can be further divided into two categories. These are the final motivation and instrumental motivation. A specific goal is the final motivation of a person and the instrumental motivation motivates action which indirectly

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<sup>235</sup> cf. Rauch and Frese, 2000, p. 101-142

<sup>236</sup> cf. Gatewood et al., 2002, p. 187-206

<sup>237</sup> cf. Duttweiler, 1986, p. 371-374

<sup>238</sup> cf. Naffziger et al., 1994, p. 29-42

<sup>239</sup> cf. Schumpeter, 1935

<sup>240</sup> cf. Carter et al., 2003, p. 13-39

<sup>241</sup> cf. Bird and Schjoedt, 2009, p. 327-358



contributes to reach the goal.<sup>242</sup> The goal is the desirable state, which motivates to actions in order to achieve this state. A clear dividing line between goal and motivation is not clearly defined in the literature. In this work, the goal is defined as a state which the entrepreneur wants to achieve with the founded company. This state causes a desire within a person to take concrete steps in order to achieve the goal. This inner desire for reaching the state is defined in this work as motivation.

According to Shaver, the motivation of entrepreneurs on why they start a new venture is the precondition for intentions.<sup>243</sup> The relevance of intentions for starting an enterprise has been confirmed in several studies.<sup>244 245 246 247</sup> The intentions of entrepreneurs depend on many factors which include needs, values, habits and beliefs.<sup>248 249</sup> According to Crant, entrepreneurial intentions in specific are defined as the desire to own their own business.<sup>250</sup> Krueger, Reilly and Carsrud also see entrepreneurial intentions as the attempt to start an own businesses.<sup>251</sup>

The research of intentions is based on the theory of reasoned action of Fishbein and Ajzen and is further converted in the theory of Planned Behaviour by Ajzen.<sup>252 253</sup> The theory of planned behaviour from the year 1991 by Ajzen, covers the behavioural factors in a developed framework. This theory predicts behaviour and explains this behaviour in specific contexts.<sup>254</sup> Most research on entrepreneurial intentions is based on the research of Ajzen and Fishbein in 1977. The core of this theory is the individual's intention to perform a behaviour. The intention includes the motivational factors that influence a person's behaviour. These factors provide information on how intensively people are trying to achieve a goal and how much effort they put into it. The stronger the intention is to perform a behaviour, the more likely the behaviour is performed. Ajzen added to this,

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<sup>242</sup> cf. Nuttin, 1984

<sup>243</sup> cf. Shaver, 1985

<sup>244</sup> cf. Davidsson, 1991, p. 405–429

<sup>245</sup> cf. Krueger and Carsrud, 1993, p. 315–330

<sup>246</sup> cf. Krueger and Brazeal, 1994, p. 5–21

<sup>247</sup> cf. Krueger et al., 2000, p. 411–432

<sup>248</sup> cf. Bird, 1988, p. 442–453

<sup>249</sup> cf. Lee and Wong, 2004, p. 7–28

<sup>250</sup> cf. Crant, 1996, p. 42–49

<sup>251</sup> cf. Krueger et al., 2000, p. 411–432

<sup>252</sup> cf. Ajzen and Fishbein, 1977, p. 888–918

<sup>253</sup> cf. Ajzen, 1987, p. 1–63

<sup>254</sup> cf. Ajzen, 1991, p. 179–211

that a large part of the behaviour also depends on the availability of the possibility and resources.<sup>255</sup> The theories of Ajzen and Fishbein bring the motivation in connection with concrete actions. The described relationship by Ajzen and Fishbein is the basis of the hypothesis, that motivation has an effect on the financial success of the company that was founded. The stronger the motivation is, the greater the desire is to perform an action in order to achieve a goal.

Krueger et al. argue, that entrepreneurial activities can be predicted more precisely by the analysis of intentions than by personal characteristics.<sup>256</sup> The intentions of the founder determines the shape and direction in which the new founded company develops. Therefore, the success of the company, its development, growth and changes of direction depend on the intentions of the founder.<sup>257</sup> In the research to identify the unique characteristic quality of entrepreneurs, some researchers have focused on the research of the intentions of entrepreneurs. Thus, understanding the relationship between intentions is essential to get an understanding of the behaviour of entrepreneurs.<sup>258</sup> <sup>259</sup> Bagozzi et al. agree with Ajzen and also argue, that intentions are even the best forecast of planned behaviour.<sup>260</sup> This is also suggested by the studies by Krueger, Reilly and Carsrud and Lee, Wong Foo and Leung.<sup>261</sup> <sup>262</sup> On the other side, certain behaviours can also give conclusions about the intentions. To better understand the behaviour, intentions must therefore be understood. If the behaviour is difficult to observe, the intentions can give conclusions about the processes behind it.<sup>263</sup>

A meta-analysis by Kim and Hunter show, that intentions predict people's behaviour. They found out, that intentions explain 30 percent of the variance of the behaviour.<sup>264</sup> Another interesting finding comes from Bagozzi et al. They argue that intentions can predict behaviour, even if a time period lies in between.<sup>265</sup> This indicates that the

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<sup>255</sup> cf. Ajzen, 1991, p. 179–211

<sup>256</sup> cf. Krueger et al., 2000, p. 411–432

<sup>257</sup> cf. Bird, 1988, p. 442–453

<sup>258</sup> cf. Bird, 1989

<sup>259</sup> cf. Krueger and Carsrud, 1993, p. 315–330

<sup>260</sup> cf. Bagozzi et al., 1989, p. 35–62

<sup>261</sup> cf. Krueger et al., 2000, p. 411–432

<sup>262</sup> cf. Lee et al., 2011, p. 124–136

<sup>263</sup> cf. Ajzen, 1991, p. 179–211

<sup>264</sup> cf. Kim and Hunter, 1993, p. 331–364

<sup>265</sup> cf. Bagozzi et al., 1989, p. 35–62

initial motivation and thus the intentions to start the business, can predict the long-term behaviour. Although the intention is considered as the best predictor of future behaviour, there is still an insufficient understanding of the relationship between intention and action.<sup>266 267 268</sup> In contrast, other authors such as Douglas and Shepherd even doubt that behaviour can be predicted by the intentions of a person.<sup>269</sup> The findings in the field of intention indicate a relationship between the motivation and behaviour of the company's founder. Intention is the specific impulse for an act which arises from the motivation. This direct relationship between motivation and behaviour via the intention leads to the assumption that the motivation has a direct impact on the development of a business.

Simon argued in 1976, that the motivation of people explains their behaviour.<sup>270</sup> People behave in a certain way because they are navigated by two different components, according to Birch. One component is the plan on what to do and the second component is the motivation.<sup>271</sup> The intensity and persistence to carry out this particular action is guided by the motivation which is greater than the motivation to perform another action.<sup>272</sup> Therefore, McCline et al. concludes, that the behaviour of people is a better prediction of starting to work entrepreneurial than the personality traits and demographic characteristics.<sup>273</sup>

Empirical studies by Carsrud and Olm showed, that entrepreneurial motivation is related to the behaviour. They further argue that this behaviour affects the performance of the company. Therefore, the motivation has an influence on the performance.<sup>274</sup> Baum et al. also showed that the motivation of entrepreneurs has an important influence on the business activities and the success of a business.<sup>275</sup> The same results comes from Herron et al., who performed a literature review on this subject. The findings were the same, that the motivation has a strong influence on the behaviour of people.<sup>276</sup> Other empirical studies show that the link between entrepreneurial motivation and behaviour is considered

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<sup>266</sup> cf. Bagozzi, 1992, p. 178–204

<sup>267</sup> cf. Bagozzi and Warshaw, 1992, p. 601–634

<sup>268</sup> cf. Edelman et al., 2010, p. 174–196

<sup>269</sup> cf. Douglas and Shepherd, 2002, p. 81–90

<sup>270</sup> cf. Simon, 1976

<sup>271</sup> cf. Birch, 2009, p. 106–118

<sup>272</sup> cf. Naffziger et al., 1994, p. 29–42

<sup>273</sup> cf. McCline et al., 2000, p. 81–94

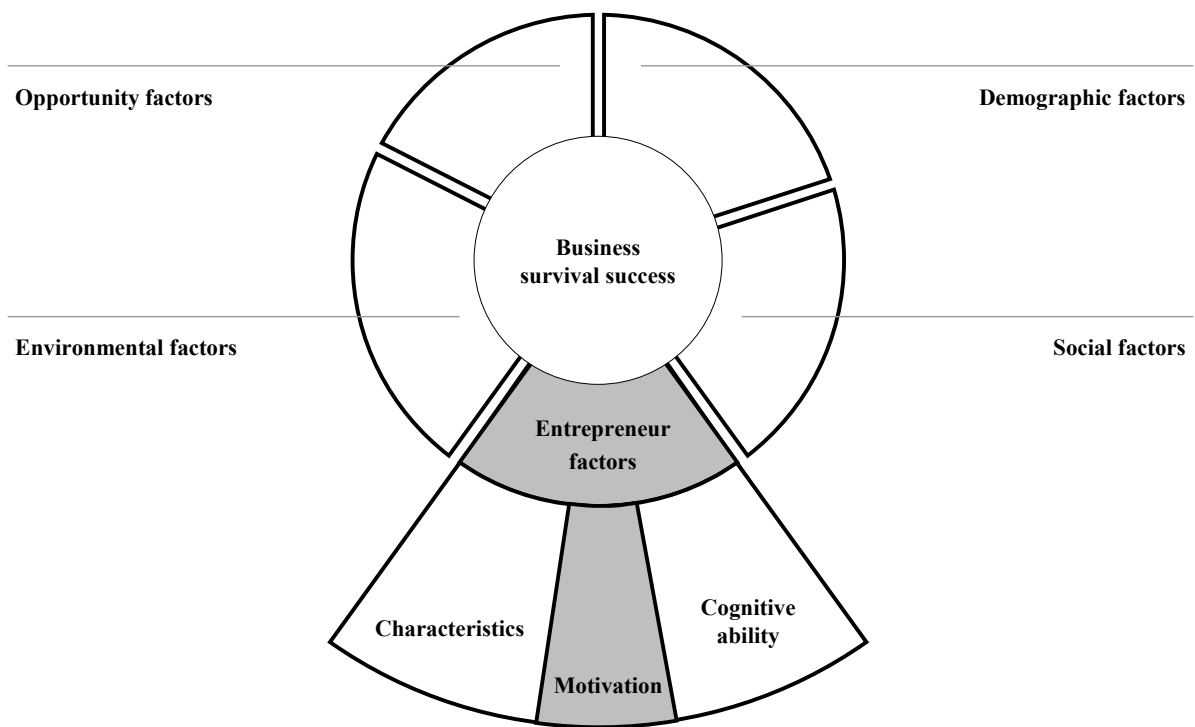
<sup>274</sup> cf. Carsrud and Olm, 1986, p. 147–162

<sup>275</sup> cf. Baum et al., 2001, p. 292–303

<sup>276</sup> cf. Herron and Robinson, 1993, p. 281–294

to be deficient.<sup>277</sup>

Behaviour which is based on motivation is individual, because every person weighs motivation factors differently. Therefore, the combination of motivational factors is different according to Lawson.<sup>278</sup> The relationship between the motivation of the entrepreneur and the performance of the company are interactive, according to Herron and Robinson. Performance or expectation of the performance of their company motivates the entrepreneur. The behaviour of the entrepreneur which is resulting from the motivation has an influence on the performance of the company.<sup>279</sup>



*Figure 1.2: Relationship between motivation and financial performance. Own figure.*

The literature supports the hypothesis that motivation has an effect on the behaviour of the company founder. The behaviour in turn has an impact on the development of the company after the foundation, and thus has an impact on the financial performance of

<sup>277</sup> cf. Kuratko et al., 1997, p. 24-33

<sup>278</sup> cf. Lawson, 1997, p. 427-449

<sup>279</sup> cf. Herron and Robinson, 1993, p. 281-294

the company. The impact of motivation on the business surviving success is shown in figure 1.2. Motivation is one of several factors which is expected to have an impact on the success. This study analysed the impact of motivation on the business surviving success. Different motivational factors are analysed independently. In the next chapter, a new model is developed to analyse the relationship between the motivation of entrepreneurs and business surviving success.

## 2 Classification of motivational factors and the four forces of entrepreneurial motivation model

### 2.1 Classification of motivational factors

The different types of motivation and motivational structures are grouped into individual factors to investigate the effects of various differentiations of motivation on the business surviving success of entrepreneurs. There has not yet been established a standardized classification of motivational factors in the literature. The classification of motivation factors from management science as well as from content management theories were reviewed in the last chapter. In the following, motivational factors are analysed in detail and the classification of motivation factors in a variety of studies is demonstrated.

According to Dunkelberg, motivational factors are not seen as the results of the research in most research studies, but as the one of many parts for research about a more complex relationships.<sup>1</sup> Working entrepreneurial is motivated by a variety of factors. The structure of motivation for why people start a business varies between entrepreneurs.<sup>2</sup> The number of motivating factors is limited, because entrepreneurs mention only a limited number of reasons during investigation. Behind these factors, there is a large number of other motivational factors.<sup>3</sup>

The reduction of the factors is necessary for recording them in surveys as well as linking concrete recommendations to them. Based on the motivational theories, motivational factors can be divided into internal and external factors. In all theories, external factors satisfy the basic needs of people whereas internal factors motivate people when all basic needs are satisfied. The classification in external and internal factors is further investigated in the next chapter.

