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Entrepreneurial Success“

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Table of Contents

INDEX OF FIGURES	III
INDEX OF TABLES	IV
EXECUTIVE SUMMARY (GERMAN)	V
EXECUTIVE SUMMARY (ENGLISH)	VII
1. INTRODUCTION	1
1.1. DEFINITION OF ENTREPRENEUR AND THEORIES OF ENTREPRENEURSHIP	2
1.1.1. <i>Definition of Entrepreneur</i>	2
1.1.2. <i>Theories of Entrepreneurship</i>	3
1.2. IMPORTANCE OF ENTREPRENEURSHIP	5
1.3. ENTREPRENEURIAL PROCESS AND PHASES OF ENTREPRENEURSHIP	9
1.4. CONCLUSION	12
2. BUSINESS PLANNING AND ENTREPRENEURSHIP	13
2.1. THEORIES OF STRATEGIC MANAGEMENT: THE PLANNING SCHOOL	15
2.2. THEORIES OF STRATEGIC MANAGEMENT: THE LEARNING SCHOOL	19
2.3. BUSINESS PLANNING AND ENTREPRENEURIAL PERFORMANCE	22
2.4. CONCLUSION	28
3. EFFECTUATION AND ENTREPRENEURSHIP	29
3.1. DIFFERENCES CAUSAL ACTION VS. EFFECTUAL ACTION	29
3.2. PRINCIPLES OF EFFECTUATION AND EFFECTUAL CYCLE.....	32
3.3. EFFECTUATION AND ENTREPRENEURIAL PERFORMANCE	35
3.3.1. <i>Means and Venture Performance</i>	37
3.3.2. <i>Strategic Alliances and Venture Performance</i>	40
3.3.3. <i>Exploitation of Contingencies and Venture Performance</i>	42
3.3.4. <i>Affordable Loss Principle and Venture Performance</i>	43
3.4. CONCLUSION	45
4. WHO DOES BUSINESS PLANNING	46
4.1. EDUCATION AND BUSINESS PLANNING	48
4.2. FINANCING AND BUSINESS PLANNING	50
4.3. EXPERIENCE AND BUSINESS PLANNING.....	52
4.4. SELF-EFFICACY, MOTIVATION AND BUSINESS PLANNING	53
4.5. CONCLUSIONS.....	56

5. DATASET AND VARIABLE DESCRIPTIONS.....	57
5.1. THE PANEL STUDY ON ENTREPRENEURIAL DYNAMICS.....	57
5.2. OVERVIEW OF THE VARIABLES.....	59
5.2.1. <i>Dependent Variables</i>	59
5.2.2. <i>Independent Variables</i>	60
5.2.3. <i>Business Planning Variables</i>	62
5.2.4. <i>Control Variables</i>	64
6. DATA ANALYSIS	65
6.1. DESCRIPTIVE STATISTICS OF THE DATASET	65
6.2. DESCRIPTIVE STATISTICS OF THE DEPENDENT VARIABLES	67
6.3. SUMMARY STATISTICS OF DEPENDENT AND BUSINESS PLANNING VARIABLES	69
6.4. CORRELATIONS.....	72
7. RESULTS	75
7.1. TESTING HYPOTHESIS 1 AND 2	76
7.1.1. <i>Regressions and Methodology</i>	76
7.1.2. <i>Fit of the models</i>	79
7.1.3. <i>Results</i>	80
7.2. TESTING HYPOTHESES 3A–3D	82
7.2.1. <i>Regressions and Methodology</i>	82
7.2.2. <i>Fit of the models</i>	82
7.2.3. <i>Results</i>	84
7.2.4. <i>Conclusion Hypotheses 3a-3d</i>	87
7.3. TESTING FOR ENDOGENEITY.....	88
7.3.1. <i>Methodology</i>	88
7.3.2. <i>Results</i>	91
8. CONCLUSION	93
8.1. CONCLUSION: IS BUSINESS PLANNING BENEFICIAL?.....	93
8.2. CONCLUSION: WHO DOES BUSINESS PLANNING?	95
REFERENCES.....	97
BIBLIOGRAPHY	97
ONLINE RESOURCES	113
CURRICULUM VITAE	I

Index of Figures

FIGURE 1: TOTAL EARLY-STAGE ENTREPRENEURIAL ACTIVITY RATES AND PER CAPITA GDP 2010 (KELLEY ET AL. (2011)).....	7
FIGURE 2: THE ENTREPRENEURSHIP PROCESS AND GEM OPERATIONAL DEFINITIONS (KELLEY ET AL. (2011)).....	9
FIGURE 3: A MODEL OF THE ENTREPRENEURIAL PROCESS (BYGRAVE AND ZACHARAKIS (2011) - BASED ON CAROL MOORE'S MODEL).....	10
FIGURE 4: CONTRASTING CAUSATION AND EFFECTUATION (SARASVATHY (2001)).....	31
FIGURE 5: EFFECTUATION IN ACTION (BASED ON SOCIETY FOR EFFECTUAL ACTION (2012) AND DEW AND SARASVATHY (2005)).....	34
FIGURE 6: NASCENT ENTREPRENEURS BY BUSINESS CRITERIA AND RECENT START-UP CRITERIA (CURTIN AND REYNOLDS (2008)).....	57
FIGURE 7: OVERVIEW OF THE EMPIRICAL ANALYSES.....	75

Index of Tables

TABLE 1: SUMMARY STATISTICS OF THE VARIABLES	65
TABLE 2: FREQUENCIES OF DIFFERENT BUSINESS PLANNING VARIABLES	67
TABLE 3: FREQUENCIES OF DISBANDMENT AND PERCEPTION OF EMERGENCE ACROSS INDUSTRIES.....	68
TABLE 4: TWO-WAY TABLES OF FREQUENCIES:	
DISBANDMENT AND PERCEPTION OF EMERGENCE.....	68
TABLE 5: TWO-WAY TABLES OF FREQUENCIES:	
DISBANDMENT/PERCEPTION OF EMERGENCE AND BUSINESS PLANNING	69
TABLE 6: TWO-WAY TABLES OF FREQUENCIES:	
DISBANDMENT/PERCEPTION OF EMERGENCE AND BUSINESS PLANNING INTENSITY	70
TABLE 7: CORRELATION MATRIX WITH PAIRWISE CORRELATIONS.....	72
TABLE 8: MARGINAL EFFECTS OF LOGISTIC REGRESSIONS ON DISBANDMENT AND PERCEPTION OF EMERGENCE	78
TABLE 9: MARGINAL EFFECTS OF PROBIT REGRESSIONS ON BUSINESS PLANNING VARIABLES.....	84
TABLE 10: RESULTS OF BIVARIATE PROBIT MODELS FOR TESTING ENDOGENEITY	91

Executive Summary (German)

Ziele dieser Arbeit

Ziel dieser Arbeit ist die Analyse des Zusammenhangs zwischen verschiedenen unternehmerischen Planungsaktivitäten und dem Erfolg von Jungunternehmen. Die Erstellung diverser Pläne (Absatz- und Finanzplanungen) bzw. Strategien ist eine der Kernaufgaben des Managements. Gerade in Jungunternehmen ist diese Frage sehr bedeutend, da sich das Unternehmensumfeld rasch ändern kann, wenn neue Märkte erschlossen werden. Diese Magisterarbeit unterstreicht die Wichtigkeit von Jungunternehmen für die Wirtschaft, weshalb es von hoher Relevanz ist, ob Planungen einen wesentlichen Beitrag zum Erfolg von Jungunternehmen leisten. Institutionen und Banken heben die Wichtigkeit von Geschäftsplänen hervor, wenn man etwa einen Kredit benötigt. In der Literatur wie z.B. Honig (2004) wird darauf hingewiesen, dass Geschäftspläne wissenschaftlich weder theoretisch noch empirisch ausreichend gerechtfertigt sind. Um diesen Zusammenhang zu untersuchen beschreibe ich zwei verschiedene Theorien. Einerseits diskutiere ich in der vorliegenden Arbeit den Planungsansatz, der besagt, dass Planungsaktivitäten sinnvoll sind und andererseits einen Ansatz, der das Handeln der UnternehmerInnen, anstatt der Planung in den Vordergrund stellt (Effectuation Theory). Diese Arbeit präsentiert zu jeder dieser Theorien verschiedene wissenschaftliche Artikel, die die jeweiligen Zusammenhänge zwischen den Theorien und dem Unternehmenserfolg von Jungunternehmen untersuchen. Aufgrund der präsentierten wissenschaftlichen Ergebnisse werden anschließend Hypothesen gebildet, die empirisch getestet werden.

Zusätzlich zur Untersuchung des Zusammenhangs zwischen Unternehmenserfolg und Planungsaktivitäten beschäftigt sich diese Arbeit mit der Frage welche Kriterien dazu führen, dass JungunternehmerInnen Planen.

Methodik

Der empirische Teil dieser Arbeit nützt die Ergebnisse der zweiten Panel Study of Entrepreneurial Dynamics (PSED II). Diese Studie wird wissenschaftlich in diversen Publikationen verwendet, was die Vergleichbarkeit der Ergebnisse erhöht. Um die Effekte zwischen Planung und Unternehmenserfolg zu analysieren, werden

verschiedene logistische Regressionen und Probit Modelle verwendet, da es sich bei den abhängigen Variablen um binäre Variablen handelt.

Ergebnisse

Die durchgeführten Regressionen zeigen, dass Unternehmen, die Planungen durchgeführt haben mit einer höheren Wahrscheinlichkeit überleben. Weiters zeigt sich, dass UnternehmerInnen, die Planungen erstellen, auch mit größerer Wahrscheinlichkeit ein operativ-tätiges Unternehmen haben. UnternehmerInnen, die verschiedene Planungen, wie etwa Finanzplanungen und Geschäftspläne erstellt haben, besitzen zusätzlich eine höhere Wahrscheinlichkeit zu überleben und als Unternehmen operativ tätig zu werden. Dies zeigt, dass die Durchführung von mehreren verschiedenen Planungen einen positiven Einfluss auf den Erfolg von Jungunternehmen hat.

Im zweiten Teil der empirischen Analyse untersucht diese Arbeit Faktoren die zu einer höheren Wahrscheinlichkeit führen, dass JungunternehmerInnen Planungen erstellen. Hierbei zeigt sich, dass Unternehmen, die Finanzmittel benötigen bzw. auch die, die Finanzmittel bekommen haben, eine deutlich höhere Wahrscheinlichkeit besitzen, Planungen durchzuführen. UnternehmerInnen mit höherem Ausbildungsgrad besitzen außerdem eine höhere Wahrscheinlichkeit, dass sie im Unternehmen Planungen durchführen. Motiviertere UnternehmerInnen und jene mit größerem Selbstvertrauen haben ebenso eine höhere Wahrscheinlichkeit, Planungen durchzuführen. Interessanterweise ist ersichtlich, dass die Erfahrung von UnternehmerInnen mit/in Jungunternehmen keinen signifikanten Einfluss auf die Wahrscheinlichkeit hat, Planungsaktivitäten durchzuführen. Arbeitserfahrung beeinflusst diese Wahrscheinlichkeit in geringem Maße positiv.

Executive Summary (English)

Aims of this thesis

This master thesis focuses on a very important topic, namely on the effects of Business Planning on entrepreneurial success. As presented in this thesis, entrepreneurs serve the economy in different ways and therefore it's of crucial interest, how the performance of new ventures can be increased. As Business Planning is popular and widely discussed, I present the planning approach theoretically and discuss articles that investigate the relation between entrepreneurial performance and Business Planning. Another important theory regarding entrepreneurial success, namely Effectuation Theory, is presented in order to get another view on determinants of entrepreneurial success. Therefore, I provide an overview of different articles that analyse the relation between Effectuation and entrepreneurial success. Furthermore, this thesis is aimed at investigating whether suggestions for undertaking Business Planning activities of different institutions can be validated. Therefore this thesis investigates the influence of Business Planning on the performance of nascent entrepreneurs empirically. The final section provides additional evidence why nascent entrepreneurs undertake Business Planning activities and mentions different factors that enhance the likelihood of undertake Business Planning activities.

Methodology

Methodologically, I use the second Panel Study of Entrepreneurial Dynamics (PSED II) dataset in order to test the Hypotheses, which are developed from evidence provided by current articles in this field of research. As the dependent variables are dichotomous, this thesis uses different logistic and probit models for the regression analyses. In order to test for endogeneity, I use a bivariate probit model.

Results

Results show that undertaking Business Planning activities decreases the likelihood of Disbandment. Additionally, it increases the likelihood of perceiving the venture as emerged. Furthermore, Business Planning was measured by Business Planning Intensity and results show that nascent entrepreneurs who undertook a greater number of different Business Planning activities from a set of variables, have a smaller likelihood of

Disbandment and a greater likelihood of perceiving the venture as emerged. Therefore, this master thesis provides evidence that Business Planning enhances the success of new ventures.

Additionally, it is investigated whether different variables affect the likelihood of undertaking Business Planning activities. I found that a marginal change in the level of Formal Education and Startup Motivation, as well as the need for getting financial support and received financial support increase the likelihood of undertaking Business Planning activities. Opposed to expectations, Entrepreneurial Experience does not affect the likelihood of undertaking any Business Planning activity significantly, while I found for Labor Experience a small positive marginally significant effect. Additionally, a marginal change in the nascent entrepreneur's level of Self-Efficacy increases the likelihood of undertaking Business Planning activities significantly.

1. Introduction

This master thesis focuses on one of the most important topics for entrepreneurs, namely on determinants that lead to success. This is especially important as the current age is according to Bygrave and Zacharakis (2011) the entrepreneurial age, which will be underpinned in this first section. As there are many success factors, I investigate mainly the effect of Business Planning. The importance of Business Planning is underlined by governmental agencies, banks and in entrepreneurship courses, eventough the effects of Business Plans are not sufficiently empirically or theoretically justified in literature according to Honig (2004). Governmental agencies and institutions like the United States Small Business Administration (SBA) (2012a) or in Europe the Austrian Federal Economic Chamber (WKO) (2012) force entrepreneurs to write business plans, which is a central part of Business Planning. The purpose of this thesis is to figure out whether Business Planning is beneficial for the entrepreneurial ventures and if it helps ventures to become successful. Even tough Business Planning is quite popular, there are researchers like Sarasvathy (2001), who mention other strategies that entrepreneurs should undertake in order to become successful. For analysing this topic, the first section provides basic information on entrepreneurship and underlines its importance. After this introduction, the planning approach is discussed and I provide a theoretical foundation why entrepreneurs shall undertake Business Planning activities. An opposing view on how entrepreneurs should act in creating a venture, namely Effectuation Theory, is presented in the third section. Both sections put the emphasis on the presentation of current empirical research, available in these fields of research. Finally, each section yields in a corresponding Hypothesis. The aim of the fourth section is to investigate the question “Who does Business Planning?” and discusses therefore reasons why people undertake Business Planning activities. This leads finally to four different Hypotheses. Sections 5 and 6 provide dataset descriptions, variable descriptions and summary statistics. Section 7 is aimed at providing an overview about the methodology used to test the different Hypotheses and provides the results of the empirical analyses. For examining the Hypotheses a dataset of the Second Panel Study of Entrepreneurial Dynamics (PSED II) (2012) is used. Finally, section eight summarizes the findings of this master thesis and discusses them in the context of current research.

As mentioned, this thesis starts with a general overview about entrepreneurship and its importance, wherefore definitions of entrepreneurship and different entrepreneurial theories are presented in the next part.

1.1. Definition of Entrepreneur and Theories of Entrepreneurship

Entrepreneurship and various definitions of the entrepreneur are often used in newspapers or in economic life. Over time, researches have developed different definitions of the term entrepreneur and provide therefore theories of entrepreneurship, which are briefly presented in this part.

1.1.1. Definition of Entrepreneur

According to Bygrave and Zacharakis (2011), this age is the entrepreneurial age as many entrepreneurs are involved in renewing and changing economies. In order to start with, the Macmillan English Dictionary (2002) defines an entrepreneur as “someone who uses money to start businesses and make business deals”. Furthermore, the Oxford Advanced Learner’s Dictionary of Current English (1974) defines an entrepreneur as a “person who organizes and manages a commercial undertaking”. As it can be seen, those definitions are slightly different and by moving further, Sternberg and Wennekers (2005) figure out that the term entrepreneurship has at least two meanings as it can be distinguished between an occupational notion of entrepreneurship and a behavioural notion of entrepreneurship. According to Sternberg and Wennekers (2005), the occupational notion states that entrepreneurship refers to owning and managing a business on one’s own account and risk. Its practitioners, who are the entrepreneurs, can be self employed or business owners, while the other definition provided by Sternberg and Wennekers (2005) is that an entrepreneur is somebody who exploits an opportunity and can be a pioneer or an innovator. Here entrepreneurs need not be business owners and can also be “intrapreneurs” according to Sternberg and Wennekers (2005). Furthermore, Sternberg and Wennekers (2005) state “at the crossroads of behavioural entrepreneurship and the dynamic perspective of occupational entrepreneurship, a new discipline of “entrepreneurial academics” (Vesper (1988)) has risen that considers new venture creation as the hallmark of entrepreneurship (Gartner (1989), Cooper (2003), Sternberg and Wennekers (2005)).

Gartner (1988) presents different definitions and discusses furthermore two approaches, namely a behavioural approach to the study of entrepreneurship and a trait

approach and states that “the entrepreneur is not a fixed state of existence, rather entrepreneurship is a role that individuals undertake to create actions”.

1.1.2. Theories of Entrepreneurship

After these explanations of the meanings of the term entrepreneur, this part presents famous theories of entrepreneurship that underpin the importance of entrepreneurship. These different theories focus on a great range of different functions, which the entrepreneur provides to the economy. Therefore the theories of four famous economists, namely Frank H. Knight, Israel M. Kirzner, Joseph A. Schumpeter and Ronald Coase are presented.

Frank Hyneman Knight, one of the representatives of the Chicago School of Economics (The Frank H. Knight Page (2010)) is well-known for his book “Risk, Uncertainty and Profit”, published in 1921. Thereby he states “it will appear that a measurable uncertainty, or “risk” proper, as we shall use the term, is so far different from an unmeasurable one that is not in effect an uncertainty at all“(Knight (1921)). According to Knight (1921) the term “uncertainty” shall be restricted to cases of non-quantitative types, and this “true uncertainty” builds the basis for a valid theory of profit and accounts for the divergence between actual and theoretical competition. This “true uncertainty” is therefore according to Knight (1921) the reason for the income of the entrepreneur. Brouwer (2000) summarizes that the entrepreneur in Knight’s view is an investor or selector and not the person who starts a new business.

Opposed to this view of Frank Knight, Israel Kirzner, a representative of the Austrian School of Economics (Ludwig von Mises Institute (2012)), explains especially in his book “Competition and Entrepreneurship” that the entrepreneur serves in a market as an arbitrageur, who brings markets through speculation and arbitrage back to equilibrium according to Boettke and Rizzo (1995).

As it can be concluded from these definitions, neither Frank Knight nor Israel Kirzner see the entrepreneur mainly as an innovator, which is often the case, when thinking about great entrepreneurs like Bill Gates, who founded Microsoft in 1975 (Microsoft (2012)) or Thomas Alva Edison, who was a great inventor and founded General Electric in 1892 (General Electric Company (2012)).

The Austrian economist Joseph A. Schumpeter provides a third definition of entrepreneurship in which he focuses on innovation and sees the entrepreneur as a revolutionary innovator according to Ricketts (2006). Bygrave and Zacharakis (2011) summarize in the first chapter of their book "Entrepreneurship" the ideas of Joseph Schumpeter for entrepreneurship as following: an entrepreneur is a person that destroys the existing economic order by introducing new services and products, by introducing new production methods, by creating new forms of organisation, or by exploiting new raw materials. With a great probability, such a person destroys the existing order by founding a venture but may also do this within an existing firm (Bygrave and Zacharakis (2011)).

The major contributions of these great economists imply that the entrepreneur has a crucial importance for the economy. Hopp (2010) and Pützl (2010) mention these economists in the same context and Ricketts (2006) provides a detailed discussion of the theories in his article "Theories of Entrepreneurship: Historical Development and Critical Assessment".

Furthermore, a fourth theory tries to explain the existence of firms. This theory provides a basis why firms emerge. Therefore, Nobel Prize Laureate Ronald Coase (The Official Web Site of the Nobel Prize (2012)) published in 1937 his famous article "The Nature of the Firm". In this paper he points out that firms occur in a market of individuals because of transaction costs. Transaction costs can be divided into coordination costs as well as motivation costs. These costs occur on the one hand when using markets and on the other hand also within organisations. Examples for coordination costs are costs that are caused by searching within markets or by the distribution of information within organisations. According to Coase, firms start to exist if the transaction costs implied by organisations are lower than the transaction costs which occur by using the market (Coase (1937), Fabel (2008)). It should be kept in mind that according to Jensen and Meckling (1976), organisations are "legal fictions which serve as a nexus for a set of contracting relationships among individuals".

Summarizing all theories and definitions presented, it can be seen that entrepreneurs are very important for the economy. In order to provide evidence in this regard, the following part focuses on the importance of entrepreneurship.

1.2. Importance of Entrepreneurship

Entrepreneurship is a field of great importance for economies according to the theories and definitions presented in the previous part. Rappaport (1998) discusses about shareholders in his book "Creating Shareholder Value" and states that executives and policymakers notice that increases in stock price reflects improvements in productivity and competitiveness which brings benefits to persons with a stake in the company and the overall economy. Michael Porter, who is recognised as the father of the modern strategy field (Harvard Business School (2012)) states in an interview conducted by Snowden and Stonehouse (2006) that profitability is the key factor of competitiveness. As earlier stated, an entrepreneur in Schumpeter's view can introduce new production methods that might enhance e.g. efficiency, which leads to a greater competitiveness. Porter states in an interview conducted by Snowden and Stonehouse (2006) that competition differs between locations, where it is not a zero-sum game, while a gain in market share for a firm operating in a marketplace is some other firm's loss of market share. Therefore it can be assumed that e.g. the retention of jobs in a firm, as well as in the country where the firm is situated, is dependent on the profitability and competitiveness of the firm. This example underpins again the importance of entrepreneurs and innovation especially in the context of globalised markets.

The Annual Report 2011 of Global Entrepreneurship Monitor Consortium (GEM) written by Kelley et al. (2012) presents the results of the 13th annual survey of the rate and profile of entrepreneurial activity around the globe. Thereby GEM estimated for 2011 that 388 million entrepreneurs are actively involved in running and starting new ventures worldwide. In 2011 around 165 million young early-stage entrepreneurs are between the ages of 18 years and 35 years. Furthermore, 141 million early-stage entrepreneurs expect to create at least five jobs in the next five years and 65 million entrepreneurs expect to create at least 20 new jobs in the next five years. Interestingly, 69 million early-stage entrepreneurs offer innovative products and services, which are new to customers and have only a small number of competitors. These entrepreneurs can be seen as entrepreneurs according to the theories of Schumpeter as earlier described. Another interesting result of the survey is that 18 million early-stage entrepreneurs sell at least 25 % of their products and services internationally. Furthermore GEM estimated that around 163 million early-stage entrepreneurs are women (Kelley et al. (2012)).

Those numbers found by GEM show that entrepreneurship has in fact a great importance and similarly with the birth of a human, the start of new ventures is crucial as something new raises. Some business concepts use the concept of human life analogically like the product life cycle concept. Kotler (2003) describes the product life cycle model as a tool that can be used to analyse a product category, a product form, a product or a brand. This is a rather important method, as Kotler (2003) explains that a company's positioning and differentiation strategy must change as the product, market, and competitors change over time. The life-cycle model can also be applied to the industry (Johnson et al. (2008)) and Dess and Lumpkin (2001) analysed therefore the moderating effect of the industry life-cycle's stage on the relation between entrepreneurial orientation and firm performance. Tools like the product or industry life-cycle are often used in Business Planning and Dess and Lumpkin (2001) found that the stage of the life-cycle moderates the relationship between proactiveness and firm performance. Before focusing even more on Business Planning and its relation to venture's success it needs to be kept in mind that there exist different motivations for entrepreneurs to start a venture. On the one hand entrepreneurship can be necessity-based and on the other hand opportunity-based (Acs (2006)). Acs (2006) describes necessity-based entrepreneurship by defining entrepreneurship as necessary, because no other better option exists, while opportunity-based entrepreneurs actively decide to exploit opportunities. Acs (2006) summarizes the findings of Acs and Varga (2005) and states that necessity-based entrepreneurship doesn't have an impact on the economic development, while opportunity-based entrepreneurship has a positive and significant influence on economic development. Acs (2006) found rising levels of economic development if more and more people get involved in opportunity-based entrepreneurship and more and more people leave necessity-based entrepreneurship.

