



**KAUNAS UNIVERSITY OF TECHNOLOGY  
SCHOOL OF ECONOMICS AND BUSINESS**

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**QUO VADIS REAL ESTATE CROWDFUNDING:  
FACTORS AND SCENARIOS**

Master's Final Thesis

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**KAUNAS, 2016**

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Master's Final Thesis  
**Economics 621L10008**

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**KAUNAS, 2016**



**KAUNO TECHNOLOGIJOS UNIVERSITETAS**

**EKONOMIKOS IR VERSLO FAKULTETAS**

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(Studento vardas, pavardė)

**EKONOMIKA, 621L10008**

(Studijų programos pacadinimas, kodas)

“Kur eina sutelktinis nekilnojamojo turto finansavimas: veiksniai ir scenarijai”

**AKADEMINIO SAŽINGUMO DEKLARACIJA**

20 \_\_\_\_\_ m. \_\_\_\_\_ d.

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(parašas)

Ditkus, Donatas. *Kur eina sutelktinis nekilnojamojo turto finansavimas: veiksniai ir scenarijai*.  
Magistro baigiamasis darbas / vadovas doc. dr. Rita Vilké; Kauno technologijos universitetas,  
Ekonomikos ir verslo fakultetas.

Mokslo kryptis ir sritis: Ekonomika 04S

Reikšminiai žodžiai: *nekilnojamasis turtas; sutelktinis finansavimas; finansai; investicijos*.

Kaunas, 2016. 77 p.

## SANTRAUKA

Sutelktinis finansavimas yra naujas internetu ir socialine medija paremtas metodas pritraukti kapitalą – projektų finansavimui sudaromas kapitalo fondas surenkant mažas pinigų sumas iš didelio kiekio individų. Internetas gali smarkiai sumažinti pinigų kaupimo ir administravimo sąnaudas, o socialinė medija – užtikrinti skaidrumą. Sutelktinis finansavimas nekilnojamojamam turtui yra augantis reiškinys, kuris pritraukia vis daugiau kapitalo ir dėmesio iš investuotojų ir nekilnojamojo turto rinkos dalyvių. Didėjant šio alternatyvaus nekilnojamojo turto projektų finansinio ir investicinio įrankio svarbai yra būtina parengti tinkamą teisinę bazę ir informuoti rinkos dalyvius apie atsirandančias galimybes bei rizikas. Todėl tampa labai svarbu suprasti potencialų sutelktinio nekilnojamojo turto finansavimo vystymąsi.

Darbo objektas: sutelktinis finansavimas nekilnojamojamam turtui.

Darbo tikslas: ištirti ištirti nekilnojamojo turto sutelktinio finansavimo vystymosi veiksnius ir scenarijus.

Darbo uždaviniai:

1. Išanalizuoti sutelktinio finansavimo nekilnojamojamam turtui situaciją, jį vertinant kaip kapitalo šaltinį ir kaip potencialią investiciją;
2. Apibūdinti esamą sutelktinio finansavimo nekilnojamojamam turtui mastą ir teisinę aplinką;
3. Išanalizuoti sutelktinio finansavimo koncepciją bei esamas sutelktinio finansavimo nekilnojamojamam turtui platformas;
4. Nustatyti veiksnius darančius įtaką minios finansavimo nekilnojamojamam turtui vystymuisi;
5. Sumodeliuoti galimus sutelktinio finansavimo nekilnojamojamam turtui vystymosi scenarijus.

Darbo rezultatai parodo, jog sutelktinis finansavimas nekilnojamojo turtui gali tapti patrauklia investavimo ir nekilnojamojo turto projektų finansavimo rūšimi. Buvo nustatyti penki pagrindiniai įtakos veiksniai sąlygojantys sutelktinio nekilnojamojo turto finansavimo vystymąsi: nekilnojamojo turto rinkos būklė; teisinė aplinka; rizikos kapitalo investicijos; interneto bei socialinės medijos skvarba. Atsižvelgiant į nekilnojamojo turto rinkos būklę ir teisinę aplinką sekantiems trimis metams prognozuojamas lėtesnis

reiškinio augimas, nei buvęs ligi šiol. Taip pat pabrėžiama, tai, jog didelės sumos institucinio kapitalo gali pradėti tekėti per sutelktinio nekilnojamojo turto investavimo platformas.

Darbo apimtis: 77 puslapiai, įskaitant 35 paveiklėlių ir 15 lentelių.

Ditkus, Donatas. *Quo Vadis Real Estate Crowdfunding: Factors and Scenarios*. Master's Final Thesis / supervisor assoc. prof. Rita Vilké. School of Economics and Business, Kaunas University of Technology.

Research area and field: Economics 04S

Keywords: *Real Estate; Crowdfunding; Finance; Investments*.

Kaunas, 2016. 77 p.

## SUMMARY

Real Estate Crowdfunding is a new internet and social media based method to raise capital – pool small amounts of money from individuals for promising projects. Internet can greatly decrease the cost of pooling investments and allowing individuals to target specific opportunities. Social media can highly increase transparency of this alternative investment. Real Estate Crowdfunding is an emerging phenomenon that increasingly attracts attention from investors and actors of real estate market. While importance of this alternative financing and investment tool is growing it is necessary to equip reliable regulative system and announce to market players about opportunities and threats. Therefore it is very important to understand the potential development of real estate crowdfunding phenomenon.

Object of the thesis: real estate crowdfunding.

Purpose of the thesis: to examine the real estate crowdfunding development factors and scenarios.

Goals of the thesis:

1. To analyze the real estate crowdfunding situation, defining it as a capital source and as an investment opportunity;
2. To describe the scope of real estate crowdfunding and present legal environment;
3. To analyze the conception of crowdfunding and existing real estate crowdfunding platforms;
4. To identify factors which affect the development of real estate crowdfunding;
5. To model prospective scenarios of real estate crowdfunding.

Results of the thesis show that real estate crowdfunding may become attractive investment opportunity and substantial capital source for real estate projects. Five influencing factors were identified that affect the development of real estate crowdfunding: real estate market conditions; legal environment; venture capital investments; internet and social media penetration. Considering real estate market conditions and legal environment, the growth of the phenomenon for next three year is projected not as high as year before. Also there is emphasis that vast amounts of institutional capital may start flowing through real estate crowdfunding platforms.

Scope of the paper: 77 pages including 35 figures and 15 tables.

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## INTRODUCTION

**Relevance of the selected topic:** Crowdfunding is a new internet-based method to raise capital – pool small amounts of money from individuals. It is a global promptly emerging financing option for business ideas and projects (Valanciene, 2014). The concept of crowdfunding derives from crowdsourcing, which describes the process of outsourcing tasks to a large, often anonymous number of individuals (the “crowd”) in the form of open call application to get ideas, feedback, assets, resources, knowledge and expertise to develop corporate activities (Hemer, 2011). The Oxford Dictionary defines crowdfunding as “the practice of funding a project or venture by raising many small amounts of money from a large number of people, typically via the internet.”<sup>1</sup> The internet and use of information technologies can greatly decrease the cost of pooling small investments and allowing individuals to target specific opportunities. Some entrepreneurs have relied on the internet to directly seek financial help from the general public (the “crowd”). This technique, called “crowdfunding”, has made possible to seek capital for real estate specific investments. Crowdfunding utilizes social media outlets like LinkedIn, Facebook and Twitter to reach an audience of potential investors thus level of transparency in real estate investment increases. According to many authors (Sigar, 2012; Gobble, 2012; Kitchens & Torrence, 2012; Bounds, 2013) different interested parties are willing crowdfunding would be successful and prosper, including governments, seeking to create jobs and foster economic growth.

Real estate crowdfunding is an emerging phenomenon that increasingly attracts attention from real estate developers, investors and real estate market players. Thus, more and more capital goes to real estate projects through real estate crowdfunding platforms. Therefore, real estate crowdfunding requires scientific research to get better understanding about this phenomenon in order to prepare for possible threats and opportunities.

**Problem Statement:** Real estate crowdfunding shows tremendous growth in popularity and frequency as an investment choice and an alternative financing tool for real estate development. Diversification of real estate finance and the recovery of the real estate industry are hereby hampered.

**Research Question:** The general question that rises through this problem statement is how real estate crowdfunding can affect the real estate industry and the development of the economy. Where is real estate crowdfunding going?

**Object:** real estate crowdfunding.

**Aim of the research:** to examine the real estate crowdfunding development factors and scenarios.

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<sup>1</sup> Oxford Dictionary. Retrieved from: <[http://www.oxforddictionaries.com/us/definition/american\\_english/crowdfunding](http://www.oxforddictionaries.com/us/definition/american_english/crowdfunding)>

**Research objectives:**

1. To analyze the real estate crowdfunding situation, defining it as a capital source and as an investment opportunity.
2. To describe the scope of real estate crowdfunding and present legal environment.
3. To analyze conception of crowdfunding and existing real estate crowdfunding platforms;
4. To identify factors which affect the development of real estate crowdfunding;
5. To model prospective scenarios of real estate crowdfunding.

**Methods:** This paper combines mixed research methodology. In exploring real estate crowdfunding various qualitative research techniques such as exploratory literature review and systemic analysis were used. Systemic analysis was used to analyze the majority of object related literature. Quantitative research methods, such as correlation and regression analysis were used to analyse selected data. In addition qualitative PEST analysis ("Political, Economic, Social and Technological") was used in order to get better explanation of influencing factors of real estate crowdfunding. Scenario modelling method was embraced to answer the main research question.

# 1. ANALYSIS OF REAL ESTATE CROWDFUNDING SITUATION

This chapter describes real estate crowdfunding from two different perspectives: as a capital source for real estate projects and as an investment opportunity. The last part of this chapter presents the scope of real estate crowdfunding. According to Investopedia<sup>2</sup> “crowdfunding is the emerging internet phenomenon, which is based on providing of micro contributions from the crowd to finance innovative projects and ideas. It is a new tool for raising money for businesses and an easier way to access such ventures for investors. Crowdfunding utilizes social media outlets like Facebook, Twitter and LinkedIn to reach an audience of potential investors. The idea behind crowdfunding is that many people are willing to invest a small amount, and when they do, large sums of money can be raised quite quickly. It opens doors for businesses to investors they could never reach otherwise.”<sup>3</sup> Crowdfunding is one way that the real estate industry is finally jumping into the twenty-first century in terms of processes and way of businesses is conducted. Next chapter describes real estate crowdfunding as a financing tool.

## 1.1. Real Estate Crowdfunding as a Capital Source

Real estate investment has been observed to require substantial capital outlay which can be obtained from various sources. According to Chiriac (2015) there are no certain answers formed about decisions choosing finance alternatives in real estate industry, very often the option for a form of financing real estate projects is influenced only by the “level of accessibility” of the resources available on the financial market and the financing policy of many companies is guided rather by the constraints of the financial market than a coherent company strategy. Communication technologies enable real estate developers and other entrepreneurs from anywhere to access capital globally (Agrawal, 2015). Real estate crowdfunding is one of the solutions how enterprises can overcome the difficult access to financial resources (Strokova, 2014). Further to capital source, many real estate developers consider real estate crowdfunding as a lead generation opportunity. Vice President of Investment at Atlas Real Estate Partners declares “We chose that site because we wanted access to high-net worth investors with whom we could develop long-term relationships” (Vogel, 2014).