Amabile argue, that people can be motivated to fulfil a task by intrinsic as well as extrinsic motivation factors. People are intrinsically motivated if they seek pleasure, interest, satisfaction of curiosity, self-expression or challenges. In contrast, people are extrinsically

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<sup>1</sup> cf. Dunkelberg et al., 2013, p. 225–240

<sup>2</sup> cf. Wright et al., 1997, p. 251–268

<sup>3</sup> cf. Dunkelberg et al., 2013, p. 225–240

motivated when they aim for a goal which is not the work itself.<sup>4</sup> A further illustration is chosen by Deci. According to Deci, a person is intrinsically motivated when the person expects no rewards from the activity besides to conduct the activity itself or the feeling that the person gets from conducting the activity.<sup>5</sup>

This argumentation is agreed by Amabile. Intrinsic motivation comes from the assumed value of the work which is defined by every person individually. Extrinsic motivation comes from the desire for the result of the work, not based on the work itself.<sup>6</sup> The result of starting a business is either extrinsic or intrinsic. This classification includes financial and material rewards as extrinsic results of a business. These results dependent on the performance of the company. In contrast, intrinsic rewards include the satisfaction to be the own boss, to be in control of the own destiny and to have the responsibility for the success of the company.<sup>7</sup>

Motivation can be classified into intrinsic and extrinsic motivational factors. According to Carsrud and Braennback, motivation can be simultaneously intrinsic and extrinsic.<sup>8</sup> The same view is shared by Amabile. She argues in her article, that a person can be simultaneously extrinsically and intrinsically motivated with respect to its work.<sup>9</sup> The distinction between intrinsic and extrinsic motivational factors in respect of the motivation of a person must be seen as a simplified model. Intrinsic and extrinsic motivation factors play a role. The intensity of each factor is what differs human beings. According to Vroom, some people concentrate more on extrinsic results and other people tend to concentrate more on intrinsic motivation factors. A person is not solely motivated by one factor but by a certain factor more than by others.<sup>10</sup> There is an interaction between intrinsic and extrinsic motivational factors. Extrinsic motivational factors can even inhibit the effect of intrinsic motivation factors. For example, money can reduce the intrinsic motivation.<sup>11</sup> Based on the two factor theory of Herzberg, intrinsic motivational factors and extrinsic motivational factors can also reinforce each other. If the extrinsic motivation factors are

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<sup>4</sup> cf. Amabile, 1993, p. 185–201

<sup>5</sup> cf. Deci, 1972, p. 217-229

<sup>6</sup> cf. Amabile et al., 1994, p. 950-967

<sup>7</sup> cf. Bird, 1988, p. 442-453

<sup>8</sup> cf. Carsrud and Braennback, 2011, p. 9-26

<sup>9</sup> cf. Amabile, 1993, p. 185–201

<sup>10</sup> cf. Vroom, 1964

<sup>11</sup> cf. Deci, 1972, p. 217-229

satisfied, intrinsic motivation factors can lead to a further increase in motivation.<sup>12</sup>

The motivational structure of a person consists of external and internal motivational factors, but the factors from one of the two sides are dominant. In a study by Gatewood et al., it was found that people are more likely to start a business if they have intrinsic motives.<sup>13</sup> According to Carsrud and Braennback, intrinsic motivation is the interest of a person in the activities of the entrepreneurship as well as a certain passion. They show the example of social entrepreneurs, who start companies to pursue social goals.<sup>14</sup> The intrinsic motivation factors are obtained by achieving tasks.<sup>15</sup> <sup>16</sup> Serial entrepreneurs start several businesses since they have an strong internal and external motivation and then found more companies through intrinsic motivation. If an entrepreneur has experienced the stimulation to starting a business, he repeats this behaviour over and over. Unsuccessful entrepreneurs that start out of intrinsic motivations, create new companies again and again, even though they have never seen extrinsic rewards for doing so.<sup>17</sup>

Extrinsic motivation is a concrete reward that a person receives. Entrepreneurs who act out of this motivation, strive for example for status, power and wealth.<sup>18</sup> Several authors stress the importance of extrinsic rewards in terms of wealth and property.<sup>19</sup> <sup>20</sup> Some entrepreneurs see the financial reward as an intrinsic motivation because it represents a positive feedback from the public to the idea and the concept of the entrepreneur.<sup>21</sup>

The motivation factors can be divided into extrinsic and intrinsic motivation factors as a first rough division. Here, entrepreneurs are attracted by external factors or driven by internal motivation factors to a specific behaviour. This classification can be found in most theories of motivation. For this study, the distinction in internal and external factors is not being sufficient enough to link certain recommendations to the factors in order to promote the motivation of entrepreneurs. For a more detailed breakdown of

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<sup>12</sup> cf. Amabile, 1993, p. 185–201

<sup>13</sup> cf. Gatewood et al., 1995, p. 371–391

<sup>14</sup> cf. Carsrud and Braennback, 2011, p. 9-26

<sup>15</sup> cf. Bird, 1989

<sup>16</sup> cf. Johnson, 1990, p. 39–54

<sup>17</sup> cf. Carsrud and Braennback, 2011, p. 9-26

<sup>18</sup> cf. Carsrud and Braennback, 2011, p. 9-26

<sup>19</sup> cf. Boyd and Gumpert, 1983, p. 44-64

<sup>20</sup> cf. Langan-Fox and Roth, 1995, p. 209-218

<sup>21</sup> cf. Timmons, 1978, p. 5-17



the motivational factors, not only the basic theories are used, but also the division of motivation from other studies.

The beginnings of the research on factors of motivation on the motivation to start a business is coming from Sari Scheinberg. The research of Scheinberg became known as the Associated Researchers of International Entrepreneurship (SARIE).<sup>22 23 24 25 26 27</sup> The categories of motivation in the research of Scheinberg come from different authors. The desire for independence for example from the investigation of Hofstede.<sup>28</sup> Social recognition was identified in 1943 by Maslow and described as a reason for starting a business also by other authors like McClelland.<sup>29 30</sup> The avoidance of unpleasant situations comes from Vroom 1976.<sup>31</sup> The motivation to avoid negative situations for entrepreneurs was also used by different authors.<sup>32 33 34</sup> Scheinberg and MacMillan conducted a factor analysis, which is based on 1402 business owners in 11 countries. The factor analysis grouped 38 factors into 6 factors. These factors consist of:

(1) need for approval, (2) perceived instrumentality of wealth (3) communitarianism (4) need for personal development (5) need for independence (6) need for escape.<sup>35</sup>

Shane et al. have undertaken further research on the results of Scheinberg and MacMillan. They have summarized the 38 reasons of Scheinberg and MacMillan in 23 reasons. Their study included 597 entrepreneurs from 3 countries. The 3 countries, Great Britain, New Zealand and Norway have already been studied by Scheinberg and MacMillan. Instead, of dividing the results in 6 clusters like Scheinberg and MacMillan, Shane et al. have divided their results in 4 categories. These 4 categories were:<sup>36</sup>

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<sup>22</sup> cf. Alange and Scheinberg, 1988, p. 1-15

<sup>23</sup> cf. Birley and Westhead, 1994, p. 7-31

<sup>24</sup> cf. Blais, 1990, p. 3-20

<sup>25</sup> cf. Dubini, 1988, p. 11-26

<sup>26</sup> cf. Scheinberg and MacMillan, 1988, p. 669-687

<sup>27</sup> cf. Shane et al., 1991, p. 431-446

<sup>28</sup> cf. Hofstede, 1980

<sup>29</sup> cf. Maslow, 1943, p. 370-396

<sup>30</sup> cf. McClelland, 1961

<sup>31</sup> cf. Vroom, 1964

<sup>32</sup> cf. Collins and Moore, 1955

<sup>33</sup> cf. Cooper, 1971

<sup>34</sup> cf. Hagen, 1962

<sup>35</sup> cf. Scheinberg and MacMillan, 1988, p. 669-687

<sup>36</sup> cf. Shane et al., 1991, p. 431-446

(1) recognition, (2) independence, (3) learning, (4) roles

Birley and Westhead use the scientific study design by Sarie to study 405 business owners in the UK. They examined the different motivational factors and how they affect the performance of the company. Birley and Westhead defined different types of entrepreneurs based on the motivation to start businesses. They have found no association between the type of company founder, the future size, the number of employees or the pursuit of growth. By a factor analysis of the reasons, they could be divided into 7 clusters. These reasons were:<sup>37</sup>

(1) need for approval, (2) need for independence, (3) need for personal development, (4) welfare considerations, (5) perceived instrumentality of wealth (6) tax reduction, (7) following role models.

The classification of the reasons to start a business or to strive for employment is divided into 11 different factors, in the study of Kolvereid. He analysed the reasons of 372 entrepreneurs who have founded a new business in the last 4 years from Norway. Kolvereid examined the relationship between the motivation of entrepreneurs, the characteristics of a company and the desire for growth. It has been found that the motivation is related to the desire of revenue growth and striving for growth in the number of employees. The study of Kolvereid was not based on the uniform classification of Scheinberg and MacMillan. The classification consists of following reasons:<sup>38</sup>

(1) security, (2) economic opportunity, (3) authority, (4) autonomy, (5) social environment, (6) work load, (7) challenge (8) self-realization, (9) participation in the whole process, (10) avoid responsibility, (11) career

Gatewood et al. surveyed 142 business owners for their reasons to start a business. The study was a survey with open questions. Therefore, the responses were summarized by a factor analysis. The result of the factor analysis is a classification of the reasons into:<sup>39</sup>

(1) identification of a market need, (2) autonomy, (3) independence, (4) a desire to make more money, (5) a desire to use, (6) knowledge and experience, (7) the enjoyment of self-employment, (8) a desire to show that it could be done

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<sup>37</sup> cf. Birley and Westhead, 1994, p. 7–31

<sup>38</sup> cf. Kolvereid, 1992, p. 209-222

<sup>39</sup> cf. Gatewood et al., 1995, p. 371–391

The researchers Sanchez and Atienza Sahuquillo made a survey of Spanish entrepreneurs. They have sent out 117 survey questionnaires and received 101 complete responses. During the investigation they could achieve a confidence level of 95 percent and a sampling error of 7,8 percent. Based on the research by Scheinberg they have drawn 23 different motivational factors to integrate them in the survey sheet. Based on these 23 factors, a factor analysis was performed. They divided the motivational factors in the following schema:<sup>40</sup>

(1) need for achievement and self-realization, (2) financial need and professional autonomy, (3) need for personal autonomy, (4) need for affiliation and institutional power, (5) need for continuity, (6) social needs and personal power, (7) need for competition.

The authors Choo and Wong identified in their study based on the GEM Report 2004 in Singapore, the key motivational factors among 145 respondents. The authors have extracted the factors by a principal components analysis and indicated by a varimax rotation. Each item had to have at least a factor loading of 0,5. In the factor analysis of Choo and Wong, the motivational variables "To receive a salary based on merit," "To provide a comfortable retirement," "To earn more money", "The need for a job" and "To realize my dream" were summarized as the motivating factor (1) "extrinsic rewards". The second motivating factor is (2) "independence/autonomy" which includes the motivation variables "To work at a location of my choice", "To make my own hours", "To keep a large proportion of my proceeds" and "To be my own boss". The other motivation variables "To have to interesting job", "To take advantage of my own creative talents" and "To challenge myself" was extracted in the motivational factor (3) "intrinsic rewards".<sup>41</sup>

Boyd and Gumpert did a similar division of motivation factors. For the authors, entrepreneurs are motivated by the prospect of financial and personal rewards. Among the personal rewards are independence and freedom according to Boyd and Gumpert.<sup>42</sup> On the other hand, Brockhaus provides a tripartite division of motivation factors. These are the desire for performance, competition and independence. This comes very close to the division of McClelland.<sup>43</sup> The same division is made by Herron and Robinson. They also come to the conclusion that 3 factors of motivation are particularly crucial

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<sup>40</sup> cf. Barba-Sanchez and Atienza-Sahuquillo, 2012, p. 132-138

<sup>41</sup> cf. Choo and Wong, 2006, p. 47-64

<sup>42</sup> cf. Boyd and Gumpert, 1983, p. 44-64

<sup>43</sup> cf. Brockhaus and Horowitz, 1986, p. 25-48

to found a company for entrepreneurs. These factors are achievement, competition and independence.<sup>44</sup> Carter et al. identified 6 factors of motivation to start a business. This includes independence, financial success, self-realization, recognition, innovation and roles. These were extracted through a factor analysis from the data set of PSED I.<sup>45</sup>

	Scheinberg	Shane	Birley	Kolvereid	Gatewood	Barba-Sanchez	Choo	Carter
<b>Independence</b>	Need for independence	Independence	Need for independence	Autonomy	Autonomy, independence	Need for personal autonomy	Independence/autonomy	Independence
	Need for escape				Enjoyment of self-employment		To be my own boss	
<b>Need for achievement</b>	Need for personal development	Learning	Need for personal development	Self-realization	Knowledge and experience	Need for achievements/self-realization	To realize my dream	Self-realization
	Need for approval		Need for approval		To show that it could be done	Need for competition	To challenge myself	
<b>Social recognition</b>		Roles	Following role models			Social needs and personal power		Roles
	Communitarianism	Recognition	Welfare considerations	Social environment		Need for affiliation		Recognition
<b>Financial reward</b>					A desire to make more money		To earn more money	
	Perceived instrumentality of wealth		Perceived instrumentality of wealth			Financial need		Financial success

**Table 2.1:** Motivational factors of studies. Own table.

These findings from literature provide an overview about the classification of motivational factors from other authors. Table 2.1 shows the motivational factors of the different studies. Most factors are similar in the studies and can be classified into a factor category. The first factor which is used by almost all studies is the desire for (1) financial rewards. This factor also includes the motivation for security and the desire to make more money. Factors which are affiliated with this category are also the providing of a comfortable retirement and perceived instrumentality of wealth. Another factor which is found in all studies is the striving for (2) independence. The factors which are included in the motivation for independence are striving for autonomy, enjoyment of self-employment, being the own boss, working at a location of my choice and the dissatisfaction of the current job.

<sup>44</sup> cf. Herron and Robinson, 1993, p. 281-294

<sup>45</sup> cf. Carter et al., 2003, p. 13-39

A lot of factors mentioned in different studies are related to the social environment of the entrepreneur. For example, the need for recognition in society, need for affiliation and the need for approval from society. These factors can be summarized in the category (3) social recognition. The need for competition could be part of this category as well. It could also be part of the category (4) need for achievement. This motivational factor covers self-realization, knowledge and experience, need for personal development and learning. Based on the literature findings, these are the four general classification of motivation factors. In the next chapter, these factors will be analysed in detail and hypothesis are created.

## **2.2 Main hypotheses on how entrepreneurial motivation impacts the surviving success of new ventures**

The results of the literature review shows, that the motivation of nascent entrepreneurs could have an impact on the financial success of new ventures. The studies by other authors indicate this relationship between motivation and success of a business. Several studies have attempted to establish a link between the motivation and the company. In this case, however, the financial success has never been considered in isolation. Success is a subjective assessment of the entrepreneur and may consist of various components.

The motivation of the entrepreneurial founder is considered differentiated. Based on the literature review, it is to be assumed that different sophistication of the motivational structure have a different impact on business success of the company founder. It comes clear from the literature, that the influence of the entrepreneur is the greatest in the early years. Therefore, the motivation of the entrepreneur is examined in the first three years of creating a business. In this way, though other factors cannot be excluded, it is assumed that the motivation is most significant during this period. Therefore, the main hypothesis for the study is as following:

**H<sub>B</sub>:** The various motivational factors of the entrepreneur have a differential impact on the business surviving success of the nascent enterprise.

The individual motivational factors and their impact on the financial performance of the company founded should be considered individually to make differentiated proposals to

support successful entrepreneur. For this, the influence of the individual motivational factors are examined separately. The results of the literature review suggest that different motivational factors have a different impact on the financial success of new ventures. The authors come to different conclusions, which motivational factors have the greatest impact on the success. These relationships have been insufficiently studied in relation to the financial success of business foundations.

	<b>Motivational factors studies</b>	<b>Content motivation theories</b>	<b>Management motivation theories</b>
Independence	Independence		
Need for achievement	Need for achievement	Self-actualization	Self-actualization
Social recognition	Social recognition	Social recognition	Social recognition
Financial reward	Financial reward	Financial reward	Security, survival

*Table 2.2: Classification of motivational factors for development of a new model. Own table.*

Based on the literature review, it is assumed that the desire for financial reward, social recognition, need for achievement and the desire for independence have a differential impact on the business surviving success of new ventures. As shown in table 2.2, the models from motivational research are inadequate since they do not contain the drive for independence. Therefore, a new model has to be developed in order to transfer the motivational models to entrepreneurship. The four motivational factors for the new developed model are explained in the following.