Acs (2006) mentions as implications for policy that all countries need to balance between General National Framework (e.g. Government or Financial Markets) and Entrepreneurial Framework Conditions (e.g. Risk Capital or Cultural Norms). This balance depends on the current level of economic development. Acs (2006) states that less developed countries need to strengthen their small and medium sized sector, before focusing on entrepreneurial framework conditions, since this is the first step toward development. Therefore, policies should focus on firms and not on individuals and

include topics like financial assistance. Underdeveloped countries should be focused on bringing in foreign direct investments that would lead people to leave agriculture and self-employment. Developing countries need a more balanced approach between National Framework Conditions and Entrepreneurial Framework Conditions, depending on the position the country has on the path of general economic development. For developing countries it is suggested that an emphasis should be put on improving the quality of the entrepreneurial environment. Developed economies should focus on Entrepreneurial Framework Conditions in order to become entrepreneurial economies, while entrepreneurial economies need to focus on change. It is suggested that such economies can focus on e.g. technology transfer (Acs (2006)).

Additionally to the findings of Acs (2006), Figure 1 shows the entrepreneurial activity across different countries sorted by the Gross Domestic Product (GDP).

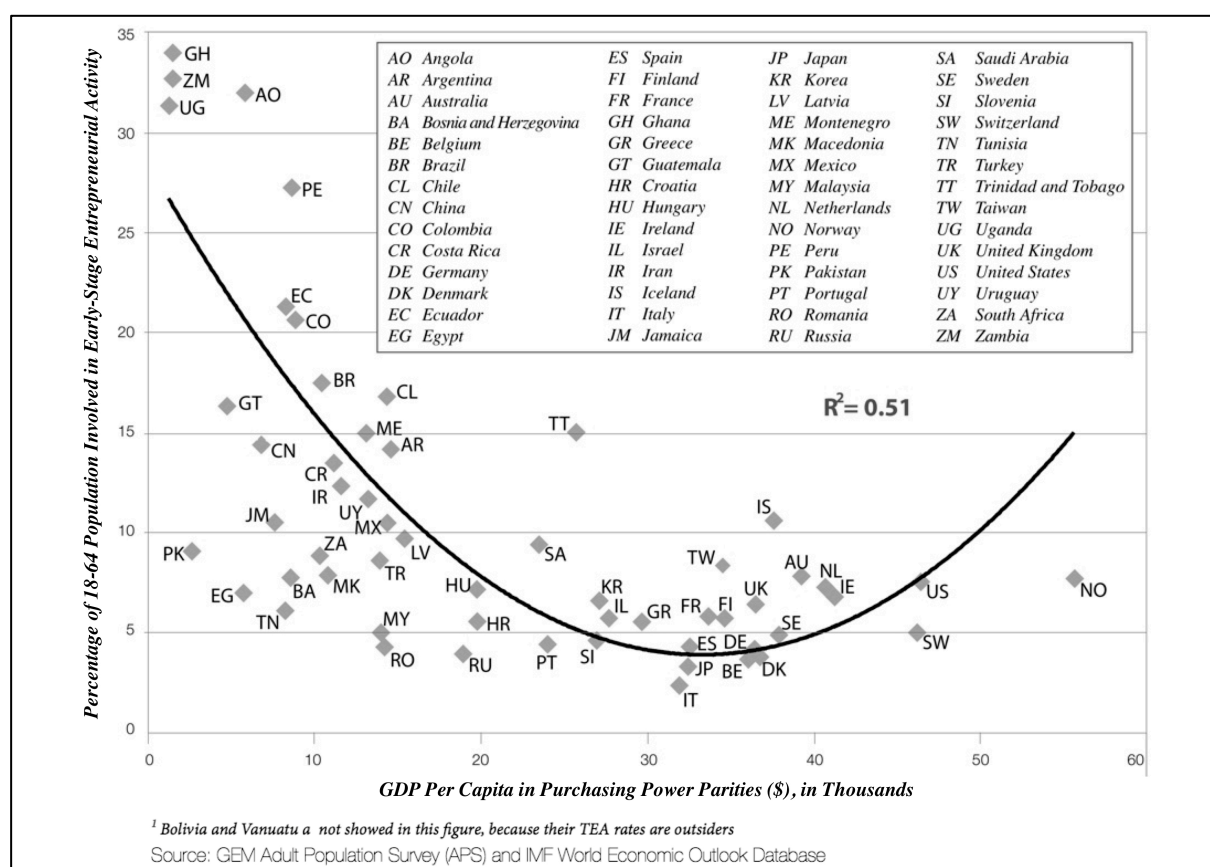


Figure 1: Total Early-Stage Entrepreneurial Activity Rates and Per Capita GDP 2010 (Kelley et al. (2011))

When looking at Figure 1 it can be seen that the percentage of people involved in entrepreneurship is very high in countries with a very low GDP. If one moves further on the curve it can be seen that the entrepreneurial activity is decreasing with increases in

GDP. Finally, the curve reaches a minimum level at a GDP Per Capita in Purchasing Power Parities, which is above \$ 30.000 and increases again. Therefore Figure 1 shows a similar trend to Acs (2006), who stated that necessity-based entrepreneurship has no significant effect on economic development. However, it needs to be kept in mind that necessity-based entrepreneurship is rather important as it can help to decrease poverty. Therefore, I want to mention a rather famous example namely the Grameen Bank in Bangladesh. This bank enables poor people to start entrepreneurial activities by supporting them with microloans. The work of the Grameen Bank and its founder, Nobel Price Laureate 2006, Muhammad Yunus resulted, according to The Official Web Site of the Nobel Prize (2012), in success as about 58 % of the borrowers were able to cross the poverty line. Yunus presents his ideas also in an article published in the Global Urban Development Magazine (Yunus (2005)). When summarizing this part, it can be seen that entrepreneurship has a crucial importance for the economy, even though there are differences between necessity-based and opportunity-based entrepreneurship. I will briefly describe the entrepreneurial process and phases of entrepreneurship, as well as determinants which affect the entrepreneurial process in the next part. This should provide a solid basis for the following sections.

1.3. Entrepreneurial Process and Phases of Entrepreneurship

After the previous part, which provided evidence for the importance of entrepreneurship, this part presents the entrepreneurial process. The entrepreneurial process is presented differently in the literature. For starting the discussion, I want to present a scheme used by the Global Entrepreneurship Monitor Consortium (GEM) that separates the entrepreneurial process into different stages.

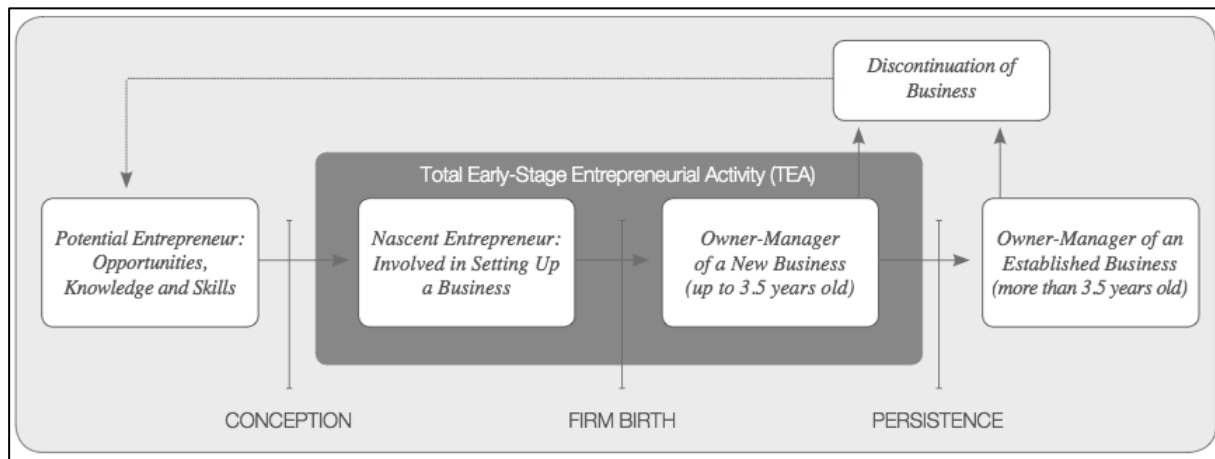


Figure 2: The Entrepreneurship Process and GEM Operational Definitions (Kelley et al. (2011))

As it can be seen from Figure 2, for starting the entrepreneurial process it is necessary to have a potential entrepreneur with knowledge, skills and opportunities, which can be exploited. As mentioned before, such behaviour can be driven by necessity, which is the case in developing countries, or by opportunity. After a conception, the entrepreneur is a nascent entrepreneur when he is involved in starting a business. After firm birth, he becomes the owner-manager of a new business. After these 3.5 years he becomes according to GEM owner-manager when he is successful. Otherwise, if he discontinues the business, he is seen as a potential entrepreneur again (Kelley et al. (2011) and Bosma and Levie (2010)).

It's important to mention that entrepreneurs who were not able to perform well, may discontinue one venture and found a new venture again with their experience. Another reason for getting back to the start of this process is when entrepreneurs start a second venture. There also exist so-called serial entrepreneurs that found new ventures again and again (BusinessDictionary.com (2012)). As a representative of this philosophy I want to mention Frank Addante, who founded several different companies like L90 or Starting Point mainly in related industries (Wassermann and UY (2008)) or Wayne

Huizenga who has a different approach as he ventures in unrelated industries (Bygrave and Zacharakis (2011)). Further information on motives for entering entrepreneurship can be found in Zwan (2011) who analysed reasons for entering and re-entering as well as for quitting entrepreneurship. Key reasons for the venture's success lie in the nascent stage, where many activities take place in order to start the venture. Especially in this stage, questions concerning e.g. funding or product strategies are of a key importance. Therefore, this master thesis focuses on the nascent stage. To present a more detailed overview with all the influences on the entrepreneurial process as shown in Figure 2, the following Figure 3 shows many determinants on the entrepreneurial process and key steps.

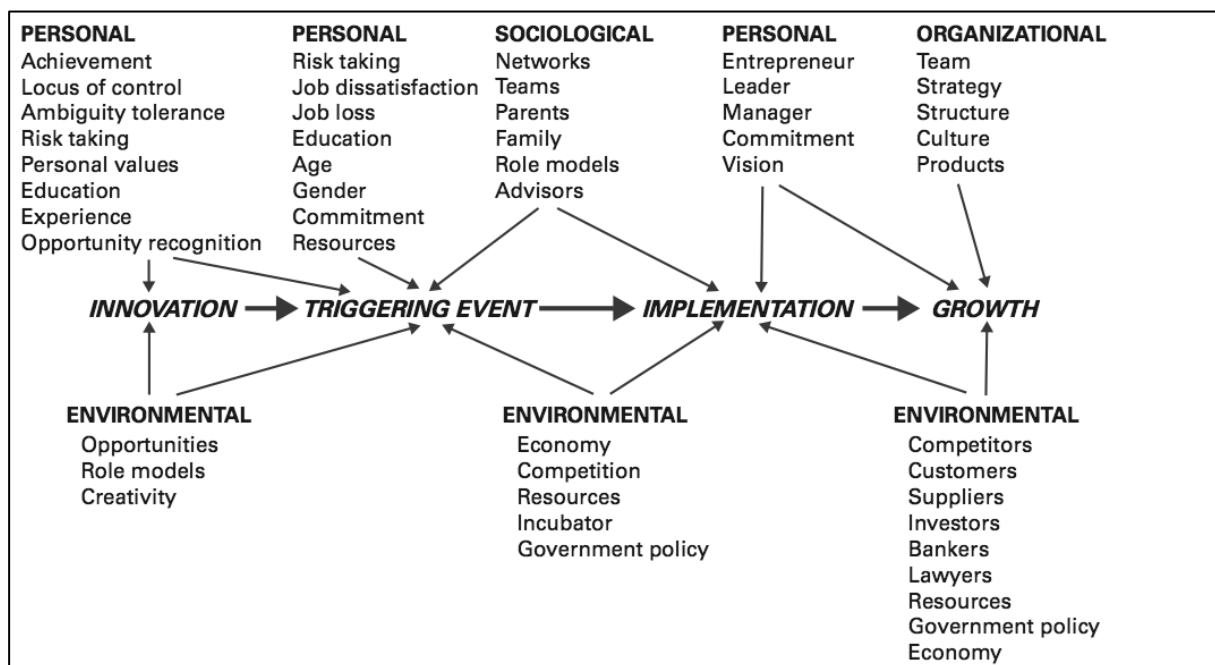


Figure 3: A Model of the Entrepreneurial Process (Bygrave and Zacharakis (2011) - Based on Carol Moore's Model)

According to this model of the process, which is based on Carol Moore's Model (Moore (1986)), the key steps are innovation, a triggering event, implementation and growth (Bygrave and Zacharakis (2011)). Important to mention is that, according to Bygrave and Zacharakis (2011), it seems to always be a triggering event that leads people to become an entrepreneur. Such a triggering event can be for example necessity-based or opportunity-based. As it can be seen in Figure 3, the steps have many interactions and there are many determinants that influence the main steps and therefore the outcome of the process. It is rather important to keep this in mind for the

next sections, as I will focus on special effects in the present master thesis. As seen in Figure 3, a crucial factor might be e.g. the entrepreneur's human capital, which was investigated by different studies like Unger et al. (2011). This article will be discussed later, however if I mention articles like Unger et al. (2011), it should be kept in mind from Figure 3 that there exist many other factors affecting the entrepreneurial process and the success of a venture.

When focusing on the implementation stage, the model shows environmental, personal and sociological influences on the process (Bygrave and Zacharakis (2011)). This causes limitations in estimating the performance of new ventures as some steps of the entrepreneurial process are influenced by exogenous determinants that can hardly be influenced by the entrepreneur himself and his skills. According to GEM, the nascent stage ends with the implementation stage in this model. As there is a very complex process in bringing a new venture to the implementation stage, a lot of work focuses on helping entrepreneurs through all necessary steps of the entrepreneurial process like getting funding or creating a product. The United States Small Business Administration (SBA) provides information and support for entrepreneurs to start an enterprise. The United States Government offers therefore mentorship programs for young entrepreneurs by supporting them with mentors that have successfully created a venture (United States Small Business Administration (2012b)).

Similarly in Europe, especially in Austria, the WKO offers entrepreneurs a great variety of information and helps them on founding a new venture through their Founder Service (Austrian Federal Economic Chamber (2012)). However, when thinking about the entrepreneurial process, there seem to be many necessary decisions, which have to be taken in the nascent stage. These decisions need to be decided carefully, which is rather similar to managing an enterprise and brings also similar problems to the entrepreneur.

According to Ansoff (1987), a huge amount of a manager's time is occupied in a daily process of making various decisions. Furthermore, Ansoff (1987) points out that the demand on the decision-maker's time always seem to exceed the capacity. When focusing on the entrepreneurial process, it can be assumed that nascent entrepreneurs have to make several decisions. This need for decisions, connected with the determinants shown in Figure 3, leads to the question on how the entrepreneurial process can be optimized and how new ventures can become more successful. A key for

optimization and increasing efficiency is planning, which will be discussed in section two extensively. Institutions like the SBA force entrepreneurs to write a business plan as well as in Europe the WKO. Additionally, market participants like banks e.g. Citibank (Creating a winning Business Plan (2011)), focus on Business Planning and suggest entrepreneurs to write business plans.

1.4. Conclusion

In this section, entrepreneurial theories, the importance of entrepreneurship and the entrepreneurial process are discussed. Davidsson and Gordon (2009) state that the creation of new firms is a tremendously important phenomenon and therefore it is necessary to know which criteria help entrepreneurs to found a venture successfully and increase the success of the new venture. The entrepreneurial process is a rather complex process as shown in Figure 3 and therefore Business Planning might help entrepreneurs to handle all necessary tasks and follow the right direction. However, the environments are rapidly changing as competitors enter and exit the markets, so it has to be questioned if Business Planning significantly helps entrepreneurs to become successful.

The aim of this master thesis is to analyse the role of Business Planning on entrepreneurial success as well as to analyse why entrepreneurs undertake Business Planning activities. Therefore, the different theories are presented in the next sections hand in hand with corresponding empirical research. Finally, all these theories lead to the different Hypotheses that are tested later by using a PSED-Dataset. In order to present a solid theoretical basis I start with the Business Planning approach in the following section and Effectuation Theory in the third section.

2. Business Planning and Entrepreneurship

Entrepreneurship is important for the overall economies in and across countries, as it has been discussed in the previous section. On the one hand, it can avoid poverty and on the other hand entrepreneurship helps developed economies to become more competitive and entrepreneurial. As this topic is crucially important, many researchers, as well as the public question what actions undertaken during the entrepreneurial process will lead to a positive outcome and increase new venture's success. As it can be seen from Figure 3 in the first section, there are many variables which influence the entrepreneurial process. Factors like human capital, learning effects, environmental effects, as well as Business Planning have an influence. If mentioning human capital, a study of Unger et al. (2011) found an overall small but significant effect of human capital on entrepreneurial success. However, it needs to be taken into account that there are different variables, which measure human capital and furthermore, also social capital plays an important role (Baron and Markman (2003)). This section of the master thesis focuses on the effect of a special issue, namely on Business Planning and its relation to entrepreneurial success. Using the right approach or strategy for the entrepreneurial process is for nascent entrepreneurs one of the most important tasks because it can help them to increase the success of newly founded ventures. Business Planning is seen as a crucial element for the entrepreneurial sector. For example many professors at universities focus in their entrepreneurial education on business plans according to Hills (1988) and Honig (2004). As mentioned in the previous section, different institutions support founders of new ventures with information on the entrepreneurial process and thereby strongly support entrepreneurs to undertake Business Planning activities like creating a business plan. Therefore the WKO also provides software that helps to create Business Plans. Different banks like in the United States Citibank or in Europe Raiffeisen or Erste Group offer detailed information related to Business Plans and the founding and funding process (Citibank (2011), Raiffeisen (2012), Erste Group (2012a), United States Small Business Administration (2012a), Austrian Federal Economic Chamber (2012)).

An interesting question occurs namely whether all of these arguments that support the idea of Business Planning enhance the success of entrepreneurial ventures. It might be assumed that e.g. business plans or financial plans are necessary to reach one further

step in the entrepreneurial process, like getting some kind of funding or subsidies but do not really impact entrepreneurial success. Erste Group, according to Kleine Zeitung (2011) one of the biggest Austrian banks, describes the importance of a business plan as follows: “The Business Plan is the business card of the new venture. It is the basis for negotiations with banks, investors and consultants” (Erste Group (2012b)). Federal agencies like Austrian Wirtschaftsservice GmbH, which support new ventures e.g. with low interest loans underpin the role of Business Plans (Austria Wirtschaftsservice GmbH (2012)).

In research, there is a great discussion if Business Planning and business plans increase the entrepreneurial success or not. Some researchers figured out that Business Planning is a very important factor for success while others downgrade the role of Business Planning and business plans. However, as it can be concluded from the following sentences, there might be many different factors why entrepreneurs create Business Plans. Honig and Karlsson (2004) analysed this in detail and found that some variables like coercion or mimetic forces influence the propensity of creating a business plan. As there are many different approaches and articles discussing these topics, the following section presents the theory behind planning and discusses different empirical studies in this field of research. The central question whether Business Planning has a great influence on the entrepreneurial success is discussed and results finally in the first Hypothesis. Before starting with the theoretical background, I want to further mention an interesting article, presented in Henry Mintzberg’s book “Strategy Safari” written by Amar Bhidé (1994). Thereby, interviewers found by questioning founders of 100 companies out of the 1989 Incorporated “500” list of the fastest growing companies, that the effort spent on the Business Plan was very low. Interestingly, 41 % didn’t have a Business Plan at all, 26 % did basic Business Planning on some sheets of paper, 5 % worked on financial projections for investors and 28 % wrote up a full blown Business Plan. According to this article, many entrepreneurs stated that they don’t want to waste time on plans because the environments are rapidly changing and it is more important to cope with troubles (Bhidé (1994)). Even though this is a rather old study, it shows the importance of this topic and raises different questions. In the following, I want to present the planning school and the learning school, as these two schools have emerged and provide a theoretical foundation for effects of Business Planning on firm performance according to Brinckmann et al. (2010). The combination of planning and

learning approach is important as learning effects occur when planning activities are undertaken (Brinckmann et al. (2010)). When creating e.g. Strength, Weaknesses, Opportunities and Threats (SWOT) Analyses, the entrepreneurs learn details about other market participants and their current position on the market. Therefore, these two schools are finally combined in this section, followed by the third section that presents the second Hypothesis and discusses the role of Effectuation Theory.

2.1. Theories of Strategic Management: The Planning School

Henry Mintzberg's Book "Strategy Safari" (1998) serves as a rough guideline for examining planning and learning school and Mintzberg et al. (1998) point out that the planning school was based on one of the most important books for strategic management, "Corporate Strategy" written by H. Igor Ansoff. The basic idea behind the planning school is to use SWOT Analyses and additionally different techniques, in order to aggregate information, which is used to create very detailed plans for different purposes. A strong focus lies on clear objectives on the front end, as well as on creating budgets and operating plans on the back end (Mintzberg et al. (1998)).

Managers are confronted with a huge number of different decisions according to Ansoff (1987) and he states that the demands on the manager's time for these decisions always seem to exceed the capacity. Ansoff (1987) points out that the decisions differ and managers might sometimes be confronted with strategic long-term decisions, like the future course of the firm's business or the reconciliation of an organisational conflict. Additionally, operational problems need to be resolved, and therefore he has to solve day-to-day operating problems. In order to understand the decision process Ansoff (1987) mentions two approaches namely a descriptive and a prescriptive approach. Ansoff (1987) discusses in his book material that is based on practical prescriptions. In the context of practical prescriptions, Ansoff (1987) states that they "can improve managerial-decision making through systematic and logically sound procedures". According to Mintzberg et al. (1998), Ansoff's book is the most influential book for the planning school. Mintzberg et al. (1998) point out that a focus of the planning school lies on formal procedure, formal training, formal analysis and lots of numbers.

During the 1970's the planning school had a great influence on strategic management but its importance decreased (Mintzberg et al. (1998)).

However, also nowadays books like “Marketing Management” (Kotler (2003)) present many techniques to analyse e.g. the environment formally. Representatives of the strategic planning approach like H. Igor Ansoff or Michael Porter have developed such tools.

Michael Porter stated in a commentary written by Snowden and Stonehouse (2006) that the measure of competitiveness for firms is market share or profitability. Studies like Hunton et al. (2003) provide evidence that planning activities lead to competitive advantages and to a greater return on assets, return on investment, and asset turnover. Therefore, they analysed the relation between enterprise resource planning systems and firm performance. Michael Porter (1998) discusses in his book different concepts how to gain competitive advantage and states “competitive strategy aims to establish a profitable and sustainable position against the forces that determine industry competition”. Porter (1998) presents tools and techniques e.g. for examining the industry by analysing the five competitive forces. Furthermore, he points out three generic strategies (cost leadership, differentiation and focus) that can be undertaken by a firm, caused by “two basic types of competitive advantage combined with the scope of activities, for which a firm seeks to achieve them” (Porter (1998)). Another model, the Generic Value Chain shows five generic categories of primary activities that are involved to compete in any industry according to Porter (1998), namely Inbound Logistics, Operations, Outbound Logistics, Marketing and Sales, and Service. Furthermore, there exist support activities like Firm Infrastructure, Human Resource Management, Technology Development and Procurement (Porter (1998)). According to Mintzberg et al. (1998), the planning school consists of several main steps, which are presented and discussed briefly.

The first step is the objectives-setting stage where the targets are defined as goals and strategies that can be rather often quantified. Mintzberg et al. (1998) point out that it’s hard to formalize goals and values, which might be the reason that much of the “so-called strategic planning has been reduced to not much more than the quantification of goals as a mean of control”.