Increasing complexity in financing real estate and area development is fuelled by poor market conditions, growing risks and fiercer banking supervision. Financing real estate is considerably hindered due to these circumstances (Huibers, 2012). Acquiring capital for development projects is an overarching issue within the real estate and area development industry. This led to perilous situations for most

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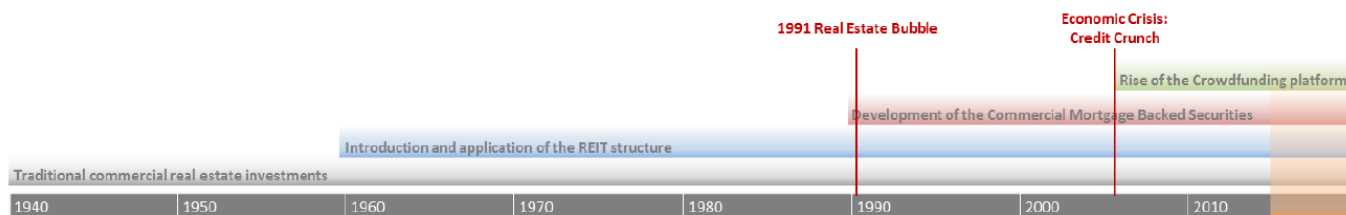
<sup>2</sup> Investopedia is an Internet site devoted to investing education bases in New York City

<sup>3</sup> Investopedia. Retrieved from: <<http://www.investopedia.com/ask/answers/1000214/what-real-estate-crowdfunding.asp>>

developers, according to Huibers (2012) over 50% of the real estate developers are under legal restraints and experience financial issues. Many developed countries experience an alteration of banks and their growing aversion towards real estate financing (Huibers, 2012; Milton, 2010). Therefore real estate crowdfunding is a financing tool that may prosper. The next chapter analyses real estate crowdfunding from an investor point of view.

## 1.2. Real Estate Crowdfunding as an Investment

The real estate investment has seen few major innovations (Figure 1.) since the introduction of the Real Estate Investment Trust (REIT) structure in the 1960s and commercial mortgage structure in the 1990s (Burgett & McDonald, 2013). Real estate crowdfunding, however, might be the next major innovative investment-structure. American initiatives boost the opportunity for the crowd to invest in real estate, reflected in a growing real estate crowdfunding industry (Traves, 2015; Gose, 2015; Mattson-Teig 2015; Grout, 2014). Many real estate crowdfunding platforms get multimillion dollar injections from venture capitalists that boost the development and popularity of this investment opportunity (Grout, 2014).



**Figure 1. Real Estate Investments Timeline (Adopted by Fabian I. Marchand, 2016)**

Real estate professionals network “RealConnex” declares “With crowdfunding small, enthusiastic investors all pitch in their share with only as much risk as they are willing to take on. People can respond agilely to new projects as they emerge. Projects heads can similarly pitch ideas that benefit the community, rather than worrying about convincing people how they can line already deep pockets.”<sup>4</sup> According to Lieser (2014) the accessibility of property is a critical factor in real estate investment due to the close link between market entry probability, liquidity, risks and market transparency.

<sup>4</sup> RealConnex. Retrieved from: <<http://www.realconnex.com/blog/the-impact-of-crowdfunding-on-commercial-real-estate-investment/>>

Real estate crowdfunding platforms are targeting two categories of investors: accredited investors<sup>5</sup> and non-accredited investors. They can be both individuals or institutional, local and abroad-based. In different states are various legal environments that regulate public investments. Thus, for crowdfunding to be successful is very important to provide appropriate law. There are good signs in this field: on April 2012, President of United States of America signed into law a JOBS Act<sup>6</sup> that regulates equity crowdfunding. Other countries should also be familiar with the real estate crowdfunding and provide reliable legal environment.

Forbes<sup>7</sup> (2015) estimated that over \$1 billion has been raised from real estate crowdfunding efforts. RealConnex (2015) noticed that low barriers to entry and an opportunity for a lower buy-in hold enormous appeal for people looking to not only collect a return on investment, but also participate in projects that they feel passionately about. Miller (2015) announced that there are trillions of dollars of institutional capital that gets invested in real assets like apartment buildings and shopping malls. It's just a matter of time until a good chunk of this capital starts flowing online to real estate crowdfunding platforms.

Bill Poorvu, emeritus professor at Harvard Business School, points out a subtle but very important tension between quality control and earning fees from transactions. Since Real Estate Crowdfunding Web sites earn fees based on the volume of transactions there will be pressure, as there was in underwriting commercial mortgage backed securities, to allow the standards to slip (Vogel, 2014). Risk also lies at the core of development: the developers manage the multiple risks of development and it is the capital injection and financing that is placed at risk (Coiacetto, 2014). However, important factor is that internet is public and transparent place where the combination of crowdfunding and social media may drive poor performing sponsors out of the market relatively quickly (Vogel, 2014). The last part of this chapter describes the range of real estate crowdfunding phenomenon.

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<sup>5</sup> According to Investopedia "Accredited Investor is a term used by Securities and Exchange Commission (SEC) under Regulation D to refer to investors who are financially sophisticated and have a reduced need for protection provided by certain government laws. Accredited investors include individuals, banks, insurance companies, employee benefit plans, and trusts. In order for an individual to qualify as an accredited investor, he or she must accomplish at least one of the following:

- 1) Earn an individual income of more than \$200,000 per year, or joint income of \$300,000, in each of the last two years and expect to reasonably maintain the same level of income.
- 2) Have a net worth exceeding \$1 million, either individually or jointly with his or her spouse.
- 3) Be a general partner, executive officer, director or a related combination thereof for the issuer of security being offered. An employee benefit plan or a trust can be qualified as accredited investors if its total assets are in excess of \$5 million.

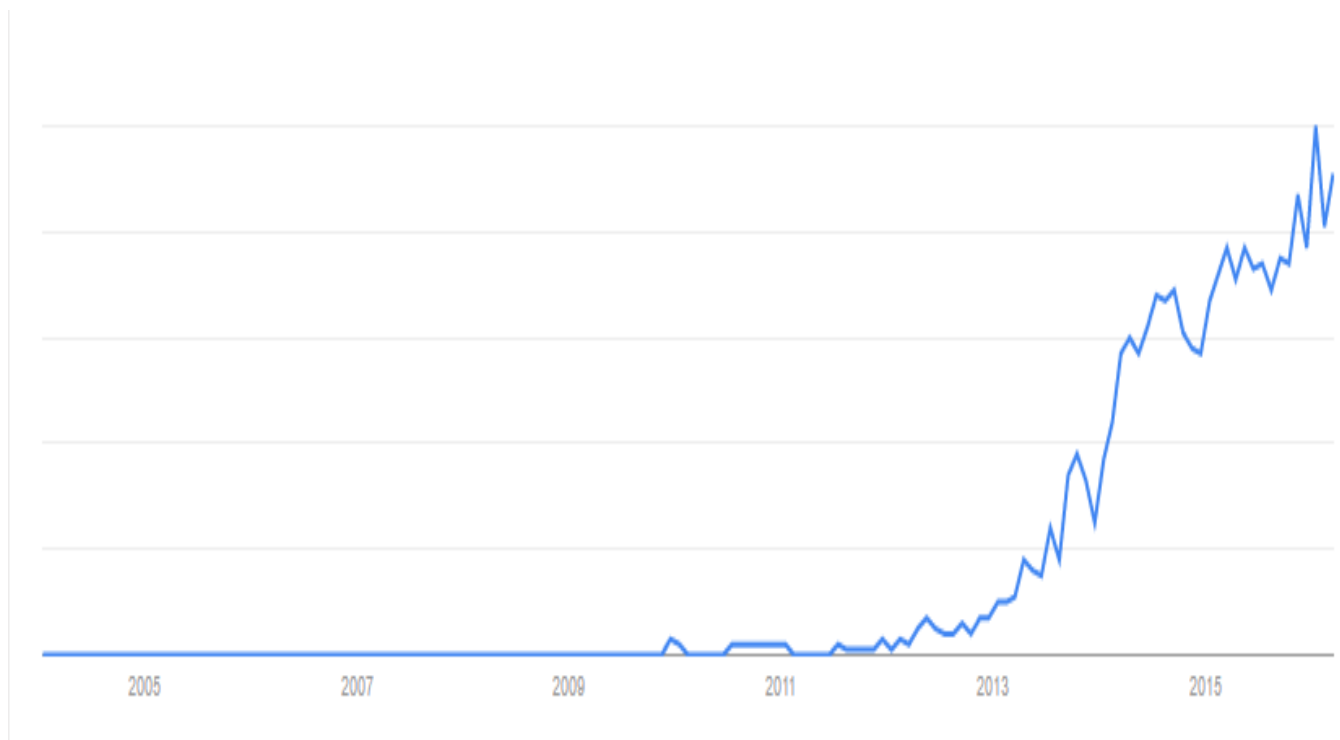
<sup>6</sup> The Jumpstart Our Business Startups Act or JOBS Act, is a law intended to encourage funding of United States small businesses by easing various securities regulations.

<sup>7</sup> Forbes is an American business magazine. Published bi weekly, it features original articles on finance, industry, investing, and marketing topics.



### 1.3. Scope of Real Estate Crowdfunding

Real Estate Crowdfunding development started in the heatedness of global financial crisis. At the time when almost all institutional financing sources were closed real estate developers began to look for new alternatives to finance their projects. Consequently, investors have become more conscious with how they spend their money, and crowdfunding should provide opportunities suitable even during recession periods. Thus real estate crowdfunding Web sites should offer only legitimate investments opportunities. People's interest in real estate crowdfunding has grown since 2010 (Figure 2.). More people are being drawn by this phenomenon into increasingly crowded space with real estate crowdfunding platforms.



**Figure 2. Interest in Real Estate Crowdfunding over Time (Google Trends Data, 2016)**

In 2013 was counted more than 500 crowdfunding Web sites.<sup>8</sup> Two popular platforms Kickstarter and IndieGoGo have funded more than 200,000 projects with nearly \$ 1 billion in capital (Vogel, 2014). Real estate crowdfunding Web sites are counted more than 230 globally<sup>9</sup>. Over \$ 1 billion was injected into real estate market in 2014. In 2015 this number has exceeded over \$ 2.5 billion<sup>10</sup> (Figure 2.).

