Czech University of Life Sciences Prague Faculty of Economics and Management

Department of Management



Diploma Thesis

Business Start Ups

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Methodology

The thesis builds on comaprison of financing options available for start-ups in US and Europe and links real financial support to various phases of start up life cycle.

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Declaration

I declare that I have worked on my diploma thesis titled "Business Start Ups" by myself and I have used only the sources mentioned at the end of the thesis. As the author of the diploma thesis, I declare that the thesis does not break copyrights of any third person.

In Prague on 31st March 2015

Štěpán Pokorný

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Možnosti Financování Začínajících Podniků

Business Start Ups

Souhrn

Hlavním cílem této diplomové práce je zhodnocení možností financování začínajících podniků (startupů), založených v souladu s jejich historickým kontextem a rovněž zhodnocení interakcí mezi uvedenými možnostmi financování. Základní typy financování spojené s prostředím startupů jsou popsány na základě definovaných fází života začínajícího podniku.

Teoretická část diplomové práce popisuje klíčové pojmy, rozdílné názory a skutečnosti spojené se startupy. Autor také používá příklady z historie, které dovolují lepší porozumění danému tématu. Hlavním zdrojem informací pro tuto část práce jsou především internetové zdroje a odborná literatura. Autor cituje názory významných podnikatelů a investorů nejen z České republiky, ale také ze zahraničí, pro lepší pochopení daného tématu.

Praktická část porovnává prostředí startupů a možnosti jejich financování ve Spojených státech amerických a v Evropě. Na základě uvedených druhů financování, dostupných pro začínající podniky, autor prezentuje skutečné příležitosti v obou oblastech a pokouší se odpovědět na otázku, proč jsou Spojené státy americké vedoucí zemí v počtu startupů a v možnostech jejich financování. Autor se rovněž zabývá možnostmi zlepšení podmínek pro vznik startupů v Evropě.

Summary

The aim of diploma thesis is to evaluate possibilities, how to finance a start-up company based on historical context of this type of businesses and interaction between presented possibilities. Basic types of financing are connected with the start-up environment and these types are described based on a defined phases of start-up life cycle.

The theoretical part of diploma thesis describes key terms, basic ideas, different opinions and facts connected to start-ups. The author also uses historical examples, which allow better understanding to the given topic. The main sources for this part are mainly taken from the Internet, because of the topicality of the information, and professional literature. The author often also uses opinions of renovated entrepreneurs and investors from the Czech Republic and abroad, to give a better insight to the issue.

The practical part compares the start-up environment and possibilities of financing in the United States of America and Europe. Based on the listed types of financing available for start-up companies, from the theoretical part of diploma thesis, the author presents real opportunities in both regions and tries to come up with valuable results which would explain why the United States of America is a leading country in the numbers of start-ups and funding options, and what options there are of improving the start-up environment in Europe.

Klíčová slova: Start-up, rizikový kapitál, andělský investor, podnikový inkubátor, internetová bublina, firma.

Keywords: Start-up, venture capital, angel investor, business incubator, dot-com bubble, enterprise.

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2 Introduction

The word start-up has becomes, in last few years, one of the most used expressions in the context of innovation approaches of modern days. Why has the term become such a buzzword online? What stands behind the evolution of this phenomenon, from topics discussed mostly on panels of technical and strictly professional society, to the subject with own web pages dedicated to this subject and being discussed on the pages of modern commercial press? The explanation can be simple. People, in general, tend to fall in love with stories, how somebody with only his dream and limited funding can develop a successful company, and make his dream become real. Positive stories are putting entrepreneurs on the covers of magazines and making them celebrities comparable to professional athletes and singers. These cases and other are making needful propagation to business start-ups and attract attention of a wide range of people, but more importantly, creative people and investors who are seeking for an opportunity to invest.

Financing of new start-up projects is one of the crucial topics that can be observed from different angles and should be considered for every project independently. An investor can be one person, a so-called "Angel," or group of people with funds prepared to put money into new prospective companies or state owned organizations. The different angles of viewing opportunities in start-up projects are making this topic interesting and at the same time hardly describable.

To be able to receive investment is one of the most significant moments in the life cycle of every start-up company. However, not every company can reach this point, and it is even more difficult when, in many cases, all they can offer to a potential investor is merely the company's vision and business. In many cases, economic indicators have to be replaced by feelings and intuition that the company is on the right way. Emotions are not relevant only during receipt of the first investment, based only on estimation of potential development of particular project and sympathy to author's ideas, but also affecting perception of different investment approaches and the attitudes toward individual start-ups.

Start-ups are receiving a lot of attention in today's media and successful authors of start-up projects are becoming publicly known personalities. The most successful start-up companies of these days are generating an enormous amount of money. It motivates other entrepreneurs to give their ideas a shot. These stories also support a creation of more financial and non-financial institutions that makes set up much easier for new start-up projects and also makes it easier for potential investors to access these projects.

Although there are more and more options on how to get investment, only great ideas are not enough to be able to reach the required investment. When discussing the huge successes of few start-up projects from the last few years, it has to be mentioned, that the percentage of projects that failed is significant. But even from these unsuccessful cases, valuable experiences and inspirations can be gained.

3 Objectives of the thesis and methodology

3.1 Objectives of the thesis

The aim of this diploma thesis is to evaluate possibilities, how to finance a start-up company based on a historical context of this type of businesses and interaction between presented options. Basic types of financing are connected with the start-up environment, and these types are described based on a defined phases of the start-up life cycle. The main aim of the practical part is to prove or reject the following hypotheses:

- Is financing of the start-up companies easier in the United States than in Europe?
- Is ICT the most dominant sector regarding investment financing?

3.2 Methodology

The first part of the diploma thesis contains the theoretical basis of literature and internet sources study. The theoretical part observes key terms, basic ideas, different opinions and facts connected to start-ups. The main sources of information for the theoretical part were mainly the internet, because of the topicality of the information, and professional literature. The second part is formed by the comparison of financing options available for start-ups in the United States of America and in Europe. Practical part links real financial support to various phases of start-up life cycle. Based on the listed types of financing available for start-up companies, from the theoretical part of the diploma thesis, the author presents real opportunities in the USA and Europe and presents valuable results that explain the current situation in both geographical areas.

4 Literature overview

It may seem that the term "start-up" has been used only in the last few years and because of this, the whole community around this topic is still at its infancy. It is not easy to agree with this statement. Start-ups appeared for the first time together with the dot-com bubble around the years 1997-2000. [35] 15 years in history of human beings is not so much but if it is considered how much technology has been developed since the late 90's. At least among technical enthusiasts, it cannot be said that the term start-up is a totally new concept. Finding a definition of what a start-up is might be difficult, since every person sees something different. Rob May, CEO and co-founder of Backupify May define a start-up as "something that is a new product or a new market, with less than 50 people, with the intention of growing quickly to scale." (MAY, 2013) [32]

Paul Graham is giving another definition of start-ups. He is pointing to the growth of a company as a significant attribute to being considered as a part of a start-up community "A start-up is an organization designed to grow fast. Being newly founded does not in itself make a company a start-up. Nor is it necessary for a start-up to work on technology, or take venture funding, or have some sort of exit." (GRAHAM, 2012) [29] It can be seen, both definitions are slightly different, but they have one main point in common. The expectation of fast growth is the same for every start-up company, and this is the biggest temptation for investors, to put their money into the project. Get a lot from nothing and earn a tremendous amount of money in a short time is what attracts people and forces them to follow this phenomenon.

The term start-up can be also used for some projects from the past. It is not as if there were no companies with a steep growth and other properties of today's start-ups companies in the past, but the difference is in the connection of projects with the latest technologies. These latest technologies, together with globalization of the world are making current startups much more sophisticated. There are many ways to start a new company. Difficulties that entrepreneurs nowadays are facing are the same as they were in the past, before the term start-up ever was conceived. Some of the types of financing for new businesses were used in past and were known throughout the whole society. For example, there were always investors waiting for their chance to finance ideas that would earn them revenues, but some of the new ways how to help companies with first years of their existence are brand new. In the last few years, a lot of non-financial supports for start-ups have come into existence, such as business incubators and start-up accelerators. Today's globalized world gives opportunities for start-up companies to reduce their initial costs by outsourcing work instead of keeping everything in-house. Outsourcing can reduce not only costs but also keep developers focus on the primary goal of the company, and not distract them by side quests. Also it allows, for example, technical start-ups to get a prototype of their product or demo version of software, despite the fact that they do not own plant, or having a limited labor force. [28]

Outsourcing is based on the concept of comparative advantage in producing goods if the opportunity costs of producing those goods in terms of other goods are lower in that country than it is in other countries. [30] It means that outsourcing can decrease costs not only in the beginning, but also in the future of the company's life. On the other hand, for some investors outsourcing is not suitable because of worries about losing their know-how. For example, how today's approaches related to start-ups has a background in the past can be found in term "crowdfunding". That refers to an approach based on collecting money through the Internet. It may seem like an invention of today, but it can be found in a history that this idea was also used more than a hundred years ago. In the summer of 1885 the Statue of Liberty was in New York in pieces awaiting assembly. The Statue paid by the French government as a gift to US was waiting for a finishing of granite plinth. Several groups such as the American Committee of the Statue of Liberty failed to raise the money, and New York's Governor Grover Cleveland rejected to fund the project from the city budget. To avoid relocation to the towns that offered help in return for the statue's relocation, Joseph Pulitzer, publisher of The New York World newspaper, launched a fundraising campaign to raise money for the completing of granite plinth. The campaign eventually raised \$101,091 - enough to cover the last \$100,000 to complete the pedestal from more than 160,000 donors from all kinds of people with different social background. [44]

The difference between today's and past approaches is that the Internet allows us to address much more people and organizations from all parts of the world. The principle and idea are still the same but the technology is helping us to easier address potential clients or people with the shared interests. Furthermore, feedback that is crucial for every company is provided in much faster ways from many different societies and in quantity that would be not possible attain without a global network. The biggest advantage is a possibility to join a global market practically from anywhere in the world. But with this great opportunity comes risk that some ideas can be stolen. Fast transferring of ideas and knowledge opens a lot of new doors but also comes with new risks.

It is sometimes difficult to orient in terminology of a start-up scene. Even the term "startup" can be observed from many distinct angles and can be interpreted by many authors by various definitions. According to some definitions a company is counted as a start-up and according to another is company not matching the requirements, because the size of a business is too big or too small, does not have enough employees or not growing as fast as it should. Even many investors have their own definitions. It is the same with authors of books dealing with start-up topics. These authors are not afraid to come up with their definitions of what a start-up is. In these cases it can be assumed that the view of the investor is valuable, because he is defining the definition of what a start-up should be, based on his positive or negative experiences, what he is looking for and which start-ups are worth to invest in. There are many other terms and notions related to start-ups that are not clearly specified and can be perceived differently.

An example of problem regarding not unified definitions can be simply the term start-up. A start-up company should come up with some kind of invention, a new product. There is a high probability that new companies, with a limited budget and capacity, do not have funds to produce something revolutionary or innovative. Because of this, start-ups are so closely connected to fundraising.