**Financial Reward** The first motivational factor is the desire for financial reward and success. This factor goes beyond the basic financial security for life. For people who strive for financial reward when starting a business, the financial reward is the primary factor for being active in entrepreneurship. In 1943, Tibor Scitovsky has developed a model in which the income of an entrepreneur was measured based to the primary goal of the entrepreneur. Scitovsky noted that the level of income depends on whether the entrepreneur wants to have financial success or by working as an entrepreneur for life balance.<sup>46</sup> In addition, other studies have identified financial motivation for people to start a new company.<sup>47</sup> <sup>48</sup>  
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In a study, the authors examined how the decision to work as an entrepreneur was related to financial motives. The authors concluded, that a positive attitude towards a high income leads to a high motivation for starting a business. This relationship was at the same time, also established for a positive attitude towards risk, hard work and independence. This study supports the theory that entrepreneurs are motivated by the pursuit of high income but also for independence, need for achievement and seeking risk.<sup>50</sup>

The authors Morton and Podolny examine the motivational factors to work as a winemaker in California in terms of the love for wine and the goal to make money. They come to the conclusion, that profit-driven wine producers delivered poorer quality of wine than winemakers who produced wine as a hobby and out of the love for wine. The result of the study is that for-profit entrepreneurs have a higher level of financial success than winemakers who did wine because they loved what they are doing. Moreover, they come to the conclusion that the entrepreneurs with a financial motivation did not settle in the area in which entrepreneurs who did it as a hobby work. The winemakers who are mainly interested in financial success were also more competitive thinking than their colleagues in the market who were not primarily interested in the financial success.<sup>51</sup> This study of Morton and Podolny indicates that people with financial motives are entrepreneurs with a greater financial success.

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<sup>46</sup> cf. Scitovsky, 1943, p. 57-60

<sup>47</sup> cf. Boyd and Gumpert, 1983, p. 44-64

<sup>48</sup> cf. Bird, 1989

<sup>49</sup> cf. Burch, 1986

<sup>50</sup> cf. Douglas and Shepherd, 2000, p. 231-251

<sup>51</sup> cf. Morton and Podolny, 2002, p. 431-456

In contrast, Choo and Wong showed in their study that non-financial goals are more important than financial goals to explain the decision to become an entrepreneur. For them, financial goals are the motivation to make money, to keep a larger share of the earnings and achieve a higher pension. The analysis of Choo and Wong is based on the GEM Report 2004 in Singapore.<sup>52</sup> Also scientific research does not agree on the role of financial reward motivation based on the findings, the striving for financial rewards is one of the factors for further analysis.

**H<sub>2</sub>:** The more the entrepreneur is motivated by financial rewards when starting the enterprise, the better is the business surviving success.

**Need for achievement** White already brought 1959 the motivation need for competition with the ability of people to deal effectively in the environment in relationship. The striving for competition includes the competence or ability to deal effectively and to exploit the external environment. It includes the pursuit of a person to understand the physical and social environment and to achieve the desired results in this environment. This is the first contribution for a motivational factor which explains the desire to achieve something in life.<sup>53</sup>

The main contribution for this motivational factor comes from McClelland. He brought together the factors need for achievement and entrepreneurship in 1961. He has found, that people with a high need for achievement want to take responsibility and therefore are motivated to start a business. These people want to do their jobs very well. Compared to other people, they want to perform better and compare with each other.<sup>54</sup>

In the category of need for achievement motivation also includes the passion to the work and the desire for the fulfilment of a vision. These two intrinsic motivational factors can also be assigned to the intrinsic factor need for achievement. The passion to work and the love of the own work were identified by Locke as the core characteristics for the development of great wealth.<sup>55</sup> Herron and Sapienza underlined in their model of

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<sup>52</sup> cf. Choo and Wong, 2006, p. 47-64

<sup>53</sup> cf. White, 1959, p. 297-333

<sup>54</sup> cf. McClelland, 1961

<sup>55</sup> cf. Locke, 2000b



intentions, the passion of the founder to achieve something new.<sup>56</sup> These key motivational factors of McClelland's theory are supported by several authors. Therefore it is expected that the need for achievement has an influence on the financial performance.

**H<sub>3</sub>:** The more the entrepreneur is motivated by need for achievement when starting the enterprise, the better is the business surviving success.

**Social recognition** Another motivation for starting a business is the prestige of entrepreneurship and the satisfaction of being an own boss. These motivations were first suggested in 1921 by the author Knight.<sup>57</sup> The striving to be an own boss will be in this theoretical model associated with the motivating factor "Independence". In contrast, the prestige to work as an entrepreneur is classified into relationship between the entrepreneur and her or his social environment. In this category, there are all types of motivation which arises through the society and family.

The motivation for prestige as described by Knight was picked up by Atkinson and Birch. They assign them to the social needs of the entrepreneur. This social need goes beyond the membership of a group like it was suggested by McClelland. The authors also assigned need for importance and ego to this type of motivation. Another motivational factor is the pursuit of higher social status.<sup>58</sup>

Wang and Wong examined the motivation of students in Singapore to set up their own companies. The sample size was 5326 students. In this study, the researchers found that the students have a greater motivation to start a business if their family owns a business.<sup>59</sup> De Wit and Van Winden were able to demonstrate in a study in the Netherlands, that fathers have a great impact on the decision of their offspring. If the fathers themselves are working in an entrepreneurial manner, the chance increases that the children also become entrepreneurs.<sup>60</sup>

In addition to the fathers, other role models have an impact on the motivation to become entrepreneurs. Various studies have shown, that the presence of a role model is an

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<sup>56</sup> cf. Herron and Sapienza, 1992, p. 49-35

<sup>57</sup> cf. Knight, 1921

<sup>58</sup> cf. Atkinson and Birch, 1978

<sup>59</sup> cf. Wang and Wong, 2004, p. 163-172

<sup>60</sup> cf. De Wit and Van Winden, 1989, p. 263-272

important motivation for people to start a business. For Brockhaus and Howritz role models of the entrepreneur are the strongest external influence. The authors argue, that most business owners have a strong role model in the family or in the circle of acquaintances who can have an influence and motivation to the entrepreneur. Here, the social circle can also consist of friends and colleagues from the work environment.<sup>61</sup> In contrast, Krueger and Carsrud indicate that role models only strengthen the confidence of the entrepreneur and encourage them in the feasibility of the establishment. The impact on self-confidence is the only influence of the models according to these authors.<sup>62</sup> This finding was also supported by other authors like Scherer et al.<sup>63</sup>

In contrast, other researchers found only a small significant effect on the existence of a model to be based on the motivation of a company. For example, Carsrud, Olm and Eddy came to this conclusion in their article "Entrepreneurs - mentors, networks, and successful new venture development: an exploratory study".<sup>64</sup> To the same conclusion came Scott and Twomey in their study.<sup>65</sup>

It can be concluded that next to the desire for a higher position and respect in society, people with the motivation for social recognition also admire a role model. In addition to that, the motivation to continue a family tradition to work entrepreneurial, should also be linked to this motivational factor.

**H<sub>4</sub>:** The more the entrepreneur is motivated by social recognition when starting the enterprise, the better the business surviving success is.

**Independence** A definition of independence in the context of entrepreneurs is provided by Shane, Kolvereid and Westhead. According to the authors, the independence helps to take over responsibility for the own actions and the resulting outcome of this action. In particular, entrepreneurs strive for this independence, as they are willing to take responsibility for taking over the business opportunities. The result of the business opportunity is in the responsibility of the entrepreneur.<sup>66</sup>

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<sup>61</sup> cf. Brockhaus and Horowitz, 1986, p. 43

<sup>62</sup> cf. Krueger and Carsrud, 1993, p. 315–330

<sup>63</sup> cf. Scherer et al., 1989, p. 53–81

<sup>64</sup> cf. Carsrud et al., 1987, p. 13–18

<sup>65</sup> cf. Scott and Twomey, 1998, p. 5–13

<sup>66</sup> cf. Shane et al., 1991, p. 431–446

The striving for independence, according to several studies and authors, is the motivation to work as an entrepreneur. Hisrich has found out in his study of interviews with experts of company founders that the strongest motivation for entrepreneurship is the desired independence.<sup>67</sup> In a survey of 60 entrepreneurs, Hornaday and Aboud have detained as a result, that entrepreneurs are significantly more independent than the average persons.<sup>68</sup>

The already mentioned motivation of Knights to be the own boss is also associated with the motivational factor of independence.<sup>69</sup> In his article from 1989, Bird has examined a survey of the Chemical Bank on the most important factors for establishing a business. The result of the survey was that people create especially a company to obtain the freedom to be their own boss and to meet the satisfaction of their own need for achievement.<sup>70</sup> The authors Jenssen and Kolvereid came to the same conclusion. The authors have identified the dissatisfaction with the employee status as the greatest motivation to work independently.<sup>71</sup> In contrast, the authors Sanchez and Atienza Sahuquillo found, that the factor independence plays a less significant role as expected.<sup>72</sup> It is to be expected, that the desire for independence does have an effect on the entrepreneurship. This also includes the motivation, to work with the own approach. This kind of motivation is not included in the motivational model from management science or in content motivation theories. It is suggested to expand the motivational factors with the desire for independence.

**H<sub>5</sub>:** The more the entrepreneur is motivated by the desire for independence when starting the enterprise, the better is the business surviving success.

Chapter 2.2: Main hypotheses on how entrepreneurial motivation impacts the surviving success of new ventures, provided a classification of motivational factors which are expected to have an impact on the business surviving success of entrepreneurship. The hypotheses are based on the classification of management science motivation theories, content motivation theories as well as the classification of studies in the area of motivational research. In addition to the three factors from motivation research, the desire of independence could

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<sup>67</sup> cf. Hisrich, 1985, p. 3–8

<sup>68</sup> cf. Hornaday and Aboud, 1973, p. 141–153

<sup>69</sup> cf. Knight, 1921

<sup>70</sup> cf. Bird, 1989

<sup>71</sup> cf. Jenssen and Kolvereid, 1992, p. 120–133

<sup>72</sup> cf. Barba-Sanchez and Atienza-Sahuquillo, 2012, p. 132–138

also have an influence on the business surviving success. Based on these classifications of motivational factors, a new model is developed in the next chapter.

## **2.3 Four forces of entrepreneurial motivation model**

Based on literature review in chapter 1.7: Relationship between motivation and entrepreneurship, it is to be expected that the motivation of nascent entrepreneurs has an influence on the business surviving success of the company. Furthermore, it can be assumed that different motivational structures have a sophisticated impact on the business surviving success. These motivational structures are illustrated as motivational factors and the business surviving success is measured by different key performance indicators from the literature.

The higher the motivation is in total, the greater the financial success of the founded company. Although this relationship is confirmed by several authors, others cannot find any relationship. Therefore, this relationship is examined further in this work as the prerequisite of other cause-effect relationships. This study is a new way to examine the relationship because this relationship has not been investigated with the PSED II data set by current knowledge.

It is further assumed that the type of motivation has an effect on the financial performance and that different sophistications have various impacts on the business surviving success. The hypothesis is, that different motivational factors have a sophisticated impact on the financial success. Therefore, the motivation factors are reviewed separately from each other on a correlation with the financial success. It is expected that the higher each of the factors are, the better is the business survival success.

The model includes the motivation factors from chapter 2.2 Main hypotheses on how entrepreneurial motivation impacts the surviving success of new ventures. The motivational variables from the PSED II dataset were added to the model in figure 2.1 and the hypothetical linkage between each of the variables and the factors were included. In order to confirm or refuse this relationship between the variables and the factors, a factor analysis will be conducted. It is furthermore expected, that the motivational factors have

an influence on the business surviving success as well as that each factor has a sophisticated influence on the dependent variable.

The model is a combination of a conceptual and calculational model. The dependent variables are calculated from the financial data of the companies. The independent variables are conceptual from the classification of motivational factors in chapter 2.2 Main hypotheses on how entrepreneurial motivation impacts the surviving success of new ventures. The motivational variables are based on the motivational variables of the PSED II data set. The expected classification of the motivational variables as well as the assignment of the variables to the motivational factors is demonstrated in the model. The name of the model 2.1 is "Four forces of entrepreneurial motivation model".

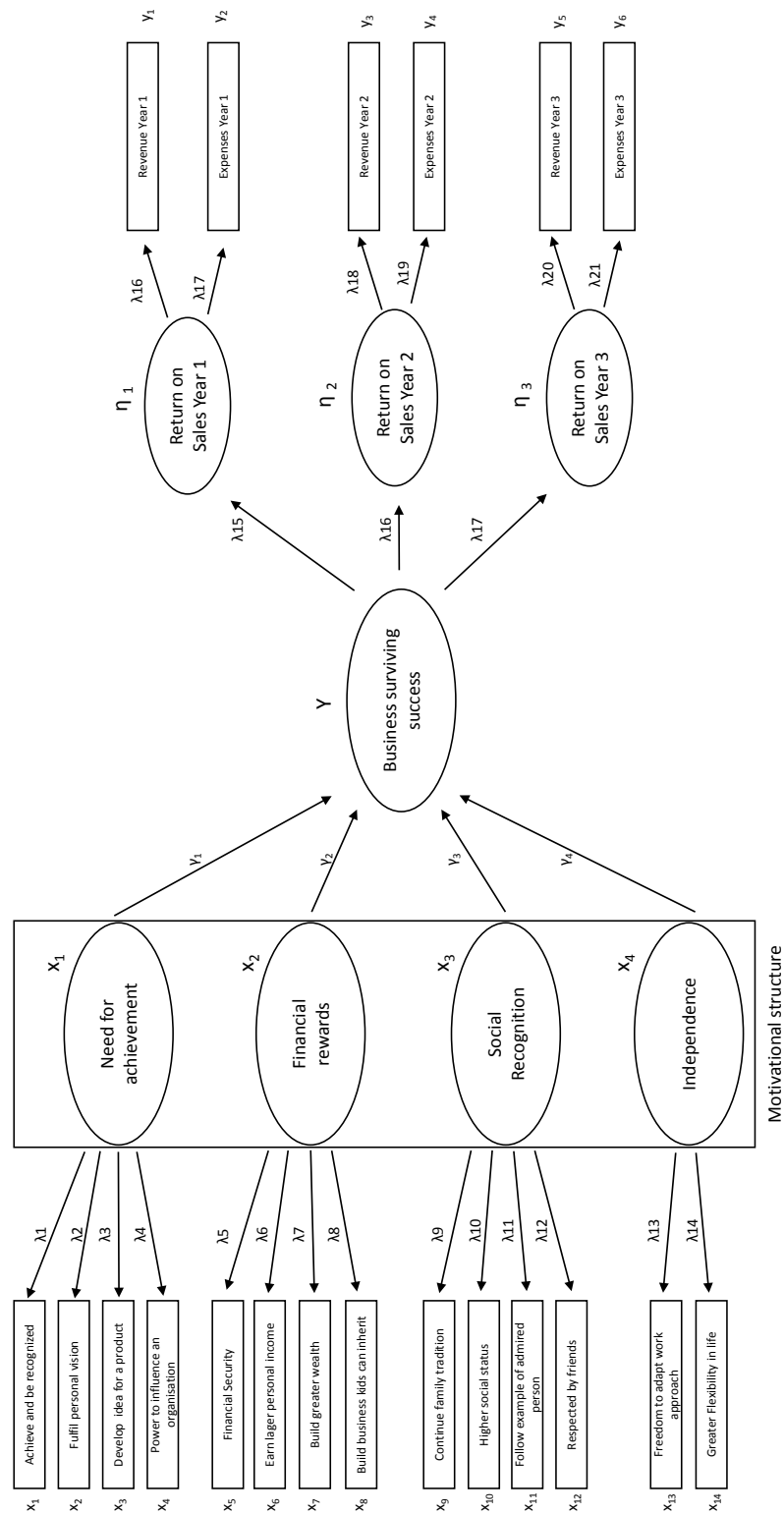


Figure 2.1: Four forces of entrepreneurial motivation model. Own figure.