<sup>8</sup> Forbes. Retrieved from: <<http://www.forbes.com/sites/ryanaldbeck/2013/06/23/crowdfunding-trends-which-crowdfunding-sites-will-survive/>>

<sup>9</sup> Crowdvalley. Retrieved from: <<http://news.crowdvalley.com/news/the-future-of-online-investing-in-the-asian-real-estate-market/>>

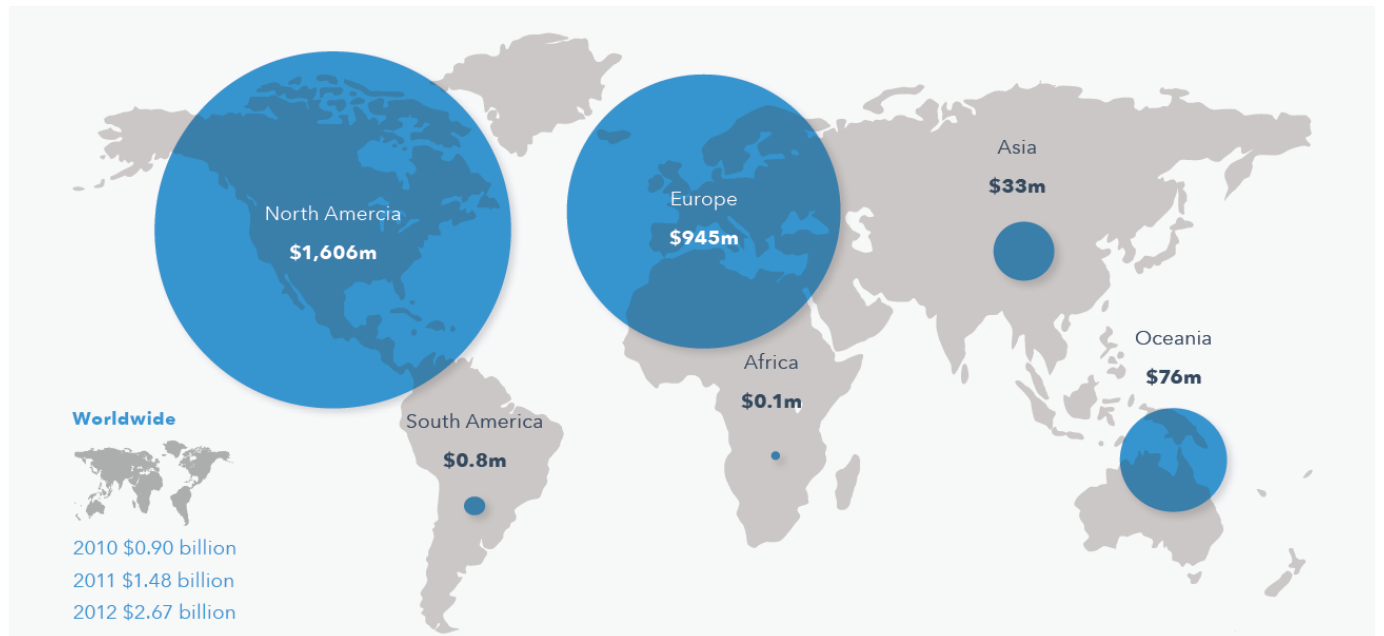
<sup>10</sup> Massolution report.



**Figure 3. Real Estate Crowdfunding Market Development 2013-2015 (Massolution, 2016)**

In 2015 the total transaction volume in alternative financing<sup>11</sup> was projected to reach € 7 billion, of which € 5.7 in the UK and the US (Wardrop et al. 2015). These figures emphasises the explicit presence of large and growing crowdfunding markets in Anglo-Saxon countries. Notably the UK and the US dominate and lead the global crowdfunding industry by their size and annual growth (Wardrop et al. 2015). Within this industry there are large differences among countries – both by size and allocation of capital (Figure 3.). In the fourth quarter of 2014 real estate crowdfunding for the first time by passed start-up/company crowdfunding in terms of demand for capital (Crowdvalley 2015). For the US alone the difference between capital allocation to real estate and (start-up) companies is even larger, appropriately 43% versus 35%. This led, globally, to over \$ 2.5 billion in 2015 and over \$ 1 billion in 2014 invested in real estate crowdfunding, an increase of approximately 155 % (Crowdsourcing.org 2015).

<sup>11</sup> Important to note is that other alternative financing tools like micro-financing, community shares and debt-based securities are included in these calculations, the actual numbers on crowdfunding are slightly lower.



**Figure 4. Global Crowdfunding Volume (Massolution, 2013)**

To summarize, Real Estate Crowdfunding is a new and emerging phenomenon that attracts more and more attention and capital from real estate market players. It is influencing two main groups of stakeholders, people who are looking for finance on one hand and people who provide it on the other hand. This is an alternative financing tool that demonstrates exponential growth and may become the disruptor of the real estate industry. Crowdfunding is an internet-based phenomenon that greatly decreases distance-related costs and utilizes social media platforms to ensure transparency. Therefore, it is a very attractive investment opportunity. Notwithstanding, there are many impact factors which shape the development of this phenomenon that have not been clearly understood. In order to get better insight about this phenomenon, there is a need for theoretical analysis.

## **2. THEORETICAL SOLUTIONS OF REAL ESTATE CROWDFUNDING**

The scientific body of knowledge on crowdfunding is extensive; a vast amount of articles, books and papers have been published on the concept of crowdfunding, its potential and the whole industry. However, specific literature on real estate crowdfunding is barely available and forms just a minor niche within the larger body of knowledge. This is worrying since real estate crowdfunding is becoming more and more favourable investment type for crowdfunding campaigns. Some explorative literature and thesis are available on real estate crowdfunding, but explicit outlining is not mature.

This chapter illustrates the theoretical background on real estate crowdfunding starting with conception, then actors in the process, components, crowdfunding models, overview of legal environment and indentifying advantages and disadvantages of this phenomenon. After case studies analysis of existing real estate crowdfunding platforms, influencing factors to real estate crowdfunding are indentified and theoretical framework of this thesis is provided.

### **2.1. Conception of Real Estate Crowdfunding**

Crowdfunding is not an entirely new conception, it has emerged from theory of crowdsourcing and micro-finance in the late 2000s and early 2010s (Mollick 2014, Burgett & McDonald 2013). During this period several definitions of crowdfunding were explicated in its current body of knowledge. Hardly any of these definitions essentially differ, most include the crowd as financing pool ant the aim of collecting monetary funds for an individual's initiative. Belleflamme et al. (2013) offer the fallowing definition: "Crowdfunding involves an open call, mostly through the Internet, for the provision of financial resources either in the form of donation or in exchange for the future product or some form of reward to support initiatives for specific purposes." Hemer (2011) and Griffin (2012) have provided an almost identical definition. Steinberg & DeMaria (2012) however use a definition focused far more on start-ups. They state it is a process of asking the general public for donations that fuel start-up for new ventures, hereby bypassing venture capitalists and angel investors. Crowdfunding uses Web technologies and existing online payment systems to facilitate transactions between initiators (people who request funds) and funders (people who give money). Explicit analysis of Real Estate Crowdfunding actors is provided in the next subchapter.

### **2.2. Actors in the Process of Real Estate Crowdfunding**

The crowdfunding process is usually divided into three different phases. The first phase is publication of an entrepreneur's concrete project or an idea, including the budget target, the time limit to

raise the necessary sum, as well as the compensation for investing in the project. In the second phase, potential funders have the opportunity to gather information on the project, pursue developments and read comments about the project by other investors. To increase success rate in terms of funding, the initiator could also promote the project through the use of social networks. During a crowdfunding campaign the second phase is often the most critical, as the mobilization of potential funders is essential for the success of the project. The third phase is implementation or playback. In the case of successful funding the project moves forward and funders receive the predetermined rewards at its completion (Lakhani, 2014). The process of crowdfunding very much depends on the way how each intermediary perceives and organizes it. There appear important differences in the application and project selection process – it can be done by just filling a form on the internet, include meeting with consultants or involving an exhaustive background check. It's strongly advices to conduct background check in real estate crowdfunding. Many real estate crowdfunding platforms allow only experienced sponsors to list their properties for potentials investments (Vogel, 2014).

Disregarding for the different names of the actors among various literature sources, it is believed that the crowdfunding process holds three main actors being project owners (initiators), funders and platforms (intermediaries) (Ahlers, 2012; De Buysere, 2012; Gertber et al., 2012; Vogel, 2014; Agrawal, 2015). The roles of different actors are described bellow in Table 1.

**Table 1. Roles of Actors in the Process of Crowdfunding (Adopted by Ahlers et al. 2012)**

<b>Roles of the Actors in the Process of Crowdfunding</b>	
<b>Actor</b>	<b>Role</b>
Initiator	<ul style="list-style-type: none"> <li>• Initiate a request for funding</li> <li>• How much capital is needed and for what cause</li> <li>• What, if so, is offered in return</li> </ul>
Funder	<ul style="list-style-type: none"> <li>• Browse offers and, if interested, invest the amount towards the funding goal</li> </ul>
Intermediary	<ul style="list-style-type: none"> <li>• Technical platform</li> <li>• Exchange of Funds between above actors</li> <li>• Manages the voting rights</li> </ul>

A need to present a project or an idea for general public is a feature of crowdfunding and crowdfunding has a marketing benefit that translates into sales (Valanciene, 2014). Thus, there appears a possibility for a general public, including backers or investors, to express their opinions and suggestions,

so the product, project or an idea might be modified and perfected with their help. To participate in crowdfunding process funders are motivated by different factors. Therefore, few models of crowdfunding exist. Explicit analysis of them is provided in the next subchapter.

### **2.3. Models of Real Estate Crowdfunding**

In general, four different types of crowdfunding are found in the literature: donation-based, reward-based, lending-based and equity-based (Hemer, 2011; Griffin, 2012; Ahlers et al., 2012; Mollick, 2014; De Buysere, 2012). Nearly all literature acknowledge this division of four crowdfunding models, although early literature by Hemer and others include fifth model of ‘sponsoring’ as well. In this thesis sponsoring is regarded to as a reward-based crowdfunding model since it offers a material return.

***Donation-based model.*** There are few crowdfunding initiatives seeking to attract donations rather than offering something in return (Schwienbacher, 2012; Griffin, 2012; Belleflamme, et al. 2014). In the donation-based model funders do not get any financial or material returns – in other words: “without existential reward”. This is a philanthropic approach to crowdfunding and attracts funders that do not expect direct returns for their money (Mollick, 2014). Because funders know the initiative’s purpose they are willing to donate higher amounts (De Buysere et al., 2012). In addition, the funders are thought to be more loyal to the initiative when they are updated with it is progress, this ensures future donations as well (De Buysere et al., 2012). The authors came to the end to the fact that the funders’ motivations are of social nature. This intrinsic motivation usually is a good base in creating a long-term relationship between the initiator and the funder.

Donation-based crowdfunding is often used by and most applicable to non-profit organizations (Schwienbacher & Larralde, 2012). Non-governmental organizations (NGOs) use this model to attract donations for various specific projects (De Buysere et al., 2012). Besides NGOs and non-profit organizations, it can help to fund creative activities or common purpose activities as well (De Buysere, 2012). Griffin (2012) agrees that majority of donations are for charities and non-profit organizations, but argues that there also are, however just a few, businesses that seek donations through crowdfunding.