The definition of original and innovative ideas for start-up companies is not fulfilled in many contemporary projects, which are only copies of other successful companies. In the Czech Republic, it can be found that many well-known companies that are only copying ideas of other enterprises from abroad. Despite this fact, they are still considered as start-up companies. Interesting is that these businesses, which are using ideas of somebody else are a real temptation for investors. In our globalized world, start-ups using the same idea of different successful project will succeed in the context of other markets too. Because of this, investors welcome these projects. Since the risk of failing is lower than with projects that are bringing to the market a whole new product or service. On the Czech market, it can be seen that companies such as Slevomat.cz, are using the same model as the American company Groupon, or Aukro that is a copy of world-known web page eBay. [34]

These cases are showing us that start-up companies do not have to be only companies bringing new product or revolution to the market. In many cases like these, companies of this type, copying the successful trace of other projects, following some trends, "cool" things, or "hype", of some invention or a movement around that they can build up similar business or company which complements mentioned invention. Many projects are based on copying of the same ideas, bringing on the market accessories for other's inventions or they just bring their own version of product on the market, where the original invention is not operating yet. On the one hand, join to the situation where one trend is popular can help us to succeed and benefits from this situation. On the other hand, sooner or later the market will be saturated with similar products. As a result, competition will be fierce.

From today's point of view, it is easy to say what inventions were revolutionary ideas or game changers, but it was not like this back in the days when these inventions were made. Sometimes even true professionals in their fields cannot identify real potential and impacts that some of these inventions carry. Inventions can also at the first glance be compared to similar product, and their uniqueness hence can be underestimated. Start-ups are mostly mentioned in connection with companies of a technical nature. In the past, it can be found that in many cases even people, experienced in mentioned field, did not detect future impacts of presented ideas and their decisions cost involved companies losing millions of dollars. The author would like to mention the case of Xerox, which had the future of personal computers in their hands but failed to identify the potential of this market. The story shows us how difficult it sometimes is to recognize and enforce ideas that are the cornerstones of most of the start-ups.

4.1 The case of Xerox

Xerox is a company mostly known as a producer of copy machines. Not so many people know that Xerox almost caused a revolution in personal computers. For most of the fans of companies such as Apple or Microsoft, it can sound unbelievable, but Xerox developed the first computer mouse, as well as invented Ethernet, which is even in era of Wi-Fi connection still standard of local LAN computer networks. These were all features of the first modern personal computer named Alto - years before IBM and Apple. With these inventions, Xerox was ahead of their competition by ten years. Or to be more accurate,

there was not any competition for Xerox Alto. For example, the future father of Apple Steve Jobs was only 18 years old at the time.

However, alto did not get permission from responsible persons for mass commercial production, and Xerox only sold about 2 000 pieces of their personal computer Alto, almost all of the sales were to the American government. From today's point of view, the decision made by Xerox management seems like an unbelievable mistake. Xerox leaders did not see the tremendous potential of personal computers and the Alto project was observed mostly as an experiment. On the other hand, it has to be mentioned that at that particular time, personal computers were something completely new, and the few that existed had a price far from what could be considered affordable by the average population. Therefore, it was hard to predict how big impact the personal computer is going to have in 10 years later.

But there was someone who benefitted from Xerox's Alto personal computer. Steve Jobs, founder of Apple Computers, had a chance to visit Xerox development center and saw what impact the Alto computer would have if it were to go to mass commercial production. Some people are saying that this was the moment that gave Jobs the idea of the Apple Lisa, a personal computer. Several years later Jobs said; "It could have been as big as I.B.M. plus Microsoft plus Xerox combined and the largest high-technology company in the world." (GLADWELL, 2011) [53]. Undoubtedly, Xerox invented something what was outstanding, but they had not seen its full potential, and it cost them a leading position in a new industry. [41]

From a historical point of view, it can be seen how thin the line can be between the realizations of a groundbreaking product and how big the potential can be from one idea. Today, cases like these can be limited by studying literature and through experiences, which were gained previous years. Because of the Internet and alternative ways of financing, such as crowdfunding, business incubators and many more that push opportunities for realizing of successful Start-ups further.

4.2 Start-up

The term "start-up" has several different definitions depending on whom you ask. Basic definitions of a start-up describe this phenomenon as a new project that tends to grow fast and its set up either by legal entity or legal personality, specified or modified further based on different definitions. To get a more clear idea about a start-up it has to be presented

several opinions on this topic, because some definitions are too narrow or only complement already existing beliefs that are showing us, which projects are start-ups and which do not meet the requirements.

Eric Ries, the author of a book The Lean Start-up, brings us his comprehensive definition of a start-up as "a human institution designed to create a new product or service under conditions of extreme uncertainty." (RIES, 2011) [38] Czech entrepreneur, living and working in the United States, John Vanhara gives us a different definition of what a start-up is, "Start-up has to be alive and has to have customers. For me, start-up is regular business. Company has some supply and sees the trend that there will be increase in numbers of clients and income." also "start-up has finished web page and business plan, which is not carved in stone but can be change in near future." (VANHARA, 2011) [58] Another's view of start-up definition can be found on the web page of CzechInvest, the state organization focused on helping with getting investment. The central point of their definition is that start-up is only part of the life cycle of company, "We are talking about already established company or a company that is in process of establishment, which does not start with commercial sale, its production and does not generate profit. Financing is connected to commercialization of its production developed in the previous phase." [13]

As it can be seen in previously mentioned definitions, they have something in common, and it is that they are talking about start-up companies as small businesses. But in these days, the word start-up can be also connected to companies, which can be hardly considered new enterprises. This paradox can be seen for example in the results of annual Crunchies Awards 2010. [43] Facebook won the first prize for Best Overall Start-up or Product. In that time, this company had already more than 500 million users and its worth was around 23 billion dollars in June 2010. [55]

Value of start-up companies is widely discussed topic. In many cases, start-ups are acquired for tremendous amount of money, despite the fact that the do not generate profit, but their value is in their unique idea or product, therefore, valuation of a company is complicated. Example of a company that do not generate profit but her value is in billions of dollars is Snapchat. This company is providing photo-sharing application and was founded in June 2011 by students of Stanford University. In year 2013, Facebook tried to

acquire Snapchat for \$3 billion, but this offer was turned down by Evan Spiegel, CEO and founder of Snapchat. [26]

Another example of Facebook's aggressive politics of acquiring their social media and start-ups competitors is Instagram. This mobile app for sharing pictures had around 30 million users in year 2012 and was sold to Facebook for 1 billion U.S. dollars. [56]

Just month before the acquisition of Instagram, California regulators were deciding, whether they should allow Facebook's acquisition of Instagram to go ahead, CEO of this company, Kevin Systrom gave short overview of the company's finances. After two years, since Instagram was found, losses reached \$2.7 million. During the speech, an officer of the Department of Corporations asked Systrom how Instagram made money and he answered in the way typical for most of start-up companies, "That is a great question, we do not." [7] These and more cases show us that in start-up world, rather than present performance of company or numbers in accounting books, enterprises are observed from the point, how big they can grow and how huge can be idea that they are carrying.

4.2.1 The roots of the term start-up

Term start-up is still developing. It gained its popularity mostly during years 1995 and 2001 in the time of the Dot-com bubble. The Dot-com bubble, as its name can advise us, is connected mainly to companies created in the internet environment. These companies reached, even with not highly developed business model, enormous investments. It has to be mentioned that most of these companies, which were able to raise millions in a short period, bankrupted during burst of the dot-com bubble. These negative experiences with the dot-com bubble are still affecting the way how people perceive start-up companies. [17]

As it was mentioned before, based not only on quoted definitions, there is not universal definition of what start-up is. In this thesis, the start-up is considered a concrete project, with clearly defined idea in a business plan or a finished prototype. To fulfill criteria, projects should come up with innovation or an original solution, which will distinguish the project from traditionally set up companies, based on other alternatives.

4.3 Start-up funding and basic breakdown

In people's lives, implementation of their ideas, even if these ideas are the simplest, need to be financed from sources, which can be either traditional funding used in classical entrepreneurship or, because of the unique needs of start-up companies, these funds can be highly nonstandard and risky. Specific options, connected to highly hazardous investments linked to the particular needs of start-ups can be divided into several categories, based on a present stage of company's life cycle.

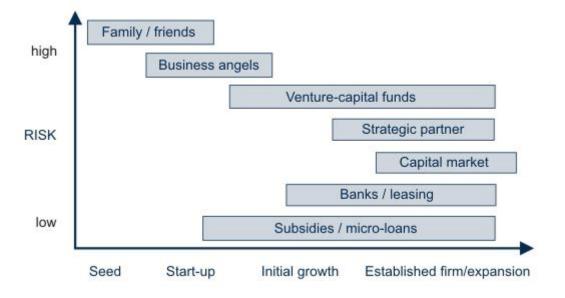


Figure 1 - Funding during start-up's life cycle and its risk. Source: (Czechinvest) http://www.czechinvest.org/en/phases-of-company

As can be seen in a picture above, in the first phase of existence, investment rate of return is equally proportional to the risk. In this part of a life cycle, investments are small, screening profitability of projects and their potential or, in case of web pages and mobile applications, traffic on these platforms. These indicators are usually essential criteria for evaluation of start-ups, regardless of their accounting performance.

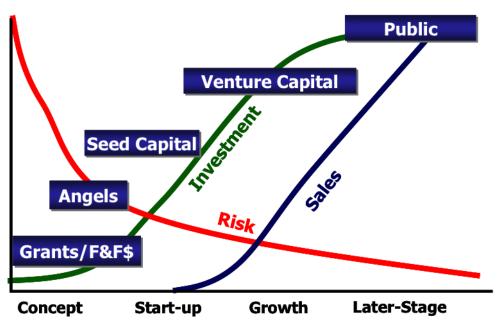


Figure 2 - The company Financing Lifecycle

Source: (MARS) http://www.marsdd.com/mars-library/angel-investors-seed-or-venture-capital-investors-that-depends-on-your-stage-of-company-development/

Between venture capital investors exists several diversified approaches that provide an initial investment to company and these, depend on a stage in the financing lifecycle of a particular company. Typically, venture capital investors invest certain amount of money for between 10% to 30% share of the company in its start-up phase, 50% in growth-stage companies and 25% in later-stage companies.

4.4 Family, Friends & Fools

For new start-ups, in the beginning, there is always hunger for promising financial support. On the other hand, investments into the new start-ups are the most difficult and the riskiest investments for potential investors. Same as in many parts of personal life, also in startup's life, it is more important to have contacts or sympathy of particular investors than just professional business plan. As it was mentioned in previous chapters, in early stage of a company's life, it is hard to tell, if a new business will succeed on the market or not. Therefore, investor relies on his intuition, willingness to take a risk, and trust in the founder of the project. First investment usually checks the viability of a start-up and can help a company to raise even bigger fundings. For the first stage of investments with name Family, Friends, Fools is used, in literature, often abbreviation FFF. In the first two cases, friends and family, a start-up company turns to family members and friends for help. In this case, it is considered more as borrowing of money rather than selling percentage share of an enterprise. The money gained this way is also called love money, money that goes from people around founders like friends and families, without significant knowledge or know-how. Opposite of love money is smart money, which goes from sophisticated business people, who have knowledge of the financial markets, strong networks and intuition for noticing trends before others.

The advantages of love money are clear: good rates, lenient credit standards and the chance for FF-investors to participate in the start-up entrepreneur's success.

The disadvantages of failure of an investment, in case of friends and family, can have bigger impact on author of start-up idea than only financial loss. If entrepreneur cannot fulfill his promises, relations can suffer. Expectations of repayment can be too high, and it could lead to disappointment if entrepreneur did not explain to the investors possible risk of their investment enough. [4]

Fools are, in terms of a start-up environment, individuals who dispose of capital and without personal relation to founder of a start-up company or profound knowledge of an issue invest significant amount of money to help company to growth. This type of investor can be characterized as someone, who is willing to take the risk based on intuition more than expertise. Fools are attracted into investment only on the base of ability of entrepreneur to sell them his ideas and visions. [43]

Friends, family and fools investments are necessary in the first and also the most difficult part of start-up's life cycle and played significant role in some of today's biggest companies.