The dependent variable in the four forces of entrepreneurial motivation model is the business surviving success of the new venture as the indicator. The financial success is the indicator for the business surviving success. Several different key performance indicators for financial success are used to examine the influence of the different motivational factors on the business surviving success. These indicators are built on the financial information of the PSED II data set which includes the revenue and the expenses for 3 years after the company was founded. The model is different to any other model from the literature since it includes the striving for independence as a motivation to start a business.

There are two basic ways to gather quantitative data. These are, according to Creswell, experiments and surveys.<sup>73</sup> According to Martella et al., surveys provide insights about how people think, act and behave. Through the survey method, the relationship between variables and the cause-and-effect relationship can be explained.<sup>74</sup> The great advantage of this research design is to collect a large amount of data. From the data of a questionnaire, the correlation can be calculated between the variables.<sup>75</sup> To investigate the hypothesis whether and how motivational factors affect the financial performance, the collection of data from a survey is the best course of action.

The disadvantages of this method are the closed questions which do not allow specific responses. Through these close questions, no other motivational factor can be recorded in addition to the one that are assumed to be the main motivational factors. In addition to that, the effort for the design of the questionnaire is a disadvantage of this method. The researchers are also reliant on the motivation of participants to conduct the telephone interview and on the substance of the answers.<sup>76</sup>

The data source can be made distinguishing between primary and secondary data. In the primary data, the data was collected by the researchers themselves. In contrast, a researcher who uses secondary data uses data from other researchers who have collected the data already in a different context. The advantages of secondary data are the validity and reliability of the data set which is confirmed by several researchers and the research institute itself. As for the identification of entrepreneurs for the PSED II data set, 31,845

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<sup>73</sup> cf. Creswell, 2014

<sup>74</sup> cf. Martella et al., 1999

<sup>75</sup> cf. Saunders et al., 2009

<sup>76</sup> cf. Martella et al., 1999

people were called in the United States. This procedure could not be performed by a single researcher. The disadvantage of secondary data is that the data was collected to answer a whole set of different research questions.

To investigate the hypotheses, the analysis of data from a survey is the most appropriate course of action. A survey allows collecting a huge amount of data from a large and representative sample size. To identify entrepreneurs from the population, a large number of screening questions were necessary. Through a telephone interview, which was conducted by an external company, 31,845 people were called in the USA. To identify a representative number of entrepreneurs, the method of telephone interviews was chosen. This method also has the advantage that it is inexpensive and can be carried out with sufficient resources in a short period of time. The entrepreneur and the process of business creation could be investigated by many questions from several angles. Sensitive data such as profits, costs and personal goals could be queried.<sup>77</sup>

Through a standardized telephone interview, data between different areas and times, as well as the persons who were interviewed can be well compared. This standardized data are a good basis for statistical analysis.<sup>78</sup> According to Mertella et al., the standardized telephone interviews include questions that were asked in a systematic order.<sup>79</sup> The participants received the same questions in the same order. With such an approach, high quality of the data was ensured.<sup>80</sup>

In order to test the model and the relationship between the individual motivational factors and financial success of new ventures, the dependent and independent variables have to be derived from information based on survey data. The PSED II data set contains 14 motivation variables recorded on a scale of 1 to 5 at the time of established entrepreneurship. Moreover, the record contains financial data of the founded company which was recorded by a repetitive annual telephone inquiry. From the data records, the ones with financial information on the revenue and the cost of at least 3 years after the foundation, are extracted. Based on these data, several financial measures are calculated to reflect the company's financial success. As an indicator for financial success, the geometric mean of

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<sup>77</sup> cf. Reynolds and Curtin, 2007b

<sup>78</sup> cf. Rea and Parker, 2012

<sup>79</sup> cf. Martella et al., 1999

<sup>80</sup> cf. DeVaus, 2002



the return of sales was calculated. In addition to that, the return on sales for each year was considered as well as the growth of revenue and return on sales.

The 14 motivation variables from the data PSED II will be analysed by factor analysis and motivational factors are extracted. The loading of the individual motivation variables on the factors is compared with the findings from the literature review and if necessary, the model is adjusted. The validity of the model is tested by several multiple regression analyses. The financial success is considered differentiated by various indicators. In addition to testing the validity of the model in total with various indicators, the individual motivation factors are examined on a significant impact on the various indicators on the financial performance.

The hypotheses are valid if they are testable. It is possible to test the hypotheses of this work as well as the model. In addition to that, the hypotheses must be falsifiable. This is also given, since the motivational factors can have an influence on the financial success of the company but it could also be the case that they do not have an influence. For alternative hypotheses, other factors could be responsible for the financial success of entrepreneurs. Furthermore, it could be true that the motivation does have an influence on the financial success but the different motivational factors do have the same influence on the financial performance. In this case, there would be no difference in the financial performance when entrepreneurs are motivated by different structures of motivation.

In addition to that, the results of the test have to be reliable. This is the case when other researchers can reproduce these results. On the one hand, other researchers can use the same record PSED II as a basis to review the evaluations. On the other hand, the questionnaires can be used again. Such a survey can be carried out in the United States as well as in other countries. Researchers who want to identify entrepreneurs with the same telephone screening questions, can identify the same kind of entrepreneurs.

The motivation of the founder in the beginning of the process to start a business can be different from the motivation during the process of entrepreneurs. Although the company's founder has launched the company out of a specific motivation, other motivation factors can affect the entrepreneurial drive to keep the company going and cause tenacity that is needed to carry on a business in critical and difficult times. The survey of the motivation of the founder by questionnaire has the weakness that there may also be a different motivation

behind the perceived motivation of the company founder. In addition to that, the selection of the motivating factors in the PSED record limits the validity, as other motivational factors and other divisions of the motivation factors will not be considered.<sup>81</sup>

The model figure 2.1. "Four forces of entrepreneurial motivation model" is the foundation for testing the relationship between the motivational factors and the business surviving success. The model is based on the findings from the literature review as well as the classification of motivational factors in chapter 2.2 Main hypotheses on how entrepreneurial motivation impacts the surviving success of new ventures. In the next chapter, the research design and methods will be explained in detail.

## **2.4 Measurement of the four forces of entrepreneurial motivation model**

Based on the results of the literature review, there should be a relationship between the motivation of the entrepreneur and the financial success of the entrepreneurship. Successes for starting a business are defined differently in the literature. One of the most popular categories of success is the financial performance of a business.

Moreover, it can be assumed that the different motivational factors have different impacts on the financial success of a business. In the factor analysis, it is assumed that the factors to achieve a higher position in society, fulfil a personal vision and are not part of this study. Developing an idea for a product, power to influence organizations and higher social status have common characteristics and therefore should be loaded together into the factor Need for Achievement. The motivational factor Financial Reward should include all variables associated with the pursuit of money and power. The variables that earn large personal income, financial security and build greater wealth should have common characteristics.

Continuing family tradition, building businesses kids can inherit, following the example of an admired and respected person by friends are four variables which are elements of the motivation factor Social Recognition. In the literature, often the influence of a role model was seen as a positive influence on the financial success. Therefore, this variable should

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<sup>81</sup> cf. Hawkins and Hastie, 1990

have the biggest impact. The two variables motivation freedom to adapt work approach and greater flexibility in life may be allocated under the striving for personal freedom. Both are therefore assigned to the motivation factor Independence.

As the society evaluates the financial success of entrepreneurs as positive, entrepreneurs with social status motivation strive for a company which achieves good financial success. The entrepreneurs with the motivation of self-realization and need for achievement also have a strong interest in the financial success of the company. Financially successful high-growth companies are more challenging since a growth is related to a constant change. Fast-growing companies need greater flexibility from the entrepreneur, who needs to adapt to many new situations in order to cope with these changes. Therefore it is to be expected, that entrepreneurs who strive for a need for achievement, focus on the growth of companies instead of a stable company.

The desire for independence as the motivation of the entrepreneur could be negatively correlated. Financially successful companies with high growth rates need entrepreneurs who invest a lot of energy and time in the company. Growing businesses need more and more resources such as labour. By increasing the size of the company, dependencies to society, to other companies and towards the staff increases. These dependencies restrict the entrepreneur in the choice of time. This limits the independence of the entrepreneur. It can be expected that people with the motivation to be independent, are not looking for high growth rates.

It is assumed that the financial reward has the strongest influence on the financial success of a business. This has already been shown by a number of studies. Hypothetically, the motivation factor Need for Achievement should have the second strongest influence on the financial success. The weakest impact on the financial success should have social recognition. Financial success is influenced by four financial factors in the following way:

$$Y = b_0 + b_1 * X_1 + b_2 * X_2 + b_3 * X_3 + b_4 * X_4$$

In this formula,  $b_0$  is the constant. The four predictors  $X_1$ ,  $X_2$ ,  $X_3$  and  $X_4$  are influencing the variable  $Y$  as the business surviving success. The  $b$  value shows how each predictor is weighted.

**Measurement model of the motivational factors** The motivation of the entrepreneur is recorded at the time when they are in the process of starting a new business. This is different to other recordings of motivation where the motivation is recorded retroactively or previously of the starting process. The advantages of this approach are explain in detail in chapter 3.2: Validity, reliability and representativeness of the PSED II data set

In the first wave of the questionnaire, the participants of PSED II were asked to classify their motivation based on 14 different factors of motivation for starting a business. The scale had 5 items to choose from and included the following response options: 1 - No extent, 2 - A little, 3 - Some, 4 - A great, 5 - A very great extent. The exact question was identical for each motivation cofactors. "To what extent was that important – no extent, a little, no extent, a little, some, a great, or a very great extent?" The question was put in front of the motivation factors which were as followed:

- W1. To achieve a higher position in society.
- W2. To have greater flexibility for your personal and family life.
- W3. To continue a family tradition.
- W4. To be respected by your friends.
- W5. To have considerable freedom to adapt your own approach to work.
- W6. To give yourself, your spouse, and your children financial security.
- W7. To follow the example of a person you admire.
- W8. To build a business your children can inherit.
- W9. To earn a larger personal income.
- W10. To achieve something and get recognition for it.
- W11. To develop an idea for a product.
- W12. To have a change to build great wealth or a very high income.
- W13. To fulfil a personal vision.
- W14. To have the power to greatly influence an organization.

The question was answered on the phone by the person interviewed. The assessment is subjective and therefore the comparability of the results between respondents is difficult. This is just a small part of the questions from the PSED II questionnaire. The willingness

of entrepreneurs to provide information about sensitive information such as motivation and financial metrics information should be considered. Despite the limitations, PSED II provides the largest data about entrepreneurs which included the motivation to start a business on a scale.

**Measurement model of the business surviving success** The financial performance of a company can be read from various financial ratios. In the literature there are a high number of indicators for the success of entrepreneurship.<sup>82</sup> The available financial data from the PSED II data set, which are recorded for all companies and at least 3 years after the foundation, are the revenue per year and the cost per year. From these values, the revenue growth over the years can be calculated.

The growth of enterprises is the result that best reflects the personal performance of the entrepreneur as well as the performance of the company on the market. Company growth is a measurable and understandable way to measure the success of the company, according to Kirzner.<sup>83</sup> According to Covin and Slevin, business growth is the ultimate goal of entrepreneurship.<sup>84</sup> The growth of revenue is specified by Davidsson as the key measure for the success of new foundations.<sup>85</sup> In addition to Davidsson, other authors see revenue growth as the key performance indicator for the success of a business. The authors Lee and Tsang also measure the performance of a company in terms of revenue growth. In addition, they use the growth of the company's capital and earnings per share growth at the same time.<sup>86</sup>

According Hornaday and Bunker, survival time in the early years is the most convincing definition of successful new ventures.<sup>87</sup> Hornaday and Bunker define success for entrepreneurs, in that they build up a business in a field in which previously there was no company and continue this at least 5 years.<sup>88</sup> Cooper, Woo, and Dunkelberg have found in their study

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<sup>82</sup> cf. Cooper, 1993, p. 241–254

<sup>83</sup> cf. Kirzner, 1985

<sup>84</sup> cf. Covin and Slevin, 1997

<sup>85</sup> cf. Davidsson, 1991, p. 405–429

<sup>86</sup> cf. Lee and Tsang, 2001, p. 583–602

<sup>87</sup> cf. Hornaday and Bunker, 1970, p. 47–54

<sup>88</sup> cf. Hornaday and Bunker, 1970, p. 47–54

of entrepreneurs in the United States, that half of the new companies must be abandoned within the first 5 years.<sup>89</sup>

In addition to growth in revenue and profit, Baum et al. defines the success of business ventures also on the growth of its employees.<sup>90</sup> The growth of the number of employees of the founded company is also used by the authors Davidsson and by the same authors in another article with the authors Delmar and Gartner.<sup>91 92</sup> The authors argue in their article "Arriving at the High-Growth Firm", that growth is important for the survival of a business.<sup>93</sup> The survival of the company is the primary goal of starting a business. In addition to that, not all companies strive for growth.<sup>94</sup>

At the same time, there are authors that reduce the financial success solely on financial metrics and base their studies on these financial indicators. Chandler and Hanks investigate in their study the growth of market share, cash flow and sales.<sup>95</sup> The authors Li et al. base their studies on 3 key figures. This is the growth, profit and efficiency.<sup>96</sup> Sarwoko et al. measure the performance of a company on the revenues, earnings and return on investment.<sup>97</sup> Also the author Beal defines the financial success of new ventures by the growth of profits and sales.<sup>98</sup> Other authors define success as the return on investment, revenue growth, annual profit and income of the company founder.<sup>99 100 101 102</sup>

Beal points out at the same time, that in many studies, qualitative indicators should be used, because new founded companies do not want to provide any information on financial metrics about their company.<sup>103</sup> For example, the authors Sanchez and Marin use in their studies next to financial indicators also qualitative indicators such as the comparison

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<sup>89</sup> cf. Cooper et al., 1988, p. 97–108

<sup>90</sup> cf. Baum et al., 2001, p. 292–303

<sup>91</sup> cf. Davidsson, 1991, p. 405–429

<sup>92</sup> cf. Delmar et al., 2003, p. 189–216

<sup>93</sup> cf. Delmar et al., 2003, p. 189–216

<sup>94</sup> cf. Wiklund and Shepherd, 2003, p. 1919–1941

<sup>95</sup> cf. Chandler and Hanks, 1994, p. 331–349

<sup>96</sup> cf. Li and Chan, 2005, p. 37–57

<sup>97</sup> cf. Sarwoko et al., 2013, p. 31–38

<sup>98</sup> cf. Beal, 2000, p. 27–47

<sup>99</sup> cf. Gatewood et al., 1995, p. 371–391

<sup>100</sup> cf. Gatewood et al., 1995, p. 371–391

<sup>101</sup> cf. Perry et al., 1988, p. 76–79

<sup>102</sup> cf. Begley and Boyd, 1987, p. 79–93

<sup>103</sup> cf. Beal, 2000, p. 27–47

of knowledge and experience with competitors, quality of products and services, rate of innovation in the development of new products and services, environmental protection and teamwork.<sup>104</sup>

According to literature, success is a subjective feeling which is reached by the own actions. This perception is based among other things on the personal characteristics and goals. Therefore, success is hard to measure because it is perceived differently for each person. A measurable success is the financial success of the company. To measure the success of business foundations based on the financial performance has two different advantages. The financial success is the prerequisite for the survival of the company and thus ensure that the prerequisite for the achievement of all other goals that are pursued by the entrepreneur and rated as success. Furthermore, the financial success can be derived in concrete and standardized numbers. This ensures an objective assessment of financial performance of all companies and the success is comparable between companies.