***Reward-based model.*** One of the most popular models of crowdfunding is reward-based model (Sharp, 2014; Mollick, 2014). Various authors often combine reward and pre-purchase-based crowdfunding when explaining reward-based model (Griffin, 2012; De Buysere et al, 2012). Reward-based crowdfunding is a model in which funders receive a reward that is not interest or a percentage of the profit (Griffin, 2012). Pre-purchase model, however, is different from reward-based model as pre-

purchase funders receive the product that the initiator is making (or get the right to buy that specific product at a reduced price upon completion) (Griffin, 2012). Mollick (2014) explains that reward-based crowdfunding can include rewarding funders for backing a project (i.e. a meet-and-greet the actors of a movie) or that it involves “pre-selling” the product, hereby treating the funders as early customers.

Both crowdfunding methods (reward-based and pre-purchase based) are often merged. Griffin (2012) shares his view that reward and pre-purchase benefits are used to attract potential contributors. Important to indicate that rewards (or pre-purchase) tend to be non-financial material objects (De Buysere et al., 2012). The authors clarify that rewards often are of symbolic value to the funders, enabling the initiator to raise capital for the project as the costs of the rewards are often much lower than the donation amount of the funders.

***Lending-based model.*** This fairly popular model of crowdfunding relies on loans as method of acquiring funds (Griffin, 2012). Lending-based crowdfunding enables the direct borrowing of funds, by passing the traditional financial institutions, such as banks and other creditors. This model of crowdfunding is largely an evolution of the peer-to-peer type of lending. Two approaches can be distinguished: microfinance (P2P microfinance) and social lending (P2P lending). Payment plus interest might be returned in a lump sum amount or along some sort of payment schedule (Gulati, 2014). Social lending related to higher amounts making it the second largest category of the world crowdfunding market, as measured by the money raised. Crowd lending is considered a threat to the big lending businesses as international banks (Pazawski, 2014). Knowing that real estate investment is related to general economic activity and prosperity of a region or a country there a must to properly investigate new sources of capital for real estate investments is only amplified.

Investors issue these loans for a pre-defined period and are repaid with rate of return on provided capital (Hemer, 2011; Griffin, 2012; Mollick, 2014). The existing literature on lending-based crowdfunding is very concordant. Common characteristics are the pre-defined period of the loan and the repayment of the original loan plus an interest-rate.

Hemer (2011) offers one alternative to the above, namely a long-term loan based on a revenue sharing approach. In this case the creditor provides a risk-bearing loan without receiving any interest. Alternatively, the creditor receives a share of the venture’s earnings at the end of the lending period. In the most favourable cases this could be a multiple of the original loan, it, however, could also be nothing.

A second alternative involves micro-financed loans (Mollick, 2014). In this case, the lender may be more interested in social gains than any financial return generated by the loan. This alternative to some degree presents the elements of philanthropy and motivation.

***Equity-based model.*** Finally, the equity based model treats funders in the process of crowdfunding as investors (Mollick, 2014; Collins & Pierrakis, 2012). This means that investors providing capital to an initiative are compensated with shares of the venture, dividends and/or voting rights (Hemer, 2011). Collins & Pierrakis (2012) define this as that “the initiative offers securities to the general public, usually through the medium of an online platform.” Of crucial importance to the model is the presence of a time span in which initiative aims to raise a certain amount of capital (Hemer, 2011). Special interest in initiatives that share a funder’s values, are locally engaging or that create jobs in a funder’s community are examples of specific drivers for funders to invest in an initiative (De Buysere et al., 2012).

When capital is invested against equity, it goes directly into capital of the company for which investors receive shares. As a consequence, they obtain some control over the company and at the same time bearing risk. On the other hand who give money for debt remain external parties, linked to the company by a detailed contractual agreement. They bear lower risk of their claims over equity (Schwiebacher, 2010). The manifestation provides range of solutions to assist projects in early stage of development. Project initiators and their partner platforms define a time period and a target amount of capital which serves as a threshold (Hemer, 2011). Capital target is divided into equal slices which are offered via the platform as equity shares (or stocks) to the crowd at fixed prices. Collecting money continues until the threshold is reached and then investment phase begins (Pazowski, 2014). Equity-based crowdfunding has the potential to open funding opportunities to huge number underfunded entrepreneurs and businesses. In addition, it can provide investors with many new ways to diversify their portfolios (Stemler, 2013).

Equity-based crowdfunding investment type is the collective effort of individuals who network and pool their money, usually via Internet to investing for equity or profit/revenue sharing in businesses or projects. Funders are getting an equity stake in a company in return for their investment. The value proposition is ownership or voting rights (Gulati, 2014).

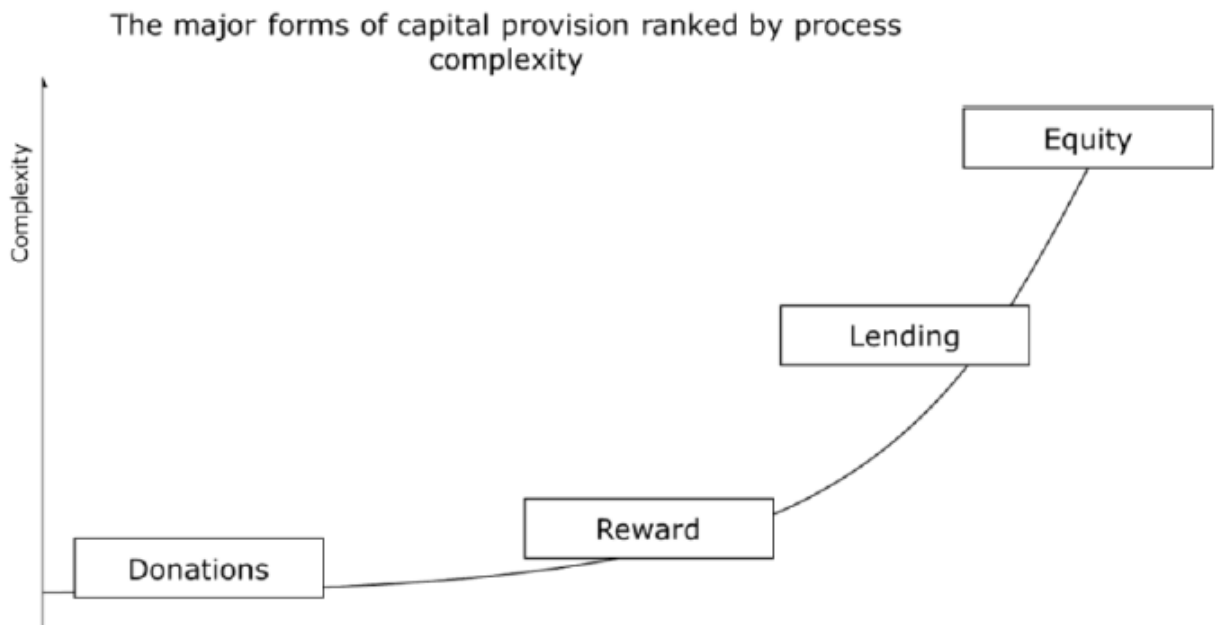
However, the equity-based model is obstructed by legal concerns and can be seen as the most complicated model of crowdfunding (Hemer, 2011). Additionally, the level of uncertainty is evidently higher than in other models (De Buysere et al., 2012). The authors share the view that it relies on the initiator’s ability to create equity value in the company. Equity value in a company is very difficult to assess, further increasing the level of uncertainty. Collins & Pierrakis (2012) argue that the notion that equity-based crowdfunding is very much alike to an initial public offering (IPO) is a misconception. Their reasoning is based on three arguments: 1) a stock market requires companies to adhere strict rules and regulations, 2) companies approaching a stock market are far more developed and larger than companies



seeking funds through crowdfunding 3) and, lastly, crowdfunding offers the opportunity for direct interactions between an investor, the initiator and other (likeminded) investors. It is, therefore, essential deviant from an IPO.

According to Ahlers et al. (2012), equity-based crowdfunding might be one of the most promising financing alternatives to boost business growth. However, it is not fully implemented in the crowdfunding industry and therefore just a little of its potential is used. Fortunately, the media announces that equity-based crowdfunding is rapidly growing.

**Complexity.** Hemer (2011) studied the relationship between different crowdfunding models and their complexity. Equity-based crowdfunding is highly complex due to regulative obstructions. Additionally, information asymmetry amplifies this effect, making the process complex to a greater extent (Hemer, 2011). It is clear that donation-based crowdfunding is less complex (legally at least) since funders donate to causes they want to support, they do not expect monetary return – it can be regarded to as philanthropic (Ahlers et al., 2012). Ahlers et al. (2012) however continue that equity-based crowdfunding involves potential monetary compensation. This makes equity-based crowdfunding, in addition to the information asymmetry between the initiator and the investor, the most complex model (Ahlers et al., 2012). Hemer (2011) illustrates this through plotting complexity versus capital provision, suggesting that equity-based crowdfunding is the most complex model, but also enables the largest amount of capital supply (Figure 4.).



**Figure 5. Relation between the varying crowdfunding models and the process complexity**  
(Abobted by Hemer et al. 2011)

Two most common real crowdfunding models of are equity and debt financing. The popular perception in the crowdfunding community that donation and reward-based platforms are more likely to attract individuals who give their money because they “like” and “enjoy” a project or an initiative and want to “support” it (Schwiebacher, 2010), whereas lending and equity-based platforms are seen as attracting people who are largely interested in backing projects for a return on their investment. However, the bundling of financial and non-financial incentives in crowdfunding campaigns can be an effective strategy for raising finance on the platforms (Cholakova & Clarysse, 2015). The next subchapter identifies and illustrates the main advantages and disadvantages of real estate crowdfunding.

## 2.4. Advantages and Disadvantages of Real Estate Crowdfunding

According to literature crowdfunding has advantages and disadvantages in relation to traditional investment vehicles (Steinberg & DeMaria, 2012). Authors describe a large number of pros and cons, a summarized version, adopted by Steinberg and DeMaria (2012), can be found in table 2.

**Table 2. Advantages and Disadvantages of Crowdfunding (Adopted by Steinberg & DeMaria, 2012)**

<b>Advantages and Disadvantages of Crowdfunding</b>	
<b>Advantages</b>	<b>Disadvantages</b>
<ul style="list-style-type: none"> <li>You are in control of everything (cost, timing, delivery, creative vision, marketing and execution)</li> </ul>	<ul style="list-style-type: none"> <li>Additional knowledge on consumer marketing, social networks and social marketing techniques might be required to successfully launch your campaign</li> </ul>
<ul style="list-style-type: none"> <li>Test and proves the popularity of your project</li> </ul>	<ul style="list-style-type: none"> <li>It can be a stressful process</li> </ul>
<ul style="list-style-type: none"> <li>Backers will market your product to their friends and contacts</li> </ul>	<ul style="list-style-type: none"> <li>Your idea, product or project is directly in front of the open public, in a potential line on fire</li> </ul>
<ul style="list-style-type: none"> <li>Possibility to raise a larger amount of capital than the intended funding goal</li> </ul>	<ul style="list-style-type: none"> <li>It requires tireless effort in social marketing campaigns and self-promotion</li> </ul>
<ul style="list-style-type: none"> <li>Chance to receive a valuable advice from your backers, who after all want you to succeed</li> </ul>	<ul style="list-style-type: none"> <li>Crowdfunding only works if it can offer (to be) something that is in interest of a sufficient number of people</li> </ul>
<ul style="list-style-type: none"> <li>Test elements of your project’s marketing approach</li> </ul>	

Advantages and disadvantages, which are more specific for real estate crowdfunding, after great number of literature analysis (Agrawal, 2015; Ahlers, 2012; Gose, 2015; Grout, 2014; Huibers, 2012;

Lakhani, 2014; Mattson-Teig, 2015; Miller, 2015; Milton, 2015; Vogel et al., 2014), are provided in table 3.