As second step, the external audit stage should contribute to create a clear picture of the environment by forecasting the environment with e.g. scenario models, which are up to now a quite popular instrument to use, for example when the uncertainty is high

(Pützl (2010)). Porter (1998) describes an industry scenario as a consistent view of an industry's future structure. Therefore, the scenario is not a forecast but one possible industry structure. Furthermore, he describes that a set of industry scenarios is chosen which reflects the range of possible and credible future industry structures with important implications for competition. This set of industry scenarios is used to design a competitive strategy. Different uncertainties are recognised for example in the different industry fields and need to be mentioned by constructing different scenarios. However, also other tools can be used for investigating the environment and researchers like Johnson et al. (2008) or Kotler (2003) provide a great range of tools for analysing the environment.

As a next step Mintzberg et al. (1998) mention the internal auditing stage with the aim to find internal strengths and weaknesses, followed by the strategy evaluation stage which focuses on mechanisms for evaluating the business with measurements that are up to now rather important, like Return on Invested Capital or Free Cash Flow (McKinsey and Company (2005)).

The strategy operationalization stage confronts the planners and managers by breaking the strategy into several sub-strategies. Mintzberg (1998) presents therefore the following statement of Steiner (1979): "all strategies must be broken down into substrategies for successful implementation". Therefore Mintzberg (1998) describes that plans differ with different hierarchies and last for different timespans. Such plans can be long-term strategic plans, medium-term plans or short-term plans. Finally, different plans are combined which leads to a huge system of different plans.

Mintzberg (1998) remarks furthermore that planning is rather often just the label, but the true intention of such planning systems is control. Furthermore, he remarks that the process of formulation and implementation should differ. He suggests that the formulation process shall be open-ended and the implementation shall be closed-ended, which is exactly the opposite of the planning school.

The final step "Scheduling the whole process" is very precise and Mintzberg et al. (1998) give an example of General Motors, where each department got specified deadlines. According to this structure of the planning school presented in this part, it can be concluded that this school is based on formalized procedures by applying different

techniques where CEO's are not involved in all decisions, but they have to approve the plans (Mintzberg et al. (1998)).

The description shows similarities to the design school, but according to Mintzberg et al. (1998) the Design School is less formalised. When mentioning the problem of many plans Mintzberg et al. (1998) states that plans are designed by their nature to promote inflexibility and are meant to establish a clear direction, in order to impose stability on an organisation. Mintzberg et al. (1998) present major fallacies of the planning school. One of these fallacies is predetermination, where they criticize that not everything can be forecasted in a stable way.

The fallacy of detachment concerns the problem of managers that are detached together with abstracted planners. This can lead to no strategy at all. Mintzberg et al. (1998) mention that effective strategists are people who immerse themselves in details while being able to abstract the strategic message. Furthermore, Mintzberg et al. (1998) underline that thinking should be connected to acting in order to create effective strategies which implies that formulation and implementation is connected. The basement on hard facts like accounting statements may result in a misinformation of managers that leads to weak strategies, e.g. like missing trends (Mintzberg et al. (1998)).

Another fallacy is the dependence on formalisation that can lead to problems in situations which need learning according to Mintzberg et al. (1998). However, the supporters of the planning school have different viewpoints on the problems, like Ansoff (1991), who criticises Mintzberg's ideas. According to the strong literature and also business practice, different planning tools can be assumed as being important. Even though much criticism by Mintzberg et al. (1998) shows problems if a company uses only formal routines, institutions, like earlier discussed, support many ideas of Business Planning and underpin its importance. As entrepreneurial ventures are affected by different determinants from e.g mature enterprises, it is interesting to know if planning is beneficial for them. Before I present empirical studies, I focus on the second part, namely on learning. As discussed before, many planning tools help people to learn and therefore I combine these two schools in this section.

2.2. Theories of Strategic Management: The Learning School

After the discussion of the premises of the planning school I want to present the learning school that focuses on different aspects. A group of researchers focuses, opposed to the premises of the design and planning school more on learning, especially when higher degrees of uncertainty do exist (Brinckmann et al. (2010)). Mintzberg et al. (1998) summarize and present the main ideas of the learning school in his book, which serves as basis for this section. The learning school differs in a very essential point from the planning school as strategies arise when people learn about a situation and the ability of their organisation to handle such a situation, according to Mintzberg et al. (1998). Thereby, one important question concerning formulation and implementation of strategies raises, which is rather separated in the planning school as earlier explained. Therefore, Kiechel summarizes in an interview conducted by Allio and Randall (2010) that one of the crucial problems of strategies is that persons who have to implement a strategy are not involved in the formulation of the strategy. Beer and Eisenstat (2000) mentioned silent killers of strategy implementation and learning and how an organisation can overcome these problems. Importantly, they state that employees are not barriers for strategic change how managers often see them, but in fact the opposite is the case. Mintzberg et al. (1998) also mention the separation as a problem, when people who implement a strategy are not involved in the formulation, as there exists a disassociation of thinking from acting. According to the learning school, strategists can be found all over the firm and formulation and implementation intertwine (Lampel and Mintzberg (1999)). The foundation of the learning school according to Mintzberg et al. (1998) is based on description rather than prescription. Learning becomes a more and more important factor in faster changing environments and a great amount of innovation in a company comes from people of all hierarchical layers (Mintzberg (1998)). I want to mention an interesting article, which is also discussed by Mintzberg et al. (1998) and written by Pascale (1984). Pascale (1984) analysed the story behind the success of Honda at selling motorcycles in the United States of America (US). Honda entered the market in 1959 and started 1960 with a small market share, which increased in six years to 63 %, even tough strong competitors like Harley Davidson or European manufacturers have been in the market. Ex post, the Boston Consulting Group (BCG) analysed for the British Government Honda's success in order to find strategy alternatives for the British Motorcycle Industry. Thereby BCG found that Honda's

strategy was appropriate and it presented a consistent picture. Additionally, the marketing strategy seemed to be appropriate and it can be summarized that Honda had a real strategic model. Pascale (1984) presents the real story of the management team of Honda in his article, who explained how they formed their subsidiary in the US and how they became successful. Interestingly, it was not planned in the way the BCG analysed, because initially Honda wanted to sell bigger motorcycles, like other manufacturers. In order to start the business, Honda's managers rented a cheap apartment and started to sell their big motorcycles. The managers noticed technical problems as the motorcycles are driven faster and over longer distances in the US than in Japan. Additionally, the sales persons in the US found out that smaller motorcycles that were used by them seemed to be popular to the buyers in the US. These smaller motorcycles, called "Supercubs" were designed for the Japanese market and were very successful there. As Honda had no choice due to technical problems with their bigger motorcycles, they brought "Supercubs" to the US and sold them. Interestingly the retailers who wanted to sell them were not motorcycle dealers but instead sporting good stores. Finally, Honda imported many of these small motorcycles and had a huge increase in sales, which helped them to become a very strong player in the US market (Pascale (1984), Mintzberg et al. (1998)).

This story explains to a great extent that focusing strictly on planning may not always be the best solution and it shows that learning effects are important. Mintzberg et al. (1998) also offer the following premises for the learning school, namely that strategies must take everything into account, unstable environments as well as the diffusion of knowledge and the formulation and implementation should be indistinguishable. Furthermore, strategy making must take the form of a process of learning over time and many different employees and workers can act as strategists in an organisation. The importance of learning is also underlined and whoever can think retrospectively can help to create a strategy. The management has the task to do knowledge management and to control the process of learning. Mintzberg et al. (1998) state that "strategies appear first as patterns out of the past, only later, perhaps, as plans for the future, and ultimately, as perspectives to guide overall behavior". Mintzberg et al. (1998) also discuss some problems of the learning school, for example the lack of a strategy. Loosing a consistent strategy may cause severe problems and the learning school might lead employees to try something new, so the management of the

process is very important. Wrong strategies may also appear as well as an overemphasis on learning can determine a coherent and perfect viable strategy negatively. Thereby, an effective management must sustain learning while pursuing strategies that work (Mintzberg et al. (1998)). In order to sum these ideas up, it can be stated that the learning approach became more important since the 1970's as the customers became more differentiated and companies needed to adjust to the environment (Pernicka (2010)). Factors influencing how learning takes place in organisations are a topic of crucial interest and research was done in this field for example by Argyris and Schön (1978) or Nonaka and Takeuchi (1995). Learning issues, with a focus on organisations, are discussed by Narver and Slater (1995), who state that the ability to learn faster may be the only sustainable source for achieving a competitive advantage.

After these descriptions of the basic ideas of the planning and learning school it can be questioned which school will be more appropriate to be used in an entrepreneurial firm. Therefore, Wiltbank et al. (2006) state that the best way to elect between the two approaches is dependent on the confidence of a firm on its ability to predict the environment. Of course such a prediction is important, as it is known from the previous chapters describing the planning school that strategies depend on the results of a formal examination of the environment, which is used to predict the future.

By contrast to the clear separation of learning and planning school, this master thesis combines the planning and learning approach to get holistic planning approach. Evidence for this view is provided by Brews and Hunt (1999), who analysed different empirical studies and found that a good business plan needs to be flexible as well, especially in unstable environments. According to their study, firms must be prepared to rework and go further with plans incrementally if the implementation goes further. According to Brews and Hunt (1999), it should be clear that sometimes abandonment is necessary. When recalling the example of Honda, it can be seen that planning goes hand in hand with the learning approach. This combination is also used, because it can be assumed that planning activities and especially planning tools will lead to learning effects for the entrepreneur and therefore go hand in hand. Business Planning may create knowledge about products and markets, which can be used for implementing appropriate strategies. This approach is rather similar to the approach described by Brinckmann et al. (2010). Furthermore, also Dencker et al. (2009) see Business Planning

as a learning tool when they state: “early-stage Business Planning is a combination of learning from others and cognitive search”.

The following part provides an overview of current papers, which investigate the relationship between Business Planning and entrepreneurial success.

2.3. Business Planning and Entrepreneurial Performance

The theories provided in the previous part of this thesis offer a framework which is used to discuss this topic by relying on current research done in this field. Due to the great complexity of the entrepreneurial process, as shown in Figure 3, there are many different factors that influence the performance of new firms. The following papers are a summary of articles that analyse the relation between Business Planning and performance empirically. To start this discussion, it's necessary to describe some of the measures used for investigating the entrepreneurial success. Therefore, some articles, like Delmar and Shane (2003) use survival-based measures, while others use performance-based measures, like sales growth or financial measures, like Return on Assets (RoA) or Profit (Honig and Karlsson, (2004)). Furthermore, the meta-study conducted by Brinckmann et al. (2010) provides an overview on different papers and separates the measures into three major groups, namely growth-related, profitability-related and bankruptcy-related performance measures.

Davidsson (2011) points out that the question of how to measure the entrepreneurial success is a very central problem of entrepreneurship research. This is the reason why I put an emphasis at the description of different articles, on the performance measures used. For starting the investigation, Davidsson and Gordon (2009) offer a review of current research work based on Panel Study of Entrepreneurial Dynamics (PSED) datasets. PSED is a research program, which is designed to enhance the understanding of how people start businesses (Panel Study of Entrepreneurial Dynamics (2012)). The empirical analysis in this master thesis is based on a PSED dataset, like many other articles, which are presented in this section. However, in order to begin with summarizing the current empirical work done, I need to focus on one major contribution of Delmar and Shane (2003) who published in the Strategic Management Journal their article “Does Business Planning facilitate the development of new ventures?”. The study uses a Swedish Dataset to investigate whether Business Planning is beneficial for the

performance of new ventures or not. Therefore, they use as performance measurements the likelihood of new venture's Disbandment, the product development and the venture organizing activity. Delmar and Shane (2003) use a random sample of Swedish firm founders to test the effects of Business Planning. According to the planning and learning school, which is discussed earlier in this thesis, it can be expected that there exists a significant positive influence of Business Planning on entrepreneurial performance. However, researchers who follow Effectuation Theory would suggest that Business Planning is less beneficial for the performance of new ventures. The article written by Delmar and Shane (2003) measures Business Planning in two different ways. First, they use a dichotomous variable that is the response of a question concerning whether a business plan has been completed and secondly a composite measure, which assigns points for different answers and the more Business Planning activities are done, the higher the score gets. A similar index is used in this master thesis and will be presented later. According to Delmar and Shane (2003), Business Planning enhances founder's product development and venture organizing activities as well, as it reduces the hazard of venture disbanding. Additionally, Delmar and Shane (2004a)¹ found that it is beneficial to complete the business plan before starting with any marketing activities or talking to any customers, because it reduces the hazard of venture's termination. Delmar and Shane (2004b)² investigated this topic further and focused on legitimacy, where they concluded that undertaking actions which generate legitimacy improve the survival and facilitate the transition to other organizing activities. Gartner and Liao (2006) investigated the persistence of emerging firms with a focus on Business Planning and the environmental uncertainty. Business Planning was used from the PSED study as a dichotomous variable and reported the outcome of the question "A business plan usually outlines the markets to be served, the products or services to be provided, the resources required, including money, and the expected growth and profit for the new business. Has a business plan been prepared for this start-up?". The environmental uncertainty was divided into financial, competitive and operational uncertainty. Gartner and Liao (2006) figured out that nascent entrepreneurs who wrote a business

¹ "Planning for the market: Business Planning before marketing and the continuation of organizing efforts"

² "Legitimizing first: organizing activities and the survival of new ventures"

plan are 2.6 times more likely to persist with their new ventures than those without Business Planning. The interactions between the different kinds of uncertainty and Business Planning were not statistically significant, which suggests a strong independent effect of Business Planning on the persistence of start-ups. Altogether, Business Planning is important for the persistence of emerging of a new venture and not significantly influenced by different degrees of uncertainty. However, a correlation between timing of Business Planning and competitive and financial uncertainty was found. Therefore, Gartner and Liao (2006) found by testing cross products between timing of Business Planning and different kinds of uncertainty, that the impact of Business Planning on persistence is moderated by perceived financial uncertainty and perceived competitive uncertainty.

Opposed to these positive relations between Business Planning and survival, Lange et al. (2007) did not find a significant influence of business plans on the performance of new start-up ventures founded by alums of the Babson College who graduated between 1985 and 2003. Lange et al. (2007) use as measures of performance revenue, net income and number of employees, but actually, also this study cannot state that business plans have a negative impact on the performance of new ventures. Furthermore, they suggest that except for getting some funding, there is no reason for writing a business plan before opening a business. However, measuring performance differently may create different outcomes which need to be kept in mind, when comparing this article to the findings of e.g. Delmar and Shane (2003). The correlation table provided by Lange et al. (2007) shows that all three measures are significantly highly correlated, which could possibly be the reason for getting similar insignificant results. Additionally, I want to present a study by Haber and Reichel (2007), which investigates the entrepreneurial process, as well as the impact of planning. For evaluating the success of new entrepreneurial ventures, they used subjective and objective as well as short-term and long-term measures. Subjective measures include variables like customer satisfaction or profitability relative to competitors, which was questioned by using a likert scale. The term objective measure refers in their article to measures like revenues or growth rates. Haber and Reichel (2007) did a very comprehensive analysis of the entrepreneurial process, which is the reason why I want to present the results with respect to the influence of planning in this section. The next section of this master thesis describes and discusses other outcomes of this paper, like

the role of human capital. In order to examine planning, they used on the one hand a variable that indicates whether a plan was written or not and on the other hand they created an index with different planning items. Haber and Reichel (2007) found a small impact of the establishment variables (business plan and planning index) on revenues and number of employees used as performance measures, by using a multivariate analysis. Furthermore, those two establishment variables showed also a relatively minor significant contribution to the explained variance of most of the other performance measures. Therefore, Haber and Reichel (2007) summarize that the contribution of Business Planning to the explained variance of the ventures is marginal with around 2 - 4 %. Dencker et al. (2009) investigated the value of early-stage Business Planning with a dataset of Munich's Federal Employment Agency. For defining early-stage Business Planning, Dencker et al. (2009) asked how intensively founders analysed issues pertaining the market definition and the attainment of competitive advantage. As a dependent variable, Dencker et al. (2009) use the survival time. Findings show that a greater intensity in early-stage Business Planning leads to a significant reduction in the chance of firm survival. Honig and Karlsson (2004) focus more on institutional forces and the written business plan, but their article also contains logistic regressions with survival as well as profitability as dependent variables. Survival was measured as a dummy variable and was coded with one when the project survived throughout the time-horizon of the study and zero if the venture disbanded (Honig and Karlsson (2004)). This is rather similar to the Disbandment measure used by Delmar and Shane (2003) and to the measure used in this thesis. The profitability was coded with one when the firm reported at one of the interviews that their venture is profitable. Honig and Karlsson (2004) use a Swedish dataset for investigating these effects. The results of the corresponding logistic regressions didn't show a significant influence of formal business plans written on profitability. However, a moderate coefficient for writing a formal business plan with a value of 1.8 was found, which means that a formal business plan is increasing the likelihood of survival, but it's only significant at a 10% level of significance. By investigating the relation between Business Planning and success, Sarason and Tegarden (2003) point out that there is partial support that strategic planning is beneficial for early stage firms and propose that this is caused by the structure and future thinking it provides. They point out that this relation is negatively moderated by the organisational stage of development. The

benefits of strategic planning might be lower to late stage firms as processes are imitable and the competitive advantage is more prone to erosion according to Sarason and Tegarden (2003). This supports the approach used in this thesis that planning goes hand in hand with learning. By using an Australian dataset including over 2,900 firms, Gibson and Cassar (2005) found that better performing firms are more likely to plan and suggest firms should not think that it is irrational to plan. The results also show that firms may not get the desired outcome when encouraging formal planning to improve growth. However, this study summarizes that there appears to be a slightly stronger support that improved performance precedes planning introduction than vice versa (Gibson and Cassar (2005)).

With a sample of 100 Venture Capital (VC) backed start-ups, Gruber (2007) found that Business Planning is beneficial but the process of Business Planning needs to be appropriate for the different kinds of the environment. If the environment is rapidly changing, the planning process should be rather fast and focused on special tasks, while in slowly changing environments, those who plan more precise will be more successful. Especially in rapidly changing environments, Gruber (2007) underlines the importance of trade-off decisions between different planning activities in order to speed-up the planning process. The environment plays a crucial role for planning and the planning-performance relationship. This result is quite interesting and supports the approach of Business Planning used in this thesis, as learning and planning is combined by undertaking Business Planning activities. Furthermore, Rauch and Frese (2000) analysed planning and success for Eastern and Western Germany, as well as for Ireland, and found a positive relationship for planning and success in Germany while the results were negative for Ireland. Additionally, planning was found to be a mediator for the relationship between business owner's achievement orientation and success. This is according to Rauch and Frese (2000) due to cultural differences, and small companies will get a positive planning – performance relationship in cultures that value uncertainty avoidance. For investigating the success, Rauch and Frese (2000) combined growth of the number of employees over three years, the owner's income and the owner's level of work satisfaction. Rauch and Frese (1998) discussed in their article that Business Planning is beneficial for success in a hostile or uncertain environment, opposed to a certain or non-hostile environment, where new firms that plan less are more successful. This differs from the results of Gruber (2007). Rauch and Frese (1998)

used similarly as in their other article, a combined success measurement that contains e.g. growth, measured by the increase in the number of employees, size which refers to the sales amount and number of employees, entrepreneurial income, entrepreneur's own judgement of success and the level of work satisfaction. Both articles of Rauch and Frese show that general results about the planning – performance relation are challenging as there may be different factors (they present uncertainty and hostility) that moderate the relationship which makes this research question even more complicated and leads to more limitations. When thinking about different analyses presented earlier in this chapter, one needs to keep in mind that cultural factors e.g. implied by datasets of different countries play a major role in this area of research. Brinckmann et al. (2010) found that Business Planning is beneficial but contextual factors like newness of firms and the cultural environment of firms influence this relationship significantly. According to Brinckmann et al. (2010), entrepreneurs should focus on the context of their firm in order to assess the value of Business Planning. If there exists a high degree of uncertainty, a basic planning might be appropriate, together with contingency plans. According to theory, the greater the information about the future is, the more beneficial planning becomes. Some studies which analysed how Business Planning is done found that more detailed planning leads to a better performance. Miller and Cardinal (1994) created also a meta-study and found that strategic planning positively influences firm performance.

2.4. Conclusion

To conclude the topic of Business Planning, it can be assumed that Business Planning is rather beneficial for firms as many articles and studies show a positive effect of Business Planning on performance. Importantly, some articles clearly figure out that Business Planning needs to be adaptive, like Brews and Hunt (1999) or Gruber (2007). Delmar and Shane (2003) found a clear advantage of Business Planning, as well as e.g. Gruber (2007) who argues that Business Planning is dependent on the environment but it is beneficial. Brinckmann et al. (2010), who conducted a meta-study, found Business Planning to be successful but also mention effects caused by different environments like Rauch and Frese found in their articles. Furthermore, Brinckmann et al. (2010) found that the newness of the firm plays a major role and finally this study provides evidence for combining planning and learning and using a dynamic approach of planning. All arguments presented in this section lead to the first Hypothesis:

Hypothesis 1: Business Planning enhances the success of new ventures.

3. Effectuation and Entrepreneurship

The previous section of this master thesis provides an overview of Business Planning and presents studies that analyse the relationship between Business Planning and entrepreneurial success. It is discussed that some studies do not find strong empirical evidence for the planning approach. Hopp (2011a) summarizes the findings of Bird (1988) and Bhidé (2000) that “nascent entrepreneurs should spend their time on more relevant organizing activities such as gaining legitimacy and establishing contacts with customers”.

As it can be seen from Figure 3, the Entrepreneurial Process is complex and there might be other explanations of strategies why entrepreneurs become successful. Therefore, this section focuses on another theory that discusses entrepreneurship from a different point of view than explained before, namely Effectuation Theory.

The Society for Effectual Action (2012), a global research community, defines Effectuation as a logic used by expert entrepreneurs to solve problems in highly uncertain market environments. Entrepreneurs can learn to think and act effectually, thereby increasing their ability to create successful ventures. Furthermore, the Society for Effectual Action also describes that expert entrepreneurs in the sense of Effectuation believe that the future is a result of the actions of people. This implies that they are less sensitive to any predictions about the future, which is different from the planning approach presented in the previous section. The theoretical description of Effectuation Theory in the next part is based on the work of Saras Sarasvathy, mainly Sarasvathy (2001). For a start I will present the differences between causal and effectual actions briefly.

3.1. Differences Causal Action vs. Effectual Action

This part discusses the differences between causal actions, which are used for the planning approach and effectual actions, which build the basis for Effectuation Theory. There are some major differences between Effectuation and Causation. Causation uses forecasts, as well as assumptions that rely on risk and uncertainty of the future in order to create for example plans for moving forward with the venture. Opposed to this, Effectuation focuses on the logic of control. When thinking about risk and uncertainty,

it's always questionable how valid forecasts can be done and how helpful they are for an entrepreneurial venture.

According to Frank Knight's book "Uncertainty and Risk" (1921) presented earlier in this thesis, uncertainty builds the basis for a theory of profit. Pützl (2010) summarizes that the entrepreneur is according to Frank Knight willing to bear uncertainty.

Handling uncertainty e.g. in forecasting is very challenging and therefore Sarasvathy (2001) describes Causation processes as processes that "take a particular effect as given and focus on selecting between means to create that effect". Effectuation processes take a set of means as given and focus on selecting between possible effects that can be created with that set of means". To clarify this, the following example of Sarasvathy (2001) shows effectual and causal action by using a very simple example of cooking. According to Causation, somebody defines the menu and buys later all ingredients in order to prepare the meal. This approach is comparable with the planning process, as you have your "meal", i.e. Business Plans and you keep staying on these tracks, by taking the "ingredients". Furthermore e.g. the cook selects between effective ways to create the meal. However, there is also another way to cook a meal according to Sarasvathy (2001). If somebody simply wants to cook a meal, he can take ingredients that are stored, in order to create a meal. This is a process of Effectuation, because the cook has to find possible menus by knowing the given ingredients. Furthermore, he has to imagine the different meals and select the menu (Sarasvathy (2001)).

In order to give an example about Effectuation, it can be thought about an entrepreneurial team, which wants to create a software company in order to develop software for financial services. Then this can be seen as a Causation process, as there is a clear target (the founding of a company that creates software for financial services). If applying the planning approach, a potential way would be to write a Business Plan and to seek for financial support. As mentioned in the previous section, the creation of a business plan might be rather time-consuming, as an entrepreneur can use different tools (e.g. scenario techniques) in order to create forecasts and to analyse different determinants. Sarasvathy (2001) states that this strategy will work well if the environment is rather predictable, but she asks what will happen if something unexpected might occur.