The PSED II record is the only known record of this size with the financial indicators such as the revenue and expenses of the companies. Moreover, the number of employees was queried for each year. While revenue and the cost were answered by a majority of the company, the information on the number of employees is insufficient. This precludes the assessment of financial performance on the number of employees and employee productivity. The financial success is therefore analysed in this study on the return on sales and sales growth. In order to calculate the return on sales over three years, the geometric mean has to be calculated. The geometric mean gives the real rate of return since it accurately captures historic volatility.<sup>105 106</sup>

The dependent and independent variables of the four forces of entrepreneurial motivation model are described for testing the model. The model will be tested by the data of the secondary data set PSED II. The research design and the research methods of the PSED secondary data set are explained in the next chapter. In addition to that, the next chapter covers the calculation of the dependent and the independent variables of the four forces of entrepreneurial motivation model.

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<sup>104</sup> cf. Sanchez and Marin, 2005, p. 287-306

<sup>105</sup> cf. Le Sourd, 2007

<sup>106</sup> cf. Filbeck and Tompkins, 2004, p. 72-80

# 3 Extraction of motivational factors and calculation of surviving success

## 3.1 The research design of the PSED II data set

The quantitative analysis of the relationship between motivation factors and the business surviving success of new ventures must be carried out on a sufficiently large data set. Research in business creation has been hampered by the fact that they did not have sufficient data available for examination. Such an extensive data set is important to understand the process of founding a company entirely. This study is based on the panel study of entrepreneurial dynamics from the University of Michigan.

The first PSED data set consist of 1.261 records of which 830 were nascent entrepreneurs and the rest consists of a random sample from the remaining population. The PSED data comes from a representative sample of the US population. PSED I had four rounds of telephone interviews. The data of PSED I included about 6000 variables.<sup>1</sup> The first PSED study already included the motivation of the entrepreneur as well as financial information of the founded company for 3 years after the company was founded. The PSED record was created from a large number of different questions. As a result, the used scales were shortened.<sup>2</sup> In total, more than 5000 questions were asked. As a result, there are several answers missing in the dataset. By excluding these records, this issue has been resolved but the record has been considerably reduced.<sup>3</sup> PSED I were weighted based on US Census data on the basis of gender, race, education, and age. This allowed the records to be nationally representative. The procedure of PSED I was then used as the basis for a global report on entrepreneurship. This was the Global Entrepreneurship Monitor which conducted 138 representative surveys about entrepreneurship in over 40 countries between 1998 and 2003. Thus, the circumstances and developments of businesses could be compared between the countries.<sup>4 5</sup>

PSED I was carried out at the height of the dotcom bubble. This was an exceptionally time for business foundations. To get a more typical record of entrepreneurship, PSED

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<sup>1</sup> cf. Reynolds et al., 2002

<sup>2</sup> cf. Shaver, 2004

<sup>3</sup> cf. Townsend et al., 2010, p. 192-202

<sup>4</sup> cf. Reynolds et al., 2005, p. 205-231

<sup>5</sup> cf. Reynolds, 2007, p. 1-149



II was launched in the years 2005-2006. The research design of PSED II is an improved version of the procedure for PSED and GEM. PSED II differs from the other data sets in the way, that it was received over 5 years. Through the experience of PSED I and GEM, some methodological improvements have been incorporated. This allowed more reliable data to be recorded. PSED II has a much larger sample with 1.214 entrepreneurs. This allows multivariate analysis methods which lead to valuable results. The PSED data is an indicator of 12.6 million nascent entrepreneurs in the US who found 7.4 million new businesses. The PSED II data set was also weighted based on US Census data to be nationally representative. PSED II was performed without a control group. The data from PSED II consists of a total of about 8000 variables.<sup>6</sup>

The data set was recorded in such a way, that three types of analysis are possible. The first is to find out the types of people and teams who pursue the process of business creation. In addition it should be analysed what happened during the starting process. Also, the correlation between the activities and characteristics of individuals and teams, as well as the different results of the foundation is to be investigated. The PSED II dataset includes exclusively active entrepreneurs at the time the data set was recorded. These entrepreneurs of the dataset meet 4 criteria. (1) The participants themselves must be in a process of business creation. (2) They must have participated in the past 12 months ago in a entrepreneurship activity. (3) It is expected that they own the businesses or parts of it. (4) The company founded is still in the entrepreneurship phase. Therefore, it may not yet be seen as an fully operating business at the point.<sup>7</sup>

The PSED II is a secondary data set which is analysed to test the model in the following. The next chapter reviews the validity, reliability and representativeness of the PSED II data set.

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<sup>6</sup> cf. Reynolds and Curtin, 2007a

<sup>7</sup> cf. Reynolds and Curtin, 2007b

### 3.2 Validity, reliability and representativeness of the PSED II data set

Gartner argues, that the study of the motivation of entrepreneurs through interviews creates problems with validity of the findings. In most cases, the entrepreneurs are asked about their motivation at a time when they are already in business. The survey on the initial motivation is thus answered retrospectively. This falsifies the answer to the question of motivation.<sup>8</sup> This argument is confirmed by Golden. According to Golden, studies with the motivation of entrepreneurs show that they want to justify their reasons later.<sup>9</sup> Therefore, there is a chance that the cause-effect is not an accurate relationship between the motivation and steps which follow.<sup>10</sup>

The peculiarity of the PSED data exist in the fact that entrepreneurs were identified who are currently in the process of business creation. This has the advantage that they have not changed retroactively their motivation. Also, they were at the time of the telephone interview under no observation and were not directed in their responses by external forces. In addition, the long-term study allows a separate consideration of motivation at the time of establishment and of the financial data for each particular time, which is a year or several years after the survey of the motivation. As a result, the motivation and financial numbers of entrepreneurs who have failed after a few years or even in the first year could be obtained. The survey of this data would have been retroactively not possible because these people would no longer be identified as an entrepreneur. The willingness of the entrepreneurs who failed would probably be considered low. A retrospective search of motivation would lead to a distorted picture. The retrospective survey of the motivation involved the justification of the entrepreneur in front of himself and towards others, extenuation and inaccuracies in memory.<sup>11</sup>

It is expected, that the financial crisis of 2008 has an impact on the survival rate of the founded companies. Reynold criticizes the abnormality of the PSED I data set because of the dotcom bubble. It is to be expected, that the dotcom bubble boosted the performance

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<sup>8</sup> cf. Gartner, 1989, p. 27-38

<sup>9</sup> cf. Golden, 1992, p. 848-860

<sup>10</sup> cf. Huber and Power, 1985, p. 171-180

<sup>11</sup> cf. Conway and Ross, 1984, p. 738-748

of entrepreneurship. The financial performance of the companies from the PSED II data set is expected to be lower because of the financial crisis in 2008. The companies in the PSED I and PSED II dataset were all exposed to the same external influential factors. As a result, the influence of each motivational factor on the business surviving success is comparable.<sup>12</sup>

The biggest problem of motivational research in entrepreneurship is the lack of control of the variables. The effect of the motivation of the entrepreneur on the success on a company is difficult to distinguish from other effects. Shane points out that the impact of the business opportunity that exists among others from the idea, industry and region, has a direct impact on the success of the company. The different business opportunities that can aspire by a company's founder, have different major impact on the success. How big the difference in the success of each business opportunity is, has yet not been evaluated by researchers. This makes it difficult to clusters the possibilities and to control this variable.<sup>13</sup>

In most studies, the samples are not specified. In addition, different groups are included in the sample. In some studies, managers and entrepreneurs are separated. In other studies, entrepreneurs, business owners and managers are packed together in one sample.<sup>14</sup> The studies, that examine the difference between managers and entrepreneurs have a weakness. The definition of manager in the studies indicates that these people have a high position in a business organization. This does not exclude that they would not perceive business opportunities when they arise. Then these people would be entrepreneurs, without changing their motivation. Therefore, it cannot be excluded that, in the group of managers are entrepreneurs who did not discover a way to start a business yet.<sup>15</sup> Following this argumentation, managers are seen separately in this study and are therefore excluded.

The entrepreneurs who are interviewed in the studies about their motivation, are located in different sections in the process of founding a business. Steps in starting a business are for example, the founding phase, growth stage and ascent phase. This implies, that the motivation of the founders equally affects all phases. In order to prevent this issue, this

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<sup>12</sup> cf. Reynolds and Curtin, 2007a

<sup>13</sup> cf. Shane et al., 2012, p. 257-279

<sup>14</sup> cf. Hisrich, 1990, p. 209-222

<sup>15</sup> cf. Shane et al., 2012, p. 257-279

study focuses on the motivation at the time that the entrepreneur has been involved in entrepreneurship activities for no longer than 6 month.

Another problem in the relationship between motivation of the entrepreneur and the company's financial success is that an entrepreneur is involved operationally very little when archiving great financial success. Therefore, its motivations are of a small impact on the financial success.<sup>16</sup> This is the reason why the study focuses on the first 3 years after the company was founded. At that time, the development of the company is most dependent on the entrepreneur and a significant relationship is expected. The telephone interviews were implemented, designed and field tested based on the ideas and experiences of the 16 members of the advisory committee.<sup>17</sup>

PSED II is a valid and reliable data set to test the four forces of entrepreneurial model. Although the data set has the weakness to be exclusively recorded in the USA as well as at the time of the financial crisis, it holds to the standard of scientific requirements. The results can only make implications on the motivation of entrepreneurs and the business survival success in the USA. The next two chapters describe the preparation of the motivational factors as well as the key financial performance indicator for the business survival success.

### **3.3 Extraction method of the motivational factors**

The classification of the motivational factors from the model is tested by a factor analysis among the motivational variables of the PSED II data set. The factors are extracted by the principal components method. In order to better interpret the factors, a Promax rotation was carried out with a kappa value of 4. The result was a new matrix with linear combination.

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<sup>16</sup> cf. Shane et al., 2012, p. 257-279

<sup>17</sup> cf. Reynolds and Curtin, 2007b

**Structure Matrix**

	Component			
	1	2	3	4
AW14.IMP: POWER TO INFLUENCE AN ORG	,800			
AW10.IMP: ACHIEVE AND BE RECOGNIZED	,762			
AW11.IMP: DEVELOP IDEA FOR A PRODUCT	,735			
AW13.IMP: FULFILL A PERSONAL VISION	,713			
AW12.IMP: BUILD GREAT WEALTH	,687	,655		
AW6.IMP: FINANCIAL SECURITY		,807		
AW9.IMP: EARN LARGER PERSONAL ...		,801		
AW8.IMP: BUILD BUS KIDS CAN INHERIT		,637		
AW7.IMP: FOLLOW EXAMPLE PERSON ADMIRE			,736	
AW4.IMP: RESPECTED BY FRIENDS			,729	
AW1.IMP: HIGHER POSITION IN SOCIETY			,688	
AW3.IMP: CONTINUE FAMILY TRADITION			,662	
AW5.IMP: FREEDOM TO ADAPT WORK APPROACH				,801
AW2.IMP: GREATER FLEXIBILITY IN LIFE				,786

**Table 3.1:** Loadings from factor analysis of the motivational variables on the motivational factors. Own table.

The first component, component 1, is highly saturated with the factor AW14, "power to influence an organization", AW10 "achieve and be recognized", AW11 "develop idea for a product" and AW13 "fulfill a personal vision". All of these have a value greater than 0,7. AW14 "Power to influence an organization" even has the value 0,8. A further charge on these factors has the AW12 variable "build great wealth" with 0,687. However, this

variable also has a charge of 0,655 on component 2.

With a closer look at component 1, the variable AW12 does not fit thematically with the other factors of the components 1. These can be described as a striving for power, self-representation and the implementation of their own ideas. To accommodate these variables in a common factor, the factor is called need for achievement. In this factor, all variables can be classified.

The second factor has two variables with a high load of  $> 0,8$ . This is AW6 "financial security" with 0,807 and AW9 "earn larger personal income" with 0,801. In addition, the variable AW8 "build business that kids can inherit" is associated with 0,637. These variables thematically build up the topic wealth which can also be passed on to the children. That is why the factor AW12 "build great wealth", which is associated to factor 1 with 0,687 and associated to factor 2 with 0,655, does thematically better fit with factor 2. Taking into account all variables, the common factor is referred to as Financial Reward.

The third factor has 4 variables which are associated with the factor. Two factors have a charge of more than 0,7. These two factors are AW7 "follow example person admire" and AW4 "respected by friends" with 0,729. In addition, there is another variable that is coming close to 0,7. This is the variable AW1 "higher position in society" with 0,688. The 4th variable with a significant load on the third factor is AW3 "continue family tradition" with 0,662. The variables which are assigned to this factor are thematically grouped around the social environment of the entrepreneur. Therefore, the factor is referred to as social recognition.

The last factor has two variables which have a high charge to this factor. The one variable is AW5 "freedom to adapt work approach" with 0,801 and the second variable is AW2 "greater flexibility in life" with 0,786. These two variables can be classified into the striving for independence. Therefore, this factor is known as independence.

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,776
Bartlett's Test of Sphericity	Approx. Chi-Square	440,471
	df	91
	Sig.	,000

**Table 3.2:** Result of the Kaiser-Meyer-Olkin Measure and Bartlett's Test.  
Own table.

The Kaiser-Meyer-Olkin criterion shows to what extent the output variables are related. Based on this criterion, it can be confirmed that the data is suitable for a factor analysis. With 0,776, the value is well above 0,5 which Kaiser, Meyer and Olkin classified as suitable.<sup>18</sup> A value which is close to 1, indicates that the detected pattern of correlations are relatively affected and therefore the factors are reliable and different. According to Kaiser, values greater than 0,5 are acceptable. Furthermore Kaiser ranks values between 0,7 and 0,8 as good. Based on this rating of Kaiser, the 0,776 of the test shows that the factor analysis is suitable for the data.<sup>19</sup>

The Bartlett tests the null hypothesis, that there is no relationship between the variables in the population. It is possible that the correlation is a random result of the population even if the variables in the population are uncorrelated. Therefore, it should be tested whether the samples of the population have the same variance. Otherwise, the factor analysis creates factors which are based on random similarities of the variables. A homogeneity exists when the variances are distributed evenly among the samples. The Bartlett test verifies that the variances are evenly distributed on a group or sample of the population. The correlations are highly significant, because the result of the Bartlett's test of sphericity shows a value of  $<0.0001$ . Since the test is significant, the null hypothesis is refuted with an error probability of 0 percent. In addition to that, it can be concluded that there are correlative relationships between the variables of the population. The loadings of the motivational variables on the factors are high. The classification of the variables is similar to the model. In the next chapter, the key performance indicators of the business survival success are calculated.