4.5 Self-Financing

Founder of a start-up company does not have to rely on financing of his idea with money from others. Financing with own sources is an alternative way that has, as it is in many other cases, pros and cons. Self-financed entrepreneur is not losing his power over the project because he is the only owner of the company. All of the revenues are going to be used in accordance with his ideas. The vision of company's growth and direction is completely on the owner and is not influenced by investor. Another advantage of selffinancing is in saving time which would be spent on finding an investor. This process is significantly time-consuming even after reaching the investment. In such case, the founder would have to be creating reports and evaluations, which would have to be submitted to the investor on a regular basis. This time could be more efficiently spent working on a project. Investments from the second party are, in most cases, followed by conditions, which can affect start-up's management where financial management and decision-making, divided into more than one person is. Therefore, time necessary to react to a change of market conditions can be inelastic and innovation and development can be slower at the expense of different values and goals. Pros and cons for self-financing differ with every start-up, and its impacts and benefits can be perceived subjectively and can be assessed differently by investors on one side and founders on the other.

Valuation of investment is mostly approach of investors, who put their money into a startup project. On the other hand satisfied customers, quality of production and investments to development are goals, which are promoted by the author of an idea on which is the project based. These two approaches are not compatible under all circumstances and company can suffer because of not unified leadership. Situation can also be observed from the other side, when experienced investor can restrict unnecessary expenses and give advice based on his experience and know-how.

In the environment of start-ups, most of the authors of innovative and ground-breaking ideas have their own vision, how to manage and lead their company in the way which is comfortable and less stressful than with investor who is observing their steps. Despite this fact, it's hard to find a start-up, which would reach global impact and technological peak without being financially supported during its life cycle. [54]

4.6 Business angels

Business angel is an individual investor, who has business experiences and know-how from his own projects and is investing his capital. These people often invest into risky ventures. Business angels are focused on companies in a seed or start-up stage of their life cycle.

Business angels are receiving, for their investment, given share of a company and their performance in the company is limited by certain time. At the end of this time, investor sells his share of the enterprise. Business angels are not only looking for the highest return

with certain level of risk. They are trying to find an area, where they can actually use their experience and contacts for encouraging growth of the company in which they have invested. [12]

It is logical choice and one of the most practical variants for company in its start-up phase, where a big additional values can be created by involved investor, who is, in case of business angels mostly experienced manager, successful entrepreneur or expert in given field. Business angel is in many instances not only source of funds, but he participates in strategic decisions and helps with creating the final product. In many instances, well-known business angels attract other investors into the projects, just because of their involvement in a company.

The term business angel is not totally new. It was used for the first time in 1970s, but even earlier, at the beginning of 1900s, the wealthy investors in Broadway production were known under the term "angel investor."

The size of the angel's share in the particular company will depend on the market value of the business and how much money is required from business angel. According to Jenny Tooth, chief executive of the UK Business Association, founder of Start-up Company should not expect to give up more than 30% of an early-stage venture. Bigger share required in exchange for investment could demotivate founders of a project and could lower the chance to reach additional investments in the future. [51]

Business angels are providing imaginary bridge between above mentioned FFF's investment and venture capital funds. Typically, FFF's can provide around \$250,000, but it is too meager to bring to the market sort of groundbreaking ideas. On the other hand, most venture-capital firms in America are willing to invest into the project if the investment is at least \$7 million. [45] The situation is the same for Europe. The average venture capital investment in UK for year 2013 was \$6.5 million and Germany \$5.3 million. [23] Because of this situation on the market, business angels are an optimal solution for many entrepreneurs who are looking for investment between \$150,000 and \$2,000,000. [25] Because of the technical development, the term business angel is slightly changing and pushes its boundaries. This change can be seen with more and more popular term equity crowdfunding. Equity crowdfunding is an effort of individual people to support start-up projects initiated by other individuals or organizations, through the provision of finance in

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the form of equity. This approach brings another opportunity for start-up founders to finance their business and simultaneously gives chance to non-professional investors use their savings. Example of a website specializing on equity crowdfunding can be British Crowdcube.

Crowdcube is one of the biggest companies gathering together business angel investors. It allows investors to connect easily with start-ups and start-up companies to find investors. Other platforms with the same focus are, for example, AngelList, Early Shares or Fundable.

Despite the fact that simple crowdfunding found its way into the Czech Republic via web pages as hithit.cz or startovac.cz, servers focusing on equity crowdfunding are still not present in the Czech Republic. Business angel's investments are not so much developed and advanced. Options for start-up founders are, despite the fact of growing numbers of angels, still significantly smaller compared to the states from Western Europe or USA. In the Czech Republic, there are present simpler alternatives such as associations gathering together angel investors and providing contacts for involved individual investors. Some of these platforms are working on a principle of charging both sides, investors and also from start-up companies. Membership in these organizations provides start-up's with contacts on investors and investors getting access to prepared business plans of promising start-ups. Examples of these organizations can be:

- Angel Investor Association (www.aia.cz)
- Central Europe Angel Club (www.ceaa.cz)
- Business Angels Czech (www.bacz.cz)
- Business Angels Network (www.bids.cz) [12]

Business angels are also connected on higher level, not only on the level of separated countries. Example of this coherence can be The European Trade Association for Business Angels (EBAN). The association is made of 146 member organizations from 41 countries. This organization was established in 1999 by pioneers of angels networks in Europe. [49]

Despite the fact that investors are putting their money to start-up projects, because they are interested in an idea of a particular company, or they want to participate in an exciting project, the main reason why business angels take the risk is a valuation of their investment. This valuation is mostly done by Exit Strategy of angel investors. This strategy means that an investor will get out of a company in certain time horizon. An exit can be done in several ways, for example, investment is taken over by stronger investor, initial public offering (IPO), management buyout (MBO), etc. [1]

Valuation of business angels' investments is high as well as risk that is taken. Because of this reason, business angels usually do not invest only into one project but they spread their capital into more promising companies where on successful project can cover loss from other unprofitable investments.

4.7 Private equity and venture capital

Private equity and venture capital are alternative sources of financing for innovative projects and companies with potential of rapid growth.

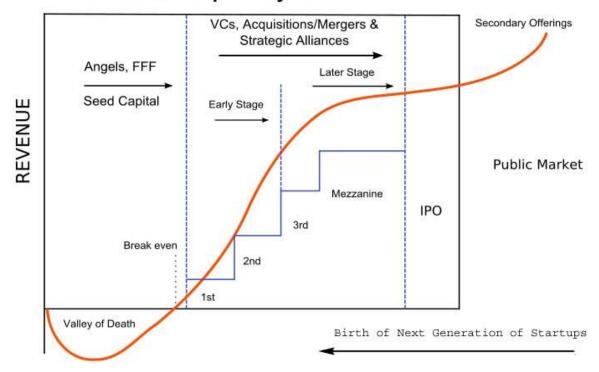
Private equity is mostly connected with medium-term and even long-term funding in exchange for a share of capital of the particular company. This company's shares are not publicly traded in a stock exchange. Investment is made into projects with potential for value creation and steep growth of market share. The goals of business plans, in cases of companies financed by private equity, are to produce and offer highly innovative products, processes and technologies.

In both instances private equity and venture capital, investments are made into publicly non-tradable companies, where investor gets certain share of the company's capital. Private equity is a name of a group of these types of investments. Under this designation, it is talking about redemption of shares by company's internal (buy-out) or external management (buy-in), but also venture capital, which is capital invested to project in its seed or start-up phase or into another development of particular company. [2]

Venture capital is financial capital invested to help create new start-up firms that in most cases are expected to have both high-growth and high-risk potential. These companies are focusing on health care or new technologies, including fields such as software, networking and the internet. In the last years, a newly created venture capital firms had recently focused on investing in socially responsible companies. In exchange for investment, the

investor receives a share on capital of the company and together with financial sources, the investor is giving to the company his knowledge and experiences, also known as smart money.

In most cases, financial and strategic support is helping in the development of the company. Form of professional help differs from every single investment, and it depends on investor and company, on which type of help will they agree. It can be active strengthening of top management or passive role of a financial consultant. Generally, investor brings into the company valuable contacts and connections, which can be helpful in different areas of business and in acquiring new customers. [5]



Startup Lifecycle

Figure 3 - Investments in Start-up Lifecycle

Source: (Silicon Valley News) [39] www.silicon-valley-news.com

Private equity and venture capital investors are, just like business angels, gathered into the association that helps them coordinate their activities and learn from each other. In Czech Republic is the organization called Czech Private Equity & Venture Capital Association (CVCA). CVCA is an association, which represents interests of companies operating in the field of private equity and venture capital in Czech Republic. CVCA is a member of European Private Equity & Venture Capital Association with

other associations mainly from Central and Eastern Europe. The primary goal of CVCA is to propagate phenomenon of private equity and venture capital in the Czech Republic. Another purpose of CVCA is to increase awareness of private equity and venture capital possibilities through permanent contact with investors and relevant political, regulatory and media subjects by following ways:

- providing information about members to individuals who are searching for private equity
- presentation of opinions and especially its members when dealing with the government and other institutions
- providing a forum for exchange of opinions between members of association
- operating as a source of education and training for employees of member firms and other subjects
- development and support of professional practice on a high level [14]

Among the most known investment companies involved in private equity in the Czech Republic belong RSJ private equity, Innova Capital, Argus Capital, Advent International, Amundi Private Equity Funds.

4.7.1 Crowdfunding

Crowdfunding is a funding method which allows open calls to the public, generally via internet, to raise money through either a donation or monetary contribution in exchange for a reward, product pre-ordering, investment, or lending.

The concept of crowdfunding is based on the broader concept of crowdsourcing. This concept involves using the "crowd" to acquire ideas, solutions, and feedback to develop corporate activities.¹ An important characteristic of crowdfunding is the extra private benefits, which is enjoyed by funders, also known as crowdfunders, in response to participating in the crowdfunding mechanism. These private benefits are changing based on the form of crowdfunding. Basic types of crowdfunding are an equity-based model, lending to outright donations, and profit-share model. In these days, pre-ordering and profit sharing dominates among other types of crowdfunding forms. In the first mentioned

¹ Jeff Howe and Mark Robinson used the term "crowdsourcing" in the June 2006 issue of Wired Magazine.

way, consumers are invited to pre-order the product, to collect certain amount of finances to start production. The pre-ordering scheme allows the entrepreneur to price discriminate between two groups of consumers. These two groups are formed by crowdfunders, funders who purchase the product, and other "regular" customers, who wait till the official production is released.

In the second, profit-sharing, scheme founders ask individuals to provide capital in exchange for a share of profits generated in the future or equity securities. In this scheme, it is up to the investor if he will consume the product at a later stage. [3]

Projects that are meant to be funded by crowdfunding are presented through specific web page, which offers propagation of projects to the "crowd". These companies, providing service, are financed by provision received from successful projects that were funded via their web page. Mostly, this fee is between 3-5%.² Crowdfunding companies offer medialization of concrete idea or invention, copyright protection and give founders valuable feedback from potential customers. Crowdfunding also provides ideas and innovations with needful verification of potential possibility of product success and brings entrepreneurs precise information, which would be difficult to gain without at the beginning unavailable economic indicators.