**Table 3. Advantages and Disadvantages of Real Estate Crowdfunding (Composed by Author)**

<b>Advantages and Disadvantages of Real Estate Crowdfunding</b>	
<b>Advantages</b>	<b>Disadvantages</b>
<ul style="list-style-type: none"> <li>• Greater transparency, all initiatives' deals are publicly announced</li> </ul>	<ul style="list-style-type: none"> <li>• Crowdfunding is strictly regulated by SEC (Security and Exchange Commission). Only Accredited Investors can invest in large (over \$1 Million) real estate investments.</li> </ul>
<ul style="list-style-type: none"> <li>• More investors, finding new investors is time consuming, crowdfunding helps access lower minimum investments and include more investors.</li> </ul>	<ul style="list-style-type: none"> <li>• Real estate is very difficult and time consuming business and often investors overestimate their expertise.</li> </ul>
<ul style="list-style-type: none"> <li>• Real estate crowdfunding platforms provide easier access to investments</li> </ul>	<ul style="list-style-type: none"> <li>• Developers often provide to investors unrealistic projections.</li> </ul>
<ul style="list-style-type: none"> <li>• Investments have already been vetted. Crowdfunding platforms have a vetting process for their investments. Only legitimate, sound investments are opened up to investors.</li> </ul>	<ul style="list-style-type: none"> <li>• Conflict of interests can arise because of lack of a personal relationship to the project initiator and to other investors, when difficulties arise in order to manage it successfully is necessary to have like-minded relationship between developer and investors.</li> </ul>
<ul style="list-style-type: none"> <li>• Vast investment selection, unlike REITs (Real Estate Investment Trusts), real estate crowdfunding gives investors the ability to decide exactly which properties they would like to include as well as exclude from their portfolio.</li> </ul>	<ul style="list-style-type: none"> <li>• Every single real estate project requires separate due diligence and technology tries to make things simpler thence appears higher likelihood of default, which can lead to disappointing results.</li> </ul>
<ul style="list-style-type: none"> <li>• Easier access to investments let crowdfunding platforms' providers charge lower fees than financial advisors and brokers for their investment management also this is cost saving approach because the Internet reduces many distance-related frictions.</li> </ul>	<ul style="list-style-type: none"> <li>• More investors, more problems. Thus crowdfunding campaigns should transfer all small investors to single limited partner</li> </ul>
<ul style="list-style-type: none"> <li>• Benefits for developers of having local investors involved in their real estate projects who can, if</li> </ul>	<ul style="list-style-type: none"> <li>• Real estate crowdfunding might not be a suitable route for investors who would like to play an active</li> </ul>

needed, provide them with information about community standards, especially if project need community approval and so forth.	role in the management of their real estate holdings. Investors in crowdfunded property usually have little control and must trust the developer or operator to successfully manage the property.
<ul style="list-style-type: none"> <li>Investments in real estate crowdfunding campaigns are not publicly traded. Thus are not given a mark-to-market valuation every minute of the day. As a result, fluctuations in the value of real estate crowdfunded investments do not occur.</li> </ul>	<ul style="list-style-type: none"> <li>Unlike REITs, real estate projects that are backed on crowdfunding Web sites are not required to distribute 90% of the rental income to investors. This might disappoint REITs investors who are accustomed to above-average yields.</li> </ul>
<ul style="list-style-type: none"> <li>Enhanced reporting and accountability, most of the crowdfunding platforms inform investors few times per year about their investments performance.</li> </ul>	<ul style="list-style-type: none"> <li>Most real estate crowdfunding investments are not liquid that means, that if, investors want to get back their investment before provided term, they most likely could not do it.</li> </ul>

Real Estate crowdfunding is viable option for investing in real estate as well as raising the capital needed to make project happen. As with all types of investing, real estate crowdfunding has its benefits and drawbacks that have to be addressed and assessed before pulling the trigger. The next subchapter illustrates case studies of selected real estate crowdfunding platforms.

## 2.5. Case Studies of Real Estate Crowdfunding Platforms

There are many crowdfunding Web sites that have successfully raised capital for real estate initiatives. To date, most of the real estate crowdfunding sites have approach which begins with finding credible real estate projects. Many crowdfunding platforms look for real estate initiators that have previously raised capital through private syndications (Vogel, 2014). The author selected five different real estate crowdfunding platforms for case analysis. These platforms are extended across the globe and vary in asset classes and type of funding. Thus it is possible to get better understanding about overall real estate crowdfunding ecosystem. Keeping in mind that leading and most developed real estate crowdfunding region is United States of America, three of five Web sites are U.S based, though are spread over the country (New York, Los Angeles, Washington DC). One selected site is Asia's real estate crowdfunding platform and one is Europe based that also raised capital internationally and has office in United Arab Emirates.

First real estate crowdfunding platform is Fundrise that is Washington DC (United States) crowdfunding Web site. After nearly a year of working with the Securities and Exchange Commission,

Fundrise launched our first online offering, ending up with 175 individual investors. Then they did it again and again. Today, there are more than 80,000 members of Fundrise and they've invested in nearly \$3 billion worth of real estate. Fundrise announce: "The idea is simple yet powerful. It's caught on because it's a good investment strategy. Fundrise offers the first low-fee diversified real estate investment available directly to anyone online. We make the process of investing in the highest quality commercial real estate from around the country simple, efficient, and transparent<sup>12</sup>.

Prodigy Network is the one of the largest Crowd-investing platform in the world with projects around the globe over \$850 million and \$300 million in equity raised. Prodigy Network crowdfunding model was developed as an innovative way to give smaller investors access to large real estate assets. Prodigy Network and its affiliates have led six international U.S.-based projects, raised more than &300 million from over 6,200 investors around the world, and are currently developing projects globally with a projected value of more than &850 million. The major banks like Deutsche Bank, CIBC and Bank of America have provided traditional mortgage financing for Prodigy's Manhattan projects<sup>13</sup>. Prodigy Network had been vertically integrated until now. Rodrigo Nino, founder and CEO of the company said: "I wanted to control the process from A to Z before opening up to third party developers. Now, with projects worth an estimated 850 million dollars and over six thousand investors contributing more than 275 million dollars, we will open our platform to other developers in order to create a true exchange. We will focus on managing and underwriting projects that meet our criteria and we will work only with proven developers and operators. In due time, we will look back and see that the change was bigger than anything we may have tries to anticipate today. Crowdfunding will level up the playing field in real estate forever", he predicted (Lakhani, 2014).

RealtyMogul is real estate crowdfunding Web site that is one of the largest by amount of investors and largest by raised venture capital (until January 2016). RealtyMogul.com is a marketplace allowing investors to pool money online for real estate investment opportunities, it has more 77,000 investors. RealtyMogul.com has raised \$9 million in Series A and \$35 million in Series B funding<sup>14</sup>. RealtyMogul arose in 2012, though it did not launch at [www.RealtyMogul.com](http://www.RealtyMogul.com) until 2013. Their mission then was the same at it remains: to simplify investing in real estate be connecting real estate investors and entrepreneurs via cutting-edge technology. RealMogul emerged fast and become a leader of real estate capital online marketplaces. They provide commercial debt and commercial equity products throughout the United

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<sup>12</sup> Fundrise. Retrieved from: < <https://fundrise.com/about?source=main-menu>>

<sup>13</sup> Prodigy Network, Retrieved from: < <https://www.prodigynetwork.com/en/about.aspx>>

<sup>14</sup> Angel, Retrieved from: < <https://angel.co/realty-mogul>>

State, educate their interested investors, and consolidate the company which they genuinely believe will alter the way that real estate is financed and invested in for all time<sup>15</sup>.

CoAssets.com believed to be Southeast Asia’s first real estate crowdfunding Web site. CoAssets is a business networking and educational platform for real estate and crowdfunding enthusiasts. This crowdfunding site from Singapore, that lists properties from around the world, has raised \$733,000 in Series A funding from undisclosed investors. This values the company at \$13 million<sup>16</sup>.

Mayfair and Morgan is Europe’s first international real estate crowdfunding platform. International property management and investment firm Mayfair & Morgan has launched a real estate investment platform that allows its members to invest in residential property from £1,000 and up. The company wants to allow investors to generate long-term returns without the need for house hunting, mortgage acquisitions, tenant recruitment and property management<sup>17</sup>.

Characteristics of analyzed real estate crowdfunding platforms are provided bellow in table 4.

**Table 4. Characteristics of analyzed real estate crowdfunding platforms (Composed by Author)**

Platform (Name on the Website)	Type of Property and Type of Investment	Headquarters	Initiators	Type of Investors	Portfolio of Properties (Estimated 2016.01)	Equity Raised (Estimated 2016.01)	Minimum Investment	Amount of Investor-Sponsor Interaction
Fundrise	Commercial & Residential Equity & Debt	USA (Washington DC)	External	Accredited Non-accredited, Foreign	\$3000 MM	\$30 MM	\$1,000	Medium
Prodigy Network	Commercial Equity	US (New York)	Internal	Accredited, Foreign	\$950 MM	\$350 MM	\$20,000 for native investors and \$100,000 for foreigners	High
Realty	Commercial &	US (Los	External	Accredited, Foreign	\$700	\$35 MM	\$5,000	Low

<sup>15</sup> Goldira Guide, Retrieved from: < <http://goldiraguide.org/realty-mogul-review/>>

<sup>16</sup> Tech in Asia, Retrieved from: < <https://www.techinasia.com/singaporebased-real-estate-crowdfunding-site-nabs-733k-investment>>

<sup>17</sup> Crowdfund Insider. Retrieved from: < <http://www.crowdfundinsider.com/2014/10/52667-mayfair-morgan-launch-europes-first-international-real-estate-crowdfunding-platform/>>

Mogul	Residential Equity & Dept	Angeles)			MM			
CoAssets	Commercial & Residential Equity & Dept	Singapore (Singapore)	External	Accredited Non-accredited, Foreign	\$140 MM	\$30 MM	\$10	High
Mayfair and Morgan	Residential Equity & Dept	UK (Guernsey); UAE (Dubai)	Internal	Accredited, Foreign	\$10 MM	\$7 MM	\$500	High

The process of crowdfunding very much depends on the way each intermediary perceives and organizes it. There appear significant differences in the application and project selection process – it can be done by just filling a form on the internet, include meeting with consultants or involving an ezhaustive background check. Some projects are of good underlying quality while others are not: thus investors face asymmetric information about the identity of projects. Some investors have informative but imperfect signals of project quality while others do not, but everyone invests limited funds in one of several competing projects (Parker, 2014). The careful due diligence is very important in real estate crowdfunding. Many real estate crowdfunding platforms allow only experienced initiators to list their properties for potential investments. As real estate crowdfunding has gained greater acceptance, the emphasis has shifted from this kind of niche lending to raising equity, mezzanine financing and debt for larger commercial properties (Vogel, 2014). There are many crowdfunding sites that have successfully raised equity capital for their investors. Crowdfunding Web sites with external initiators emphasize their ability to find outstanding rea; estate developers and perform careful due diligence on these opportunity providers and projects.