<sup>18</sup> cf. Cureton and D'Agostino, 1983, p. 389 f

<sup>19</sup> cf. Kaiser and Rice, 1974, p. 80-88

### **3.4 Calculation methods of the business surviving success indicators**

In the data set of PSED II there are the revenues and expenses of the queried companies over a maximum span of 5 years. All records for which the revenues were available also included expenses and vice versa. Based on the 31,845 screening telephone interviews, 1,214 data sets were available with the information about the entrepreneur and the founded company. Some entrepreneurs did not provide financial information for their business. Other records were incomplete because of several reasons. The entrepreneur may start to refuse to provide further financial information, sold their company or stopped the foundation process. All records were identified, which include revenues and expenses for all 3 years after the foundation. This narrows the available records down to 103, which is a high number considering the limitation of recording financial information of nascent entrepreneurs stated in the last chapters.

In the first step, the profit was calculated from the revenue and expenses for each record and year of the entrepreneurship process. The profit was calculated by the revenue minus the expenses. The next key performance indicator was the return of sales. This indicator was calculated for each record with the information on the revenue and profit. It was also done for each of the three years of the foundation process. Return on sales is calculated by the profit divided by the revenue.

Bases on these indicators, the geometric mean of the return on sales was calculated over a period of 3 years. The geometric means was applied since it gives the accurate capture of historic volatility over the whole period. In addition to that, the return on sales growth, the profit growth as well as the revenue growth was calculated from year 1 to 2 and year 2 to 3.

The calculated key performance indicators as the dependent variables as well as the motivational factors as the independent variables are prepared for testing the relationship between the motivation of entrepreneurs and the business surviving success. In the chapter 4.1: Testing of the hypotheses concerning the impact of entrepreneurial motivation on the financial success of the new venture, this relationship will be tested with different indicators for the business survival success.



# 4 Impact of entrepreneurial motivation on business surviving success

## 4.1 Testing of the hypotheses concerning the impact of entrepreneurial motivation on the financial success of the new venture

In the following chapter, the four forces of entrepreneurial model will be tested with different key performance indicators for the business surviving success. In the main model, the business surviving success is indicated by the geometric mean of the return on sales over 3 years.

The results of the multiple regression of the model with the 4 motivational factors, Need for Achievement, Financial Reward, Social Recognition and Independence as well as the geometric mean of the return on sales over 3 years as the dependent variable shows in the first place, that there is a relationship between these variables. The goal of the multiple regression is to predict the business surviving success depending on the motivational factors. Although this relationship is guided by theory, the multiple regression delivers the scientific proof.

In order to evaluate the impact of the motivational factors on the business surviving success, the R square of the regression is examined. R-square is the variance of the criterion variables which are solved by the predictors and therefore is the measure for the explanatory power of the model in total. R-square indicates how much variance in the dependent variable is explained by the independent variable. As shown in table 4.1, the R square for this model is 0,083. 8,3 percent of business surviving success is explained by the motivation. Therefore, 91,7 percent will remain unknown. There are other variables that have an impact on the business surviving success of the company.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,288	,083	,046	,26824

*Table 4.1: Result of the multiple regression analysis of the four forces of entrepreneurial motivation mode. Own table.*

The R square is a correction based on the numbers of predictors of the R value. The multiple correlation is the simple correlation R of the predicted values with the observed values. R is the multiple correlation of the criterion with all predictors. R represents the joint correlation of the motivational factors with business surviving success. The model of the four motivational factors to predict the company's financial performance has an R of 0,288. This value of R is the value of the multiple correlation coefficient between the motivation factors and the result value. The standard error of the estimate is 0,26824. Therefore, the prediction of financial success by the model has an error rate of 27 percent. The standard error defines the accuracy of the testing.

## ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,645	4	,161	2,243	,070
	Residual	7,123	99	,072		
	Total	7,769	103			

**Table 4.2:** Analysis of variance of the four forces of entrepreneurial motivation model. Own table.

For further analysis, an ANOVA analysis was performed and the results are displayed in table 4.2. The sum of squares reflects the variances and the ratio of the regression sum to the total sum:  $0,645 / 7,769 = 0,083$  which is the R square. 0,645 is the proportion of the total scattering, which is explained by the regression model. 7,123 quantifies the proportion of variance that cannot be explained by the regression model. 7,769 is the total scattering.

Based on the sum of squares as an unstandardised measure for the variance, the variance is further measured by the F-test. The F-test checks whether the predictors are suitable for predicting the criterion. The F-test is based on a decomposition of the variance of the criterion in a declared and undeclared part. For this model, the F-ratio is 2,243. This results in a p-value of 0,07. This gives an overview whether the model can predict the business surviving success significantly well. Since the p-value of 0,07 is greater than 0,05, the null hypothesis should not be rejected. The null hypothesis H0 says, that the motivational factors have no impact on the business surviving success of new ventures and would be rejected by a small F-ratio. Since the null hypothesis can be rejected by a small

**Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,284	,026		48,816	,000
	Need_for_achievement	,034	,029	,123	1,168	,246
	Financial_rewards	-,048	,030	-,173	-1,593	,114
	Social_recognition	,026	,029	,096	,906	,367
	Independence	,063	,028	,228	2,217	,029

**Table 4.3:** *Coefficients of the four forces of entrepreneurial motivation model.*  
Own table.

F-ratio, the regression model is not confirmed. However, since the p value is close to 0,05, it can be concluded that there is a relationship.

In addition to that, the multiple regression shows the impact of each single independent variable on the dependent. Furthermore, the analysis can show how the dependent variable changes if the independent variables change and therefore delivers a prognosis. This is shown in table 4.3. The constant is the intersection of the regression line with the y-axis when  $x = 0$ . The constant is 1,284. The positive sign indicates the direction of the effect. The figure shows how strong each predictor is weighted which is declared the B value. The B value in this case is 0,034 for the "need for achievement". If the independent variable "need for achievement" increases by one unit, then the dependent variables "business surviving success" rises by 0,034 units. The t-tests will determine whether the individual predictors make a significant proportion and shows which predictors are important for the explanation of variance.

In addition to testing the whole models, the influence of each of the motivational factors will be evaluated. The T-Test in table 4.3 shows the significance of the influence of each factor. The only factor which has a significant influence is the motivational factor "independence" with a p value of 0,029. The influence of this factor is the highest on the business surviving success with a B value of 0,063. The three other factors do not have an significant influence. The influence for striving for financial rewards has an negative, but not significant influence. Therefore, the contribution of each motivational factor on the financial performance can be stated as a formula:

Not-standardised:  $Y = 0,34 * x_1 - 0,48 * x_2 + 0,26 * x_3 + 0,63 * x_4 + 1,284$

Standardised:  $Y = 0,123 * x_1 - 0,173 * x_2 + 0,096 * x_3 + 0,228 * x_4$

The business surviving success  $Y$  is influenced positively by the need for achievement with a weight of 0,34, the social recognition by 0,26 and independence with  $B = 0,063$ . The business surviving success is negatively influenced by striving for financial rewards with a  $B$  value of -0,048. Therefore, the business surviving success is influenced the strongest by the desire for independence.

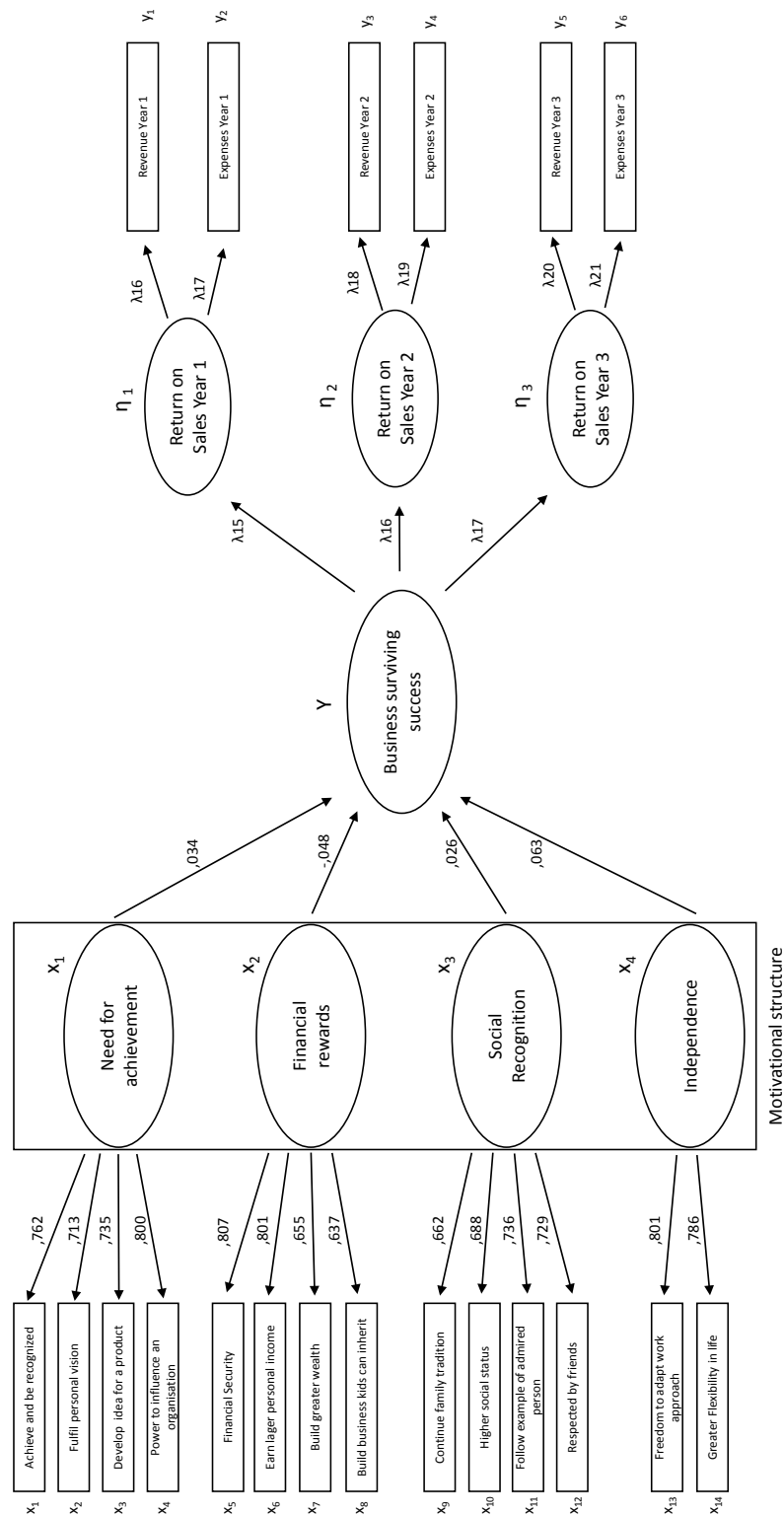
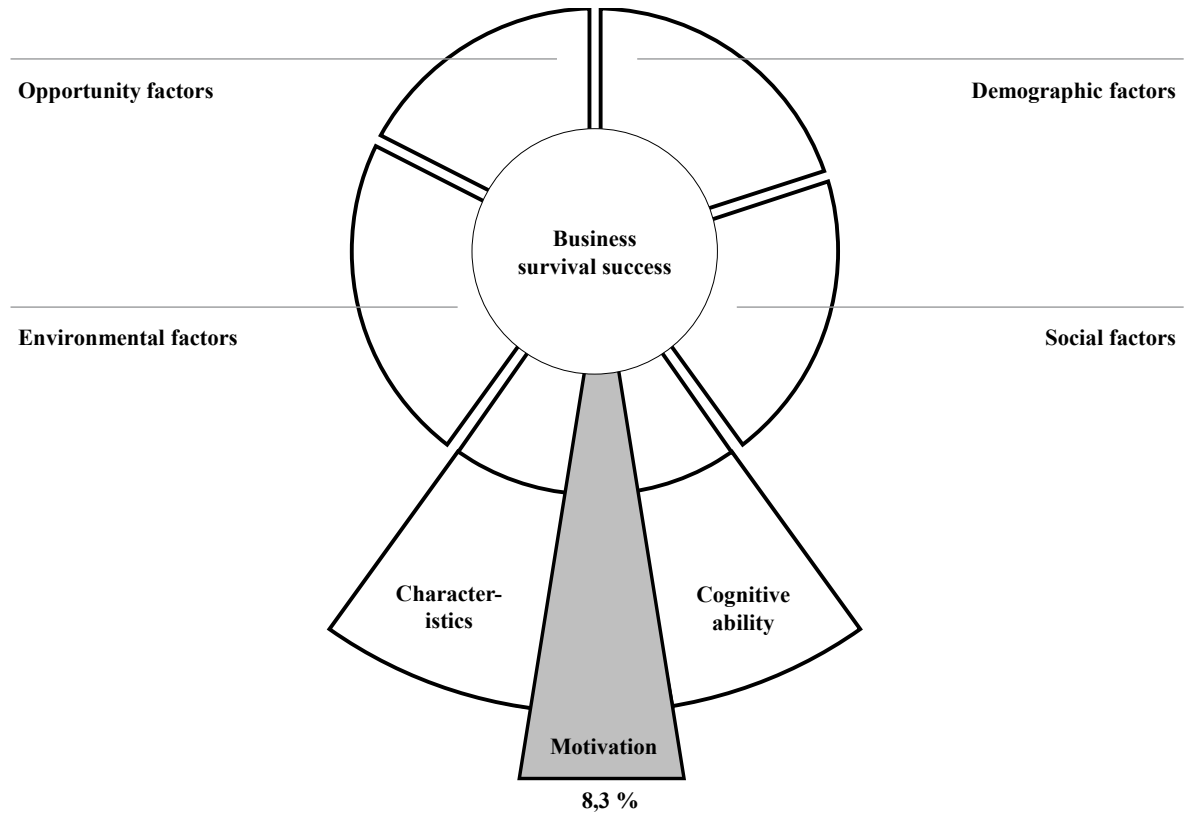


Figure 4.1: Impact of motivational factors on business surviving success. Own figure.

The figure 4.1 shows the results of the factor analysis and the multiple regression analysis. The figure demonstrate the loadings of the motivational variables on each motivational factors. Moreover, the relationships between the individual motivational factors and the business surviving success of the founded company are shown.



*Figure 4.2: Business surviving success can be explained by the motivation of the entrepreneur. Own figure.*

As a result of the multiple regression analysis it can be concluded, that the influence of the motivation on the business success survival is 8,3 % among all factors. Figure 4.2 illustrates the proportion of motivation to the business survival success as one of several factors. The motivation with a share of 8,3 % has a high impact on the business surviving success due to the large number of influencing factors.

The relationship between the motivation of the entrepreneur and the business surviving success is further analysed with other financial indicators. In the first step, the first 3 years after the company is founded are considered separately in order to get a differentiated

insight about the development of businesses.