Crowdfunding is mostly connected with start-up companies but is also widely used by artists, non-profitable organizations, museums and even scientists. In these days, even big companies and well-known names are using crowdfunding web pages to finance their ideas. Good example can be the project of famous movie director and professor of New York University's film school Spike Lee. Veteran filmmaker raised \$1.4 million from 6,421 backers in August 2013 [50] to create his next movie "Da Sweet Blood of Jesus" through Kickstarter web page. [48]

Probably, the most famous crowdfunding platform, where people can find funds for their projects is the already mentioned web page Kickstarter.com. This American server was launched in 2009. Since this year; 7.7 million persons have pledged \$1 billion, funding 76,000 creative projects.³ Kickstarter is one of the platforms, which have its mutations in

² Fee differs based on a country where is project funded. Example can be found on the crowdfunding web page Kickstarter Available at: <u>https://www.kickstarter.com/help/fees</u>

³ Statistics are updated on daily basis and can be find at : https://www.kickstarter.com/help/stats?ref=footer

many other countries all over the world. In the case of the Czech Republic, there are already several pages that are dealing with crowdfunding. The biggest are hithit.cz, startovac.cz, fondomat, and nakopni.me.

Same as with most of the topics connected to start-ups, options and variants of crowdfunding are many and can be adjusted for purposes of concrete ideas. Above mentioned types of crowdfunding can be combined, and it cannot be strictly sorted into separate types. On the other hand, there is a range of options, which allows us to complement or intermingled with different types of funding

4.8 Alternative options for start-up realization

There is a wide range of new ways how to implement personal ideas. It does not have to be only about business incubators but also about individual projects that are, in many cases, created by big corporations or founders of successful start-ups. Reasons for these entities to participate in start-up projects are they can use their capital and previously earned knowhow in a field where they are experienced. This input can be crucial for creating of a new start-up company and capitalizing of investment.

In the Czech Republic, examples of the projects that can be placed into this group are Think Big created by O2 Czech Republic a.s., Nápad roku by Vodafone Czech Republic a. s. and the last one that can be considered as an alternative for people with a desire to realize their ideas is the project Rozjezdy roku funded by T-Mobile Czech Republic, a.s.. Mission of projects like these is mostly similar. It has helped to motivate general public to creative activity, to start their own business, and support their innovative projects. Typically, these competitions try to simplify the launch of winning products and services in the market. It can also help its further development by feedback from experienced entrepreneurs, investment, medial support or valuable contacts that can be used in the future.

The same opinion is held by the winner of Nápad roku 2014 Petr Svobodník, creator of BlindShell, who said in interview that "It is mostly about experiences, which I gained, and it is confirmation that our idea makes sense. It makes sense to go for it and become successful in the best scenario and actually attract investor, to help us accelerate project; this is probably the most important." (SVOBODNÍK, 2014)[15]

Some of the people prefer to create something new and own and not to spend life in a corporate environment with financial benefits. These approaches and enthusiasm present in a start-up environment is used by the server start-upjobs.cz or Start-upHire. These web pages provide direct offer of vacancy positions in concrete start-up companies.

4.9 Other ways to support start-ups

4.9.1 Business incubators and start-up accelerators

A lot of start-up companies use opportunities given by business incubators and accelerators to start and grow under the imaginary wings of these institutions. They offer help with many aspects of daily business life such as accounting, managing of a space, but also can play a role of mentor. Probably the most important benefit of joining business incubator and accelerator is the opportunity to be in an environment full of people with the same goals and passion. Gathering of start-up companies at one place is allowing tight cooperation and communication between each other. The National Business Incubation Association, the world's largest professional association representing this field in the US, provides the following definition, "Business incubation is a business support process that accelerates the successful development of start-up and fledgling companies by providing entrepreneurs with an array of targeted resources and services. These services are usually developed or orchestrated by incubator management and offered both in the business incubator and through its network of contacts. A business incubator's main goal is to produce successful firms that will leave the program financially viable and freestanding. These incubator graduates have the potential to create jobs, revitalize neighborhoods, commercialize new technologies, and strengthen local and national economies." (NBIA, 2014) [52]

4.9.1.1 Practical examples

Example of business incubators can be found in a private sphere, but can also be found in a public sector. In last years, business incubators experienced boom at the university campuses. University with the most experience in this field is, without no doubt, Czech Technical University with their project InovaJET, which was created in 2010 by the merger of two previous projects of this university. Czech University of Life Sciences in Prague started their business incubator in October 2014 with the maximum capacity of 10

teams. The University of Economics in Prague has also created their project that is called xPort and is available to help students with their entrepreneur ideas from the end of January 2015. [24]

The finance and the budget of the mentioned business incubators is mostly covered and maintained by the university and partners of projects. PointOne, for example, is supported by consultancy company Everesta and cooperating with Microsoft. The University of Economics in Prague's xPort is funded partly by heritage from Tomáš Baťa Jr. University also found a strong partner in one of the most successful business incubator in the world, SkyDeck. [6] This business incubator created a joint venture between UC Berkeley's College of Engineering, Haas School of Business and the Vice Chancellor for Research Office. SkyDeck has become the top start-up launchpad for UC Berkeley. SkyDeck goal is to graduate fundable start-ups by providing access to other entrepreneurs, mentors and venture capitals. [40]

In the previous years, model of business incubator and accelerator has become very popular models that are founded and supported by multinational companies. These companies provide start-ups with main advantages in field like technology, financing, community and customers. We can analyze this cooperation in cases like SAP Start-up Focus, program launched to support young entrepreneurs and their innovative ideas. In the beginning, SAP chooses enterprise and IT companies in their early stage. These firms should be applying predictive analytics to a particular problem or vertical, for example, supply chain management or retail inventory. SAP provides selected companies with advices, mentorship from SAP executives and also with HANA.⁴ HANA, new big thing coming from SAP Company is a database tool with tremendous potential, but it is expensive to access and deploy. Through SAP Start-up Focus, it gives a company an opportunity to get its foot in the door with developers that are building the next wave of technologies for the enterprise. SAP is focusing to attract young talented entrepreneurs and developers and connect them with their system and environment earlier than their competitors. This approach gives SAP advantage within cooperation with these companies and also chance to be the first in the case of acquisition of the enterprise. [59] At the

⁴ HANA – High-Performance Analytic Appliance

beginning of the year 2015 SAP Start-up Focus program consists of more than 17000 startups from approximately countries.⁵

Not only between business incubators and accelerators can be found significant coherence, but it also brings other opportunities and shows how to create a successful project. Business incubators can be created and thanks to big and prosperous companies, which are running these projects on their own including universities and other institutions.

4.9.2 Start-up accelerators and its specifications

Demands of concrete accelerators are hard to define. Accelerators have their specifications in the way of selecting suitable candidates for the interview and focus on a specific field. Some of the accelerators assert higher demands on start-up founders. This approach helps them to eliminate these projects with uncertain viability and gives a chance to start-ups that can survive and sometimes it can be hectic and even stressful.

Example of successful accelerator can be Y Combinator, located in Silicon Valley. The first accelerator ever was found in year 2005 and every year selects approximately around 80 start-up projects, out of more than 2600, to be part of their 3 months long program. This program focuses on getting start-ups to the point where they can built a prototype of their product or a demo version and raised money on a larger scale. Selected start-ups get paid between \$14,000 and \$20,000 to attend an accelerator cycle at Y Combinator. In return, they have to hand over about 7% of their firm's equity. [47]

Other accelerators created in the North America are for example 500 Start-ups, Techstar, Startupbootcamp. Market of the Czech Republic has started to discover its accelerator's potential. Among them, the most popular can be listed names such as Node5, StarCube, Start-upYard and Wayra.

Listed accelerators represent privately owned companies. But entrepreneurs have also chance to refer to agencies owned by public organizations. The best example of this funding is CzechAcccelerator, project funded by agency CzechInvest. CzechInvest is an agency of the Ministry of Industry and Trade and was established in 1992, thus financed by

⁵ Exact numbers can be find at the web page: <u>http://startupfocus.saphana.com/program/</u>

the Czech Republic. Since year 2011, project CzechAccelerator helps innovative projects and companies to gain experiences in entrepreneurship through time spent abroad and from consulting services provided by foreign mentors. Selected innovative enterprises from the fields such as ICT, engineering, life sciences, nanotechnologies etc. have an opportunity to spend from 3 to 6 months on the east or west coast of USA, Singapore, Israel or Switzerland. Already 40 companies had a chance to gain experiences and develop their ideas under the mentoring of top foreign specialists and spend time surrounded by same enthusiastic innovators because of the CzechAccelerator since 2011. [11]

4.10 Events, Competitions and Workshops

Event, competitions and workshops, especially in a start-up's community, are a great way how to present ideas and projects to potential investors and to gets valuable feedback. Participation in these events and competitions can also give us a chance to be placed into a business incubator or accelerator.

Start-up projects can promote their ideas through competition Nápad roku and Social Impact Award, which supports young and promising entrepreneurs, and these young entrepreneurs solve societal and environmental problems with the help of their business projects. Part of the Social Impact Award is also to hold workshops around the Czech Republic.

The best way how to evaluate particular ideas is to confront them with others projects and approaches. Start-up Weekend, an event held around the entire would including Prague is the platform for creative people where they can communicate and co-work with the same aim. Start-up Weekend also provide page Start-up Digest, which allows people to find and attend tremendous number of events and workshops all around the world. The author of this thesis was, because of this page, able to attend start-up events not only in Prague but also in Taipei and Hong Kong.⁶

⁶ More about Startup Weekend and Startup Digest can be found here: <u>http://startupweekend.org/</u> & <u>https://www.startupdigest.com/</u>

4.10.1.1 Intellectual property

Based on the definition what start-up is and on which pillars is standing it can be claimed, that the innovative idea and a new approach is the key equity, which start-up projects carry. The early stages of a new business can be a whirlwind. In the beginning, the main work is to build the team, attract investment, developed the product, partnerships, and sale channels and structures the company. All these tasks are typically in the charge of founders and because of challenging time schedule, with all these essential activities, intellectual property sometimes takes a back seat. [22]

Three relevant types of intellectual property that start-ups should understand are:

- Patents
- Trademarks
- Copyrights

In a start-up, intellectual property, or in other words intangible assets, often represents 90% of the value of the company. [27]

Intellectual property issues can be at times brushed aside. When company is during the early stage of a business, the benefits of diligent and intelligent intellectual property are likely to produce significant value. According to Richard P. Zemsky, "start-ups should be aware of the types of intellectual property that can impact their business and strategically consider pursuing patent, trademark and copyright protection as appropriate" (Zemsky, 2014). In other words, start-up companies should assess the intellectual property. That awareness should be coupled with clearance efforts to ensure that the business will not infringe upon the intellectual property of others.

5 Practical Part

5.1 Difficulties and importance of funding

5.1.1 Problems observed from the start-up's side

Projects, at their beginnings, needs sufficient funding to enter the market, and more importantly, to keep their share of a particular market. Today, this is a difficult task to accomplish, and it is very rarely possible with one's own financial resources. Start-ups often face huge start-up costs, especially when the product is in the prototype phase. The new start-up must also spend huge amounts on marketing costs to inform the public of their new product. Therefore it is important that these new start-ups are sufficiently funded. In many cases, when authors and professionals are trying to explain the term start-up, they are talking about small or medium size companies, but also companies formed only by a team of people or individuals. Especially, in the cases of a small team and individual entrepreneurs, students or fresh graduates often manage these businesses. Under these circumstances, the chance of development and realization of an idea from own financial resources, is even more complicated and in some cases, without external helps unlikely to happen.

The start-up projects are frequently criticized because of their inability to survive at their beginning without external financial support. Despite this fact, start-up companies are still successful in reaching foreign funds. The question of support does not have to be only about financial aid. These businesses are also receiving non-financial support, which helps with realization of a project and in the end also helps financially, indirectly through a reduction of expenses, which would be spent for example on consulting service.

Start-ups are synonymous with innovation in the eyes of investors, and thus, they invest in the hope of product being revolutionary and creating a significant financial return on their investment. These projects have to be accelerating as fast as it is possible, to keep their lead ahead of their competition and limit their entry into the market. For the stated reasons, and many others, financial and non-financial support is often the crucial factor for project's future.