This may lead to a struggling of the new venture. If the entrepreneurial team would act in the way the Effectuation Theory suggests, they would start with the idea to found a venture. In a further step they will focus on their means and they might find out to go into the Information Technology (IT) industry. Then they talk to many people, undertake networking activities and ask some firms if they can do small projects for them. After a while they might improve and use the feedback got from their clients and specialize in a small area and become successful. Both examples presented earlier are based on the examples given by Sarasvathy (2001), who states that: "effectuation process not only enables the realization of several possible effects (although generally one or only a few are actually realized in the implementation) but it also allows a decision maker to change his or her goals and even to shape and construct them over time, making use of contingencies as they arise".

This implies that the entrepreneur uses much more than a formalized plan and talks therefore to people and is always aware of new opportunities as explained in the examples. In order to show the differences between Effectuation and Causation, Sarasvathy (2001) provides an overview, as it can be seen in Figure 4.

Contrasting Causation and Effectuation		
Categories of Differentiation	Causation Processes	Effectuation Processes
Givens	Effect is given	Only some means or tools are given
Decision-making selection criteria	Help choose between means to achieve the given effect Selection criteria based on expected return Effect dependent: Choice of means is driven by characteristics of the effect the decision maker wants to create and his or her knowledge of possible means	Help choose between possible effects that can be created with given means Selection criteria based on affordable loss or acceptable risk Actor dependent: Given specific means, choice of effect is driven by characteristics of the actor and his or her ability to discover and use contingencies
Competencies employed	Excellent at exploiting knowledge	Excellent at exploiting contingencies
Context of relevance	More ubiquitous in nature More useful in static, linear, and independent environments	More ubiquitous in human action Explicit <i>assumption</i> of dynamic, nonlinear, and ecological environments
Nature of unknowns	Focus on the predictable aspects of an uncertain future	Focus on the controllable aspects of an unpredictable future
Underlying logic	To the extent we can predict future, we can control it	To the extent we can control future, we do not need to predict it
Outcomes	Market share in existent markets through competitive strategies	New markets created through alliances and other cooperative strategies

Figure 4: Contrasting Causation and Effectuation (Sarasvathy (2001))

Figure 4 summarizes the main differences between Effectuation and Causation. As it can be seen, one of the most relevant aspects in the field of entrepreneurship is the nature of uncertainty, which leads again to the major contribution of Frank Knight (1921) that has already been discussed in this master thesis. If risk occurs, the school of strategic management offers many different tools and strategies to handle these risks and also uncertainty can be handled e.g. by scenario planning, as described by e.g. Mintzberg et al. (1998). This is consistent with Figure 4, which shows that the knowledge exploitation is perfect with strategies based on Causation in a stable environment. Figure 4 also shows many related processes of Effectuation and summarizes the examples given before. To summarize all the presented ideas, Sarasvathy (2001) points out four major principles of Effectuation, which are presented in the following part.

3.2. Principles of Effectuation and Effectual Cycle

Sarasvathy (2001) mentions four major principles that provide the basis for the theory of Effectuation, which will be briefly presented.

Affordable loss rather than expected returns

The first principle is that the focus doesn't lie on expected returns but on the affordable loss, which helps to find options and even more options. The principle of affordable loss is also mentioned in a small article by Read and Sarasvathy (2007) and presents the case of Tom Fatjo, who founded Browning-Ferris Industries and was concentrating on his tolerance for a misleading of the venture (a worst case scenario). Finally, the venture became a billion-dollar enterprise that shaped an industry (Read and Sarasvathy (2007)).

Another example for the application of this principle is Richard Branson, who founded the Virgin Group. He stated in a Wall Street Journal interview, which is available through the webpage of the Society for Effectual Action, how he started Virgin Atlantic (Wall Street Journal (2009)). Therefore, he knew about the riskiness of the idea of founding an airline. He negotiated with Boeing to buy the first plane and had a contract which gave him the ability to return the plane within a year if the airline does not work, so he minimized the downside risk. His actions show that he was working according to

the affordable loss principle (Wall Street Journal (2009), Society for Effectual Action (2012)).

Strategic alliances rather than competitive analyses

Furthermore, Effectuation Theory suggests using strategic alliances or precommitments from stakeholders, instead of detailed competitive analyses, to reduce uncertainty and to erect entry barriers (Sarasvathy (2001)).

Exploitation of contingencies rather than exploitation of preexisting knowledge

The third principle suggests Causation as preferable for exploiting pre-existing knowledge, which builds the basis for reaching competitive advantage. However Effectuation is better for exploiting contingencies that arise unexpectedly over time and Sarasvathy (2003) concludes “this principle makes uncertainty a friend and an asset, eliminating the need to overcome it” (Sarasvathy (2001)).

Controlling an unpredictable future rather than predicting an uncertain one

The last principle focuses mainly on controlling an unpredictable future. The logic of Causation is according to Sarasvathy (2001) “to the extent that we can predict the future, we can control it”. Opposed to this, Effectuation focuses on controllable aspects of an uncertain future. Sarasvathy (2001) states therefore “to the extent that we can control the future, we do not need to predict it”.

Conclusion: Principles of Effectuation

Sarasvathy (2001) points out that if human action is the main factor shaping the future, Effectuation is very appropriate. Furthermore, Sarasvathy (2001) points out that Kotler focuses on markets as a universe of customers, while an effectuator defines the market according to Sarasvathy (2001) “as a community of people willing and able to commit enough resources and talents to sustain the particular enterprise”. Sarasvathy (2001) points out that the market is created by the entrepreneur himself when he brings many stakeholders together that “buy into” the idea to sustain the enterprise. Thereby the structure of what the enterprise is exactly, is dependent on the commitments of stakeholders and therefore less prediction is needed. Sarasvathy (2001) concludes this topic by stating “the particular firm created becomes the residual of a process of constructing a network of partnerships and precommitments (Burt (1992)) and the market itself is an aggregated taxonomy of such sustainable sets of partnerships and

commitments”. In order to provide a more detailed view, the following part summarizes all principles and ideas.

The effectual cycle

In order to summarize the main ideas of Effectuation presented in the previous parts, Figure 5 shows the effectual cycle.

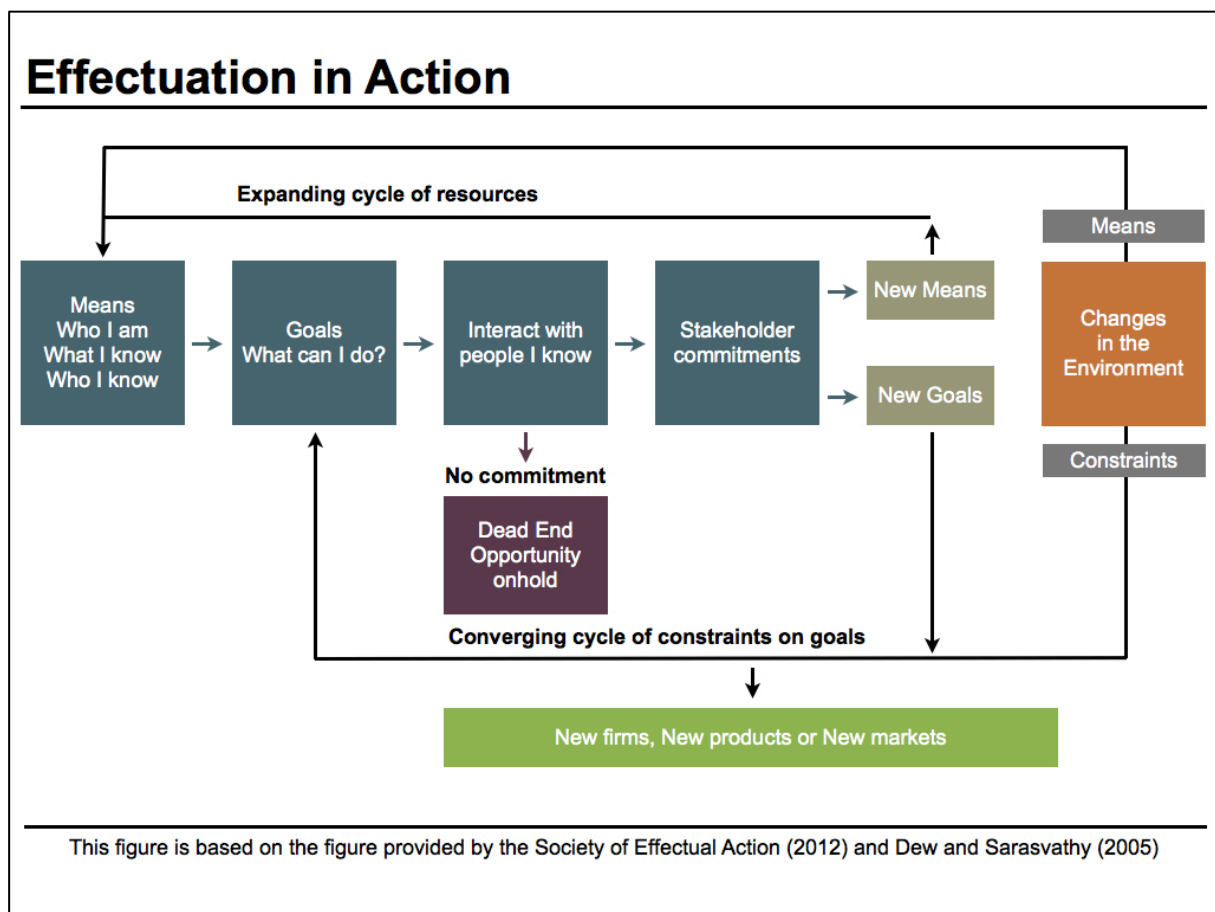


Figure 5: Effectuation in Action (Based on Society for Effectual Action (2012) and Dew and Sarasvathy (2005))

Figure 5 shows again the main ideas and underlines once more the importance of stakeholder commitments and the interactions with different people. In order to present evidence for the arguments of Saras Sarasvathy, the following part provides an overview of articles that investigate the relationship between Effectuation and the performance of entrepreneurial ventures.

3.3. Effectuation and Entrepreneurial Performance

To discuss the influences of Effectuation on entrepreneurial performance, it needs to be kept in mind that up to now I focused in this master thesis on a rather specific topic, namely Business Planning. Effectuation provides a very broad view on the determinants of success as the four principles pointed out by Sarasvathy (2001) include many different variables that can determine entrepreneurial success.

In order to start the discussion of important articles for this topic, I want to mention an article written by Carter et al. (1996), which explains start-up activities of entrepreneurs by using a dataset of 71 nascent entrepreneurs. Carter et. al (1996) suggest that advisors might find in their results that entrepreneurs are action-oriented and not passive and entrepreneurs who are not starting a business or abandon the efforts within one year, are likely to remain in their stage, without deciding to undertake or abandon it. This provides evidence that undertaking actions is important for entrepreneurs. As it can be seen in Figure 5, Effectuation is rather action-oriented, if one thinks about the major principles.

When focusing on the influences of the principles of Effectuation and discussing the results, it is necessary to put again a strong emphasis on different measures used for valuing performance like in the previous section. Read et al. (2009) conducted a meta study that analyses different articles empirically to find the effects of Effectuation processes on venture performance and serves as a rough guideline for this discussion. Thereby, they analysed the most important principles of Effectuation Theory, namely Means, Partnerships, Affordable Loss and Leverage Contingency. They found significant positive effects for means and partnerships on firm performance, while affordable loss is not significantly related to venture performance. However, Read et al. (2009) included therefore only four studies with rather diversified effects. The principle of leverage contingency, which means that strategies are adaptive to the opportunities, shows a significant positive effect on new venture performance. It needs to be clearly stated that the studies involved in this meta-study use different performance measures that might influence results. This study figures out that there exists evidence for three principles of Effectuation. The following part is aimed at presenting studies that were done in this field and which investigate the relation between Effectuation and entrepreneurial performance.

For consistency reasons, this part is separated according to the major categories used by Read et al. (2009). This is in line with The Society for Effectual Action (2012) that explains the four principles, and describes the first principle as “Start with your means”. Therefore, they suggest that instead of waiting for perfect opportunities, one shall start to undertake actions “based on what you have readily available: “who you are, what you know, and who you know” (Society for Effectual Action (2012)). Saras Sarasvathy underlines the importance of these three questions in an interview conducted in 2009 and mentions that entrepreneurs ask themselves questions like “What can I do with this?” and “What else can I do with it?” (Big Think (2012)).

Therefore, I start with presenting the effects of Means followed by the influence of Strategic Alliances, Exploitation of Contingencies and Affordable Loss on venture performance.

3.3.1. Means and Venture Performance

Dew and Sarasvathy (2005) stated that means are given and include the questions “Who I am, what I know, and whom I know”. It can be seen that this is a broad definition and covers many determinants e.g. human or social capital. I want to start presenting this part with a contribution of Unger et al. (2011) who conducted a meta study on human capital and entrepreneurial success and found an overall small significant positive relationship between human capital and success as earlier stated. Unger et al. (2011) found that the relationship between human capital and success was higher especially for human capital outcomes like skills or knowledge compared to human capital investments. Additionally, it was found that the effect of task-related knowledge on success was higher than the effect of past experiences. For examining the entrepreneurial success, Unger et al. (2011) used three measures of entrepreneurial success namely growth, profitability and size.

Earlier, Davidsson and Honig (2003) investigated the effects of different human capital parameters on the performance of new ventures (measured for reporting any sale or being profitable during the 18 month period of the study). They only found one aspect of social capital to be statistically significant for both performance variables, namely being a member of a business network. Additionally, having close friends or neighbours in business showed significantly positive effects on the sales variable. Other human- and social capital variables didn't show a significant influence on sales or profitability. Interestingly, they also investigated if nascent entrepreneurs differ from a control group according to their human and social capital. Therefore, they found that differences in tacit and explicit knowledge, as well as social capital increase the probability of entering into nascent entrepreneurship. To conclude the effects, social capital seems to be more influential than the human capital variables on the probability of nascent entrepreneurship. The question of which people enter entrepreneurship was also investigated by Zwan (2011). Honig and Karlsson (2004) analysed different means in their article and found that being a member of a business network and knowing customers before starting, is significantly correlated with survival and profitability. Furthermore, previous start-up experience was positively related to profitability at a 10 % level of significance. They also found a significant effect between “Close friends or neighbours in business” and profitability. Interestingly, they found that variables which

measure education, work experience and managerial experience, are not significantly related to survival or profitability. Focusing on personality, leads to an article of Ciavarella et al. (2004) that investigates the “Big Five” personality attributes, namely extraversion, emotional stability, agreeableness, conscientiousness and openness to experience and relates them to success. In order to explain the different attributes, Ciavarella et al. (2004) provide a table with traits and components. The measure of success was based on long-term venture survival. The variables used by Ciavarella et al. (2004) have a stronger focus on personal attributes compared to the variables used by Davidsson and Honig (2003). The results show a positive effect of the entrepreneur’s conscientiousness that includes traits like being hardworking or achievement-oriented. The variable “openness to experience” showed a negative effect, which is rather surprising, as such openness may help to use contingencies according to Effectuation Theory. However, if the criticism on the learning approach is recalled, it might occur that entrepreneurs who are very open-minded lose their strategy. The other attributes are not related to the long-term survival. Lerner and Haber (2000) investigated performance factors of small tourism ventures. By comparing different independent variables, they found that the most important factor for profitability, compared to the other factors analysed, is managerial skills. Therefore, they argue that entrepreneurs in smaller ventures are involved in many areas of activity and they suggest that incubators shall use management trainings in order to promote new venture’s development and success. Additionally, Lerner et al. (1997) analysed woman entrepreneurs in Israel and found an effect of the entrepreneur’s network affiliation, motivation, human capital and environmental factors on performance. Especially motivation showed a strong effect on performance, where performance was measured by using the variables Revenues/Sales, Income, Profitability and Number of Employees. Importantly, human capital showed mixed results. Social learning theory or the existence of role models didn’t influence the performance outcomes significantly according to Lerner et al. (1997).

Anna et al (2000) focused on differences between women in traditional (e.g. retail and service sector) and non-traditional industries (e.g. construction sector) with an emphasis on different attributes like venture efficacy, career expectations, or perceived support received. Thereby, they found that there are crucial differences between

entrepreneurs in traditional and non-traditional businesses. Findings show that venture efficacies for opportunity recognition and economic management as well as career expectations of autonomy and money had a positive effect for traditional owners while efficacy toward planning and the need for security had a negative effect on sales. For non-traditional owners, venture efficacy towards planning, as well as career expectations of autonomy were positively related to sales, but the expectation of money or wealth, as well as the perceived importance of the emotional and financial support were negatively related to sales, according to Anna et al. (2000).

Honig (1998) investigated determinants of success of Jamaican microentrepreneurs and found a strong positive effect between vocational trainings, years of experience and mother's occupational status and profit. Social capital, which was operationized by frequent church attendance and marital status showed also positive effects. Honig (1998) found in line with other articles presented earlier, a strong positive effect of social networks on performance. Importantly different structural environments may affect the rate of return to human, social and financial capital.

As discussed in the previous section, Haber and Reichel (2007) analysed beside the effects of Business Planning also the effects of human capital, as well as the influence of environmental resources on venture's performance. In line with other articles mentioned in this section, Haber and Reichel (2007) found that managerial skills have a key influence on new venture's performance. The second biggest influence on performance was found for the venture type, which is a variable with three categories including accommodation, tourism attraction and active recreation. Additionally, they found that the impact of external support, which includes financial and advisory assistance, is relatively small. Importantly, the results of Haber and Reichel (2007) show that the entrepreneur's human capital doesn't affect objective long-term performance measures significantly. However, they concluded that this pattern prevails in all other resources analysed, as their cumulative contribution to long-term objective measures is relatively small. This can be explained according to Haber and Reichel (2007) by the nature of small tourism ventures, which are "lifestyle businesses" (Haber and Reichel (2007)).

Additionally, Honig (2001) analysed the human capital of firms in Palestine territories

and found that human capital e.g. training, advice and education, is especially important for the success of smaller firms in rapidly changing environments, while larger firms benefit most from loans and capital support. They also benefit from advice across the human capital base and from managerial skills. Thornhill (2006) focused on the role of knowledge and innovation on firm performance by investigating Canadian manufacturing firms. Therefore, he found that in highly flexible environments, a skilled workforce is very beneficial, while in rather stable manufacturing industries the most benefits for firm performance result from investments in training. These results seem to be very obvious when thinking about the tasks of firms in highly dynamic environments e.g. faster changing markets or a greater number of product launches. Additionally, this supports the learning approach, discussed earlier in this master thesis.

After the presentation of all these papers, which investigate mainly the role of human or social capital on entrepreneurial success, it can be concluded that there seems to be a strong relation between means and performance. Means play an important role for Effectuation, according to Dew and Sarasvathy (2005) and in order to get a comprehensive view on Effectuation and performance, the next parts focus on the other principles presented by Sarasvathy (2001).

3.3.2. Strategic Alliances and Venture Performance

As earlier described, Sarasvathy (2001) underlines the importance of strategic alliances and precommitments from stakeholders as a way to reduce uncertainty and to build up entry barriers.

Some articles, earlier discussed like Lerner et al. (1997) and Honig (1998) analysed issues of network affiliation and found partially significant relations between networks and venture performance. Ciavarella et al. (2004) mention that industry experience had a significant influence on survival, which implies that an industry specific knowledge can help entrepreneurs to lower uncertainty and enhances the probability of survival, by making e.g. initial contacts with suppliers or customers, as well as establishing networking relationships with others who know the specific industry (Ciavarella et al. (2004)).

Davidsson and Honig (2003) suggest that entrepreneurs should force networks of all firms but especially interfirm and intrafirm relations. Walter et al. (2006) analysed the

network capabilities of university spin-offs and the performance of these spin-offs. They found strong effects of network capabilities on performance, which was measured by objective and perceptual measures. The article also investigated the effects of entrepreneurial orientation and Walter et al. (2006) didn't find a direct relationship to venture performance. However, Walter et al. (2006) found that network capabilities strengthen the relationship between entrepreneurial orientation and performance. These results imply, according to Walter et al. (2006), that firms shall improve their network capabilities and their networks in order to use them as means to improve the venture's performance. Additionally, resources should be available for networking and for pushing employees to develop relationships (Walter et al. (2006)).

This suggestion is in line with the Effectuation Theory and provides therefore a great support for this Effectuation principle. Another study was written by George et al. (2002), and analysed links between universities and publicly traded biotech companies and found partnerships to decrease Research and Development (R&D) costs, but they didn't find statistically significant differences in financial performance, which was measured by net sales to assets. George et al. (2002) point out that this might be caused by other costs, which are implied by managing and working with partnerships and therefore suggest that managers should not simply follow such partnerships but should evaluate them carefully. Higashide and Birley (2002) focus on a very special part, namely on the partnership between a venture capitalist and the entrepreneurial firm. This partnership is normally rather strong and if there arise conflicts, it is interesting how such conflicts affect performance. The results support that conflicts as disagreement can be beneficial for the performance but conflict as personal friction is negatively associated to performance. These impacts are stronger for conflicts about organisational goals than for policy decisions according to the results (Higashide and Birley (2002)).

When summarizing the articles presented about networks and partnerships, it can be seen that there was extensive research done which underpins the influence of these issues on venture performance. Also Read et al. (2009), who conducted a meta-analysis on these topics, found a significant positive effect for partnership on new-venture's performance which supports, together with the articles mentioned in this part, the assumption that this Effectuation principle is of crucial importance.

3.3.3. Exploitation of Contingencies and Venture Performance

In order to get a holistic view on Effectuation, one needs to analyse the utilization of contingencies as a third principle, according to the theory provided by Sarasvathy (2001). Dew and Sarasvathy (2005) define the effectual position on the issue of predisposition toward contingencies with the term leverage, which means: "Surprises can be positive. So invest in techniques that are open to them and leverage them into new opportunities". Dew and Sarasvathy (2005) describe the causal position on this topic, that surprises may be unpleasant and therefore such situations should be avoided. Keeping this statement in mind, it can be assumed that management systems that are more open and less planning-oriented might have a positive influence on firm performance. Ciavarella et al. (2004) analysed the openness to experience and found interestingly a negative relation between the openness and long-term venture survival. Ciavarella et al. (2004) explain this by the fact that long-term survival needs managerial skills instead of an introspective and creative mindset. However, Ciavarella et al. (2004) mention that an introspective and creative mindset may enhance the propensity to start a new venture but this was not tested in their article.

Another article by Beckman et al. (2007) investigates how top management teams and their characteristics affect the completion of Initial Public Offerings (IPO) and the ability to attract venture capital. Therefore, 161 technology firms from Silicon Valley were used and data show that top management teams, whose members had many different employers and a functional diversity, influence the likelihood of Initial Public Offerings positively. Interestingly, the exits of firm founders who are part of the top-management team and enterings of new people increase the likelihood to achieve an Initial Public Offering, which can be according to Hopp (2010) the end of the financing cycle. Beckman et al. (2007) point out that replacing firm founders with experienced managers leads to firm success. Connecting these outcomes to Ciavarella et al. (2004), it can be seen that the need for managerial skills (e.g. diverse functional backgrounds) shows also according to Beckman et al. (2007) a positive effect on success.

If I link these articles to Effectuation Theory, it can be assumed that contingencies can be utilized easier with management teams having a lot of experience as they might be more open-minded than teams with an owner, who might be very convinced of his idea. When talking about top-management teams, it is necessary to discuss the relation between

top-management teams and success. Ensley et al. (2006) published an article in this regard, which analyses differences between vertical and shared leadership in management teams and their effects on the performance of new ventures. Performance was measured with two variables, where the first measures the average annual revenue growth and the second, the annual growth rate in the number of employees. The term vertical leadership is used for a leadership style e.g. with a Chief Executive Officer (CEO), while shared leadership refers to a style with many different managers at a same hierarchical level, who manage the enterprise together. According to the articles and results that are presented up to now, it can be expected that a form of shared leadership enhances the chance of exploiting contingencies, as the organisation is less streamlined to the ideas of the Chief Executive Officer. According to the findings of Ensley et al. (2006), shared leadership is more successful than a vertical leadership for new ventures, especially in the development or growth stage. Furthermore, Ensley et al. (2002) analysed the management team regarding the team's cohesion and provide evidence that cohesion is negatively related with affective conflicts and positively related to cognitive conflicts. According to their findings, the cohesion of top management teams also leads to venture growth.