A need to present a project or an idea for a general public is a crowdfunding feature and crowdfunding has a marketing benefit that translates into sales (Valanciene, 2013). Thus, there appears a possibility for a general public, including investors, to express their opinions and suggestions, so the project might be modified and perfected with their help as well, if needed, local communities could provide necessary support for legal approval. However, developers should be cautious about the time of project publication, because it might also be harmful for project success.

Each investment that is listed generally contains the information one would expect in an institutional investment committee memo. The memo and other attachments discuss: the location, the market,

historical financials, underwriting assumptions, initiator track record, risks and exit strategy. For some deals, the crowdfunding Web sites hold webinars or conference calls to introduce the project initiator and the deal to investors who are registered on the Web platform and are interested in the property (Vogel, 2014). Educating general public is very important and necessary in order to achieve sustainable development of emerging real estate phenomenon. However, there are many impact factors which shape the development of real estate crowdfunding. The next subchapter explains them and conduct a detail analysis.

## **2.6. Influencing Factors of Real Estate Crowdfunding**

According Vogel J.H. (2014) and Sigar (2012) two recent developments have elevated the profile and potential for raising money for private real estate investments through crowdfunding. The first is the Jumpstart Our Business Startup Act or JOBS Act which President Barack Obama signed into law on April 5, 2012. This bill changes key provisions in securities law to allow sponsors to raise capital from the general public utilizing broad based advertising (what the SEC (Security and Exchange Commission) calls “general solicitation”). The second development has been the venture capital injections to promising real estate crowdfunding platforms. Based on literature review and logical analysis several other important factors can be described. Forasmuch real estate crowdfunding utilizes social media platforms this research distinguishes internet and social media penetration as influencing factors which are selected for further analysis. Two social media platforms were selected, Facebook as social media leader and LinkedIn as biggest in the world business social network. Undoubtedly, since real estate crowdfunding is a method of investing in real estate, real estate market conditions also is important factor. This thesis researches global real estate phenomenon, therefore for further analysis six indices were selected which provide information about global real estate market conditions. Detailed analysis of influencing factors are provided in the next subchapters.

### **2.6.1. Legal Environment of Real Estate Crowdfunding**

Real estate crowdfunding is global phenomenon thus is important for all countries approve suitable regulations because it can be beneficial not only at national level, but also as a considerable source of DFI (Direct Foreign Investment). Lieser (2014) defines a country’s attractiveness for investment by means of six latent key drivers: 1) economic activity; 2) real estate investment opportunities; 3) depth and sophistication of capital markets; 4) investor protection and legal framework; 5) administrative burdens and regulative limitations; and 6) socio-cultural and political environment.



Various legal issues have so far largely restricted real estate crowdfunding (Cholakova & Clarysse, 2015). However, there are the bright signs in this field. The Jumpstart Our Business Start-ups (JOBS) Act was signed into law in April of 2012, with the intention of allowing a greater number of Americans to invest in promising projects, small businesses and start-ups. With this the release of SEC's final rule on Title III, non-accredited investors will be allowed to purchase equity stakes through SEC/ FINRA – registered crowdfunding platforms. The 2012 Jumpstart Our Business Startups Act (JOBS) legalized equity crowdfunding; companies could raise a considerable amount of money from investors who are accredited or have demonstrated that they have a net worth of at least \$1 million or an annual income of at least \$200,000. By law, crowdfunding sites must register with the United States Securities and Exchange Commission (SEC), either as investment brokers or funding portals for this type of investment (Barzilay, 2015). These new regulations should take effect in mid-2016 (180 after publication in the Federal Register).

There is distinction from popular crowdfunding platforms such as Kickstarter<sup>18</sup>, in that the Title III intermediary platforms will be registered with the SEC and carry obligations of due diligence, while investors will be purchasing equity stakes rather than essentially making donation or pre-purchasing a proposed product.

The real estate crowdfunding market is already strong (estimated over \$2.5 Billion in 2015 according recent Massolution report<sup>19</sup>), consisting of accredited investors operating under Title II of the JOBS Act and operations which do not fall under the SEC's definition of "crowdfunding". With Title III opening the doors to non-accredited investors (who by some estimates make up 91% of the investing population), the market is only expected to be larger. At the same time, Title III also specifies several caps for both investors and initiatives, some of which may throttle the excitement as we approach the 2016 roll out date.

Bellow in this subchapter are provided an overview of the key provisions and highlights of the debate over how they will affect Real Estate market.

### *Key Provisions of Title III of the JOBS Act<sup>20</sup>*

Under the SEC's final rules on Title III:

- "Security issuers may raise a maximum of \$1 Million in any 12 month period."

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<sup>18</sup> Kickstarter is an American public-benefit corporation based in Brooklyn, New York which has built a global crowdfunding platform focused on creativity. The company's stated mission is to help bring creative projects to life.

<sup>19</sup> Massolution report, Retrieved from: <[http://reports.crowdsourcing.org/?route=product/product&product\\_id=52](http://reports.crowdsourcing.org/?route=product/product&product_id=52)>

<sup>20</sup> U.S. Securities and Exchange Commission, Retrieved from: <<https://www.sec.gov/rules/final/2015/33-9974.pdf>>

- “Investors with a net worth or annual income less than \$100K may invest \$2,000 or 5% of their annual income/ net worth, whichever is greater. This limit covers all investment with crowdfunding issuers in a rolling 12 month period.”
- “Investors with deeper pockets may invest up to 10% of their net worth or annual income, whichever is less. These limits apply to investors whose annual income/ net worth is greater than \$100K, and is structured on the same rolling 12 month period.”
- “All investors are capped at \$100K in investments over a rolling 12 month period, no matter their total annual income/ net worth. This is true regardless of whether the investor is accredited or non-accredited.”
- “Securities purchased through a Title III offering may be resold after one year.”
- “Crowdfunding portals are required to perform due diligence upon any issuer they do business with, though portals will not be held strictly liable for misstatements or misrepresentations made by the issuer.”<sup>21</sup>

One of the biggest concerns about rules of Title III is that if a company is soliciting non-accredited investors, then they can only raise \$1 Million in 12 months period. This is clearly not sufficient amount on capital for many real estate projects, therefore many real estate companies, and especially reliable and experienced ones, will be not much interested in crowdfunding campaigns.

Despite the new regulations leading to all types of crowdfunding platforms, only about 3 percent of Americans participate. Plus, the SEC is discussing tougher regulations, which may mean that fewer investors will be able to use these platforms in the future (Barzilay, 2015). The next subchapter describes venture capital investments.

### **2.6.2. Venture Capital Investments**

Venture capital (VC) is money that is provided to seed early-stage, emerging growth companies. Venture capital funds invest in companies in exchange for equity in the companies they invest in, which usually have a novel technology or business model. Venture capital can also include managerial and technical expertise. Most venture capital comes from a group of wealthy investors, investment banks and other financial institutions that pool such investments or partnerships. This form of raising capital is

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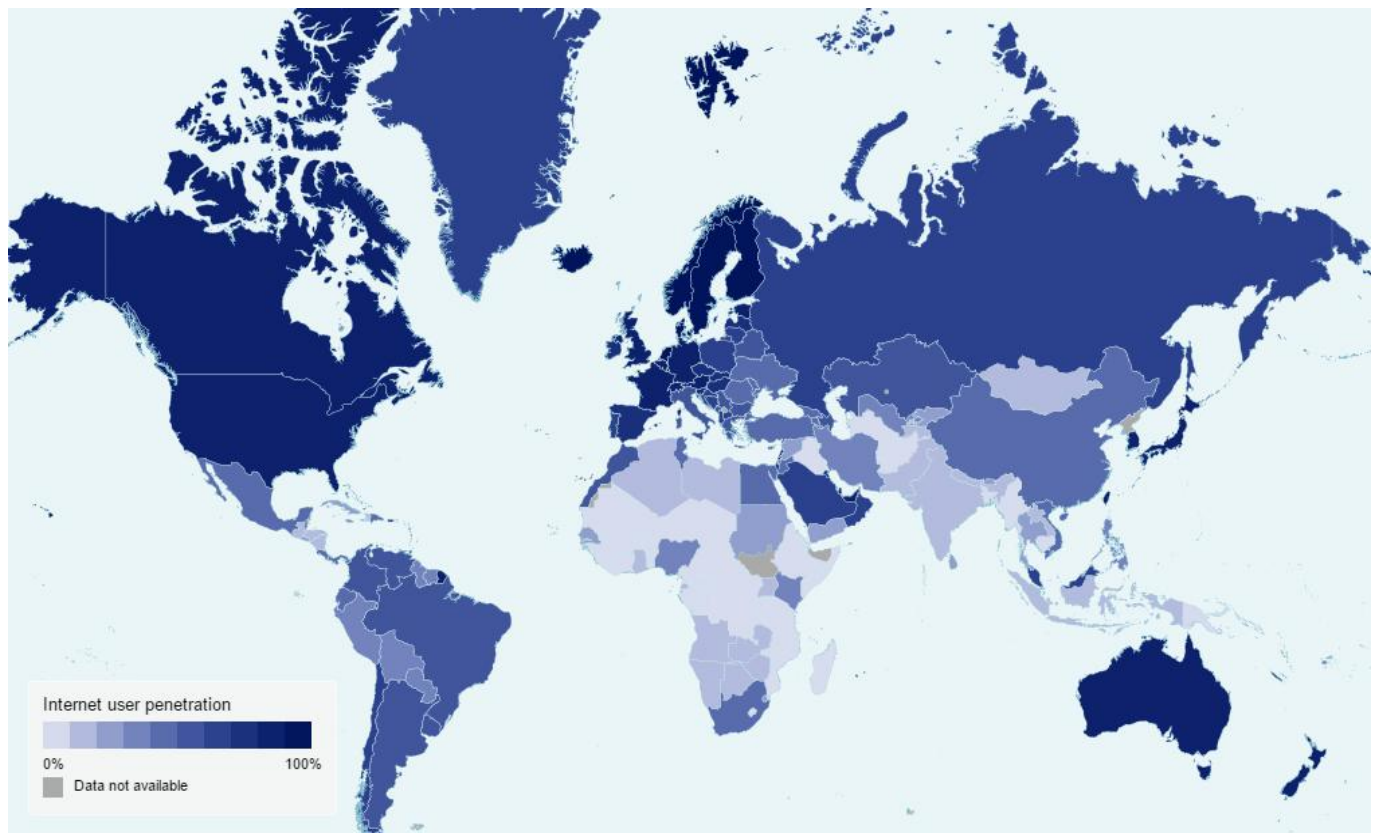
<sup>21</sup> SEC Adopts Rules to Permit Crowdfunding, Retrieved from: < <https://www.sec.gov/news/pressrelease/2015-249.html>>

popular among new companies or ventures with limited operating history, which cannot raise funds by issuing debt.<sup>22</sup>

Venture capital is fuel for new businesses and VC money raised for new real estate crowdfunding companies partly show that real the spectre of how fast real estate crowdfunding industry is growing.