5.2 Problems observed from the side of the state

In the past few years, the political representatives were searching for ways to increase national income and to encourage economic growth. This effort of an economic boost was conducted mainly through a support of foreign direct investments. The biggest plus of the Czech Republic was, without no doubt, highly skilled labour force and small labour costs. The decrease of investments at Central and Eastern Europe markets is significantly noticeable even in the Czech Republic. Total inflow of foreign direct investments in the period 2009-2013 321 projects, but between years 2004-2008, it was 512 projects. Despite this fact, the Czech Republic and Poland remains between the most attractive destinations in countries of the Central Europe. [21] Political and economic tools, such as devaluation of the Czech currency or providing tax rebates are not the instruments which are always positively welcomed by everybody and they can cause problems in different spheres of the economy.

The question arises, is supporting of foreign direct investments the best solution nowadays and also in the long run? The reinvestments of these businesses back into the particular country are one of the arguments for keeping this track, but, on the other hand, the significant portion of the profit generated by foreign companies stays abroad. An alternative way to support the economy can be a contribution of the state into the knowledge society and innovations, which are closely connected with start-ups.

There are plenty of companies that were founded by individuals or a small group of people and now employing hundreds or even thousands of people. Foreign companies invested a considerable amount of money into the Czech start-up projects, and some of them were, together with their patents, sold abroad. These businesses shows that, for example, in the Czech Republic, there are still great ideas, which can reach funding from the local sources but they can succeed even on the global market, to help them to survive at the beginning of their journey to becoming successful company. A good example of a start-up that reached global impact and received financial support from abroad is the company Socialbakers. This Czech start-up founded by Jan Řežáb received at the beginning of 2014 investment worth \$26 million from the group of venture capital investors. [42] In the theoretical part it was mentioned the state-owned organization CzechInvest. This company is helping start-up companies to find investor from abroad, but except this case, involvement of the state could also be by providing their funds. This contribution would lead the country to get a share in companies at lower costs and also support research, innovation and qualification instead of effort to compete with lower costs of the labour. In case where a state would be able to select the most proficient projects and would follow the steps that are typical for venture capital groups or accelerators, there could be created successful alternative to the support, which comes from abroad. Through the usage of the same technological structure, there would be cooperation among start-up companies and the state would be benefiting from both of the involved parties. The right way is to use projects created by universities to share practical experiences of experts from particular fields, ensure cooperation between projects and its members and to raise a prestige of the universities. Also, this would be the way to provide students with practical experiences.

The above mentioned strategy is widely used by foreign investors, who know that investing into the seed start-ups and companies in their growth stage is in many cases more attractive than investment into the established businesses. In the cases of successful start-ups or Spin-off Company supported by research organization, countries can get a share in companies, which can replace profit gained from foreign firms looking for a cheap labour force.

5.3 Business angels financing in the United States of America and Europe

As mentioned in the theoretical part, the market of business angels is the most developed in the USA. In the year 2013, angel investors from the United States of America invested \$24.8 billion in 70,730 entrepreneurial ventures and created 290,020 new jobs or 4.1 jobs per angel investment. The average deal size in the market of the USA was, in 2013, \$350,830. An increase of 2.6%, compared to 2012. The average equity received was 12.5% with a deal valuation of \$2.8 million. [8]

The European market is in many aspects similar to the market of the USA. The number of business angels operating in the European market increases every year and for the year 2013 there were 279,000 angel investors. It means an increase by 6.9% compared to the

year 2012. Despite the fact that Europe is relatively small continent and the European Union together with many international investments networks is making cooperation and trade between countries easier. It can be seen that 96% of the deals made within Europe took place in the country of the investor's origin. [16]

Total number of business angels and amounth invested by them in 2013		
	USA	Europe
Number of business angels	298,800	279,000
Invested amounth	\$24.8 billion	\$6.22 billion

Figure 4 - Total number of business angels and amount invested by them in 2013

Source: (EBAN) http://www.eban.org/wp-content/uploads/2014/09/13.-Statistics-Compendium-2014.pdf, (Center for Venture Research) http://paulcollege.unh.edu/research/center-venture-research/cvr-analysis-reports

As figure no. 4 shows, the difference between the situations of business angels is not in the numbers of active angel investors but the invested amount. The amount invested by business angels in the United States was four times bigger than it was in Europe.

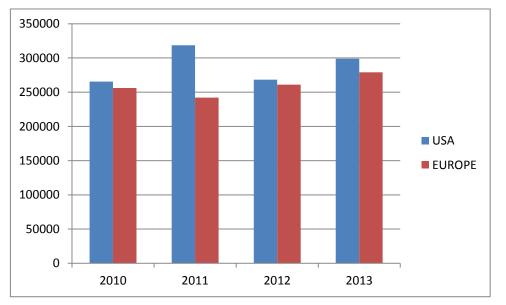


Figure 5 - Number of business angels in the USA and Europe since 2010 [9] [16]

Source: (EBAN) <u>http://www.eban.org/wp-content/uploads/2014/09/13.-Statistics-Compendium-</u>2014.pdf

(Center for Venture Research) http://paulcollege.unh.edu/research/center-venture-research/cvr-analysis-reports

Based on the figure no. 5, it can be seen that the numbers of angel investors was increasing, except the year 2011 in Europe and 2012 in the USA. Since 2010, the total number of active investors increased in Europe by 8.984% and 12.585% respectively in the USA. From these results, it is visible that the difference in growth of estimated numbers of business angels differs only by 3.601%, despite the fact that the United States are still ahead in front of Europe in total numbers of these investors.

For a better understanding of the development of figures for business investors in Europe, compared to the market of the United States, and its development in a long term period, author compares the numbers of mentioned type of investors in the year 2013 with the year 2006. As it is known from the figure no. 4, the total number of business angels in the year 2013 in the USA was 298,800 and for Europe 271,000. Thus, the difference between two mentioned regions was 27,800, therefore, 9.304%. In the year 2006 the estimated number of business angels in Europe was only around 50.000. Based on the data provided by Center for Venture Research at the University of New Hampshire, the United States were home of 234.000 business angels. Through the comparison of mentioned data, it can be observed a significant increase in the number of angel investors in Europe by more than 441% and for the United States increase by 27.692%. This result shows us that the community of a business angels grown tremendously for the European market than it was in the market of the United States, where numbers of business angels between year 2006 and 2013.

5.3.1 The total investments made in the USA and Europe

The development of business angels can be also observed through total investments made in the particular year. As mentioned previously, following the figure no. 4, the total investments made in the USA compared to the European market were worth more by \$18.58 billion. This number shows clearly that amount of resources available in the United States to support innovative companies are significantly bigger than in Europe. Europe made a significant step since the year 2006. In the year 2013, angel investors made, in total, investment worth \$6.22 billion. It means that the amount invested in Europe by business angels increased by 82.031% compared to the year 2006 with a total investment \$3.417 billion.

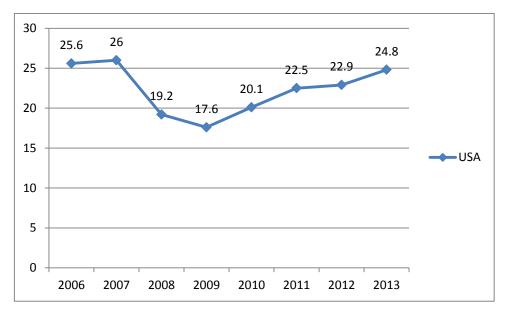


Figure 6 - The total investments in billions of dollars between the years 2006-2013 [10]

Source: (Center for Venture Research) http://paulcollege.unh.edu/research/center-venture-research/cvr-analysis-reports

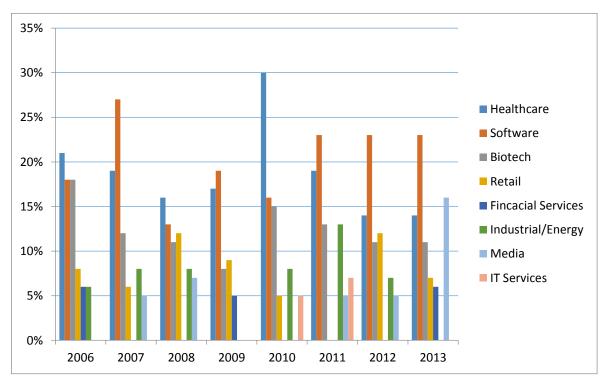
On the other hand, the situation in the market of the United States is different if we are talking about business angel investments. As it can be seen in the figure no. 6, the peak in investments provided by angel investors was reached during the year 2006 and especially 2007 when investments in start-up companies reached value of 26 billion dollars. Since mentioned year 2007, the investments provided by angel investors decreased and hit its bottom in the year2009, worth \$17.6 billion. This sudden fall can be attributed to the economic crisis, which affected the market of the USA, Europe and the rest of the world in the year 2008. Since the year 2009, the investments from business angels started increasing on average by 9.055% till its today's figures, \$24.8 billion. It is interesting to see that business angel investments made in 2013 are still lower by 4.615%, compare to the year 2007.

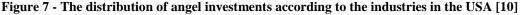
5.3.2 Distribution of business angel investments on the market

5.3.2.1 Distribution in the USA

The investments provided to fund a start-up companies, are in most of the cases directed into the projects which are trying to succeed in a field of information and communication technologies, or at least are somehow with this discipline connected. This is also a stereotype that does not have to be true under all circumstances.

Today there is a wide range of options available for start-up companies to go to for funding. On the other hand, investors have a lot of choices where to put their money and into which sector they are going to invest. As the author described business angel's behavior in the theoretical part, chapter dedicated to this type of investors, angel investors mostly invests into the field where they can use their experiences, where they personally succeed during professional life.





Source: (Center for Venture Research) <u>http://paulcollege.unh.edu/research/center-venture-</u>research/cvr-analysis-reports

The figure no. 7 shows the distribution of angel investments of the US market by their industry. As it can be seen above, the main industries where business angels invested their money in the year 2013 were software and media industry. In the figure no. 7, it can be seen that the industries that attracting investors the most are changing every year. The two leading industries in the United States, where business angels invest their money the most, are software and healthcare industries.

The preferences of investors have changed through the years, and it can be barely claimed that they would be stable. The development of the distribution of investments between sectors is changing. As it can be seen in the figure no.7, there was a decrease of investment into the software industry in the year 2008. According to the author of this thesis, the drop was caused by the economic crisis, which led investors to invest into more stable industries such as healthcare and retail or biotech. Especially the healthcare industry, which had decreasing trend since year 2006 recorded an increase in the share of all the investments provided by business angels in the United States and in the year 2010 dominated with the share by 30%. Despite this trend, the healthcare industry has decreasing tendencies from its peak in the year 2010. In the year 2013, the healthcare industry was for the first time since 2006, deposed from the second place in the share on a business angel's investments by media industry.

5.3.2.2 Distribution in Europe

The investment preferences for Europe go to the information and communication technologies in the year 2013. As the chart below demonstrates, ICT industry received 32% of investments invested by business angels in Europe. At the second spot end up homogenously biotech and life sciences industries and mobile industry.