All in all it can be concluded that different findings underpin the importance of this principle. When taking the results provided by Read et al. (2009) into account, who found a positive and significant influence on new venture's performance by conducting their meta study, it can be stated that the exploitation of contingencies is important for new ventures.

3.3.4. Affordable Loss Principle and Venture Performance

After the discussion of the utilisation of contingencies with questions like openness or management teams, I move further to the principle of affordable loss, which means, according to Dew and Sarasvathy (2005) that a firm should concentrate more on the affordable loss when undertaking projects instead of looking at expected returns, as earlier discussed. Read et al. (2009) used only a small number of empirical studies to investigate this principle, and did not find a significant relationship between the application of the affordable loss principle and new venture performance. Read et al. (2009) measured the effects of the affordable loss principle by the risk taking propensity (the inverse of the affordable loss principle) and secondly, how people

mitigate or distribute risk. Tan (2007) found a significantly positive influence of risk taking on firm performance for the year 2002. Defensiveness showed a significant positive effect for the year 1990, while it didn't show a significant effect for the year 2002. Importantly, it needs to be mentioned that Tan (2007) used a five-point scale that related a firm's profitability to major competitors and size, measured by the number of employees, was used for control purposes. By applying meta-analytic heuristics Read et al. (2009) found a corrected effect of -0.220 between "Defensiveness" and "(reverse coded) Risk Taking" on venture performance, for this study.

Bamford et al. (2004) analysed the temporal nature of growth determinants in new bank foundings. For investigating the risk position of banks Bamford et al. (2004) used liquidity risk and leverage risk. By conducting meta-analytic techniques Read et al. (2009) found a corrected effect of -0.061 between liquidity and leverage risk position and performance, measured by deposit and loan growth.

Finally, even though there is no clear empirical evidence that the principle of affordable loss is really beneficial, examples of entrepreneurs like Richard Branson discussed earlier need to be considered, and therefore it cannot be stated that the principle of affordable loss is not influential at all. However, this principle seems to be the weakest of all principles presented by Sarasvathy (2001). In an interview conducted in 2009, Saras Sarasvathy states that successful entrepreneurs focus more on their interest in the issue and that they enjoy doing it, than on expected returns, which is implied by this principle (BigThink (2012)). Under the assumption that investors obviously analyse expected returns, it can be assumed that this principle might be questionable, if a venture needs to raise financial resources. Banks, for example, focus strongly on financial information and compare this to industry standards according to Mason and Stark (2004). I would suggest that the principle of affordable loss is beneficial, when applied together with looking at expected returns in order to limit downside risks.

3.4. Conclusion

This section provides an overview of Effectuation Theory. As mentioned, the evidence shows that this topic is very broad, as principles like focusing on means include many different variables. Read et al. (2009), who analysed this huge field of research with their meta-study, show that an overall significant effect exists between the principle of strategic alliances, means and the utilization of contingencies and firm performance. The affordable loss principle didn't show significant effects, as explained in the previous part. When summarizing the principles, it can be seen that the first principle that suggests to focus on existing means includes lots of empirical evidence e.g. human and social capital theories. Furthermore, several different articles provide evidence for focusing on strategic alliances. When taking the example given, that shared leadership enhances performance, it supports the idea of Effectuation by focusing on leveraging contingencies. Even though there is no strong evidence, the affordable loss principle seems to work, when looking at entrepreneurs like Richard Branson or Tom Fatjo as earlier described. It can be seen in this section that Effectuation covers many different areas of research, which include several determinants that might influence the entrepreneurial process. Business Planning is, opposed to Effectuation, a much more specific determinant as it can be seen in the previous section.

As the evidence for the Effectuation principles is rather strong, it can be concluded that planning might be supervalued, when comparing its influence to the great number of effects mentioned by Effectuation Theory, e.g. strategic alliances.

Therefore, it can be expected that a clear focus on undertaking planning activities takes lots of time, which could be used e.g. for undertaking effectual actions like building partnerships. This leads to the second Hypothesis:

- *Hypothesis 2: Business Planning hinders entrepreneurs undertaking effectual actions and decreases the performance of entrepreneurial ventures.*

4. Who does Business Planning

Up to now, this master thesis covered the topics of Business Planning and Effectuation. However, I have not mentioned the very important field of “Who does Business Planning” yet. It can be seen from the previous sections that different criteria like human or social capital affect the performance, or increase the likelihood of becoming an entrepreneur (Davidsson and Honig (2003)). In order to figure out whether such variables also determine the Business Planning activities, this section focuses on the two main questions, “Who does Business Planning” and “Why are Business Planning activities undertaken”. Furthermore, this can help to explain the relationship between Business Planning and success. In the empirical section, the Hypotheses are tested. As earlier stated, it seems to be very popular to undertake Business Planning activities as e.g. the creation of a business plan is supported by institutions that help start-ups. According to the first Hypothesis, it can be assumed that Business Planning enhances venture’s performance. There might also be other reasons, beside the entrepreneur’s wish to increase performance, that influence the likelihood of Business Planning, as for example institutional pressures or human capital variables. Investigating such reasons is exactly the aim of this section.

A rather similar study was conducted by Honig and Karlsson (2004) and published in the Journal of Management. This study investigated institutional forces that might affect the creation of business plans. Therefore, they analysed a sample of 396 nascent entrepreneurs and conducted surveys during a two-year period every six months. Importantly, they also analysed the relation between Business Planning and performance, which was measured by profitability and survival. As this article mentions many important aspects, I describe this article in more detail. To get a holistic overview of the article, I want to present the five Hypotheses that were used by Honig and Karlsson (2004) for investigating this research question:

- Hypothesis 1: Nascent organizations whose founders contact public support agencies have a greater propensity to produce business plans than those without such contact.
- Hypothesis 2: Nascent organizations in industries where Business Planning is deeply rooted have a greater propensity to produce business plans than those in other industrial fields.

- Hypothesis 3: Nascent organizations whose founders have a business education have a greater propensity to produce business plans than those whose founders do not have a business education.
- Hypothesis 4: Producing business plans will increase the probability of a nascent organization's survival.
- Hypothesis 5: Producing business plans is positively correlated with the probability of a nascent organizations's reaching profitability.

These Hypotheses underpin the very broad idea of this article, which uses methodologically hierarchical logistic regressions with "Formal Business Plan Written" as well as in a second stage "Survival" and "Profitable" as dependent variables. Findings suggest that entrepreneurs who were encouraged by family or friends have a significantly, nearly three times higher probability for writing business plans than those who were not encouraged, according to Honig and Karlsson (2004). Nascent entrepreneurs who were members of business networks have increased odds to write a business plan and the probability of writing a business plan was also slightly increased by the age of the entrepreneur. Furthermore, it was shown that the first and second Hypothesis were upheld and the third Hypothesis was rejected. Interestingly, the variable "Business classes taken" does not show a significant influence on the likelihood of creating formal business plans, which is rather interesting, as many entrepreneurship courses focus on Business Planning, as mentioned by Honig (2004) or Hills (1988). The variable that measures contact with a support agency shows a rather strong influence on the probability of writing a business plan. This seems to be rather obvious, if it is taken into account that institutions like United States Small Business Administration (2012a) suggest entrepreneurs e.g. to create Business Plans. Additionally, Honig and Karlsson (2004) analysed the effects of Business Planning on performance. Therefore, they found that "Formal Business Plan" is just positively related to survival at a 10 % level of significance, while they didn't find a significant relationship between "Formal Business Plan" and profitability. Finally, the fourth Hypothesis was not supported and the fifth Hypothesis was rejected. Additionally, Honig and Karlsson (2007) analysed the norms surrounding business plans and conducted 37 face to face interviews with managers, external capital providers, governmental agencies and consulting professionals. Honig and Karlsson (2007) state: "the main aim of these interviews was to understand how the business plan concept traveled from external

sources to the focal ventures, and how they were used by the focal ventures". The sample included six focal companies located in a university incubator which were analysed during a timeframe of five years. Importantly, the firms were rather small and the entrepreneurs were rather inexperienced as entrepreneurs.

Honig and Karlsson (2007) found that the companies had a symbolic preference for writing a business plan, especially to gain legitimacy from external actors, making the companies look structured, well planned and established. Interestingly, entrepreneurs wrote business plans even though they did not have an intention to use them. When expectations in business plans differed from the current situation, many entrepreneurs were found to loosely couple their plans to their actual operations (Honig and Karlsson (2007)). Additionally, none of the firms investigated allowed the business plan to significantly change their operations (Honig and Karlsson (2007)). This is rather interesting, as supporters of the traditional planning approach, like Porter (1998) mention that competitive advantage can be reached by using e.g. generic strategies. However one should keep in mind that different articles mentioned in this master thesis point out that business plans should be adapted if e.g. the environment changes. According to Brews and Hunt (1999), the adaption of plans is of crucial importance. However, when firms do not allow business plans to influence the operations or the entrepreneurial process, it is rather hard to estimate the effect of Business Planning on performance. In order to give an overview about different factors that might influence the likelihood of Business Planning I combine the variables from the dataset used to four main groups, according to their characteristics. In the following, each topic will be discussed by presenting empirical studies that already focused on similar issues. The link to performance is also included, as this is necessary for presenting a solid background for the empirical analyses provided in the following section.

4.1. Education and Business Planning

In the beginning, one of the major personal attributes, namely education is investigated, as years of education can be expected to influence the likelihood of undertaking Business Planning activities. Entrepreneurs might be confronted with events like business plan competitions (Russel et al. (2008)) or presentations about companies during their education. Furthermore, skills that are taught might influence the way in

which entrepreneurs use planning tools. For example, doing some collaborative learning enhances critical thinking, according to Gokhale (1995). Critical thinking might have an influence on the likelihood of undertaking Business Planning activities. According to Gokhale (1995) collaborative learning takes place if there are students who work together on a project, which might be rather often the case during the period of education. Schoemaker (1995) discusses scenario planning in a similar context as a tool for strategic thinking. As mentioned previously, the scenario technique is a tool that is often used in planning. For creating scenarios, it is important to examine the environment in a precise way, where it can be assumed that critical thinking skills might help. Eventough Pithers and Soden (2000) point out that students differ by critical thinking and that teachers do not always teach “good thinking skills”, it can be assumed that critical thinking can be learned in education and therefore it could have an influence on the likelihood of Business Planning. As the question how entrepreneurs can be educated is of crucial importance, Honig (2004) published an article which focuses especially on entrepreneurial education and presents two different alternatives for education, additionally to the currently used planning approach. According to Honig (2004), 78 of the 100 best universities (U.S. News and World Report (2004)) in the United States offer special courses that contain Business Planning issues.

Honig (2004) argues therefore that neither theoretical nor empirical evidence sufficiently justifies the teaching of business plans or the plans themselves. He suggests to use simulations or a contingency approach instead and to rethink the entrepreneurial education, as many determinants are unstable. Therefore Benson Honig (2004) states: “Rather than accepting at face value standardized activities and routines, we should begin examining our learning interventions in order to identify those activities most suitable for present and future entrepreneurs we hope to assist.” When analysing this quote, it needs to be considered that current empirical work points out that Business Planning is beneficial, as discussed in the previous sections, and according to Brews and Hunt (1999) also plans need to be reworked and updated. Investigating the role of Education is important as it might affect the likelihood of undertaking Business Planning activities. It is important to mention that according to Dencker et al. (2009), planning outcomes are contingent to the pre-entry knowledge endowments of founders.

For analysing the effects of education on Business Planning, this thesis focuses on years of education of each entrepreneur, not specifically on entrepreneurship education. According to the presented articles, it can be concluded that aspects like critical thinking and other tasks learned from education have an influence on the likelihood of Business Planning, eventough articles like Honig and Karlsson (2004) found different results. In this context, I assume that planning tools are used to examine different factors e.g. the environment and therefore people with higher education are more likely to use such planning tools as they might put a stronger emphasis on analytical methods. Another reason could be that people with higher education are more open to literature and according to Honig and Karlsson (2004), many books exist that provide hints regarding the creation of business plans. Furthermore, institutions like the United States Small Business Administration or WKO offer guidelines about founding a new venture and recommend e.g. to create business plans. Importantly, regarding business education, Honig and Karlsson (2004) included a great answer of a respondent about business plans who stated: "In school it was very important. A business plan is definitely the first thing that you should think of (when you start a new firm)." Eventough this quote is about business education, it might be a similar situation for people with greater education levels as they might be more likely to get in touch with contents taught in business classes or by institutions. This leads to the first Hypothesis in the third section:

- Hypothesis 3: Who does Business Planning
 - a.) *Education increases the likelihood of Business Planning.*

4.2. Financing and Business Planning

Financing is definitely one of the most important topics for an entrepreneurial venture. As nearly all business ideas need a basic funding for getting started, governmental agencies or institutions offer support to entrepreneurs by providing hints and help for the creation of new businesses. It is suggested that nearly all capital providers need as a prerequisite for funding a business plan which is sometimes seen as an essential roadmap for venture success (United States Small Business Administration (2012), Austrian Federal Economic Chamber (2012)). The role of such assistance agencies and their influence on the likelihood to write business plans is discussed by Honig and Karlsson (2004). They found that a contact with a support agency is significantly positively related to the likelihood of writing a formal plan. Many banks like

UBS (2012), Deutsche Bank (2012), Raiffeisen (2012) or Erste Group (2012) underline the importance of Business Planning. Furthermore, venture capitalists like Sequoia Capital (2012) from the United States or Gamma Capital Partners (2012) from Austria focus on the importance of business plans for getting started. In their article on how bankers, venture capitalists and business angels focus on business plans, Mason and Stark (2004) found that bankers focus especially on the risks that the loan will not be paid back and on the financial resources of the entrepreneur. In order to investigate the venture, they use the financial information given in a business plan and compare it with industry averages. venture capitalists and business angels focus on growth opportunities and potential returns according to Mason and Stark (2004). Financing issues are important, but the focus is on markets and growth potential and especially Business Angels put emphasis on personal relationship issues. According to the findings, it may help to engage business angels also at an emotional level as they focus even stronger on the entrepreneur and “investor fit” considerations (Mason and Stark (2004)). Regarding business angels and venture capitalists, Mason and Stark (2004) summarize that they are focused on the market and “want to know what is the customer benefit or what problem is being solved” (Looser and Schläpfer (2001)). Their suggestion for entrepreneurs is to carefully consider the addressee when creating the business plan and that business plans shall focus on criteria that are most important for the addressee.

In order to sum this up, there seems to be pressure that entrepreneurs have to create business plans if financial resources need to be raised. Another reason might be that if financing was successful, e.g. banks focus during the investment period also on Business Planning activities. Entrepreneurs who do not need to raise funding are assumed to have a lower need for writing business plans as they are not forced to do so by investors. This is the reason why I expect that entrepreneurs with a greater need for financing are more likely to create business plans. This yields in the second Hypothesis in this section:

- *Hypothesis 3: Who does Business Planning*
 - b.) *Needed Financial Resources increase the likelihood of Business Planning.*

4.3. Experience and Business Planning

Another very important attribute of an entrepreneur is the experience that the entrepreneur earned over the years. In order to examine the role of experience, the analysis is focused on entrepreneurial, as well as on labor experience. Generally, it could be expected that entrepreneurs who have already founded or worked at an entrepreneurial venture know exactly how the process looks like and will therefore undertake those actions that have been successful in the venture where they have already worked at. If there has been a funding process, it can be expected that the entrepreneur knows about the importance of business plans for institutions. Furthermore, labor experience can have a crucial effect on the actions an entrepreneur undertakes. This could be due to situations where entrepreneurs have already been in touch with planning instruments in their work. In order to clarify this, I want to present a small example. Let's think about the situation that a marketing manager who used planning techniques discussed in e.g. Kotler (2003), starts a new venture. In this case it can be assumed that such a person has already been in touch with planning tools and might be therefore more likely to undertake Business Planning activities.

Additionally, to underline the importance of experience on venture performance, Delmar and Shane (2006) analysed the relation between founding team experience and performance and found positive effects of founding team experience on survival and sales but these effects are not linear and change with the age of the enterprise. However, Honig and Karlsson (2004) didn't find an effect of experience on written formal business plans and they did not find an effect between experience and survival or profitability. However, it can be assumed that work experience might also affect being member of a business network which is positively related to the likelihood of writing a plan, according to Honig and Karlsson (2004). Additionally, the real entrepreneurial experience might have a strong effect on the likelihood of undertaking Business Planning activities. When thinking about the evidence presented in the second section, e.g. Delmar and Shane (2003), which underline Business Planning to be beneficial for firm survival, it can be assumed that entrepreneurs with experience in entrepreneurship are likely to write business plans because they know about the advantages of business plans. As it was previously discussed in this master thesis, according to Honig and Karlsson (2007), entrepreneurs often use business plans in order "to gain legitimacy from external actors, making the companies appear more structured, well

planned and established”. If recalling from a previous section that a business plan is the business card of new ventures, I assume that entrepreneurs with a greater experience know about the importance of business plans and planning activities. Persons that have already earned entrepreneurial experience may have also been part of business networks, which leads according to Honig and Karlsson (2004) to a greater likelihood of writing business plans. However, according to Effectuation Theory, it would be expectable that entrepreneurs who already possess entrepreneurial experience don’t want to waste their time and focus instead for example on establishing partnerships or undertaking other actions. However, the importance of planning is also underpinned in the previous sections and therefore it can be expected that experience leads, due to the factors and relations explained, to a greater likelihood of Business Planning. Importantly, according to the findings of Honig and Karlsson (2004), who found a significant relation between age and the likelihood of Business Planning, I use age as a control variable for testing the Hypotheses in this section. Age is obviously, according to the dataset highly correlated with labor experience. The arguments mentioned in this part lead to the third Hypothesis in this section:

- *Hypothesis 3: Who does Business Planning*
 - c.) *Entrepreneurial Experience and Labor Experience increase the likelihood of Business Planning.*

4.4. Self-Efficacy, Motivation and Business Planning

After these different criteria that are expected to increase the likelihood of Business Planning, I want to focus additionally on motivation and self-efficacy and examine whether these attributes affect the probability of Business Planning. According to Bandura (1994) perceived self-efficacy refers to “people’s beliefs about their own capabilities to produces effects”. The exact description of the measure of self-efficacy that is used in this master thesis is provided in the next section.

Markman et al. (2005) investigated self-efficacy and entrepreneurship and found that entrepreneurs score significantly higher on levels of self-efficacy and on two aspects of perseverance (perceived control over adversity and perceived responsibility regarding outcome of adversity) than non-entrepreneurs (Markman et al. (2005)). Additionally, they found that regretful thinking co-occurs with the valuable attributes perseverance and self-efficacy and leads to increases in personal costs, due to stronger regrets.

Similarly to these results, Chen et al. (1998) found that business founders had greater self-efficacy in innovation and risk-taking than non-founders. Tyszka et al. (2011) analysed motivation, self-efficacy and risk attitudes and separated the sample into necessity-based and opportunity-based entrepreneurs. Tyszka et al. (2011) found that the need for independence and for achievement was higher for entrepreneurs who were opportunity-based while this was not the case for necessity-based entrepreneurs and non-entrepreneurs whose main motivation was job security. Additionally, self-confidence was higher for entrepreneurs who were opportunity-based compared to the group of employees, but the risk aversion was similar to all groups. Furthermore, it was found that entrepreneurs undertake riskier investments in both groups (opportunity-based and necessity-based) and it is argued that this is necessary for entrepreneurs and not caused by human's preferences.

Chen et al. (1998) demonstrate entrepreneurial self-efficacy as a distinct characteristic of an entrepreneur. Corbett and Hmieleski (2008) analysed interaction effects between self-efficacy, improvisational behaviour and venture performance and found a positive relationship between improvisational behaviour and venture performance for those who had high levels of self-efficacy, while for those with lower levels of self-efficacy, the relationship was negative. According to their results, entrepreneurs who were excited improvisers with high levels of self-efficacy are the highest performers in the sample. Baron and Hmieleski (2008) found that the environment is important for the relationship between self-efficacy and venture performance, as in highly dynamic environments entrepreneurial self-efficacy combined with moderate optimism is positively related to venture performance, but however negative when combined with high optimism. Baron and Hmieleski (2008) found weak effects of self-efficacy on venture performance in stable environments. Summarizing the findings, effects between self-efficacy and undertaken entrepreneurial actions in the entrepreneurial process might exist. Therefore, this master thesis analyses whether the level of self-efficacy will also affect the likelihood of Business Planning. It can be assumed that people with lower levels of self-efficacy will be more likely to plan, as they might have a greater need for a guideline in order to orientate themselves during the entrepreneurial process. Additionally, they might need more often assistance of support agencies, which leads, according to Honig and Karlsson (2004), to a greater likelihood to write a formal business plan.

Motivation plays a crucial role in the entrepreneurial process. Watson et al. (1998) focused on differences between successful and unsuccessful founders concerning their startup motivation. They found different “push” criteria, like unemployment or frustration with previous employment and “pull” criteria like using creative skills and being one’s own boss. Those “pull” criteria are more important motivators and more closely associated with survival. Collins et al. (2004) found that achievement motivation was significantly correlated to the choice of an entrepreneurial career, as well as to entrepreneurial performance. Gelderen et al. (2005) found that “push” motivation, paired with high ambitions, is negatively related to performance. Therefore, they suggest that people who are forced to start a business and are searching for organizational employment should limit a start-up in scale and scope (Gelderen et al. (2005)).

As it can be seen, there are “push” and “pull” factors and in this master thesis it is tested whether the level of startup motivation has an effect on the likelihood of undertaking Business Planning activities. It can be assumed that motivated people are more likely to plan because they undertake every effort to found a new venture. Additionally, it can be assumed that entrepreneurs with higher startup motivation will contact support agencies or visit different entrepreneurship courses, in order to increase the likelihood for founding, which leads again to a greater likelihood of Business Planning.

Finally, the different personal traits, self-efficacy and motivation might influence the likelihood of Business Planning, which is tested with the fourth Hypothesis in this section:

- *Hypothesis 3: Who does Business Planning:*
 - d.) *Lower levels of Self-Efficacy (a) and higher levels of Startup Motivation (b) increase the likelihood of Business Planning.*

4.5. Conclusions

This section of the master thesis presents four Hypotheses in order to analyse the topic of “Who does Business Planning” in more detail. These four Hypotheses suggest that higher education, the need for funding, greater levels of experience and higher levels of startup motivation lead to a greater likelihood of undertaking Business Planning activities. Importantly, as the fourth Hypothesis focuses on personal attributes, I expect that lower levels of Self-Efficacy increase the likelihood of Business Planning. In order to get a holistic view on the issue of Business Planning, this section presents links to the previous sections. The empirical background presented supports the different Hypotheses. In the empirical analysis, I use several regressions in order to test the different Hypotheses presented in this section. The following section provides an overview of the dataset and presents variable descriptions.

5. Dataset and Variable Descriptions

After the theoretical examination of the topic in the previous sections, this section is aimed at providing further details of the dataset and at providing information about the different variables used for the empirical analyses. This section is followed by section 6, that provides descriptive statistics and by section 7, that presents the results of the regression analyses. The empirical part of this master thesis is based on the Panel Study of Entrepreneurial Dynamics and therefore, the next part provides information on this study.

5.1. The Panel Study on Entrepreneurial Dynamics

The Panel Study of Entrepreneurial Dynamics (PSED) is a research program, which is aimed at increasing the scientific understanding of how people start businesses. Altogether, there have been two PSED surveys up to now, namely PSED I, which started 1998 and PSED II, which started in 2005. The PSED II screening was started between 2005 and 2006, followed by six yearly interviews (Panel Study on Entrepreneurial Dynamics (2012)).

Methodologically, the different follow-up interviews took place in different waves, ranging from Wave A to Wave F. The dataset used in this thesis, includes all data which were collected up to wave E. This wave was finished in January 2010 (Hopp (2011a)). The questions asked are widely diversified and include e.g questions about the activities undertaken, as well as the characteristics of new firms (Panel Study on Entrepreneurial Dynamics (2012)).

According to Curtin and Reynolds (2011), PSED II (Wave A to F) resulted in 1,214 cases (all nascent entrepreneurs) and over eight thousand variables. Figure 6 provides details of the PSED surveys.