### 2.6.3. Internet Penetration

While real estate crowdfunding is mainly internet-based, there is no doubt that internet penetration is one of the most important influencing factors. Global internet penetration by world region is shown in figure 6.

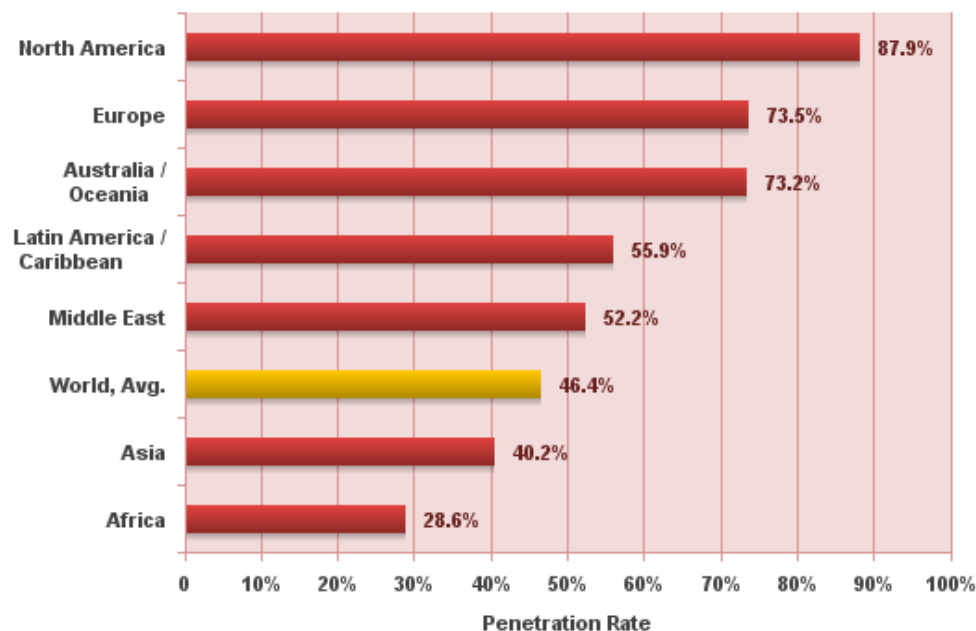


**Figure 6. Global Internet Penetration (Source: Internet Society, 2016)**

Internet penetration rates by geographic region are shown in figure 7. North America has highest internet penetration in the world, it demonstrates internet penetration rate of 87.9 %; Europe goes second demonstrating internet penetration rate of 73.5 %; comes Australia / Oceania region with internet penetration rate of 73.2 %; bellow stands Latin America / Caribbean region with internet penetration rate

<sup>22</sup> Investopedia. Retrieved from: < <http://www.investopedia.com/terms/v/venturecapital.asp> >

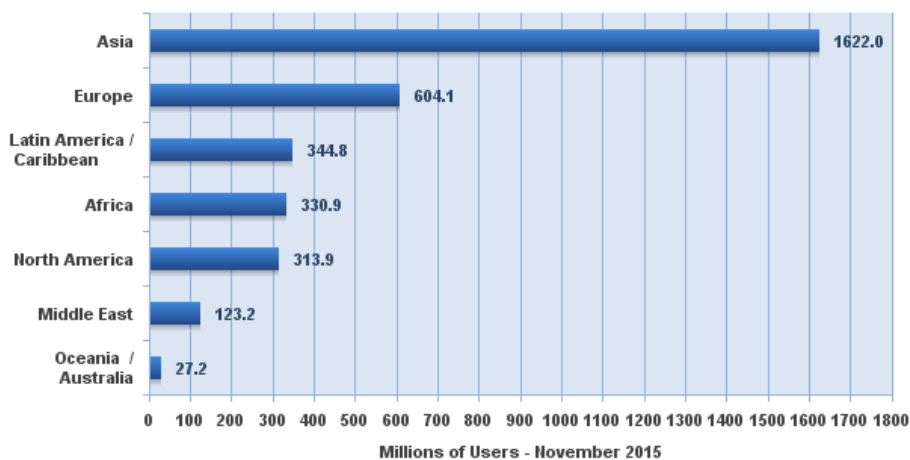
of 55.9 % and Middle East with internet penetration rate of 52.2 %. World average internet penetration is 46.4 %; less than average internet penetration rate has Asia with 40.2 % of it and the least is Africa with internet penetration rate of 28.6 %.



**Figure 7. Internet World Penetration Rates by Geographic Region<sup>23</sup>**

(Source: Internet World Stats, 2015)

Internet penetration rates have strong positive relation with distribution of real estate crowdfunding platforms. The numbers of internet users by geographic region are shown in figure 8.



**Figure 8. Internet Users in the World by Geographic Region<sup>24</sup>**

(Source: Internet World Stats, 2015)

<sup>23</sup> Penetration rates are based on a world population of 7,259,902,243 and 3,366,261,156 estimated Internet users on November 30, 2015.

<sup>24</sup> 3,366,261,156 estimated Internet users on November 30, 2015.

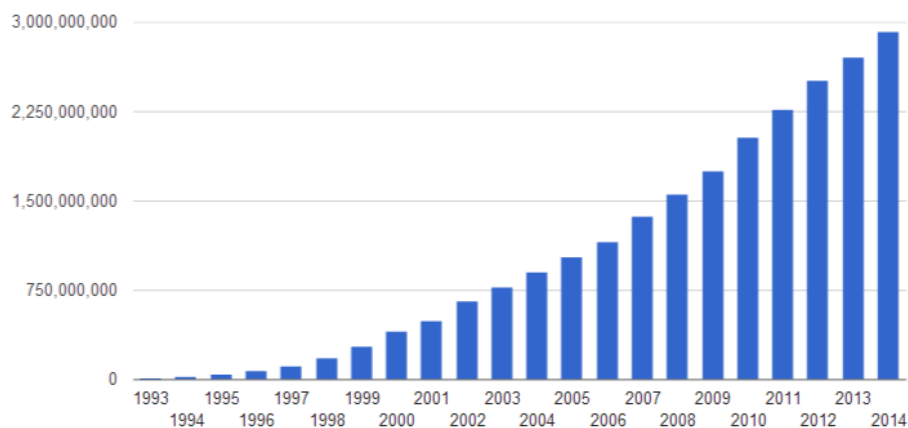
The numbers in figure 8 shows the direction of potential development of real estate crowdfunding and let to draw an inference that real estate crowdfunding is going from North America through Europe to Asia and then to rest of the world.

Detailed statistics of internet usage are provided in table 5.

**Table 5. Internet Usage and Population Statistics (Source: Internet World Stats, 2015)**

WORLD INTERNET USAGE AND POPULATION STATISTICS NOVEMBER 30, 2015 - Update						
World Regions	Population (2015 Est.)	Population % of World	Internet Users 30 Nov 2015	Penetration (% Population)	Growth 2000-2015	Users % of Table
<a href="#">Africa</a>	1,158,355,663	16.0 %	330,965,359	28.6 %	7,231.3%	9.8 %
<a href="#">Asia</a>	4,032,466,882	55.5 %	1,622,084,293	40.2 %	1,319.1%	48.2 %
<a href="#">Europe</a>	821,555,904	11.3 %	604,147,280	73.5 %	474.9%	18.0 %
<a href="#">Middle East</a>	236,137,235	3.3 %	123,172,132	52.2 %	3,649.8%	3.7 %
<a href="#">North America</a>	357,178,284	4.9 %	313,867,363	87.9 %	190.4%	9.3 %
<a href="#">Latin America / Caribbean</a>	617,049,712	8.5 %	344,824,199	55.9 %	1,808.4%	10.2 %
<a href="#">Oceania / Australia</a>	37,158,563	0.5 %	27,200,530	73.2 %	256.9%	0.8 %
<b>WORLD TOTAL</b>	<b>7,259,902,243</b>	<b>100.0 %</b>	<b>3,366,261,156</b>	<b>46.4 %</b>	<b>832.5%</b>	<b>100.0 %</b>

The growth of internet users by year is represented in figure 9. World population clock shows 7,421,265,555<sup>25</sup> people in the world and internet users clock shows, that 3,366,142,222<sup>26</sup> of them have internet access. And both these numbers are competing with each other in the race of world evolution. However, human intelligence is always winning and we may expect internet penetration might grow even faster.



**Figure 9. Internet Users Penetration (Internet Live Stats, 2015)**

The next subchapter represents social media penetration.

<sup>25</sup> Current World Population, Seen on 5 of May, 2016 at 22:22, Retrieved from: <<http://www.worldometers.info/world-population/>>

<sup>26</sup> Internet Users, Seen on 5 of May, 2016 at 22:22, Retrieved from: <<http://www.internetlivestats.com/internet-users/>>

## 2.6.4. Social Media Penetration

Real estate crowdfunding utilizes social media outlets to reach an audience of potential investors. Therefore, social media penetration was selected as one of influencing factor of real estate crowdfunding. Facebook and LinkedIn social media platforms were selected for the representation of social media penetration. Facebook is world leading social media platform with more than 1.5 billion users' base. The growth of Facebook users by year is show in figure 10.