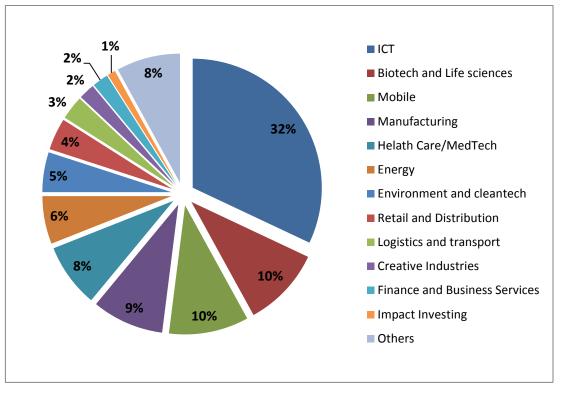


Figure 8 - The distribution of angel investments according to the industries in Europe [16]

Source: (EBAN) http://www.eban.org/wp-content/uploads/2014/09/13.-Statistics-Compendium-2014.pdf

Based on the figure no. 8 above, for year 2013, it can be said that the aims of business angels for investments are similar to the both researched markets. It can be claimed that the premise of the investments directed into the ICT start-up projects is a right, in the context of business angels. The ICT industry dominated with the total share of all investments from angel investors by 32% in Europe, respectively 23% in the USA. This finding for the United States seems a little bit surprising since this part of the world is considered as the hub for information and communication technologies. The dominance should be bigger, at least more than on the European market.

Europe is a very particular place if it is talked about business angels and entrepreneurship overall. Europe, after Second World War, was divided into two pieces. The Western part, fully democratic and open for many types of trade and self-realization and the Eastern part was during the communism focused mostly on fulfillment of goals given by centrally planned economy with companies owned by a state and no place for entrepreneurship.

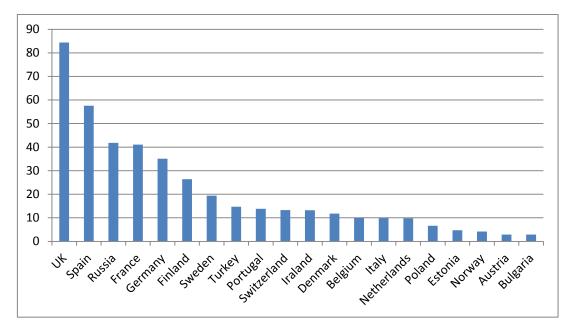


Figure 9 - Angel investments by European countries in millions of Euros in the year 2013 [16]

Source: (EBAN) http://www.eban.org/wp-content/uploads/2014/09/13.-Statistics-Compendium-2014.pdf

Above listed 20 European countries, with the highest angel investments in the year 2013, confirms the assumption that the countries that were under the influence of the Soviet Union do not have as much developed business base, thus cannot, even in year 2014, compete with the countries from Western Europe. As it can be seen in the figure no. 9, among 20 countries with the highest investments in Europe are only four countries that were part of the Soviet Union or under its direct influence. Russia, Poland, Estonia, Bulgaria stands for 13.2% of all angel investments made in the 20 above-mentioned countries. In the analysis, it has to be said that Germany, which is a country with the second highest investments by angel investors in Europe, was divided into two parts, one democratic and one under the influence of the Soviet Union. For the purpose of the thesis, it will be assumed that Germany, after the fall of the Berlin wall, was acting as one country. German integration of the eastern part was going faster and the society adopted rules and habits of the democratic economic environment in tremendously shorter period than it was for the other countries from the eastern bloc. Thus, Germany is considered, for purposes of the thesis, as part of the developed Europe.

The most active country among listed European countries is the United Kingdom with 4350 business angels who invested €84.4 million in 2013. This amount covers almost 20% of all money invested by angel investors in Europe.

5.4 Development stages of angel investments

As stated in the theoretical part, business angels are focused on companies in a seed or start-up stage of their life cycle. The Angel investors provide imaginary bridge between FFF's investments and venture capital funds.

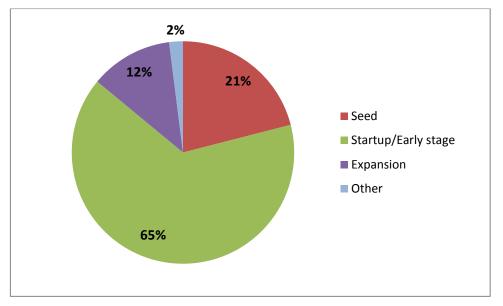


Figure 10 - Investments by investee's development stage in the USA for the year 2013 [8]

Source: (Center for Venture Research)

http://paulcollege.unh.edu/sites/paulcollege.unh.edu/files/2013%20Analysis%20Report%20FINAL .pdf

This premise mentioned above is confirmed for US market. As stated in the Figure no. 10, the seed and start-up stage companies obtained in total 76% of all of the investments made by business angels. More precisely the seed stage companies received 21% share of the business angel's investments for the year 2013. The Start-up and Early stage companies get a share of 65% of business angel investors in the same year.

Business angels also invest in the companies that have reached the stage of expansion. Significant character for a business, which is in the expansion stage of its life cycle, is that money obtained from angel investors are aimed to reach the scale of industrial production, upgrading the production facilities and attracting further employees. In the year 2013, business angels invested 12% of all of their investments in this type of the companies.

The situation in Europe, as shown below in the figure no. 11 is copying the situation in the USA and confirms contention about business angel investments and their aims of investing in most of the cases in the companies in their seed and start-up stage.

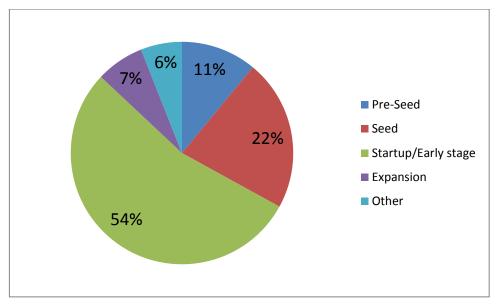


Figure 11 - Investments by investee's development stage in Europe for the year 2013 [16]

Source: (EBAN) http://www.eban.org/wp-content/uploads/2014/09/13.-Statistics-Compendium-2014.pdf

Business angels invested 76% of the investments into seed and start-up companies in 2013. It is 10% less than the same investments made in the USA in the same year. It can be explained by the fact that European angel investors were spreading their investments into more ways. In Europe, 11% of investments were used to support projects in their pre-seed stage of life cycle. It means that this money was used to support financing of ideas and research projects, with the aim of building a commercial company around it later on.

The companies in their expansion stage of a life cycle were supported by 7% of all of the investments made by angel investors in Europe. Compared to the United States, European enterprises of expansion type received 5% fewer funds, in the year 2013.

There can be seen slight will, in Europe, to invest more in the enterprises in their start-up phase then it is in the USA. It can be partly explained by the fact that angel investors in Europe have a wider range of interest, where to place their funds. By this, author means, for example, that even companies in their pre-seed stage of life cycle received 11% share on the business angel investments. This type of enterprises is not even listed in the data provided for the market of the United States. In the case of businesses in their seed phase of a life cycle, it can be claimed that there is not a big difference and the share of investments in the enterprises in seed stage of development is the same on both markets, differing only by 1 percentage point.

5.5 Venture capital financing in the United States of America and Europe

As defined in the theoretical part of the thesis, venture capital is one of the forms of financing, in which investors do not purchase a stake in already developed project or enterprise. Instead of it, these investors support the creation and development of new enterprises by investing at their very early stage of business development through the launch of a company. Venture capital investment is associated with high levels of technology diffusion through the economy and high employment creation.

The global annual venture capital investment in the year 2013 was 48.5 billion US dollars. This means an increase of 1% compares to the year 2012. In this global world, the leader in the field of venture capital investments is United States that accounts for 68% of global VC activity. Europe, the second largest hotbed in the global VC rankings ended up the year 2013 with investments worth 7.4 billion of US dollars. (EY, 2014)

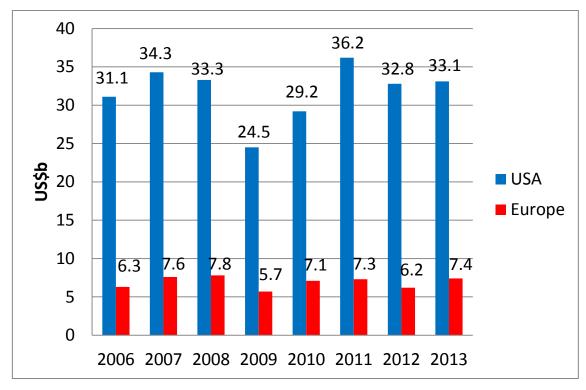


Figure 12 - VC Investment in billions of USD 2006-2013 [20]

Source: (EY)

http://www.ey.com/Publication/vwLUAssets/Global_venture_capital_insights_and_trends_2014/\$ FILE/EY_Global_VC_insights_and_trends_report_2014.pdf

The venture capital activity is significantly bigger in the United States than in Europe. The total amount invested by venture capitals of United States was greater by \$25.7 billion [20] in the year 2013. The development of the VC investments between the years 2006 and 2013 was not stable and recorded fluctuations. The strongest drop for both regions was between years 2008 and 2009. The investments, as itself globally, decreased by 30.7%. As it can be seen in the Table no. 10, in the year 2009, the venture capital investments decline in the United States, compare to the year 2008, by 26.426%, in total by \$8.8 billion. As almost in every market in the world, European market also recorded slowing down of the economy and the investments flow to the newly created and innovative companies decreased, in the period between years 2008 and 2009, by 26.92%, in total by \$2.1 billion.

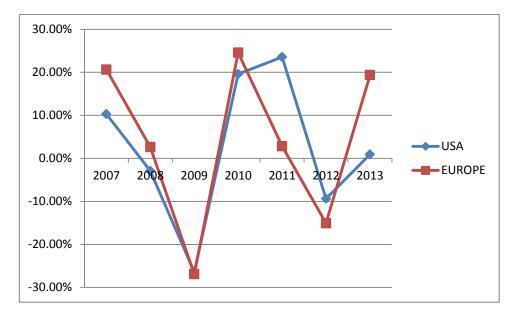


Figure 13 - Percentage change in VC investments between years 2006-2013 [20]

Source: (EY)

http://www.ey.com/Publication/vwLUAssets/Global_venture_capital_insights_and_trends_2014/\$ FILE/EY_Global_VC_insights_and_trends_report_2014.pdf

For the better understanding of the development of the venture capital investment on the market of the United States and Europe, author placed above created table that shows the percentage change in the venture capital investments between the years 2006 and 2013 for both regions. As it can be seen, fluctuation of the markets is slightly similar, especially between the years 2008 and 2010. Talking about the situation nowadays, it can be assumed that, the market of Europe seems to be in better conditions in a context of growth of the venture capital investments. But even with this trend, it cannot be expected that the market of Europe would be comparable to the market of the USA, in terms of worth of venture capital investments.

5.5.1 Distribution of venture capital investments in the United States

The distribution of venture capital investments among the industries on the market of the United States is mostly focused on investments into the software industry. Despite the fact that the data provided for mentioned location lists more than 17 industries which were supported by this type of investments, it can be told that the first 3 industries listed, were

dominant and received 62% of all the venture capital investments in the USA for year 2013. These three primary industries were already mentioned software industry, together with biotech and media/entertainment industry, as it can be seen in the figure no. 14 below.

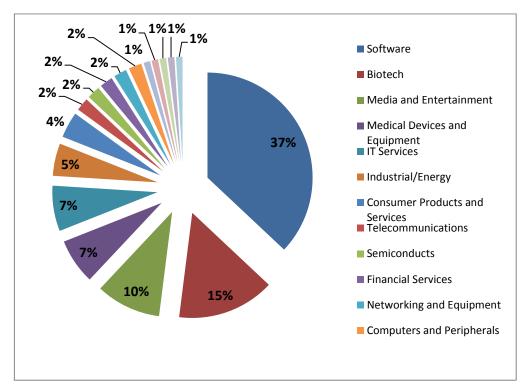


Figure 14 - Distribution of the venture capital investments for the USA for year 2013

Source: (NVCA) [33]

The distribution of venture capital investments is following the historical trend that the ICT sector attracts a significant share of these particular investments in the USA.