## 4.2 Impact of motivational factors on return on sales per year

**Year1** The four forces of entrepreneurial motivation model is tested with different performance indicators. These indicators provide differentiated findings of the relationship between the motivation of entrepreneurs and the business surviving success for further analysis.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,303	,092	,055	,33127

*Table 4.4: Result of the multiple regression analysis of the motivational factors and the return on sales in year 1. Own table.*

In the first year after the foundation, there is a relationship between motivation and the company's business surviving success. The motivation factors explain the company's business surviving success with an R square of 0,92 and therefore with 9,2 percent as shown in table 4.4. Compared to the relationship between motivation factors and the geometric mean over the first 3 years, the motivation of the entrepreneur in the first year after the founding has a stronger influence on the success of the entrepreneur. Also, there is a positive correlation between the motivation and business surviving success with an R value of 0,303. In this case, the standard error is 0,33127. Therefore, the prediction of business surviving success through motivation factors from the model, has a 33% chance to be incorrect.

## ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1,100	4	,275	2,506	,047
	Residual	10,864	99	,110		
	Total	11,964	103			

**Table 4.5:** Analysis of variance of the motivational factors and the return on sales in year 1. Own table.

The results of the ANOVA indicate that the model has a significant effect of 0,047 which is below the threshold for significant values of  $p < 0,05$ . Therefore, the relationship between the motivation factors and on the company's success in the first year after the foundation is significant. The model predicts the business surviving success significantly. The F value is 2,506 and therefore above the F value of the geometric mean over 3 years. 1,100 is the percentage of scattering which is explained by the regression model. In contrast, a share of 10,964 cannot be explained by the model. The total scattering is 11,964.

## Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,341	,032		41,291	,000
	Need_for_achievement	-,007	,036	-,021	-,199	,843
	Financial_rewards	-,019	,037	-,056	-,518	,606
	Social_recognition	,072	,036	,211	2,000	,048
	Independence	,070	,035	,206	2,013	,047

**Table 4.6:** Coefficients of the relationship between the motivational factors and the return on sales in year 1. Own table.

The influence of the individual coefficients of the model on the business surviving success of the company foundation is illustrated in the table 4.6. Two factors have a significant influence on the dependent variable. On the one hand the motivating factor "social recognition" with a significance of 0,048 and the motivating factor "independence" with a significance of 0,047. Both motivational factors have an almost equally strong influence. The pursuit of social recognition with a B value of 0,72 has a slightly stronger influence



than the pursuit of freedom with a B value of 0,70. The t-values are similar with  $t = 2,000$  for the motivation to increase the social recognition and  $t = 2,013$  for the motivation for independence.

In the first year after the company is founded, the motivation of the entrepreneur has a significant impact on the business surviving success of a business. The desire for independence and the pursuit of social recognition have the largest and the most significant impact on the business surviving success of a business. Of particular note is, that both motivational factors have an equal influence in strength and significance on the dependent variable.

**Year2** The development of the return on sales is recorded by analysing the impact of the motivational factors on the return on sales of the founded company in the second year.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,094	,009	-,031	,43418

*Table 4.7: Result of the multiple regression analysis of the motivational factors and the return on sales in year 2. Own table.*

After the first year, an influence of the motivation on the business surviving success of the business could be proven. Such proof is no longer possible in the second year after the foundation. In the second year, the motivation factors explain only 0,9 % of the independent variable with an  $R^2$  of 0,009. The adjusted  $R^2$  is merely -0,031 and the standard error is 0,43418. The deterioration of the  $R^2$  in the second year compared to the first year after its establishment suggests that other factors in the second year are more relevant to the business surviving success of the company.

## ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,167	4	,042	,222	,926
	Residual	18,663	99	,189		
	Total	18,830	103			

**Table 4.8:** Analysis of variance of the motivational factors and the return on sales in year 2. Own table.

The significance of the model from the ANOVA analysis with a value of 0,926 is clearly above the threshold of  $p < 0,05$ . This value points to the fact, that the null hypothesis is not discarded. The model of the year 2 explains only 0,167 of the dependent variable. In contrast, the high value of 18,663 comes from other factors which have an influence on the financial success of a business. The F-value is 0,222.

## Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,258	,043		29,539	,000
	Need_for_achievement	,025	,047	,060	,544	,588
	Financial_rewards	-,039	,048	-,092	-,815	,417
	Social_recognition	,012	,047	,028	,254	,800
	Independence	-,003	,046	-,007	-,069	,945

**Table 4.9:** Coefficients of the relationship between the motivational factors and the return on sales in year 2. Own table.

This result of the non-significant relationship is also supported with a look at the detailed correlation between the different factors. All 4 motivational factors have non-significant p-values. With 0,588 for need for achievement, 0,417 for the desire of financial reward, 0,800 for the desire of social recognition and with a p-value of 0,945 for the desire for independence, none of the values is below the threshold for significant values of  $p < 0,05$ . Therefore, in all 4 cases, the hypotheses are rejected and the null hypotheses are retained. In addition to a weak significance, the strength of the effects is small. With values from -0,039 to 0,025, the values are grouped around the zero value.

For the second year after the company was founded, the results draw a different picture compared to the first year. The hypothesis of the motivational influence of entrepreneurs on the financial success of entrepreneurs must be rejected. Also, the 4 sub-hypothesis of the influence of each factor on the independent variable have to be rejected. After the finding, that the motivation in the first year was relevant to the financial success of a business, other factors are essential in the second year of financial performance.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,264	,069	,032	,74455

**Table 4.10:** Result of the multiple regression analysis of the motivational factors and the return on sales in year 3. Own table.

**Year3** In the third year after the company was founded, the influence of the motivation of the entrepreneur on the financial success of the company increases as shown in table 4.10. With an R Square of 0,069, the model of the motivation factors has less impact on the return on sales than in the first year after the company was founded, but significantly more than in the second year after the company was founded. The correlation with a R value of 0,264 is lower than in the first year, in which R was 0,303. The standard error is 0,74455 in the third year.

**ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4,099	4	1,025	1,849	,126
	Residual	54,881	99	,554		
	Total	58,980	103			

**Table 4.11:** Analysis of variance of the motivational factors and the return on sales in year 3. Own table.

The significance of the ANOVA analysis is a p value of 0,126, which is higher than the value of  $p = 0,05$ . Therefore, the model is not significant. The influence of the regression on the independent variable is 4,099. The unexplained portion of the independent variable

by the model is 54,881. The F-value of 1,849 is smaller than in the two previous years. The motivation of the entrepreneur does not have a significant influence in the third year. The result can be explained by the decreasing influence of the entrepreneur on the founded company. The entrepreneur is less involved in the daily operational business. Most entrepreneurs have employees at this point who also have an influence on the success of the business and therefore, the influence of the entrepreneur decreases.

Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1,267	,073		17,349	,000
Need_for_achievement	,048	,080	,064	,602	,549
Financial_rewards	-,130	,083	-,172	-1,572	,119
Social_recognition	,183	,081	,242	2,262	,026
Independence	-,040	,078	-,053	-,512	,610

**Table 4.12:** Coefficients of the relationship between the motivational factors and the return on sales in year 3. Own table.

Although the model is not significantly overall, there is a significance for separate motivating factors. The coefficient "social recognition" has a significant impact on the independent variable with  $p = 0,026$ . The t-value is 2,262 and the strength of influence is 0,183. The other motivating factors have no significant effect on the dependent variable. The influence of the desire for financial success and the desire for independence is negatively directed.

The model with the 4 factors of motivation has no significant overall effect on the financial success of a business. The influence of motivation is lower than the first year and more than in the second year. The only motivating factor with a significant influence on the dependent variable is "social recognition".

The motivational model with 4 motivational factors has in total a significant influence on the financial performance of the company in the first year. In year 2 and 3, the influence on the dependent variable of the model is not significant. While the influence is the highest in the first year after the company was founded with an R Square of 0,09, the model has very little influence in the second year with an R Square of only 0,009. This suggests that the influence of the motivation of the founder is the biggest in the first year and different

factors are exclusively responsible for the financial performance in the second year. It is exciting to realize that after a relatively small influence of motivation in the second year, the influence becomes a lot stronger with an R square of 0,069 for the third year. The influence of motivation is proven and the hypothesis is accepted.

When considering the influences of each individual motivation factor, a differentiated approach is noticed. In the first year, the motivational factor "social recognition" has the strongest influence on the return on sales. The influence of this motivation factor is also significant with a p value of 0,026. In the second year, the desire for social recognition has a much smaller influence of 0,012 but still a positive impact. The influence increases in the third year significantly to 0,183. The influence of the third year is again significant with a p-value of 0,026. It can be concluded, that the desire for social recognition has a positive impact on the financial success of a business in every year. In the first and third year, the influence is also significant. The motivating factor "social recognition" has the most significant influence on all 4 factors of motivation.

Another significant influence is the motivational factor "independence" in the first year after the company was founded. In the first year, the motivating factor has a similarly strong influence on the success of the company with 0,72 as the motivating factor "social recognition". In the following two years, the motivation factor has no significant influence on the success of the company foundation. The impact is very low in the second year of -0,003 and changes in the third year to a negative value of -0,40. Interestingly, the motivation factor has the strongest ( $B = 0,63$ ) and the most significant ( $p = 0,029$ ) influence on the geometric mean of the return on sales over three years. It can be concluded from this fact, that the desire for independence has a very strong influence on the company's financial success in the first year.

In contrast, the motivation factors "financial reward" and "need for achievement" have no significant impact on the financial success of a business in any of the three years. Striving for financial reward has a negative impact on the financial success of the company's founding in all three years. In the first year with  $B = -0,019$ , in the second year with  $B = -0,039$  and in the third year with -0,130. With an increase in the financial motivation, the return on sales of the founded company declines. This is in line with the results from the multiple regression analysis using the geometric mean of the return on sales over 3

years. In the analysis of the motivation factor "financial reward" shows a negative impact on the company's success as the only motivational factor. It can therefore be concluded that the motivation for financial reward has a negative impact on the financial success of a business.

In order to get a more sophisticated view on the relationship between the motivation and the business surviving success, the impact of motivational factors on the return on sales growth is analysed in the next chapter.

### 4.3 Impact of motivational factors on the growth of return on sales

In addition to the geometric mean of the return on sales over 3 years after founding the company and return on sales of each year after the founding, a new viewing angle between the motivational factors and financial success of the company's founding will be added. Here, the growth of the return on sales of one year to the following year is examined.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,170	,029	-,010	57,62594

*Table 4.13: Result of the multiple regression analysis of the motivational factors and the growth of return on sales from year 1 to 2. Own table.*

The correlation between the return on sales growth between year 1 and year 2 after the foundation and motivation of the entrepreneur is  $R = 0,170$ . Here, the R square is 0,029. Thus, only 3 % of the variance is explained by the model of the 4 factors of motivation. The standard error is 57,62594. The relationship between return on sales growth and the motivational factors is weak. The interpretation is that other influential factors become more important after the first year.

## ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9742,784	4	2435,696	,733	,571
	Residual	328754,149	99	3320,749		
	Total	338496,933	103			

**Table 4.14:** Analysis of variance of the motivational factors and the growth of return on sales from year 1 to 2. Own table.

The significance from the ANOVA analysis with a value of 0,571 indicates a lack of significant correlation between the model and the return on sales growth. The results are shown in table 4.14. 328754,149 of the sum of squares remains unexplained. The motivation of entrepreneurs is therefore not an explaining of the development of the return on sales of the founded company.

## Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2,644	5,651		,468	,641
	Need_for_achievement	2,857	6,218	,050	,459	,647
	Financial_rewards	-2,743	6,421	-,048	-,427	,670
	Social_recognition	-8,449	6,265	-,147	-1,349	,181
	Independence	-1,998	6,068	-,035	-,329	,743

**Table 4.15:** Coefficients of the relationship between the motivational factors and the growth of return on sales from year 1 to 2. Own table.

The analysis of the individual coefficients of the model attracts attention in the way that none of the factors has a significant impact on the return on sales growth. Moreover, "social recognition" (B = -8,449), "independence" (B = -1,998) and "financial reward" (B = -2,743), have a negative impact. Only need for achievement has a positive impact with a B of 2,857. Since the results are not significant, it cannot be finally concluded that only the need for achievement has a positive impact on the return on sales from year 1 and 2. With the model itself as well as all correlations of the motivational factors being not significant, there is still a lack of understanding of the impact of motivation on the return

on sales from year 1 and 2.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,223	,050	,011	252,99764

**Table 4.16:** Result of the multiple regression analysis of the motivational factors and the growth of return on sales from year 2 to 3. Own table.

Compared to the return on sales growth between the first and second years after the companies foundation, the strength of the correlation of  $R = 0,170$  increased to  $R = 0,223$ . In addition to that, the proportion of the model which is described increased from  $R$  Square =  $0,029$  to  $R$  Square =  $0,050$ . The adjusted  $R$  Square becomes positive with an  $R$  square value of  $0,011$ . But, there is a much higher standard error of  $252,99764$ .

**ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	330702,952	4	82675,738	1,292	,279
	Residual	6336772,851	99	64007,807		
	Total	6667475,803	103			

**Table 4.17:** Analysis of variance of the motivational factors and the growth of return on sales from year 2 to 3. Own table.

The model with the return on sales growth between the second and third year after the foundation is not significant with a significance of  $0,279$ . As demonstrated in table 4.17, the F-value is small with  $1,292$ . Since the motivation does not have an significant impact on the growth of the return on sales from year 1 to 2 as well as from year 2 to 3, it can be concluded, that the growth of a company is not linked to the motivation of the entrepreneur. Other external factors or aspects of the entrepreneur have an impact on the growth of the company.



Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	14,009	24,808		,565	,574
	Need_for_achievement	8,334	27,299	,033	,305	,761
	Financial_rewards	3,555	28,191	,014	,126	,900
	Social_recognition	53,861	27,504	,212	1,958	,053
	Independence	-11,981	26,639	-,047	-,450	,654

**Table 4.18:** *Coefficients of the relationship between the motivational factors and the growth of return on sales from year 2 to 3. Own table*

The analysis of the relationship between the individual coefficients and the return on sales growth of year 2 to 3 reveals that one value can be regarded as significant although it is slightly above the p value of 0,05. This is the motivating factor "social recognition" with a p value of 0,053. It has a very strong influence with an unstandardised coefficient value of  $B = 53,861$ . The other three factors are not significant. The motivating factor "independence" has a negative influence with a B value of -11,981.

#### 4.4 Impact of motivational factors on revenue growth

In a further detailed analysis of the motivation of the company's founder on the financial success of the company, the financial success will be considered as the revenue growth. It has to be taken into account, that the revenue of a company does not show any indication on the profitability of the company as the return on sales did. Nevertheless, the relationship between the motivation and sales growth shows an indication of the impact of motivation on the financial performance of the company.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,204	,042	,003	79,31920

**Table 4.19:** Result of the multiple regression analysis of the motivational factors and the growth of revenue from year 1 to 2. Own table.

The model has a correlation value of  $R = 0,204$  and an R square value of 0,42. Adjusted R Square is only 0,003 with a standard error of 79,31920. The model in total does not have a significant influence with a p value of 0,371. 27160,154 Sum of Squares of the dependent variable are explained. It can be concluded that the motivational factors in total do not have an significant impact on the growth of revenue from year 1 to 2.

**ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	27160,154	4	6790,039	1,079	,371
	Residual	622861,956	99	6291,535		
	Total	650022,110	103			

**Table 4.20:** Analysis of variance of the motivational factors and the growth of revenue from year 1 to 2. Own table.

When considering the individual coefficients of the model it attracts attention, that the motivating factor "need for achievement" is close to the threshold of  $p = 0,05$  with a significance of 0,067. In addition to that it sticks out, that this motivational factor has the only positive influence on the dependent variable with a B value of 15,848. As a result the motivation need for achievement has an impact on the growth of revenue from year 1 to 2.

## Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	20,323	7,778		2,613	,010
	Need_for_achievement	15,848	8,559	,199	1,852	,067
	Financial_rewards	-2,380	8,838	-,030	-,269	,788
	Social_recognition	-2,065	8,623	-,026	-,240	,811
	Independence	-8,334	8,352	-,105	-,998	,321

**Table 4.21:** Coefficients of the relationship between the motivational factors and the growth of revenue from year 1 to 2. Own table.

The motivating factor "need for achievement" has no significant or strong correlation in the analysis with the return on sales as the key performance indicator. In the multiple regression with sales growth, this factor is identified as the most influential motivating factor. This suggests that people with the motivation to achieve are focused exclusively on the revenue and neglect the associated costs. The interpretation is that people with the need for achievement take higher risks and accept the possibility of a unsuccessful venture.

## Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,212	,045	,006	234,02489

**Table 4.22:** Result of the multiple regression analysis of the motivational factors and the growth of revenue from year 2 to 3. Own table.

When considering the sales growth between years 2 and 3 after the company was founded it is a interesting finding, that the difference to the sales growth between years 1 and 2 is very low. The strength of the correlation is slightly stronger with an R of 0,212. The R Square is also slightly higher with 0,045. This also applies to the adjusted R Square of 0,006. Compared to the impact of the motivation on the geometric mean of the return on sales over 3 years, the impact on the revenue growth from year 2 to 3 is half as strong. In total, the impact of motivation is small on the growth of revenue as well as on the growth of the return on sales.

## ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	255043,739	4	63760,935	1,164	,331
	Residual	5421997,045	99	54767,647		
	Total	5677040,784	103			

**Table 4.23:** Analysis of variance of the motivational factors and the growth of revenue from year 2 to 3. Own table.

The overall model is also not significant with a p-value of 0,331. The model describes 255043,739 of the dependent variable. This finding is consistent with the impact of the motivation on the growth of revenue from year 1 to 2. Looking at the p-value of all growth indicators as the return on sales growth as well as the revenue growth it becomes clear that the motivation cannot explain the growth of new founded companies. External factors or other aspects of the entrepreneurs are responsible for the growth of entrepreneurship. A more sophisticated interpretation can be made about the motivational factors as shown in table 4.24.

## Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	64,415	22,948		2,807	,006
	Need_for_achievement	-47,418	25,251	-,202	-1,878	,063
	Financial_rewards	13,812	26,077	,059	,530	,598
	Social_recognition	13,057	25,441	,056	,513	,609
	Independence	-23,894	24,642	-,102	-,970	,335

**Table 4.24:** Coefficients of the relationship between the motivational factors and the growth of revenue from year 2 to 3. Own table.

A surprising view arises if the motivation factors are considered individually. Here, the motivating factor "need for achievement" is again clearly more significant than the 3 other factors. This factor has a p-value of 0,063 and therefore is higher than the p-value threshold for significant factors of 0,05. Interestingly is especially, that in contrast to sales growth from year 1 to 2, the motivation "need for achievement" has a negative impact on the

financial performance measured as the sales growth.

Within the model of the influence of motivation on the return of sales motivation, the factors "social recognition" and "independence" are the factors with the greatest impact. The influence of motivation on sales growth produces a more nuanced picture. In this case, the need of achievement motivation is the most relevant factor for the financial success.

The results of the testing the model with varies indicators of business surviving success show that the motivation of entrepreneurs has an high impact on the success of the new venture. The motivational factors have a sophisticated influence on the financial performance and therefore on the business surviving success. In the conclusion, the findings of the study are discussed in detail and recommendations are given in the last chapter of the study.

# Conclusion and Recommendations

## Enhancing the theory in the field of motivational factors

It can be concluded that the models in the field of motivation are insufficient for explaining motivational factors of entrepreneurial motivation. The results show, that the striving for independence has an significant impact on the business surviving success. The conclusion of reviewing the motivation models as well as studies in the field of motivation in table 2.2, "Classification of motivational factors for development of a new model" shows, that striving for independence is part of the studies but not part of the motivational models. The results of testing in this study show, that a new model has to be scientifically applied to explain the motivation of entrepreneurs. Based on the results of this dissertation, the four forces of entrepreneurial motivation model is suitable for explaining the different motivational factors and the business surviving success of entrepreneurs.

The lack of models for entrepreneurial motivation becomes clear when analysing the studies about the motivation of entrepreneurs of other authors. Table 2.1 "Motivational factors of studies." shows that all studies are based on a different classification of motivational factors for entrepreneurs. This results in a lack of comparability between the studies and further studies cannot be easily based on the these results. The four forces of entrepreneurial motivation model enhances the scientific research in the area of entrepreneurial motivation by delivering a common framework for the classification of the motivational factors.

The relationship between the needs of the entrepreneur as the motivation and the business surviving success can be supported by this study. The results of this thesis are backing the argumentation of Carl Menger, that the individual needs of people are the driving force for economic activities through entrepreneurship. In addition to that, the study shows that different motivational factors have a differentiated impact on the business surviving success. This results in the conclusion, that it is relevant for the business surviving success, which motivational factor is the driving force for the entrepreneurship. The conclusion can be drawn, that the higher the motivational factor is on the hierarchy of needs by Maslow, the better the business surviving success is. The motivational factor "financial reward" does not have any significant impact on the business surviving success, whereas the motivation on higher levels of the hierarchy become more important for explaining the business surviving success. By classifying the results in the concept of Herzberg, it can

be concluded, that motivators have a more significant impact on the business surviving success in comparison to hygiene factors.

For the management theories it can be concluded, that people who are motivated by autocratic motivation have no significant impact on the business surviving success. The autocratic motivation can be find again in the theories of Ackoff and Davis. According to the results of this study, this kind of motivation has even a negative impact on the business surviving success. In the organisation of Likert, it is the exploitive authoritative motivation and in McGregor's views of management it is the factors of theory X which have a negative but not a significant impact. The impact is more significant when the entrepreneur is motivated by social recognition and self-actualization motivational factors in the management science.

	<b>Motivational factors studies</b>	<b>Content motivation theories</b>	<b>Management motivation theories</b>
Independence	Independence	<i>Independence</i>	<i>Independence</i>
Need for achievement	Need for achievement	Self-actualization	Self-actualization
Social recognition	Social recognition	Social recognition	Social recognition
Financial reward	Financial reward	Financial reward	Security, survival

**Table 4.25:** *Enhancing the motivational theories. Own table.*

The studies in the field of entrepreneurial motivation as well as the results of this study show, that the motivational theories are insufficient. The motivational factors of the four

forces of entrepreneurial motivation model are not ordered in any hierarchy. Therefore, it is not possible to complete the existing motivational theories. As shown in the table 4.25, the content motivation theories and management motivation theories should include the striving for independence. For adding this motivational factor in the theories, further research is necessary. Table 4.25 shows the insufficiency of the theories and that independence as a motivational factor should be added in the theories, but it does not make any implication about the place in the hierarchy of the motivational factors.

## **Conclusion**

1. Four different categories of motivational factors have an influence on the business surviving success.

- The results of the factor analysis show that the 14 different motivation variables can be grouped into 4 motivating factors which have a similar structure. People, who are driven by the power to influence an organization, to achieve and be recognized, developing idea for a product and to fulfil a personal vision, want to achieve something in life and they want to prove it by starting their own company. These entrepreneurs are driven by the Need for Achievement.
- Another drive for starting a business attracts people from the pursuit of financial reward. The goals are building great wealth and financial security. Furthermore, they are driven by dissatisfaction with the current income into starting their own company in order to receive a higher income. Another motivation is to build up a company that their children can inherit. All these motivations are grouped around the Financial Reward that can be drawn from the foundation.
- The third category of motivations is the desire for Social Recognition. It includes people who are motivated by a role model and to continue family tradition to work entrepreneurial. In addition to that, the category includes entrepreneurs who strive for respect among friends and a higher position in the society.
- The motivational factor which has the most significant influence on the business surviving success is the need for Independence. It includes entrepreneurs who start a



business because they desire more freedom to the approach of their work as well as more flexibility in their life.

2. The motivational factors of entrepreneurs have a differentiated influence on the business surviving success.

- The multiple regression analysis of the model shows that there is an influence of motivation on the business surviving success of entrepreneurs. The influence of the model with its 4 different motivational structures is significant. This results in a prerequisite for the differentiated analysis of the individual motivation factors on the business surviving success of entrepreneurs.
- The differential considering of the motivational structures of entrepreneurs leads to the results, that various motivational factors have an differentiated influence on the financial performance of the new venture.
- Another finding of the study is that the motivation of the entrepreneur has the strongest influence on the business surviving success at the first year after the company was founded. This can be explained by the small number of employees for the establishment of the company who could affect the development of the company. In addition, the company is tailored to the entrepreneur which affects it with personality and goals. The company is based on the idea of the entrepreneur and is more independent of external influences from the environment as it is in the following years.

3. The desire for independence has the most significant and strongest influence on the business surviving success.

- The differential considering of the motivational structures of entrepreneurs leads to the results, that the drive for independence has the strongest and most significant impact on the business surviving success of new ventures. It has a significant influence on the geometric mean over three years.
- In addition to that, when looking at the financial performance of each year after the foundation separately, the motivational factor "independence" has a significant influence in the first year of the founding process. The pursuit of independence has in the following years as well as on the return on sales growth and revenue growth no significant impact on the business surviving success.

- The conclusion can be drawn, that the entrepreneur is motivated through the acquired freedom of working for himself in the first year. By striving for independence and freedom, these entrepreneurs focus their life not entirely on the business creation and work less than other entrepreneurs. This has a negative impact on the business surviving success of the company in the following years. Thus, the entrepreneur meets his personal goal to have more freedom and let his life not be determined by the company. The financial success is neglect compared to other people with different motivational factors.
4. The motivation for financial reward has a negative influence on the business surviving success.
- The motivation for financial reward has both an inferior level of significance and a negative impact on the business surviving success of new companies. Striving for financial reward has poor significance, indicating a lack of influence of the financial motivation to the business surviving success of a business in all multiple regression analysis.
5. Striving for social recognition has significant long-term influence.
- In the first year after the company was founded, the motivation "social recognition," also has a significant and positive impact on the business surviving success of the company. Unlike the motivational factor "need for independence", this desire also leads to a long-term business surviving success. In addition to the significant influence of the motivation for social recognition in the first year, this motivational structure also has a significant impact on the financial performance in the third year. This results in a long-term success of people who are driven by a desire for social approval.
  - This is also consistent with the study of the influence of motivational structures on the return on sales growth. The growth of the return on sales from year 2 to year 3 is significant influenced by the motivational factor "social recognition". It must be stated here, that social recognition has the only influence on return on sales growth.
6. Need for achievement has an influence on the growth of sales but not on the return on sales.

- Another finding of the study is that the need for achievement has a significant impact on the growth of sales but not on the growth of return on sales. Interestingly, the motivation has a significant but an opposite influence on the growth from year 1 to year 2 and year 2 to year 3. While these motivational structure has a positive impact on growth from year 1 to year 2, the influence of motivation on growth is negative in year 2 to year 3.
- The significant effect of the need of achievement on sales is explained by the fact that people with the need for achievement want to realize their own idea in the form of a vision or product. This very personal idea about the company and the company's development means that the entrepreneur has a very direct and intense influence on the company.
- People who are driven by the need for achievement, are seeking a higher social status and want to increase their recognition in society. This means that they compare themselves as entrepreneurs with other people by the financial success of their company. Therefore, these entrepreneurs want to establish a large and rapidly growing company. The focus is therefore on sales rather than putting the same attention on the costs.

## **Recommendations**

Although the results of this study are based on USA data and the conclusion are made for entrepreneurs in the USA, the agencies, venture capitalist, entrepreneurs, employees and companies outside of the USA can use the results for thought-provoking impulses.

To the investment promotion agency of governments

- The purpose of investment promotion agencies is to encourage entrepreneurs to establish new businesses. In order to motivate them target-oriented, an understanding of the motivation of entrepreneurs is necessary.
- In the USA, the Small Business Administration provides frameworks conditions for entrepreneurs in the USA. In order to develop preconditions for successful entrepreneurs, the motivation of successful entrepreneurs have to be understood. The agency should

select a target of the investment to address the motivation of people who strive for independence and social recognition.

- In the EU, the investment promotion agencies in the countries can select how to use the money from the EU structural funds. The agencies in the EU can use the results for thought-provoking impulses on how to spend the money from the EU structural funds.
- The introduction of a basic income for entrepreneurs which encourages them to become independent will support them to start their own business. The desire for independence is the motivation with the most significant and positive impact on the business surviving success after the company was founded. This basic income helps people to become independent from an old job and become successful with their founded company. This motivates more people to start their own business who have a high probability of success with their new venture.
- The agencies should make successful entrepreneurs well-known and support them to become role models. People who follow these role models and also seek such recognition in society have a higher probability to start a successful business and thus to promote economic development.
- Competitions between entrepreneurs should be organized by the agencies to increase the social value in society and raise the social position in society.
- A higher taxation of entrepreneurs from a certain level, however, has no negative impact on the economic growth of the country, as there is no significant relationship between the motivation for financial reward and the business surviving success of the company.

To Venture capitalists

- Venture capitalist should consider the motivating factors of the company founder when choosing their investments, in order to increase the chances of success in their investment.
- VCs should not set strict specifications and procedures for the development of an entrepreneurship, as this blocks the motivation of the entrepreneur's own work approach and thus the motivation is reduced.

- With entrepreneurs who start a company because of the Need for achievement motivation, the exit should be done after a maximum of 2 years since the correlation between this motivational factor and the company's business surviving success becomes negative.
- When the entrepreneur start a business just because of financial incentives, more factors have to be considered to evaluate the investment.

To Researchers in the field of entrepreneurship

- The impact of different policies for different motivational factors from the model should be examined in terms of economic development of a country. It is expected that the creation of conditions for motivating people to seek independence and social recognition has a positive impact on the economic development of a country.
- The findings from this study can be examined on the basis of Hofstede index. In countries where it is possible for people to strive for independence through a corporate foundation, there should be more successful businesses and higher economic development.

To companies

- The motivation of employees who want to start as intrapreneurs in the company where they are employed should be examined in detail. Employees who wish to improve their payment have a more improbable chance to build a successful business than employees who want to strengthen their independence or their social position within the company.
- The entrepreneur should have no restriction and rules for the establishment of an intrapreneurship in terms of flexible working hours and own approach.

To Employees

- The desire for independence as a motivation has a significant and positive impact on the success of a business. Employees, who wish to start their own business because of this kind of motivation, have good prospects of success.

## To Entrepreneurs

- The motivation for starting a business is a good indicator about the success of the company. However, the decision to act entrepreneurial should not be based alone on this criterion, since only 10 percent of the success of establishing is explained by motivation.

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