	PSED I	PSED II
Screening period	1998–2000	2005–2006
Screened sample	62,612	31,845
Candidate nascent entrepreneurs (2-criteria)	3592	
Candidate nascent entrepreneurs (3-criteria)		1571
Active nascent entrepreneurs	830	1214
Confirmed active nascent entrepreneurs	824	1148
Recent confirmed active nascent entrepreneurs	747	947

Figure 6: Nascent Entrepreneurs by Business Criteria and recent Start-up Criteria (Curtin and Reynolds (2008))

Figure 6 shows that 1,214 entrepreneurs were identified as active nascent entrepreneurs from a sample of 31,845 individuals (Curtin and Reynolds (2008)). The following description of the sample selection process is based on Hopp (2011a). The 1,214 active nascent entrepreneurs were figured out by an initial interview. Interviewees were identified through their answers on screening questions like, if they intend to start a new venture, if they had carried out at least one start-up activity in past years, if they expected to own part of the firm and if they did not already have an operational business. Entrepreneurs who are qualified, with an ongoing but not yet operational business were also involved. The early stage screening was used to ensure that the data were representative, and more importantly, to reduce distortions caused by potential survivorship biases. In the following interviews, which took place over a time period of five years, (Waves A – E) that was a part of the data collection process, the entrepreneurs gave answers on which actions they already undertook in order to become operational (Hopp (2011a)).

According to the PSED II Codebook (Curtin (2012)), 1,214 nascent entrepreneurs participated in wave A, 972 in wave B, 746 in wave C, 527 in wave D and 435 in wave E. Furthermore, 486 entrepreneurs disbanded the venture according to the dataset and according to Hopp (2011a), 228 perceived their venture as operational and 247 reported on going activities but did not yet perceive their venture as operational at the fifth wave. 279 start-ups out of the sample omitted at least one wave. Further information on the dataset can be found in the paper of Hopp (2011a). The PSED II dataset includes data of Nascent Entrepreneurs that are mostly born in the United States of America (Curtin and Reynolds (2008)).

The dataset that is used in this master thesis is based on the PSED II project and was modified by Hopp (2011a), who also created different variables based on the basic PSED II data. The following part provides explanations on the different variables that are used for the empirical analyses.

5.2. Overview of the Variables

5.2.1. Dependent Variables

I use two different variables as dependent variables that indicate venture performance, in order to get more detailed results. Therefore, I use a survival-based measure (Disbandment) as used in different articles presented in the previous sections of this master thesis, and a measure that focuses on another performance aspect, namely Perception of Emergence. All variables used in this master thesis and the descriptions provided, are based on Hopp (2011a).

Disbandment

Disbandment is a dummy variable that is coded with one if all persons who worked on the venture stopped working. This implies that nobody is working again on bringing the venture back to life. The individuals were asked if they disengaged from the venture. Ventures where not all people stopped working on were not coded as disbanded. This measure focuses on survival and is rather appropriate to use according to Honig and Karlsson (2004), who stated that survival measures are commonly used for measuring the performance of nascent organisations (Hopp (2011a)).

Perception of Emergence

Perception of Emergence combines two different questions of the PSED II survey and is a dichotomous variable. Opposed to the variable Disbandment, which states whether the company survived or not, this variable contains additional information about the performance of the entrepreneurial venture. Therefore, it is used for further analyses. This variable was constructed by Hopp (2011a) and combines the two questions A35 and A41 of PSED II. The first question mentions therefore whether monthly revenues ever exceeded monthly expenses (including salaries for managers). Secondly, A41 questions the following: "It would appear that you are managing/helping to manage an operating business - one with sales and revenue greater than the ongoing expenses including salaries. Would you agree with this description of the current status?" (Panel Study of Entrepreneurial Dynamics (2006)). If both of these conditions are fulfilled, the venture is perceived as emerged and therefore the variable Perception of Emergence takes the value of one (Hopp (2011a)).

5.2.2. Independent Variables

This part describes briefly the different independent variables used. As mentioned before all variables and explanations provided here are based on Hopp (2011a).

Formal Education

The education variable uses the outcome of a question included in PSED II survey, that asks about the highest level of education all members of the entrepreneurial team had completed. The variable ranges from elementary school to PhD and was transformed into a number of years of education (see e.g. Davidsson and Honig (2003), Iacus et al. (2011)). Therefore, a high school degree equals 12 years, a college degree equals 16 years and a PhD equals 20 years of education (Hopp (2011a)).

Labor Experience

The PSED II dataset provides information about the years worked in the industry a new venture is active in, years of full-time paid work experience and years of managerial, supervisory or administrative responsibilities of the nascent entrepreneurs. The Cronbach's alpha is 0.72 for the three factors (Hopp (2011a)).

Entrepreneurial Experience

Information on the number of other businesses the subjects previously helped starting as being owner as well as information on the number of other businesses they have owned is used. The correlation of these two variables is 0.6, which would lead to a Cronbach's alpha of 0.65 (Hopp (2011a)).

Seek Financing

This variable is coded with one if the entrepreneur sought for outside financing. As described earlier in this master thesis, this variable might play a crucial role because seeking for financing may lead to a greater likelihood of undertaking Business Planning activities. Furthermore, it can be assumed that this variable might have an effect on Disbandment and Perception of Emergence and therefore this variable is included in the present analysis (Hopp (2011a)).

Financial Support Received

This variable refers to the question whether the venture received financial support from other people or financial institutions. This variable is rather important as it can be used as a qualitative criterion that provides information how different capital suppliers evaluate the venture. Therefore, it can be expected that this affect Perception of Emergence, as well as the likelihood of Disbandment.

Self-Efficacy

The perception of Self-Efficacy is measured by using five questions identified in Dimov (2010). The questions employ a five-point likert-type scale. A factor analysis reveals that three of the five items load on one factor and result in a satisfactory Cronbach's alpha of 0.68 (corresponding to questions AY4 to AY8 from PSED II). The fit could be improved to 0.72 by using only the questions AY6 to AY 8. However, this dataset follows the recent approach in Dimov (2010) in order to get comparable results with other published studies and to employ a measure for all five factors. Importantly, the original PSED II scale is inverted, so that higher values imply higher levels of Self-Efficacy (Hopp (2011a)).

Startup Motivation

The motivation to start a business may be different between entrepreneurs and therefore, this variable follows Dimov (2010) and includes questions about entrepreneurial motivations into the empirical analysis. It can be assumed that different levels of motivation influence the performance of entrepreneurial ventures. The measure of start-up motivation summarizes the answers to the questions: "There is no limit as to how long I would give maximum effort to establish my business" and "My personal philosophy is to do whatever it takes to establish my own business". According to the PSED II Codebook (Curtin (2012)) it was possible to answer these questions by indicating whether an entrepreneur strongly agrees, agrees, neither agrees nor disagrees, disagrees, or strongly disagrees. The combination of both variables leads to a Cronbach's alpha of 0.71, which is according to Hopp (2011a) comparable to Dimov (2010).

5.2.3. Business Planning Variables

In order to test the impacts of Business Planning on Disbandment and Perception of Emergence, I use as a basis the following five dummy variables that were questioned in the PSED II survey. Furthermore, I construct two variables out of these variables, namely first a dichotomous Business Planning variable, which indicates whether planning activities are undertaken and secondly I construct an index that measures the intensity of Business Planning.

Started Business Plan

This variable shows the outcome of the question “(Have/Had) you already begun preparation of a business plan for this (new) business, (will you prepare one in the future), or (is/was) a business plan not relevant for this new business (before your involvement ended)?” (Curtin (2012)). If the business plan was started, this variable is coded with one and implies that the entrepreneur has started his planning activities.

Finished Business Plan

This variable is coded with one if the business plan has been completed. Therefore, it reports the outcome of the question “In what month and year was the first version of the business plan completed?” (Curtin (2012)).

Formal Business Plan

Similarly to the questions of the Started and Finished Business Plan, this variable is coded with 1 if entrepreneur responded to the question “What is the current form of your business plan - is it unwritten or in your head, informally written, or formally prepared?” (Curtin (2012)), that the business plan is formally prepared.

Financial Projections

The dichotomous variable Financial Projections uses as basic information the outcome of the PSED II question “Have financial projections, such as income or cash flow statements or break-even analyses, been developed, will financial projections be developed in the future, or is this not relevant for the new business?” (Curtin (2012)).

Changed Business Plan

This variable is coded with one if the respondent answered that business plan was at least once modified during the period investigated by the PSED dataset. Therefore, the question “Since last year, (has/had) the business plan been modified or updated (before your involvement ended)?” was used (Curtin (2012)).

Business Planning

In order to test the impact of Business Planning on Disbandment and Perception of Emergence, a dichotomous variable is constructed with the information provided by the four variables, namely *Started Business Plan*, *Finished Business Plan*, *Formal Business Plan*, *Financial Projections*. The variable that measures changes of business plans has not been included as changes only occur, according to the used dataset (PSED II modified by Hopp (2011a)), when at least one of the four Business Planning variables e.g. *Started Business Plan* is coded with one. According to the theoretical part of this master thesis, this variable is of crucial importance, as it provides a solid basis for testing the effects of Business Planning.

Business Planning Intensity

A second measure for testing the effects of Business Planning, beside the previously described Business Planning dichotomous variable, is constructed by using five different variables, namely *Started Business Plan*, *Finished Business Plan*, *Formal Business Plan*, *Financial Projections*, *Changed Business Plan*. The basic idea is to get a measure for the intensity of Business Planning in order to analyse whether more planning activities influence the likelihood for Disbandment or for Perception of Emergence. Similar to Delmar and Shane (2003), this study uses different variables that are related to Business Planning and can be combined according to prior research (Gatewood et al. (1995), Delmar and Shane (2003)) in order to create a composite measure. Gatewood (1995) therefore summarized hours spent in each category. As this analysis includes dichotomous variables for the different activities, the index that is used here, summarizes the activities meaning that if e.g. three variables of the presented set of variables are coded with one, the Business Planning Intensity gets a value of three. This is different to Delmar and Shane (2003), who created a non-dichotomous variable and rated the different tasks with different weights. As there is no detailed information

about the exact efforts spent on different Business Planning activities, this intensity measure does not use weights as it can be assumed that e.g. a very detailed financial analysis needs probably more working hours than a started business plan and creating such an index would imply an assumption which can not be validated. Keeping in mind the difficulties of using such measures, this thesis uses Business Planning Intensity alternatively to the common Business Planning dichotomous variable. This approach is similar to Delmar and Shane (2003) and to Haber and Reichel (2007).

5.2.4. Control Variables

In order to control for different effects that might influence the performance of entrepreneurial ventures, I include the following three control variables.

Team Size

The Team Size results from the response which is indicated in the Wave A questionnaire and shows how many members the founding team has. Especially when thinking about Effectuation Theory, a greater team might affect performance and therefore, I use it as a control variable (Hopp 2011a).

Age

Age is used as a control variable for analysing the first two Hypotheses while it is used in the third section for the estimation of the likelihood of Business Planning. Age is measured as the average of the ages of all team members (Hopp 2011a).

Industries

In order to figure out if there exist industry effects, dummy variables are included for each industry. The dataset provides information on the following industries: Real Estate and Finance, Manufacturing and Construction, Retail, Consumer Services, Health, Consulting and Other Industries. Importantly, it needs to be mentioned that two observations cannot be categorized, as there is no data available for the industry-type of these observations.

6. Data Analysis

The previous section provides information on the PSED II dataset and explains the different variables which are used for investigating the effects of Business Planning. Additionally, this section is aimed at presenting a detailed overview of the dataset, the methodology and provides summary and descriptive statistics. The next section shows and discusses the results of the different regression analyses. Finally, the results will be discussed and compared to other empirical studies. Thereby I put an emphasis on possible limitations of the results.

6.1. Descriptive Statistics of the Dataset

As explained in the previous section, this dataset was modified by Hopp (2011a) and is based on the PSED II dataset. In order to provide an overview on the variables used for the analyses that are provided in the next section, the following table contains summary statistics of all variables. Furthermore, descriptive statistics are presented and sorted by the different kinds of variables, namely dependent, independent and control variables.

Table 1					
Summary Statistics of the Variables					
Variable	Obs	Mean	Std. Dev.	Min	Max
Perception of Emergence	1,214	0.2001647	0.4002884	0	1
Disbandment	1,214	0.4003295	0.490167	0	1
Business Planning Intensity	1,214	2.215815	1.613897	0	5
Business Planning	1,214	0.7874794	0.4092598	0	1
Team Size	1,203	1.634248	0.8414536	1	5
Age	1,203	43.40101	12.13098	18	81
Education	1,212	14.47001	2.143157	8	20
Labor Experience	1,214	13.29461	7.946181	0	46
Entrepreneurial Experience	1,214	0.6541598	1.05647	0	13.5
Seek Financing	1,214	0.276771	0.4475867	0	1
Financial Support Received	1,214	0.208402	0.4063331	0	1
Self-Efficacy	1,214	4.344316	0.514065	2.2	5
Startup Motivation	1,213	4.09357	0.8540961	1	5
Real Estate and Finance	1,214	0.0766063	0.2660753	0	1
Manufacturing and Construction	1,214	0.1268534	0.3329458	0	1
Other Industries	1,214	0.1688633	0.3747855	0	1
Retail	1,214	0.1293245	0.3356971	0	1
Consumer Services	1,214	0.3484349	0.4766709	0	1
Health	1,214	0.0700165	0.2552799	0	1
Consulting	1,214	0.0782537	0.2686811	0	1

Table 1: Summary Statistics of the Variables

The summary statistics in Table 1 show that nearly all variables contain values for the 1,214 observations. It is important to mention that those variables with a minimum of 0 and maximum of 1 are dummy variables. The Business Planning variable shows that a vast majority (78.75 %) of all entrepreneurial ventures included in the sample undertook at least one Business Planning activity from the previously described set of variables. The Business Planning Intensity ranges from zero to five, due to the construction of the variable. For all dichotomous variables, it's important to mention that the mean represents the fraction of entrepreneurs who coded the question with one e.g. 0.20 at Perception of Emergence means that twenty percent perceived their venture as emerged. Table 1 also shows that around 40 % of the ventures disbanded. Additionally, it can be seen that the biggest founder team consists of five members and the age varies rather strong between 18 and 81. Summary statistics show that the maximum value of education is 20, which is obvious as according to Hopp (2011a), the highest value received for completing a PhD programme is 20 years. It is important to mention that this variable is available for nearly all entrepreneurs who are included in the dataset. Additionally, summary statistics show that 57 nascent entrepreneurs of those who answered this question (1,212 nascent entrepreneurs) and are included in the sample do not have a high-school degree, meaning that the number of years of education is lower than 12 years. Further information on the construction of this variable can be found in the previous section. Labor Experience shows a great bandwidth of values, but only two entrepreneurs have no Labor experience, 17 less than one year and furthermore 180 indicated to have Labor experience of less than 5 years. Entrepreneurial Experience is in a rather small range between 0 and 13.5 and the two dichotomous financing variables are similar, however the rate of entrepreneurs who received financing is lower than the number of entrepreneurus who seek for financial support, which is rather obvious.

Finally, the variables for industries show that around 35 % of the entrepreneurs are in the Consumer Services Industry, while the amount of entrepreneurs in Consulting and Real Estate and Finance is much lower (in total 15 to 16 %). Furthermore only 7 % of the ventures are in the Health industry. As this could be a reason for biases in the further regressions, I control for industries. As described in the previous section, the Business Planning variables (Business Planning and Business Planning Intensity) are constructed by four (five) variables, namely Started Business Plan, Finished Business Plan, Financial

Projections, Formal Business Plan and Changed Business Plan, which are all dummy variables. The following table summarizes frequencies of the Business Planning variables and shows also distributions of the Business Planning Intensity.

Table 2			
Frequencies of different Business Planning Variables			
Business Planning Variables		Business Planning Intensity	
Business Planning	78.75%	0	21.25%
Started Business Plan	72.65%	1	14.74%
Finished Business Plan	47.12%	2	19.36%
Formal Business Plan	19.44%	3	19.44%
Financial Projections	46.87%	4	16.23%
Changed Business Plan	35.50%	5	8.98%

Table 2: Frequencies of different Business Planning Variables

Data show that nearly 79 % percent of the entrepreneurs undertook at least one Business Planning activity. The frequencies of the Business Planning Intensity show that around 39 % of all nascent entrepreneurs undertook two or three Business Planning activities. Table 2 shows that 72.65 % started a business plan while Financial Projections were done by 47 % of the entrepreneurs, which is similar to the amount of those entrepreneurs who answered that they completed their business plan. Around 35.5 % answered that they changed or modified their business plan. Interestingly, only 19.4 % answered that their business plan is formally written.

6.2. Descriptive Statistics of the Dependent Variables

Before analysing the different correlations, the following part focuses especially on the dependent variables and shows frequencies for different subgroups. As mentioned earlier, around 40 % of the entrepreneurial ventures disbanded, while 20 % perceived their venture as emerged. In a first step, I want to provide an overview of the distribution of Disbandment and Perception of Emergence across the industries.

Table 3 Frequencies of Disbandment and Perception of Emergence across Industries							
Industry	Real Estate and Finance	Manufacturing and Construction	Retail	Consumer Services	Health	Consulting	Other Industries
Disbandment	39.78%	38.96%	42.68%	41.61%	44.71%	31.58%	37.56%
Perception of Emergence	29.03%	17.53%	15.29%	20.57%	20.00%	22.11%	19.51%
Nr. of observations	93	154	157	423	85	95	205

Table 3: Frequencies of Disbandment and Perception of Emergence across Industries³

Table 3 provides information on the rates of Disbandment and shows that they are in a rather small bandwidth across industries. The amount of entrepreneurs who disband is only lower for Consulting Industries with 31.58 %. The frequencies of the second dependent variable, Perception of Emergence, show that it is higher in Real Estate and Finance and not within the same bandwidth as in the other Industries. As different industries might affect the performance, measured by Disbandment and Perception of Emergence, I include different industries as control variables in the regression analyses. In order to focus on the frequencies between Disbandment and Perception of Emergence, Table 4 provides two-way frequencies of those dependent variables.

Table 4 Two-Way Tables of Frequencies: Disbandment and Perception of Emergence			
Disbandment	Perception of Emergence		Total
	0	1	
0	520 71.43%	208 28.57%	728 100.00%
1	451 92.80%	35 7.20%	486 100.00%
Total	971 79.98%	243 20.02%	1,214 100.00%

Table 4: Two-Way Tables of Frequencies: Disbandment and Perception of Emergence

Table 4 shows that around 728 ventures survived and 243 perceived their venture as emerged. Most of the entrepreneurs (around 80%) did not perceive their venture as emerged and, among those ventures 520 still survived while 451 disbanded.

³ Notice: 1,212 (instead of 1,214) observations are included in this table, as two observations are not linked to any industry according to the dataset.

Interestingly, around 7 % of those who disbanded, perceived their venture already as emerged and furthermore, those who perceived their venture as emerged did survive (85.6 %) in most cases.

6.3. Summary Statistics of Dependent and Business Planning Variables

In order to provide further information on the dataset, I focus on the Business Planning variables that are constructed from five of the variables listed in Table 2. Therefore, I present two-way frequencies between Disbandment, as well as Perception of Emergence and the Business Planning variables.

Table 5 Two-Way Tables of Frequencies: Disbandment/Perception of Emergence and Business Planning						
Business Planning	Disbandment		Total	Perception of Emergence		Total
	0	1		0	1	
0	131	127	258	226	32	258
	50.78%	49.22%	100.00%	87.60%	12.40%	100.00%
1	597	359	956	745	211	956
	62.45%	37.55%	100.00%	77.93%	22.07%	100.00%
Total	728	486	1,214	971	243	1,214
	59.97%	40.03%	100.00%	79.98%	20.02%	100.00%

Table 5: Two-Way Tables of Frequencies: Disbandment/Perception of Emergence and Business Planning

Table 5 shows different two-way frequencies between the two dependent dummy variables and the dichotomous Business Planning variable. When discussing Disbandment, data show that those nascent entrepreneurs who did not undertake any Business Planning activity, disband in around 49 % of the cases. This differs from those who undertook Business Planning activities as in this group 62.45 % survive and 37.55 % disband. Focusing on Perception of Emergence, results show that 12.4 % of those who didn't plan perceive their venture as emerged. Furthermore, 22 % of those who planned perceive their venture as emerged. To summarize these informations, it could be expected that there might exist correlations between the variables.

As earlier stated, this master thesis uses Business Planning Intensity as a second variable and therefore Table 6 provides two-way frequencies between Business Planning Intensity and both dependent variables. This is aimed at providing greater

insights into the role of Business Planning, as Business Planning Intensity includes more information on the activities undertaken than the dichotomous variable.

Table 6						
Two-Way Tables of Frequencies:						
Disbandment/Perception of Emergence and Business Planning Intensity						
Business Planning Intensity	Disbandment		Total	Perception of Emergence		Total
	0	1		0	1	
0	131	127	258	226	32	258
	50.78%	49.22%	100.00%	87.60%	12.40%	100.00%
1	97	82	179	149	30	179
	54.19%	45.81%	100.00%	83.24%	16.76%	100.00%
2	139	96	235	198	37	235
	59.15%	40.85%	100.00%	84.26%	15.74%	100.00%
3	151	85	236	194	42	236
	63.98%	36.02%	100.00%	82.20%	17.80%	100.00%
4	131	66	197	145	52	197
	66.50%	33.50%	100.00%	73.60%	26.40%	100.00%
5	79	30	109	59	50	109
	72.48%	27.52%	100.00%	54.13%	45.87%	100.00%
Total	728	486	1,214	971	243	1,214
	59.97%	40.03%	100.00%	79.98%	20.02%	100.00%

Table 6: Two-Way Tables of Frequencies: Disbandment/Perception of Emergence and Business Planning Intensity

Table 6 shows again that around 49 % of those ventures that did not undertake any Business Planning activity disband. By focusing on the frequencies for the different index values, it can be seen that the more Business Planning activities are undertaken (i.e. the higher the score of Business Planning Intensity is), the smaller is the amount of nascent entrepreneurs who disband. It can be seen that the amounts of entrepreneurs who disband decrease continuously with an increase in Business Planning Intensity. Additionally, it can be seen that only 27.52 % of the ventures that undertook five Business Planning activities disband. This is much lower, compared to the rate of Disbandment, which equals nearly 50 % if there are no Business Planning activities undertaken. When focusing on the frequencies of Perception of Emergence, it can be seen that those ventures that undertook four or five Business Planning activities have a much higher rate of perceiving the venture as emerged, compared to those that didn't undertake any Business Planning activity. Interestingly, the frequency of perceiving the venture as emerged is slightly smaller for those nascent entrepreneurs who undertook

two Business Planning activities compared to those who undertook one Business Planning activity.

Summarizing information provided by the different frequency tables, it can be assumed that Business Planning might affect different variables, especially Disbandment and Perception of Emergence. In order to focus on possible effects, the following part discusses the correlations between the different variables. This builds the basis for the different regression analyses. This master thesis provides two different regression analyses, the first is used for figuring out whether there exists a significant relation between Business Planning and the likelihood of Disbandment and Perception of Emergence while the second focuses on criteria that affect the likelihood of nascent entrepreneurs to undertake Business Planning activities.

6.4. Correlations

In order to get a more detailed view on the correlations between the variables included in the dataset, Table 7 provides pairwise correlations. A correlation marked by a star shows that the correlation is significant at a 5 % percent level.