5.5.2 Distribution of venture capital investments in Europe

As it is in most of the cases all around the world, the start-up projects focused on social media and similar areas might get all the headlines but Europe's innovation and start-up activity spans a variety of sectors. Europe is being home for some of the world's dominant life science's researchers. Based on this capability, Europe becomes one of the most dedicated to life science sector across the world.

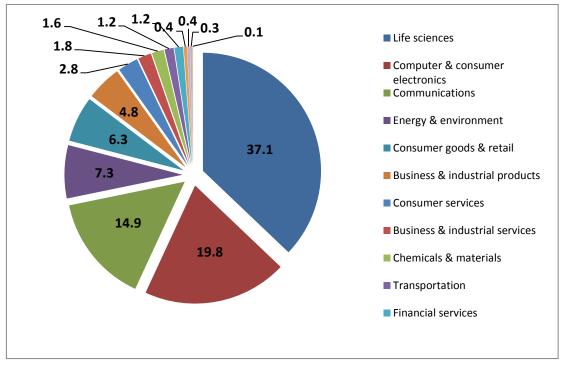


Figure 15 - Distribution of the venture capital investments in Europe for year 2013 [18]

Source: (European Commission) http://ec.europa.eu/enterprise/policies/finance/data/enterprise-finance-index/venture-capital/index_en.htm

The trend in Europe, as a hub for projects that are related to the life science's disciplines, also continues in the year 2013. As it can be seen in the table no. 15, the share of this particular industry of the venture capital investments in Europe was bigger than one-third of the whole size of all VC investments. The top sectors for VC investment were, in the first place with share of investments 37.1% life sciences, the second place with 19.8% computer & consumer electronics, third place goes to communications (14.9%) and on the fourth spot energy and environment with share of VC investments of 7.3%. These four types of industries together accounted for nearly 80% of all venture investments.

From the listed information it can be claimed, that the sector of life sciences for Europe and software for the USA are dominant in both markets. Their share on the mentioned markets is almost the same and that they are significantly ahead of other sectors. Also as stated in the theoretical part, it can be confirmed that venture capital investments, in reality, focuses on the new technologies and health care and as case of the European venture capital confirmed, the trend of investment into the socially responsible companies is still present base on the fact that the most funded sector in Europe is the area of life sciences.

5.5.3 Venture capital investments by deal stage

Based on the theoretical part of the diploma thesis, the author talks about venture capital as an instrument used for long-term investments, in a form of capital entry into the company. The previous part, dedicated to the business angels uncovered that the most funds from this group of investors is aiming the start-up companies in their seed and start-up stage. Theoretically venture capital investors should focus on companies, in their more mature stage of development.

5.5.4 Venture capital investment by stage of development in the USA

In 2013, the data for the venture capital invested by the stage of development of funded companies is unveiling the unwillingness of investors to put their money into companies with higher potential of failure, compare to the companies with proved ability to survive on the market and thus generate money.

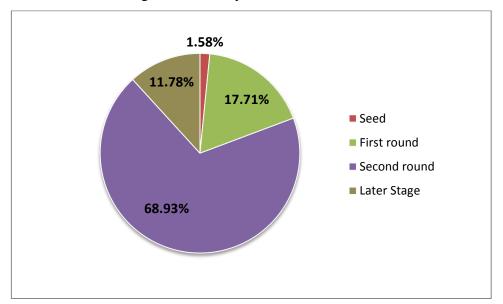


Figure 16 - Investment by deal stage in the USA for year 2013 [57]

Source: (The Wall Street Journal) http://blogs.wsj.com/tech-europe/2013/07/31/venture-capital-in-the-u-s-and-europe-compared/

As it can be seen, investors on the market in the United States considered as the most attractive companies, which are in their second round stage of development with 68.93%

share of the investments. This stage can be also called the expansion stage of development, thus the stage where the idea has been transferred into the product and is being produced and sold.

The second most attractive stage of development for VC investors was the first round stage that received 17.71% of all investments. This stage is also often labeled as the start-up stage. The later phase of development, which is also considered as the safest way for investments in the environment of the start-up companies, collected almost 12% of all the investments.

The trend on the market showed that investors put the bulk of their money into the second round deals, focusing on the companies that already proved that they have a market and are generating revenue.

5.5.5 Venture capital investment by stage of development in Europe

The situations on the European market, from the point of view of investment by development stage, seem to be significantly different than it was for the market of the United States.

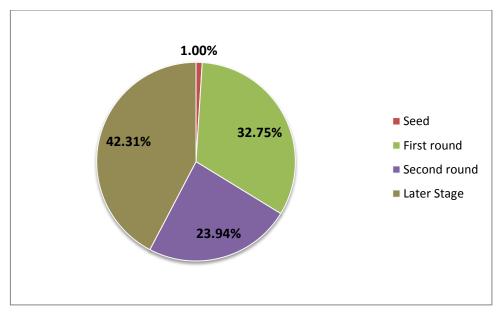


Figure 17 - Investment by deal stage in Europe for year 2013 [57]

Source: (The Wall Street Journal) http://blogs.wsj.com/tech-europe/2013/07/31/venture-capital-in-the-u-s-and-europe-compared/

From the first look at the figure no. 17, it is visible that the venture capital investments are spread more equally than it was in the case of the United States above. The most noticeable change, compared to the overseas market, is in the willingness to invest in the companies, which are in their first round stage of development. The companies fulfilling this criterion raised the share of 32.75% of all of the investments. This difference is suggesting that European venture capital investors are interested in the companies in their riskier stage, where return on invested funds is less guaranteed, but the profit can be much higher. On the other hand, the European investors are also interested to invest in the later stage deals, the contracts that are inherently considered as more stable in terms of future appreciation of invested sources. The difference between investments to the companies in their later stage of development is 30.53%.

5.6 Private equity on the market of the United States and Europe

Private equity, as a source of investment capital from high net worth institutions and individuals, has purpose to invest and acquire equity ownership in companies. As stated in the theoretical part, partners at private-equity firms collect funds and manage these sources to yield favorable returns for their shareholder clients. Typically this process takes between four and seven years.

The private equity is one of the investments, which supports companies in their last stages of start-up life cycle. This type of funding is also connected to the venture capital financing. Besides the fact that ventures capital focuses mostly on companies in their middle stage of development, private equity investments, in most of the cases, make larger investments.

5.6.1 Private equity investments between the years 2007-2013

The difference between an amount of money invested by private equity individuals and organizations in the USA and Europe is significant. As it was in a case of venture capital investments, the amounts of investments from which start-up companies can benefit are wider in the USA. Concretely, the private equity investments were bigger in the USA by \$391.2 billion in the year 2013 than it was in Europe.

As it can be seen in the figure below, the private equity type of investment went, same as other analyzed investments, through a fluctuation in last several years due to the economic crisis. Still, in the year 2013, private equity investments were not on the same level, as it was in the pre-crisis period.

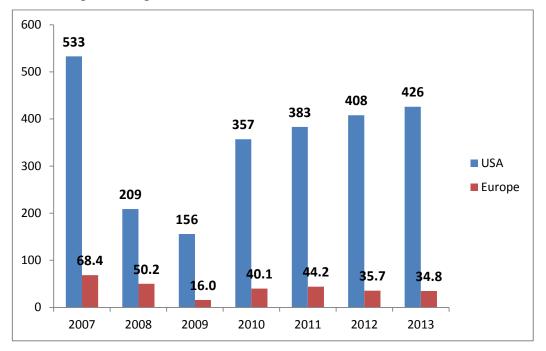


Figure 18 - Private equity investment in billions of USD 2007-2013 [19]

Source: (Pitch Book) [36] [37], (EVCA) http://www.evca.eu/media/142790/2013-european-private-equity-activity.pdf

More precisely, the private equity investments in the United States for year 2013 were still lower by 20.075% than it was in the year 2007. In a total numbers, the private equity individuals and organizations invested in the year 2013 \$107 billion less, than it was in the year 2007. In Europe, private equity investments were lower by \$33.6 billion in the year 2013 than it was in the year 2007. It means that the investments in the year 2013 reached only the half to the private equity investments, which were made in the year 2007.

As it can be seen in the figure no. 18, the PE investments in the United States were on the rise since 2010 in average by 6.07% which is in contrast with the European trend. The European market of private equity investment has a downward trend actually, since year 2011. Every year, since year 2011, private equity investments decrease on average by 10.82%. This discovering is surprising mainly because of the fact that declining trend after

the economic crisis that would be recorded more than in one following year was not observed in any other form of investment.

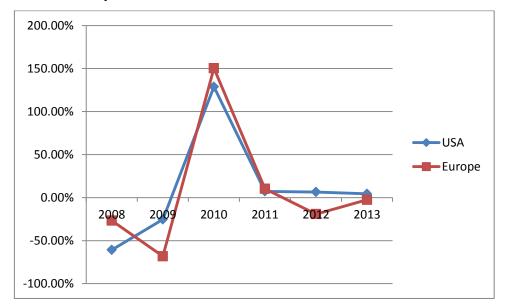


Figure 19 - Percentage change in PE investments between years 2007-2013 [19]

Source: (Pitch Book) [36] [37], (EVCA) http://www.evca.eu/media/142790/2013-european-private-equity-activity.pdf

The percentage change in the amount, invested by private equity individuals and organizations, can be seen above, based on the date from the figure no. 18. It can be seen that the PE investments skyrocketed up between the years 2009 - 2010.

5.6.2 Distribution of private equity investments on the market

The look at the distribution of the private equity investments will allow the better understanding of the situation in this type of investments and that innovative companies are the most tempting for investors to put their money in.

5.6.2.1 Distribution of private equity investments in the USA

The B2C industry, retail, had an exceptional year 2013 from the perspective of private equity investments. As it can be seen in the figure below, B2C industry received 25.59% of all of the investments, in total numbers \$109 billion. (PitchBook, 2014) [36]

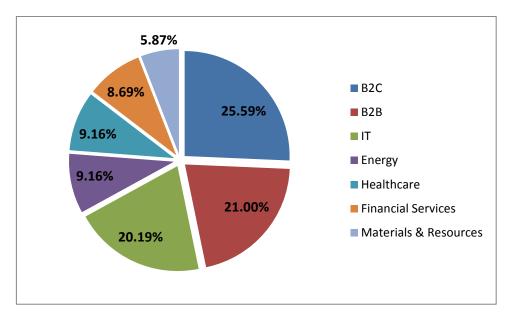


Figure 20 - Distribution of the private equity investments for the USA for year 2013

Source: (Pitch Book) [36]

The second place in the share of private equity investments occupied B2B industry, commerce transfer between businesses. The B2B industry received 21% of a share in private equity investments. This result is higher only by .81% than on the third position effect for the information technology sector. In total numbers, B2B industry raised \$96 billion compared to the \$86 billion for the information technology sector. Interesting is to see that the industry of energy and healthcare received the same share on the private equity investments, 9.16%. The last two reported spots belong to the financial services with 8.69% share in the private equity investments and materials & resources industry with a share of 5.87%.

5.6.2.2 Distribution of private equity investments in Europe

The data, which can be found below and were extracted from the report of European Private Equity and Venture Capital Association gives more comprehensive inside look on the distribution of private equity investments in Europe then it was for the market of the United States.

Among the fifteen observed industries in the year 2013, the biggest share in private equity investments was raised by industry, which is producing business & industrial products. For

purposes of the thesis it can be said that this sector is closely or wholly connected with B2B industry. It means that the private equity investors in the USA and Europe are interested the most in the same sector, although the Business & Industrial products industry in Europe received smaller share on the total investments 14.1%, compared to the 25.59% in the USA.

The second place, in Europe, occupied industry producing consumer goods and the retail industry; this is also copying the trend from the United States for the year 2013. The consumer goods & retail industry raised investments from the private equity investors in total share of 13.8%. In third place was the life sciences industry, which was the last industry that went over 10% shares of the private equity investments for the year 2013.

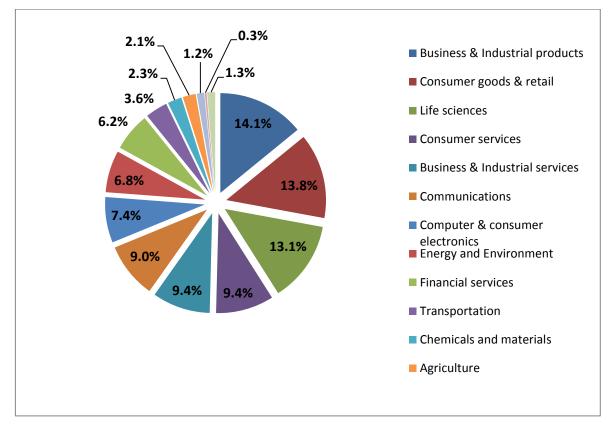


Figure 21 - Distribution of the private equity investments in Europe for year 2013 [19]

Source: (EVCA) http://www.evca.eu/media/142790/2013-european-private-equity-activity.pdf

The above three leading industries together received 41% share of all investments made by private equity investors in Europe for the year 2013. The other industries, where investors gave their money, in a hope of future appreciation, are consumer service, business &

industrial services and communications industries. These industries together raised 27.8% of all private equity investments.

5.7 Crowdfunding on the market of the United States and Europe

Since the global financial crisis, alternative finance headed by crowdfunding - which consists of distribution channels and financial instruments that emerge outside of the traditional financial system, has been successful in the US and now has thrive in the UK and continental Europe. In particular, all the types of crowdfunding, for equity-based to reward- based crowdfunding, is providing credit to the small and middle enterprises. Also offering venture capital to start-ups, providing more diverse and transparent ways for people to fund or borrow money, support innovation, creating jobs and invest in worthwhile social causes.

Lack of the data makes an analysis of the markets of the United States and Europe difficult. However, based on the estimates data, available mostly because of the surveys made by research firm Massolutions, it can be claimed that the worldwide crowdfunding market in 2012 raised volume of \$2.7 billion through over 1.1 million campaigns.

In the year 2012, according to the same source, crowdfunding platforms in the North America raised estimated over \$1.6 billion, stands for 105% increase since year 2011. The estimated amount raised by European platforms was worth \$945 million. This means an increase year on year by 65%.

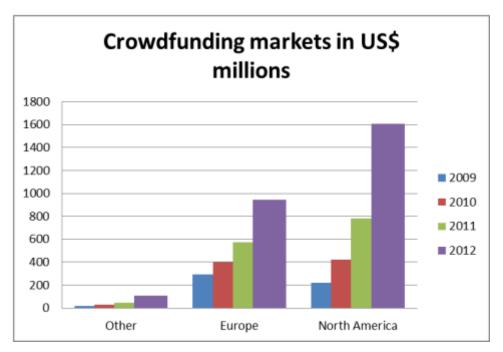


Figure 22 - Crowdfunding markets in US\$ millions by geographic distributions

Source: (Massolutions) [31]

It cannot be claimed that the collaborative financing would be new concept or activity. The increase in the money inflow in recent years is a direct response to the advancement and availability of web and mobile-based services and applications. The second reason for the rise of the crowdfunding industry is also the failure of the financial services industry to answer a demand for small businesses and project financing.

As the author mentioned in the theoretical part, there are different types of crowdfunding: donation, reward, lending and equity. These types of business models focus on various kinds of projects and firms. Mainly because of this, these models are also subject to different growth rate. The Massolutions report shows that for donation and reward based crowdfunding, the year on year growth for 2012 reached 85%, amounting to \$1.4 billion. The lending-based crowdfunding reached growth of 111% in the year 2011, amounting to \$1.2 billion. Equity-based crowdfunding, which has the smallest share of the crowdfunding investments recorded growth by 30% to \$116 million.

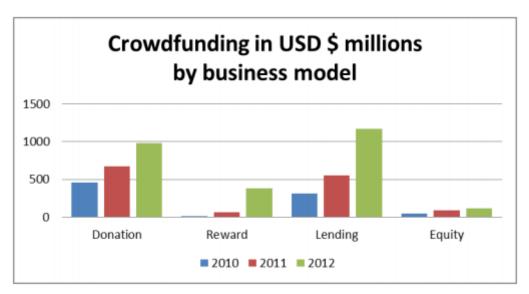


Figure 23 - Crowdfunding in USD \$ millions by business model

Source: (Massolutions) [31]

After years, in which the crowdfunding market experienced high growth through new platforms offering a large number of transactions that were considered as small, the industry is reaching, in a present, a stage where bigger deals are interesting for sufficient number of backers.

5.7.1 Distribution of crowdfunding investments on the market

To better understand, what is working the best in crowdfunding campaigns, the data uncovering distribution of crowdfunding investments are crucial. It allows more to understand, where success and failure lies.

As an example, it can be used the fact, that across all crowdfunding models, social causes were a very popular among backers. On the other hand, it was not the case with environmentally focused campaigns, a type that can be considered as a close one to social causes.

Crowdfunding firstly gained its reputation and popularity among people as one of the ways to support and fund creative, philanthropic and social endeavors. This fundamental idea prevails, but crowdfunding's application for entrepreneurial ventures has growth traction also, mostly crowdfunding models with financial return.

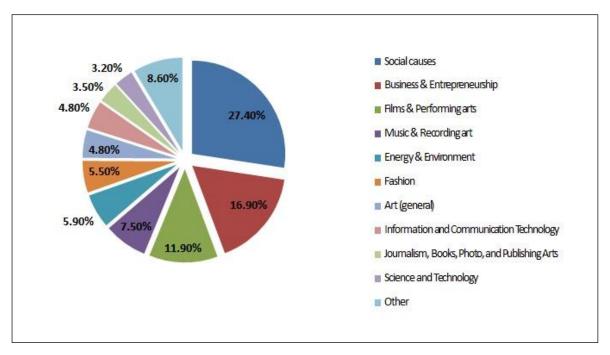


Figure 24 - Distribution of the crowdfunding investments for year 2012 [31]

Source: (Massolutions) [31]

As it can be seen in the figure no. 24, social causes were in the year 2012 the most attractive category with a share of investments by 27.4%, followed by Business & Entrepreneurship with 16.9%, and the two major art categories: Films & Performing Arts (11.9%) and Music & Recording Arts (7.5%). Energy & Environment with the share of 5.9% is the emerging category on the last place among the five most active categories. It would be possible to add some of these ventures to the social causes category while others would be possible to add to Business & Entrepreneurship, but due to increased focus on green technologies and visionary energy solutions and because of their extensive recall, Energy & Environment has appeared as its category that is expected to strengthen its position.

6 Conclusion

This thesis is based on studies of the problematic that start-up companies' face – by utilizing relevant literature, Internet articles and other sources of information. The thesis, besides mentioned sources of information reflects different ideas and approaches in this field of study. The author also used information gained through his participations in events related to given problematic in the Czech Republic and abroad. Another valuable source of information was conversations and communications with experienced people in given topic.

Based on the observations, which were listed in the practical part and supported by the data received from the interested associations and organizations, it can be seen that the start-up companies have stronger position and a higher chance to raise needed finance to support their innovative ideas and growth in the United States at all of the stages of their life cycle. This fact is backed by the undisputable highly developed base of the different types of investors. Business angels on the market of the United States invested, in the year 2013, \$18.58 billion more than what was invested in Europe for the same year. The same trend can be observed in venture capital, private equity and crowdfunding investments. The venture capital investments in the United States were greater by \$25.7 billion than in Europe. Private equity individuals and organizations, the investment platform with the highest funds invested into the start-up companies and entrepreneur projects had annually even greater gap between the USA and Europe in the terms of total investments. The private equity investments were bigger in the USA by \$391.2 billion, in the year 2013 than it was in Europe. An interesting fact, that was discovered, is that none of the above-listed ways of financing reached its pre-crisis peak of volume invested on the market of the USA or Europe. This fact shows how big an impact the economic crisis of 2008 had on the market. In total numbers, the three most dominant ways of financing listed in previous lines shows, that the investor groups and individuals invested, in the United States' market, \$435.48 billion more than in the market of Europe.

The last observed way on how to support innovative ideas and companies was crowdfunding. The dataset, available for the year 2012 shows that in the mentioned year,

crowdfunding platforms in the North America raised an estimated \$655 million more than the same platform in Europe.

The European start-up environment is experiencing its growth in ways of how to finance new projects and innovative companies in the future. According to the author of this thesis, the growth should be due to more participation from the site of the countries that were, in the past, part of the Eastern Bloc. Based on the historical events, these countries, their entrepreneurs and investors are just now exploring the opportunities that come with the support of start-up companies and their ideas. This development should support the growth of the start-up scene in Europe and help to get closer to the situation that is present now in the USA.

The dominance of the ICT sector among the most financed start-ups and projects, that would be mostly financed by different types of funds, were not been confirmed. As it can be seen from the data provided in the practical part, the ICT sector is mostly popular among the investors such as business angels; thus the companies are more likely to be funded in their first stages of their life cycle. As it was discovered in the practical part, the business angels in the United States and Europe prefer to invest at this stage into the companies that are operating in the ICT industry. More specifically, in the United States, 23% of all business angel investments went to the companies that focused on software development in the year 2013. The situation in Europe was moving in the same direction. In the same year, 32% of all angel investments were invested to support companies involved in the ICT industry. But there is a demonstrable diversion from the trend in the later stages of a start-up life cycle. The whole 37% of the venture capital investments in the United States, for the year 2013, went to the ICT industry. On the other hand, it can be observed that the European market played a significant role in the support of start-up companies that were focused on the field of the life sciences. This trend is noticeable in the chapter devoted to the venture capital and shows that the ICT industry was losing its dominance among other sectors. Europe, based on the analyzed data, is considered as the place where the start-up companies and innovative projects focused on the life sciences industry should aim. As presented in the practical part, the life sciences industry was the most funded industry among other sectors for venture capital investments in the year 2013. The share of the business investments in mentioned year was 37, 1%. Even in the areas

supported by private equity investments, the life sciences industry received the third highest share of the investments, 13.1%. This only confirms that mentioned industry is strongly supported in Europe by alternative ways of financing. For the start-up companies that are involved in the life sciences industry might be beneficial to focus their effort to be funded on the market of Europe than the USA.

It can be also claimed that the investors in Europe are slightly more willing to take risks regarding their invested money into start-up companies. This fact is mostly visible in the case of venture capital investments and their willingness to invest in the companies, which are in their first round stage of development. The companies fulfilling this criterion raised the share of 32.75% of all of the investments. This difference is suggesting that European venture capital investors are interested in the companies in their riskier stage, where return on invested funds is less guaranteed but the profit can be much higher. This is a different approach compared to the market of the United States where the share of the venture capital investments at the first round stage of development of the start-up companies was only 17.71%.

The topic of the start-ups and its financing is interesting and convoluted at the same time. The author of the thesis provided a wide range of data and information that helps every person who would be reading the diploma thesis to better understand the ground rules and regularities regarding the stages of the start-up lifecycle and ways and process of financing at the different stages of development of the company. Due to its focus, especially on the markets of the United States and Europe, this work can also give a closer look on the both markets regarding investments in the start-up companies. The diploma thesis can help young entrepreneurs and persons, with innovative ideas, to decide where to focus their effort to receive an investment, based on their stage of development and the sector where particular individuals and companies operate.

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