Table 7											
Correlation Matrix with Pairwise Correlations											
* = Significance at 0.05		1	2	3	4	5	6	7	8	9	10
Disbandment	1	1									
Perception of Emergence	2	-0.2617*	1								
Team Size	3	-0.0372	-0.0021	1							
Age	4	-0.0068	0.0397	-0.0187	1						
Formal Education	5	-0.0046	0.0735*	0.0458	0.2331*	1					
Labor Experience	6	-0.0635*	0.1159*	-0.0445	0.7639*	0.2050*	1				
Entrepreneurial Experience	7	-0.0811*	0.0275	0.0516	0.2136*	0.1649*	0.2343*	1			
Seek Financing	8	-0.0959*	0.1231*	0.1209*	-0.0148	0.0722*	0.0123	0.0888*	1		
Financial Support Received	9	-0.1792*	0.1894*	0.1274*	0.0445	0.1444*	0.0720*	0.1943*	0.3308*	1	
Self-Efficacy	10	-0.0818*	0.0594*	-0.0361	-0.0574*	-0.02	0.0607*	0.0469	0.0686*	-0.0079	1
Startup Motivation	11	-0.0719*	0.0067	-0.0349	-0.0825*	-0.1929*	0.0068	-0.0605*	0.0595*	-0.0551	0.4529*
Business Planning	12	-0.0975*	0.0988*	0.1071*	-0.0341	0.0976*	0.0284	0.0572*	0.1593*	0.1773*	0.1208*
Business Planning Intensity	13	-0.1395*	0.1909*	0.1461*	-0.0196	0.2161*	0.0629*	0.1278*	0.2996*	0.2695*	0.1353*
Real Estate and Finance	14	-0.0015	0.0649*	0.0112	-0.0097	0.0499	0.0031	0.0231	0.0987*	0.0962*	0.0119
Manufacturing and Construction	15	-0.0083	-0.0237	0.0187	0.0175	-0.0591*	0.0576*	-0.0094	0.0132	0.0543	0.0131
Other Industries	16	-0.0227	-0.0057	0.0964*	-0.0032	-0.0652*	0.0334	-0.0074	0.0750*	-0.0202	-0.0511
Retail	17	0.0208	-0.0456	-0.0234	-0.0282	-0.0273	-0.0558	-0.0024	-0.0299	-0.0104	-0.0003
Consumer Services	18	0.0235	0.0101	-0.0745*	-0.0208	-0.0709*	-0.0735*	-0.0597*	-0.0930*	-0.1071*	-0.0452
Health	19	0.0262	-0.0001	-0.0142	0.0308	0.0983*	0.0248	0.008	-0.0254	-0.0057	0.0624*
Consulting	20	-0.0503	0.0152	0.0064	0.0374	0.1871*	0.0576*	0.1044*	0.0117	0.0770*	0.0602*
		11	12	13	14	15	16	17	18	19	20
Disbandment	1										
Perception of Emergence	2										
Team Size	3										
Age	4										
Formal Education	5										
Labor Experience	6										
Entrepreneurial Experience	7										
Seek Financing	8										
Financial Support Received	9										
Self-Efficacy	10										
Startup Motivation	11	1									
Business Planning	12	0.0841*	1								
Business Planning Intensity	13	0.0928*	0.7135*	1							
Real Estate and Finance	14	-0.0062	0.0815*	0.0882*	1						
Manufacturing and Construction	15	0.0133	-0.0682*	-0.0602*	-0.1098*	1					
Other Industries	16	0.0305	0.0138	0.0528	-0.1298*	-0.1718*	1				
Retail	17	0.0023	0.0322	-0.0074	-0.1110*	-0.1469*	-0.1737*	1			
Consumer Services	18	0.0031	-0.0681*	-0.0721*	-0.2106*	-0.2787*	-0.3296*	-0.2818*	1		
Health	19	-0.0206	0.0242	-0.0187	-0.0790*	-0.1046*	-0.1237*	-0.1057*	-0.2007*	1	
Consulting	20	-0.0481	0.0539	0.0770*	-0.0839*	-0.1111*	-0.1313*	-0.1123*	-0.2131*	-0.0799*	1

Table 7: Correlation Matrix with Pairwise Correlations

The discussion of the correlations focuses on a few, very important correlations for the regression analyses, which are presented in the next section. All pairwise correlations

can be found in Table 7. Correlations show that there is a significant negative correlation between Disbandment and Perception of Emergence. Formal Education is significantly positively correlated with Perception of Emergence, but not with Disbandment. Labor experience is significantly positively correlated with Perception of Emergence, as well as significantly negatively with Disbandment. Entrepreneurial Experience is significantly negatively correlated with Disbandment and not significantly correlated with Perception of Emergence. Entrepreneurial Experience is also significantly positively correlated to both financing variables, namely Seek Financing and Financial Support Received. Importantly, the financing variables are significantly positively correlated with Perception of Emergence, which can be seen as rather obvious, as financial support helps ventures to become operational. These financing variables are also significantly negatively correlated to Disbandment.

Self-Efficacy and Startup Motivation are significantly negatively correlated with Disbandment, but only Self-Efficacy is significantly positively correlated with Perception of Emergence. Importantly, the Business Planning variables are significantly negatively correlated with Disbandment and Table 7 shows a significant positive correlation of these variables with Perception of Emergence. The correlation table shows furthermore that Seek Financing, as well as Financial Support Received are significantly positively correlated with Business Planning and Business Planning Intensity, which will be analysed especially in the regressions that are used for investigating Hypotheses 3a-3d. Importantly, Self-Efficacy and Startup Motivation are significantly positively correlated with the Business Planning variables, as well as Entrepreneurial Experience, Formal Education and Team Size. Labor Experience is interestingly only significantly positively correlated with Business Planning Intensity and not with Business Planning. Business Planning is positively significantly correlated (0.71) with Business Planning Intensity, which is rather obvious due to the creation of the Business Planning Intensity variable. When taking a further look on the control variables, Age is correlated significantly positively with Labor Experience, Formal Education and Entrepreneurial Experience, while it is significantly negatively correlated to Self-Efficacy and Startup Motivation. Analysing team size shows that there is no significant correlation between team size and the two dependent variables. Additionally, the industries are not significantly correlated with the dependent variables, except there is a significant positive correlation between those entrepreneurial ventures that are involved in Real Estate and Finance and

Perception of Emergence. Importantly, many significant correlations show rather low coefficients. For figuring out whether these variables influence the dependent variables, the following section presents an overview of the methodology and provides the results of the regressions.

7. Results

After the summary statistics of the variables included in the dataset which were presented in the previous sections, this section describes the methodology of testing the different Hypotheses and provides the results. In order to start with, Figure 7 summarizes all Hypotheses presented and discussed in the previous sections of this master thesis. Figure 7 also provides information on dependent variables that are used for the different Hypotheses. The results are presented according to the different Hypotheses. The first two Hypotheses were tested together and similar regressions test the Hypotheses in the third section. As a final step, I investigate whether there exists a problem with endogeneity caused by potential self-selection effects.

Overview of the Empirical Analyses	
Hypothesis 1: <i>Business Planning enhances the success of new ventures.</i>	Dependent Variables: Disbandment Perception of Emergence
Hypothesis 2: <i>Business Planning hinders entrepreneurs undertaking effectual actions and decreases the performance of entrepreneurial ventures.</i>	
Hypothesis 3a: <i>Education increases the likelihood of Business Planning.</i>	Dependent Variables: Business Planning Started Business Plan Finished Business Plan Formal Business Plan Financial Projections Changed Business Plan
Hypothesis 3b: <i>Needed Financial Resources increase the likelihood of Business Planning.</i>	
Hypothesis 3c: <i>Entrepreneurial Experience and Labor Experience increase the likelihood of Business Planning.</i>	
Hypothesis 3d: <i>Lower levels of Self-Efficacy (a) and higher levels of Startup Motivation (b) increase the likelihood of Business Planning.</i>	

Figure 7: Overview of the Empirical Analyses

As earlier presented, the first two Hypotheses are aimed at providing answers about the value of Business Planning in entrepreneurial ventures and whether undertaking Business Planning activities is beneficial for the new venture's success. The Hypotheses in the third section test how different variables like Entrepreneurial Experience influence the likelihood of Business Planning.

The methods and descriptions provided in this section and in section 5 and 6 are based on the books of Kohler and Kreuter (2008), Baum (2006), Cameron and Trivedi (2010), Wooldridge (2009) and on Hopp (2011a), Hopp (2011b) and Kunst (2009).

7.1. Testing Hypothesis 1 and 2

7.1.1. Regressions and Methodology

As it can be seen from the previous sections, there exist different articles that question the value of Business Planning and analyse the relation between Business Planning and entrepreneurial performance empirically. As shown in Figure 3, many different criteria might influence the entrepreneurial process. Therefore, the theoretical section presents the Effectuation Theory and provides evidence on related issues. The traditional planning literature also figures out that Business Planning has a rather strong influence on success. For examining the first two Hypotheses, this master thesis uses Disbandment and Perception of Emergence as dependent variables. The Disbandment variable measures, as earlier described, the survival of the company, which is similar to the measure used by Delmar and Shane (2003). Furthermore, Perception of Emergence aggregates more information and offers a more performance-based view for measuring the success of entrepreneurial ventures as described in the fifth section. As presented earlier, only around 7 % of the ventures that perceived their venture as emerged disbanded over time. By using two different measures, it is possible to get a more detailed view on the value of Business Planning, as Disbandment provides a survival-based view, while Perception of Emergence includes information whether the venture is an operating business. The question of using different measures, as earlier explained, is according to Davidsson (2011) a central problem in entrepreneurship research. Additionally, using two measures allows a comparison with a greater number of different articles. As both dependent variables are dichotomous variables it is necessary to use logistic regressions instead of Ordinary Least Squares (OLS) Regressions. According to Baum (2006), OLS would be likely to produce point predictions outside the unit interval. Baum (2006) discusses this problem and suggests using a different strategy for solving this problem. Therefore, logistic or probit models are discussed. Kohler and Kreuter (2008) state that models based on linear combinations should only use dependent variables that are not restricted (opposite to the case of dichotomous variables). In order to test the first two Hypotheses, I calculate four

different logistic regressions. Therefore, I use as dependent variables Disbandment or Perception of Emergence alternatively, and for figuring out the effect of Business Planning, I use the Business Planning dichotomous variable as well as Business Planning Intensity alternatively. Furthermore, those regressions include many different independent variables beside the Business Planning variables, namely Financial Support Received, Entrepreneurial Experience, Formal Education, Labor Experience, Self-Efficacy and Startup Motivation. In order to investigate, whether there exist industry effects, I control for different industries, which are coded as dichotomous variables. In order to avoid multi-collinearity, I selected “Other Industry” as a reference category and excluded it from the regression (Center for Statistical Computing Support, University of Kentucky (2012)). Additionally it is controlled for Age, as well as for Team Size. The previously described regressions were calculated by using STATA, which is a statistical software (STATA (2012a)).

Table 8				
Marginal Effects of Logistic Regressions on Disbandment and Perception of Emergence				
Model	[1]	[2]	[3]	[4]
	Disbandment	Disbandment	Perception of Emergence	Perception of Emergence
Business Planning (d)	-0.0677+ [0.065]		0.0636* [0.019]	
Business Planning Intensity		-0.0242* [0.013]		0.0355*** [0.000]
Financial Support Received (d)	-0.202*** [0.000]	-0.193*** [0.000]	0.169*** [0.000]	0.142*** [0.000]
Entrepreneurial Experience	-0.0237 [0.157]	-0.0215 [0.197]	-0.0142 [0.198]	-0.0168 [0.133]
Formal Education	0.00596 [0.416]	0.00852 [0.254]	0.00706 [0.214]	0.00218 [0.704]
Labor Experience	-0.00605* [0.039]	-0.00585* [0.046]	0.00959*** [0.000]	0.00899*** [0.000]
Self-Efficacy	-0.0472 [0.144]	-0.0449 [0.166]	0.038 [0.134]	0.0317 [0.210]
Startup Motivation	-0.0298 [0.126]	-0.0275 [0.160]	-0.00443 [0.770]	-0.00873 [0.561]
Age	0.00272 [0.148]	0.00249 [0.187]	-0.00384* [0.015]	-0.00330* [0.037]
Team Size	-0.00849 [0.633]	-0.00662 [0.711]	-0.00769 [0.570]	-0.0131 [0.332]
Real Estate and Finance (d)	0.0572 [0.383]	0.0537 [0.413]	0.0531 [0.320]	0.0547 [0.307]
Manufacturing and Construction (d)	0.028 [0.610]	0.0224 [0.684]	-0.0331 [0.386]	-0.0216 [0.585]
Retail (d)	0.0406 [0.457]	0.0346 [0.524]	-0.0343 [0.377]	-0.0251 [0.527]
Consumer Services (d)	0.0134 [0.756]	0.00943 [0.828]	0.028 [0.418]	0.035 [0.313]
Health (d)	0.0614 [0.367]	0.0506 [0.456]	0.00222 [0.965]	0.0211 [0.696]
Consulting (d)	-0.0378 [0.553]	-0.0419 [0.509]	-0.0162 [0.722]	-0.0102 [0.824]
Observations	1,200	1,200	1,200	1,200
chi2	68.75	71.41	79.63	96.74
p	0.000	0.000	0.000	0.000
Marginal effects; p-values in brackets (d) for discrete change of dummy variable from 0 to 1 + p<.1, * p<.05, ** p<.01, *** p<.001				

Table 8: Marginal Effects of Logistic Regressions on Disbandment and Perception of Emergence

Table 8 presents the marginal effects of the regressions that are used to investigate the influence of Business Planning on entrepreneurial performance. The marginal effects are calculated by using Stata's "mfx" command that calculates the marginal effects at the means of the independent variables (Stata (2012b)).

7.1.2. Fit of the models

In order to start with the discussion, it needs to be mentioned that all four regressions included 1,200 observations. The χ^2 values can be used like the F-values in linear regressions in order to test the Hypothesis that all coefficients other than the constant are zero. This implies that the independent variables in the regression have no explanatory power. The probability of this Hypothesis being true is reported by the p-value, which is 0.000 for all regressions. Therefore the null Hypothesis is rejected and this implies that all regressions have explanatory power, as at least one of the beta coefficients in each regression is not 0 (Kohler and Kreuter (2008) and Kunst (2009)).

Furthermore, different methods were used in order to evaluate the fit of the regressions estimated. According to Kohler and Kreuter (2008), a model should classify correctly more than 50 % of cases. All four models fulfil this criterion. Model 1 and 2 classify around 62 to 63 % of the cases correctly, while Model 3 and 4 classify around 80 % correctly which equals to the count R^2 . Another quality indicator is according to Kohler and Kreuter (2008) the Hosmer-Lemeshow Test, where a large p-value indicates that the difference between observed and estimated frequencies is small. The models reach p-values between 0.5 and 0.98. Furthermore, Cleveland's (1979) locally weighted scatterplot smoother (Kohler and Kreuter (2008)) was used and showed a rather good fit of the models. Other post estimation tools, like Receiver Operating Characteristic (ROC Curve) show that the area under the ROC Curve is greater than 0.5 for all four models and ranges from 0.64 to 0.69. Importantly, 0.5 is reached by random guessing and a classifier should not be lower than 0.5 according to Fawcett (2003).

Finally, STATA's collin command was used in order to check for multi-collinearity according to UCLA Academic Technology Services (2012) and showed that the Variance Inflation Factors (VIF) are all below 3. According to Hopp (2011b), VIF values that exceed 10 are problematic and therefore results show that there doesn't exist a problem of multi-collinearity. Importantly, in order to avoid multi-collinearity, the variable Other Industries was used as a reference category and not included in the regressions (Center for Statistical Computing Support, University of Kentucky (2012)).

7.1.3. Results

Table 8 presents the marginal effects of the variables used in the logistic regressions. In order to start, I analyse model one and two together, followed by model three and four. Finally I provide a conclusion.

In the first model, it can be seen that the dichotomous variable Business Planning is marginally significant (at a 10 % level) and those nascent entrepreneurs who undertake at least one Business Planning activity have a significantly 6.8 % lower likelihood of Disbandment. In the second model, the variable Business Planning Intensity is used for investigating the role of Business Planning. Results show a p-value of 0.013, which implies that Business Planning Intensity has a significant influence, and a marginal change in Business Planning Intensity reduces the likelihood of Disbandment by 2.4 %.

When focusing on other independent variables results show that those nascent entrepreneurs who received financial support have a highly significantly 20 % lower likelihood (Model 1) and a highly significantly 19 % lower likelihood (Model 2) of Disbandment. Labor Experience is also significant, and a marginal change in Labor Experience decreases the likelihood of Disbandment, but the coefficients are very small (around -0.006). All other variables did not show a significant influence on Disbandment.

For the third and fourth model Table 8 shows, that entrepreneurs who undertake at least one Business Planning activity have a significantly 6.4 % greater likelihood of perceiving the venture as emerged and a marginal change in Business Planning Intensity increases the likelihood of Perception of Emergence by 3.6 %. Results show that Business Planning Intensity is highly significant.

Furthermore, Table 8 provides evidence that nascent entrepreneurs who received financial support have a highly significant 14.2 % (Model 4) and 16.9 % (Model 3) greater likelihood of perceiving the venture as emerged. Labor Experience is highly significant and influences the Perception of Emergence positively, but the marginal effects are rather low with an effect around 0.9 % to 1 %. Interestingly, Age which is used as a control variable, influences the likelihood of perceiving the venture as emerged significantly with negative marginal effects between -0.3 % and -0.4 %. All other variables tested, especially industries, do not influence the dependent variables significantly. Even though a marginal change in Startup Motivation would lead to a lower

likelihood of Disbandment, it failed to pass the 10 % level of significance in Model 1 with a p-value of 0.126. Self-Efficacy shows negative influences on the likelihood of Disbandment and positive effects on Perception of Emergence but it clearly fails to pass the 10 % level of significance with p-values between 0.134 and 0.21.

To summarize the findings, it can be concluded that Business Planning has a significant negative influence on the likelihood of Disbandment and a positive influence on Perception of Emergence. Therefore, Hypothesis 1, which suggested that Business Planning enhances the ventures' success, is accepted. According to the second Hypothesis, it can be concluded that there might be other factors of interest that determine entrepreneurial success but according to this work, there is no proof that Business Planning has a negative influence on the performance of entrepreneurial ventures. This leads to a rejection of the second Hypothesis.

In the third section of this master thesis, I discuss different principles of Effectuation Theory and provided an overview of articles that investigate the relation between those principles and venture performance. Therefore one principle focuses on the main questions "Who I am, What I know and Whom I know" and the overview of articles in the third section shows that there might be a strong relation between human or social capital and success (Dew and Sarasvathy (2005)). Interestingly, when looking at the results provided in this section, it can be seen that some related variables like Entrepreneurial Experience or Formal Education do not significantly affect the likelihood of disbanding or perceiving the venture as emerged.

Even though there may be many other factors that are important for a venture's success, like labor experience, it can be concluded that Business Planning, measured by a Business Planning dichotomous variable and Business Planning Intensity, is beneficial. This results in the conclusion that Business Planning is important and undertaking more Business Planning activities, measured by Business Planning Intensity, is also better for the success of the venture. Additionally to these findings, the next part provides the results of testing Hypotheses 3a to 3d in order to get a holistic view on this topic.

7.2. Testing Hypotheses 3a–3d

7.2.1. Regressions and Methodology

As the analyses in the previous part show, undertaking Business Planning activities has a positive marginal effect on the likelihood of perceiving the venture as emerged and it reduces the likelihood of Disbandment. As discussed in the previous sections, I take a further look on the question “Who does Business Planning?”. As discussed earlier, Honig and Karlsson (2004) conducted a similar analysis. In order to test the Hypotheses I use different regressions. Finally, I include variables used in the following regressions in order to test for endogeneity in the regressions used for testing the first two Hypotheses.

As the model that I use for testing endogeneity and self-selection effects uses probit models, the regressions in this section are also estimated by using probit models, instead of logistic models, as in the previous sections. However, the differences between probit and logit are rather small and according to Baum (2006), the cumulative distribution functions of the normal distribution, used by probit models and logistic distributions are rather similar. According to Baum (2006), both functions will produce similar outputs, if the distribution of sample values y_i is not too extreme. Importantly, it needs to be mentioned that eventough this section focuses mainly on the Business Planning variables, I include for control purposes also the different industries. As earlier explained, the variable Other Industry is used again as reference category, in order to avoid multi-collinearity (Center for Statistical Computing Support, University of Kentucky (2012)).

7.2.2. Fit of the models

In order to present the results of the regressions, I want to follow a similar approach as before for discussing some characteristics of the regressions briefly in advance. Importantly, further information on the methods can be found in the previous part, which describes this in more detail. Table 9 shows the marginal effects of the regressions and it can be seen that all p-values for the regressions are around 0.000 which leads to a rejection of the null Hypothesis. As mentioned in the previous part, this indicates that at least one beta coefficient is in each regression not zero (Kohler and Kreuter (2008) and Kunst (2009)). Alltogether the regressions were calculated with 1,200 observations.

When focusing on classification results, it can be seen that all models classify more than 65 % correctly. Post-Estimation tools like ROC Curves show that the area under the curve is 0.67 or greater for all regressions, which is higher than 0.5. Stata's "lowess" smoother was also used, like in the regressions for Hypotheses 1 and 2, and showed solid results. All of the adjusted Count R^2 are positive and show therefore that a model which includes different independent variables decreases the error rate compared to a prediction simply based on the marginal distribution of the specific dependent variable (Kohler and Kreuter (2008)). Checking for multi-collinearity by using Stata's "collin" command showed low Variance Inflation Factors that are lower than 3 and therefore it can be assumed that multi-collinearity is not a problem when applying the criteria mentioned in the previous part.

7.2.3. Results

Table 9						
Marginal Effects of Probit Regressions on Business Planning Variables						
Model	[1]	[2]	[3]	[4]	[5]	[6]
	Business Planning	Started Business Plan	Finished Business Plan	Formal Business Plan	Financial Projections	Changed Business Plan
Entrepreneurial Experience	0.0064 [0.634]	-0.00719 [0.582]	0.0344* [0.030]	0.0197* [0.049]	0.0391* [0.024]	0.00638 [0.644]
Labor Experience	0.00385+ [0.091]	0.00334 [0.196]	0.00733* [0.017]	0.00131 [0.570]	0.00626* [0.041]	0.00480+ [0.090]
Formal Education	0.0160** [0.006]	0.0240*** [0.000]	0.0455*** [0.000]	0.0247*** [0.000]	0.0330*** [0.000]	0.0340*** [0.000]
Age	-0.00350* [0.016]	-0.00232 [0.164]	-0.00983*** [0.000]	-0.00338* [0.027]	-0.00425* [0.033]	-0.00141 [0.453]
Seek Financing (d)	0.0907*** [0.000]	0.106*** [0.000]	0.153*** [0.000]	0.162*** [0.000]	0.209*** [0.000]	0.144*** [0.000]
Financial Support Received (d)	0.144*** [0.000]	0.130*** [0.000]	0.148*** [0.000]	0.0626* [0.042]	0.218*** [0.000]	0.141*** [0.000]
Self-Efficacy	0.0566* [0.025]	0.0697* [0.015]	0.0472 [0.163]	0.0126 [0.621]	0.00248 [0.941]	0.117*** [0.000]
Startup Motivation	0.0313* [0.039]	0.0349* [0.043]	0.0417* [0.041]	0.0348* [0.025]	0.0228 [0.264]	0.0421* [0.032]
Real Estate and Finance (d)	0.0785+ [0.065]	0.0124 [0.828]	-0.0408 [0.527]	0.00622 [0.894]	0.0803 [0.231]	-0.000677 [0.991]
Manufacturing and Construction (d)	-0.0929+ [0.059]	-0.122* [0.023]	-0.117* [0.028]	-0.0720* [0.033]	-0.087 [0.111]	-0.0910+ [0.060]
Retail (d)	0.0274 [0.491]	0.0481 [0.287]	-0.0708 [0.190]	0.011 [0.791]	-0.114* [0.033]	-0.0206 [0.689]
Consumer Services (d)	-0.0282 [0.414]	-0.0266 [0.495]	-0.0697 [0.115]	-0.0248 [0.439]	-0.0717 [0.107]	-0.0329 [0.429]
Health (d)	0.022 [0.662]	-0.0217 [0.725]	-0.088 [0.184]	-0.0607 [0.143]	-0.0899 [0.177]	-0.0861 [0.139]
Consulting (d)	0.0308 [0.531]	-0.0145 [0.809]	-0.035 [0.594]	0.0106 [0.825]	-0.0418 [0.527]	-0.00846 [0.890]
Observations	1,200	1,200	1,200	1,200	1,200	1,200
chi2	109.2	91.6	147	114.1	172.3	128.2
p	0.000	0.000	0.000	0.000	0.000	0.000
Marginal effects; p-values in brackets (d) for discrete change of dummy variable from 0 to 1 + p<.1, * p<.05, ** p<.01, *** p<.001						

Table 9: Marginal Effects of Probit Regressions on Business Planning Variables

Table 9 shows the marginal effects of probit regressions on different Business Planning variables. The most important model is the first model, as it uses as dependent variable Business Planning that was also used in the regressions for testing the first two Hypotheses.

When focusing on the results, it can be seen that Entrepreneurial Experience doesn't have a statistically significant influence on the likelihood of Business Planning.

A marginal change in Labor Experience, which is marginally significant (at a 10 % level), increases the likelihood of Business Planning by 0.39 %. A marginal change in the level of formal education significantly increases the likelihood of Business Planning by 1.6 %. Those nascent entrepreneurs who received financial support, have a highly significant 14.4 % greater likelihood of undertaking at least one Business Planning activity. Nascent entrepreneurs who seek for financial support, have a highly significant 9.1 % greater likelihood of Business Planning. Self-Efficacy and Startup Motivation are significant and a marginal change increases the likelihood of Business Planning by 5.7 % and 3.1 %.

Results provided in Table 9 show that Formal Education has a significant positive marginal effect in all regressions, as well as Seek Financing and Financial Support Received. Age is significant in models 1, 3, 4 and 5 and a marginal change in Age from the mean decreases the likelihood of undertaking different planning activities between 0.3 % and 1 %.

Startup Motivation shows significant positive effects on the dependent variables in all models, except model 5. Marginal changes in Startup Motivation increase the likelihood of undertaking different Business Planning activities in a range between 3 % and 4.2 %. Results show that Self-Efficacy has significant marginal effects in models 1, 2 and 6 between 5.7 and 11.7 %. Finally, Labor Experience is significant in the models 1, 3, 5 and 6, but shows only small positive marginal effects between 0.4 % and 0.7 %. Interestingly, Entrepreneurial Experience has a significant effect in models 3, 4 and 5. Therefore, it can be concluded that a marginal change in Entrepreneurial Experience increases the likelihood of having a Finished Business Plan by 3.44 % and Financial Projections by nearly 4 %, while it increases the likelihood for having a Formal Business Plan by 2 %.

Additionally, as earlier stated, I control for Industries because Honig and Karlsson (2007) found Business Planning activities are undertaken for e.g. making companies look more structured. Therefore, I test whether there exist any industry effects. Interestingly, results show that those nascent entrepreneurs who are involved in the Real Estate and Finance Industry have a marginally significant 7.9 % greater likelihood of Business Planning. Entrepreneurs who are involved in the Manufacturing and Construction Industry have a significantly lower likelihood of undertaking different planning activities, ranging from 7.2 % to 12.2 % in the models 1, 2, 3, 4 and 6.

Importantly, the effects found for model 1 and 6 are only marginally significant at a 10 % level of significance.

Furthermore, results show that those nascent entrepreneurs who are involved in Retail Industry have a significantly 11.4 % lower likelihood of having financial projections which might be caused by mimetic forces that influence the Business Planning activity, as Honig and Karlsson (2004) stated. The negative impact of being part of Manufacturing and Construction Industry is opposed to the findings of Honig and Karlsson (2004), who found that being in this industry increases the likelihood of writing a formal business plan.

7.2.4. Conclusion Hypotheses 3a-3d

For summarizing the findings, I focus mainly on the effects of the different variables on the likelihood of Business Planning, calculated in Model 1.

Results show that Hypothesis 3a is clearly accepted. As expected, a higher level of Formal Education leads to a significantly higher likelihood for undertaking a Business Planning activity. It needs to be mentioned that the marginal effect of Formal Education on the Business Planning variable is around 1.6 %. Results show that Formal Education affects the likelihood of all Business Planning activities significantly positively. The marginal effect of Formal Education on the likelihood of finishing a Business Plan or creating Financial Projections is at a level of 4.6 % and 3.3 % for example.

Hypothesis 3b suggests that Needed Financial Support increases the likelihood of Business Planning. Results presented in Table 9 show that those nascent entrepreneurs who search for financing, have a significantly 9 % greater likelihood of Business Planning. Furthermore, entrepreneurs who received financial support, have a significantly 14.4 % greater likelihood of Business Planning. Therefore, Hypothesis 3b is clearly accepted. Furthermore, it can be seen that those entrepreneurs who search for financing or received financial support have a 21 % to 22 % greater likelihood of having Financial Projections. This is the greatest effect between those two financing variables and all Business Planning variables. When connecting the results to the theoretical background provided in previous sections, this seems to be rather obvious as many institutions underpin the importance of Business Planning.

Hypothesis 3c investigated whether Entrepreneurial or Labor Experience increases the likelihood of Business Planning. Results show that only Labor Experience is marginally significant and affects the likelihood of Business Planning positively with a marginal effect of 0.4 %. Therefore, this Hypothesis is only partly accepted at a 10 % level of significance. However results show that Entrepreneurial Experience is significant in the models 3, 4 and 5 and Labor Experience is significant in the models 3 and 5, and marginally significant in model 6 and model 1. Therefore, it can be seen that both experience variables should be taken into account when analysing factors that lead to different Business Planning activities.

Hypothesis 3d assumed that lower levels of Self-Efficacy (a) and higher levels of Startup Motivation (b) increase the likelihood of Business Planning. Results provided in Table 9 show that this Hypothesis is partly accepted. Even though a marginal change in Startup Motivation leads to a significantly greater likelihood of Business Planning, entrepreneurs with greater levels of Self-Efficacy are also more likely to plan. Additionally to model 1, Self-Efficacy was also significant in models 2 and 6 and showed also positive marginal effects. Startup Motivation shows similar effects for all models, except Model 5.

It can be seen that several variables like education or Startup Motivation influence the likelihood of Business Planning. As there are significant influences of different variables like Formal Education on the likelihood of Business Planning, it needs to be figured out if there might be a potential bias in the models used for testing Hypotheses 1 and 2.

7.3. Testing for Endogeneity

7.3.1. Methodology

For verification purposes, I analyse whether there might be a potential bias due to endogeneity. Therefore, I assume, similar as discussed by Millimet (2001), that Business Planning might be endogenous and entrepreneurs self-select into undertaking or not undertaking Business Planning activities. According to Cameron and Trivedi (2010), an endogenous regressor is a regressor that arises within a system that influences u , which is defined as the error term. Opposed to this, an exogenous regressor is a regressor that arises outside the system and is unrelated to u . As this master thesis uses probit and logit regressions in order to test the different Hypotheses, endogeneity needs to be taken into account as these methods are inconsistent, if any regressor is endogenous, according to Cameron and Trivedi (2010). For investigating sample selection effects, Kennedy (2008) presents three methods, namely maximum likelihood estimation, instrumental variable (IV) estimation and Heckman's two-stage procedure. However, as there exists a problem with endogeneity I follow Cameron and Trivedi (2010) who mention similarly two approaches that can be used for testing endogeneity, namely the structural model (which includes maximum likelihood estimation and twostep estimation) and a instrumented-variable approach. Baum (2006) discusses especially the Instrumental Variable (IV) approach that is applicable to many different problems. As mentioned earlier, I assume the variable Business Planning as being endogenous.

As this is a binary variable, Cameron and Trivedi (2010) suggest a special methodology that takes the binary nature of the endogenous regressor into account and changes the first-stage model to a latent-variable model, which is rather similar to a probit model. In this model, the probabilities can be calculated with maximum likelihood or with a two-step method.

In order to explain this in further detail Cameron and Trivedi (2010) present the model formally:

$$y_{1i} = \beta_{1y2i} + x'_{1i}\beta_2 + u_i \quad (1)$$

$$y_{*2i} = x'_{1i}\pi_{1j} + x'_{2i}\pi_{2j} + v_i \quad (2)$$

$$y_{2i} = \begin{cases} 1 & \text{if } y_{*2i} > 0 \\ 0 & \text{otherwise} \end{cases}$$

This model can be calculated in Stata by using the “treatreg” command and exactly this model is suggested by Millimet (2001) in order to test for endogeneity. Therefore, according to Ettner (2004), STATA calculates the two equations (1) and (2) simultaneously, which is according to Ettner (2004) equivalent to controlling for the non-zero expectation of the error term in the outcome equation and this eliminates the omitted-variable bias. This model is available in STATA by using the “treatreg” command. The model calculates, according to Cameron and Trivedi (2010), rho, sigma and lambda and tests if rho is equal to zero. If this is the case, the errors of u_i and v_i are uncorrelated and there is no problem of endogeneity. However, as in this case the outcome variable y_{1i} is also a dichotomous variable (Disbandment or Perception of Emergence), STATA’s “treatreg” command cannot be used. According to STATA’s help on the webpage (STATA (2012c)), treatreg fits a treatment model that considers the effect of an endogenously chosen binary treatment on another endogenous continuous variable, conditional on two sets of independent variables. Ettner (2004) suggests using a bivariate probit model for estimating these models for dichotomous outcome variables.

Interestingly, Chiburis et al. (2011) published an article that investigates the specific differences between bivariate probit models and linear instrumental variable estimators. Therefore, they analysed the situation of binary outcome paired with a binary treatment variable. They state that both models can result in different outcomes and use Monte Carlo simulations in order to estimate the differences.

They found that the bivariate probit model is not robust against misspecification and therefore, highly biased estimates can be caused if error terms exhibit excess skewness or excess kurtosis. Additionally, they suggest using bootstrapped confidence intervals in samples with sizes below 10,000 observations. For testing model specifications, Chiburis et al. (2011) suggest to use Murphy's Score test. Murphy (2007) mentions to use this test in order to test the normality assumption of bivariate probit models specifications, as a mis-specified distribution of the random error terms leads to inconsistent parameter estimates. Furthermore, Bhattacharya et al. (2006) analysed probit models with self-selected treatment and focus on models like two-step probit estimator, two-stage least squares linear probability model estimator and multivariate probit. It is summarized that, when treatment and outcome variables are dichotomous variables, models that maximize directly the bivariate likelihood of the outcome and the treatment yield to consistent results. Additionally, it is mentioned that methods like multivariate probit are not consistent if the assumptions on distributions of the outcome and the treatment are wrong. However, Bhattacharya et al. (2006) found by using Monte Carlo simulations that the parameter estimates of multivariate probit methods are robust, even if the model is mis-specified in some ways, even as the treatment models are biased (Bhattacharya et al. (2006)).

Summarizing the arguments, it can be seen that bivariate probit models are appropriate and therefore I follow Ettlner (2004) by using a bivariate probit model in order to test whether Business Planning is endogenous. In order to test the specification, I use Murphy's Score test, suggested for usage by Chiburis et al. (2011). Thereby I use STATA's "scoregof" command.

7.3.2. Results

For calculating the bivariate probit model, I use as dependent variable Disbandment and Perception of Emergence. As earlier explained, I use as a potential endogenous regressor the Business Planning dichotomous variable. As independent variables for estimating the first equation, Formal Education, Entrepreneurial Experience and Labor Experience are used. It needs to be mentioned that the bivariate probit model used here is the Seemingly Unrelated Bivariate Model, as each of the equations estimated has different predictors (Ender (2012)). Importantly, results of using the Murphy's Score Test (Murphy (2007)), suggested by Chiburis et al. (2011), show for both models that none of the models is mis-specified (p-values 0.1 and 0.27). Importantly both models include 1,200 observations.

Table 10						
Results of Bivariate Probit Models for testing Endogeneity						
Model	[1]			[2]		
	Disbandment			Perception of Emergence		
	Coef.	Std. Err.	P>z	Coef.	Std. Err.	P>z
	Disbandment			Perception of Emergence		
Entrepreneurial Experience	-0.064	0.039	0.101	-0.049	0.038	0.198
Formal Education	0.033	0.017	0.047	-0.007	0.019	0.725
Labor Experience	-0.008	0.005	0.105	0.016	0.005	0.002
Business Planning	-1.483	0.134	0.000	1.566	0.109	0.000
_cons	0.608	0.252	0.016	-2.006	0.273	0.000
	Business Planning			Business Planning		
Entrepreneurial Experience	0.004	0.045	0.925	0.016	0.046	0.729
Labor Experience	0.014	0.008	0.068	0.014	0.008	0.064
Formal Education	0.060	0.021	0.003	0.057	0.020	0.005
Age	-0.013	0.005	0.006	-0.014	0.005	0.003
Seek Financing	0.367	0.100	0.000	0.311	0.098	0.001
Financial Support Received	0.712	0.124	0.000	0.672	0.117	0.000
Self-Efficacy	0.245	0.083	0.003	0.239	0.077	0.002
Startup Motivation	0.126	0.049	0.011	0.060	0.047	0.197
_cons	-1.466	0.463	0.002	-1.080	0.455	0.018
/athrho	1.051	0.219	0.000	-1.407	0.332	0.000
rho	0.782	0.085		-0.887	0.071	
Likelihood-ratio test of rho=0: chi2(1) = 30.2753 Prob > chi2 = 0.0000			Likelihood-ratio test of rho=0: chi2(1) = 31.0005 Prob > chi2 = 0.0000			
Murphy's score test for biprobit chi2(9) = 14.68 Prob > chi2 = 0.1000			Murphy's score test for biprobit chi2(9) = 11.09 Prob > chi2 = 0.2694			

Table 10: Results of Bivariate Probit Models for testing Endogeneity

By focusing on the Likelihood-ratio test which tests whether rho equals 0, it can be seen that this Hypothesis is rejected in both models. Therefore, bivariate probit models show that the equations are correlated and there exists a problem with endogeneity.

Importantly, according to Ettner (2004), rho measures the correlation of the two model's error terms.

In order to find the direct and indirect effect of Business Planning on Disbandment and Perception of Emergence I calculate the marginal effect of Business Planning. This shows that for those who do Business Planning, the marginal direct and indirect effect of Business Planning on Disbandment, by using STATA's "margins" command in the way suggested by Nichols (2011) is -48.30 %. Similarly, the marginal direct and indirect effect of Business Planning on Perception of Emergence is 47.96 %. These results indicate that Business Planning has a positive effect on the performance of new ventures, which supports Hypothesis 1 again. According to Ettner (2004), a positive (negative) rho implies that the estimated effect of treatment from single-equation estimation will generally be biased away from zero (towards zero). As it can be seen from Table 10, rho reaches a value of 0.782 for Model 1 and -0.887 for Model 2.

For verification purposes, I also use the treatreg model, as earlier discussed, eventough Stata's treatreg command has its limitations with binary variables. However, those regressions show a similar effect of Business Planning on Disbandment as it reduces the likelihood of Disbandment and increases the likelihood of perceiving the venture as emerged. Importantly, Ettner (2004) suggests the same bias interpretation as stated earlier also for the treatreg interpretation. The rho for Model 1 is 0.825 and for Model 2 is -0.717, which is rather similar to the bivariate probit outcomes.

All these results support the Hypotheses that Business Planning is beneficial, which is shown by the marginal effects. In order to summarize the findings, the following section provides the final conclusions, where I put an emphasis on the comparison of the results to results provided in other articles.

8. Conclusion

The aim of this master thesis is to figure out whether Business Planning increases the performance of entrepreneurial ventures. Therefore, two different theories that try to explain entrepreneurial success are presented, namely the Planning Approach and Effectuation Theory. The third part of this thesis is aimed at figuring out which criteria lead nascent entrepreneurs to undertake Business Planning activities. As there are different „key questions“, this conclusion is separated in two parts, whereas the first part concludes the first two Hypotheses and puts the findings into a relation to similar articles. Secondly, the findings of the second part, which cover all Hypotheses presented in the fourth section are discussed. For testing the different Hypotheses I use a dataset from the Second Panel Study of Entrepreneurial Dynamics (PSED II).

8.1. Conclusion: Is Business Planning beneficial?

For analysing the role of Business Planning, this thesis uses two different measures of performance, namely Disbandment and Perception of Emergence. The effect of Business Planning is analysed by using two different variables. Therefore, I use on the one hand a Business Planning dichotomous variable, that is coded with one if any Business Planning activity was undertaken (from a set of variables) and on the other hand I construct an index from several variables in order to measure the Business Planning Intensity. Other variables, like Formal Education or Labor and Entrepreneurial Experience were used as independent variables. In order to analyse the Hypotheses, logistic regressions are used, because the dependent variables are dichotomous variables. This results in four different regressions and shows that Business Planning lowers the likelihood of Disbandment and increases the likelihood of perceiving the venture as emerged. Business Planning Intensity influences the two dependent variables in a similar way, suggesting that undertaking more planning activities is also better for the likelihood of survival and for perceiving the venture as emerged. Independent variables, like Labor Experience show a significantly negative effect on Disbandment and a significantly positive effect on Perception of Emergence. The same effect is seen for the variable Financial Support Received. Both of these outcomes seem to be rather obvious. As the sample is cross-sectional, I control for industries and don't find any significant influence of industry type on the performance of new ventures. Compared to different articles presented earlier, these results are in line with Delmar and Shane (2003), who used a

similar method. Delmar and Shane (2004b) analysed legitimizing activities, which also included a variable „Completed Plan“ and found a similar effect. Similarly, Gartner and Liao (2006) found that Business Planning increases the likelihood of persisting in the process of emergence of ventures, which was not influenced by different kinds of uncertainty. Haber and Reichel (2007) found a marginal effect of Business Planning on performance. Furthermore, Gruber (2007) found that planning is beneficial, but mentions that it needs to be adapted to the environment. Rauch and Frese (1998) found that Business Planning helps to become successful in hostile environments. Additionally, Rauch and Frese (1998 and 2000) found that the relationship between Business Planning and success is moderated by different factors. Brinckmann et al. (2010) found similar effects by conducting a meta-analysis, namely that the relationship is influenced by contextual factors. Business Planning is according to Brinckmann et al. (2010) beneficial for venture performance.

However, the results provided in this thesis are different to the findings of Lange et al. (2007) and Dencker (2009). If thinking about Effectuation Theory, my results show that Business Planning is successful, but the marginal effects range from -2.4 to -6.8 % on the likelihood of Disbandment and from 3.6 to 6.4 % on the likelihood of Perception of Emergence. This implies that there are many other determinants that influence the entrepreneurial process, which can be assumed when looking at Figure 3, which provides a model of the entrepreneurial process and shows different determinants that influence the process.

Many articles, which were discussed and presented in the section about Effectuation Theory show that different determinants contribute to entrepreneurial success like e.g. being member of a business network. However, the aim of this master thesis is to figure out whether Business Planning enhances or hinders the performance of nascent entrepreneurs (Hypothesis 1 and Hypothesis 2) and therefore it can be clearly seen that Business Planning enhances the performance and undertaking more Business Planning activities is better for the performance of entrepreneurial ventures. Finally, a bivariate probit model is used for examining whether there exists a problem with endogeneity and also these results underpin the importance of Business Planning for nascent entrepreneurs. Importantly, this master thesis uses a dataset from the United States, and therefore the results might differ for Europe, eventough similar results were found by

Delmar and Shane (2003) by using a Swedish dataset. Another important limitation of this master thesis is caused by the performance measures used. It might be possible that the effects of Business Planning are different, when one uses other performance measures. However, as explained, similar measures are used by other researchers. Furthermore, when focusing on the research field that is covered by Effectuation Theory, there exists a huge space for further research, that focuses exactly on the question which actions the nascent entrepreneur undertakes are most important and most appropriate and under what conditions. The second part of this conclusion focuses on the question “Who does Business Planning?” and is discussed in the following part.

8.2. Conclusion: Who does Business Planning?

As mentioned in the previous conclusion, results show several positive effects of Business Planning on performance. It is mentioned in this master thesis that institutions like support agencies as well as banks suggest entrepreneurs to undertake Business Planning activities. Therefore, the section “Who does Business Planning?” is aimed at providing evidence on why Business Planning is done. In order to investigate this, I use methodologically different probit regressions with various Business Planning variables as dependent variables (Business Planning, Started Business Plan, Finished Business Plan, Formal Business Plan, Financial Projections and Changed Business Plan).

Hypothesis 3a assumed that Formal Education increases the likelihood of undertaking Business Planning activities. The results provided in this master thesis show that this Hypothesis is accepted. Interestingly, this differs from the results of Honig and Karlsson (2004), as they did not find a significant influence of Education on the likelihood of a “Written Formal Business Plan”.

Furthermore, I found as expected, that Needed Financial Resources increases the likelihood of undertaking Business Planning activities significantly. This was expected according to Hypothesis 3b, which is accepted. Furthermore, this provides evidence for the Hypothesis that nascent entrepreneurs who search for financing are forced to undertake Business Planning activities by institutions or banks. Additionally, results show that those entrepreneurs who received financial support have a greater likelihood of undertaking Business Planning activities.

Hypothesis 3c, which assumed that Entrepreneurial Experience, as well as Labor Experience increase the likelihood of Business Planning was only partly accepted, as the effects on Business Planning are only marginally significant for Labor Experience and not significant for Entrepreneurial Experience. Furthermore, results show a small significant marginal effect of Entrepreneurial Experience as well as of Labor Experience on different Business Planning variables, like Financial Projections, which can be seen in the previous section. Honig and Karlsson (2004) found that experience does not significantly influence the likelihood of having a “Written formal business plan”, which is slightly different to the findings in this thesis, as Entrepreneurial Experience shows a significant positive marginal effect on the likelihood of having a Formal Business Plan as well as on Finished Formal Plan.

Finally, Hypothesis 3d, which suggested that lower levels of Self-Efficacy and higher levels of Startup Motivation increase the likelihood of Business Planning, was partly accepted. According to Table 9, higher levels of Self Efficacy lead to a greater likelihood of Business Planning and furthermore higher levels of Startup Motivation increase the likelihood of Business Planning.

Summarizing the findings, it can be seen that the effects are partially similar to the findings of Honig and Karlsson (2004). It needs to be kept in mind that findings might differ, when using datasets from different countries. Results show strong evidence that nascent entrepreneurs who need financing are more likely to undertake Business Planning activities. This is rather obvious, as many institutions seem to focus on Business Planning activities. Interestingly, I found industry-specific effects and therefore it would be possible in further research to focus on these effects. A further limitation is caused by the measures used, as other measures e.g. measuring Business Planning activities by the hours spent on planning tasks might lead to different results.

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Ausbildung

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09/2002 - 07/2007	HLFS - Forstwirtschaft Bruck/Mur Notendurchschnitt Abitur: 1,0
09/1998 - 07/2002	Altes Gymnasium Leoben mit sprachlichem Schwerpunkt (Französisch)
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Seit 2007	LIECO GmbH & Co KG Freier Mitarbeiter im Marketing der LIECO GmbH & Co KG
10/2009-01/2012	Universität Wien Lehrstuhl für Internationales Personalmanagement Univ. Prof. Dr. Oliver Fabel Als Studienassistent lag der Schwerpunkt einerseits auf der Betreuung sämtlicher Online Ressourcen (E-learning, Homepage) des Lehrstuhls und andererseits auf der Mitarbeit in der Forschung
08/2009 - 09/2009	Murtal Seilbahn Betriebs GmbH, Skigebiet Kreischberg Praktikum im Controlling mit Fokus auf Datenanalyse und Auswertung von relevanten Daten für das Skigebiet Kreischberg
07/2006 - 08/2006	Stora Enso AB, Bergvik Skog AB, Schweden, Metsäliitto Cooperative, Finnland Praktikum bei Stora Enso und Metsäliitto mit besonderem Augenmerk auf die strukturellen Unterschiede in der Forstwirtschaft und Logistik zwischen Österreich und Skandinavien
05/2005 - 07/2005	Stiftung Fürst Liechtenstein LIECO GmbH & Co KG Forst Kalwang Praktikum bei LIECO GmbH & Co KG und im Forst Kalwang im Zuge der Ausbildung an der HLFS Bruck/Mur

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2010-2011	Mitglied der Bundesvertretung der Österreichischen Hochschülerschaft
2009-2011	Mitglied der Fakultätskonferenz Fakultät für Wirtschaftswissenschaften, Universität Wien
2010	Accenture Campus Challenge Teilnahme an der Accenture Campus Challenge und Gewinn des zweiten Platzes im Deutschland/Österreich/Schweiz - Finale in Kronberg im Taunus.
Seit 2007	Mitglied und studentischer Vertreter des Verbandes Österreichischer Förster in der Union Europäischer Forstleute

Computerkenntnisse

Betriebssysteme:	Windows, Mac OS, Linux
Software:	Microsoft Office, Open Office
<u>Statistik:</u>	STATA, EViews, SPSS
<u>Graphik/Layout:</u>	Quark XPress, Adobe Creative Suite
<u>Programmierung:</u>	JavaScript, HTML, VBA (Basiswissen)

Sprachkenntnisse

Englisch	Fließend, in Wort und Schrift
Französisch	Grundkenntnisse
Italienisch	Grundkenntnisse

Interessen

Skifahren, Tennis, Radfahren, Schwimmen, Wandern, Lesen