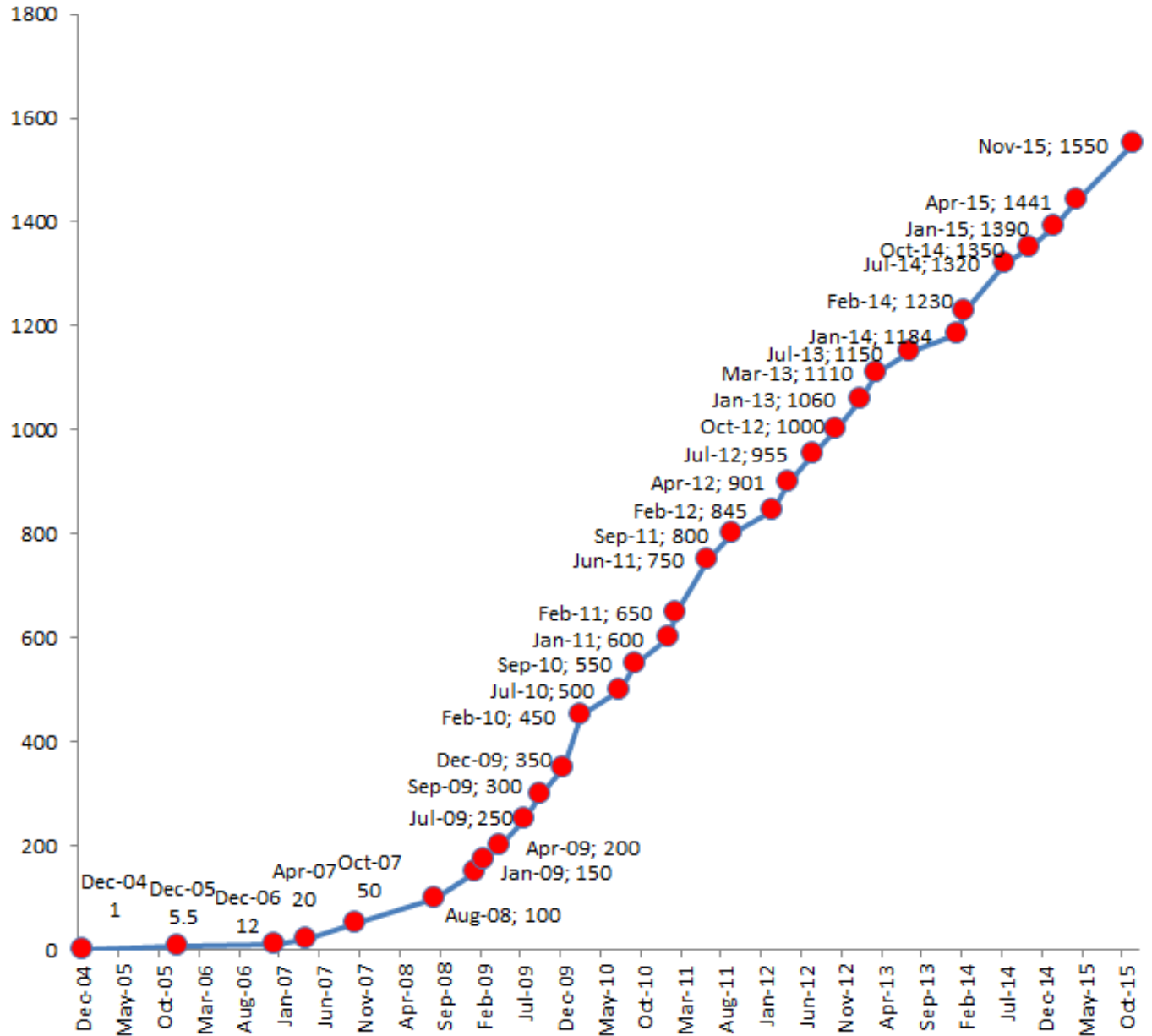
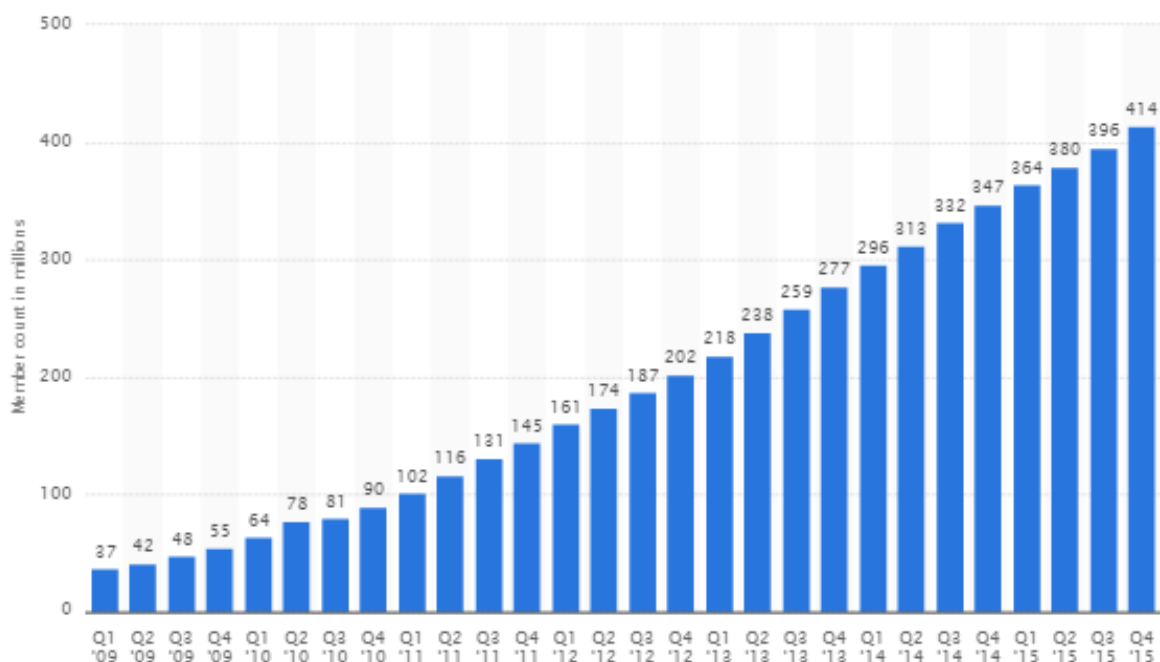


Figure 10. Facebook Users Penetration (Ben Foster, 2015)

LinkedIn is world largest professional social network for business persons. The LinkedIn membership grows by approximately two new members every second<sup>27</sup>. The growth of LinkedIn users by year is show in figure 11.



**Figure 11. LinkedIn Users Penetration (Statista, 2016)**

The next subchapter represents real estate market conditions.

### **2.6.5. Real Estate Market Conditions**

Since real estate crowdfunding is a tool for financing and investing to real estate projects it is clear that real estate market conditions have strong impact on real estate crowdfunding development. To describe real estate market conditions six real estate market indices were selected. Descriptions of each of them are provided below.

#### ***Dow Jones Global Select Real Estate Securities Total Return Gross Index***

The Dow Jones Select Real Estate Securities Indices (RESI) measure the performance of publicly traded real estate securities, and intend to serve as proxies for direct real estate investment. The regional indices represent only those securities traded in the indicated regions. The REIT indices are subsets of the

<sup>27</sup> "LinkedIn now adding two members every second". TechCrunch.com. Retrieved on October 31, 2011 from <<http://techcrunch.com/2011/08/04/linkedin-now-adding-two-new-members-every-second/>>.

real estate securities indices, and include only REIT and REIT-like securities. On any given day, the index value is the quotient of the total float-adjusted market capitalization of the index's constituents and its divisor. Continuity in index values is maintained by adjusting the divisor for all changes in the constituents' share capital after the base date. This includes additions and deletions to the index, rights issues, share buybacks and issuances, and spin-offs. The divisor's time series is, in effect, a chronological summary of all changes affecting the base capital of the index. The divisor is adjusted such that the index value at an instant just prior to a change in base capital equals the index value at an instant immediately following that change.<sup>28</sup>

Dow Jones Global Select Real Estate Securities Total Return Gross Index stated objective to measure the performance of publicly traded real estate securities. The indices are designed to serve as proxies for direct real estate investment, in part by excluding companies whose performance may be driven by factors other than the value of real estate. The Dow Jones Global Select Real Estate Securities Index (RESI) represents equity real estate investment trusts (REITs) and real estate operating companies (REOCs) traded globally. Key features:

❖ Inclusion Requirements:

- The company must be both an equity owner and operator of commercial and/or residential real estate.
- At least 75% of the company's total revenue must be derived from the ownership and operation of real estate assets.
- The company must have a minimum total market capitalization of USD 200 million at the time of its inclusion.
- The liquidity of the company's stock must be commensurate with that of other institutionally held real estate securities.

❖ Exclusions:

- Mortgage REITs, net-lease REITs, real estate finance companies, mortgage brokers and bankers, commercial and residential real estate brokers and estate agents, home builders, large landowners and sub-dividers of unimproved land, hybrid REITs and timber REITs.
- Companies that have more than 25% of their assets in direct mortgage investments.

❖ The Dow Jones Global Select Real Estate Securities Index was first calculated on March 21, 2006.

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<sup>28</sup> S&P Dow Jones Indices, Mc GRAW HILL Financial, "Dow Jones Select Real Estate Securities Indices Methodology". Retrieved from:

<[https://www.djindexes.com/mdsidx/downloads/meth\\_info/Dow\\_Jones\\_Select\\_Real\\_Estate\\_Indices\\_Methodology.pdf](https://www.djindexes.com/mdsidx/downloads/meth_info/Dow_Jones_Select_Real_Estate_Indices_Methodology.pdf)>



Country allocation of Dow Jones Global Select Real Estate Securities is provided in table 6.

**Table 6. Dow Jones Global Select Real Estate Securities Total Return Gross Index Country Allocation<sup>29</sup> (Source: S&P Dow Jones Indices LLC, 2016)**

United States	59.57%
Japan	9.43%
Australia	5.63%
United Kingdom	5.50%
France	4.34%
Canada	4.27%
Hong Kong	3.07%
Singapore	2.72%
Philippines	1.05%
Switzerland	0.96%
Sweden	0.59%
South Africa	0.56%
Netherlands	0.51%
Austria	0.48%
Belgium	0.36%
New Zealand	0.36%
Thailand	0.19%
Brazil	0.18%
Italy	0.11%
Malaysia	0.06%
Poland	0.04%
Turkey	0.03%

<sup>29</sup> Data calculated in USD as of end of March, 2016.

All calculated period of Dow Jones Global Select Real Estate Securities Total Return Gross Index is shown in figure 12.



**Figure 12. Dow Jones Global Select Real Estate Securities Total Return Gross Index**  
(Source: Google Finance, 2016)

### ***Dow Jones Real Estate Titans 30<sup>TM</sup> Index***

Dow Jones Real Estate Titans 30 Index stated objective is to represent leading companies in the global real estate sector. Key features:

- The index includes 30 stocks selected based on rankings by float-adjusted market capitalization, revenue and net profit.
- The index covers the Real Estate Super Sector of the proprietary classification system described at [www.djindexes.com](http://www.djindexes.com).
- The Dow Jones Real Estate Titans30<sup>TM</sup> Index was first calculated on June 20, 2008.

Country allocation of Dow Jones Real Estate Titans 30<sup>TM</sup> Index is provided in table 7.

**Table 7. Dow Jones Real Estate Titans 30<sup>TM</sup> Index Country Allocation<sup>30</sup>**

(Source: S&P Dow Jones Indices LLC, 2016)

United States	63.92%
Hong Kong	9.68%
Japan	9.64%
Canada	4.53%
France	4.03%
United Kingdom	3.43%
Australia	2.72%
China	2.05%

All calculated period of Dow Jones Real Estate Titans 30<sup>TM</sup> Index is shown in figure 13.



**Figure 13. Dow Jones Real Estate Titans 30<sup>TM</sup> Index (Source: Google Finance, 2016)**

### ***Dow Jones U.S. Real Estate Index***

Dow Jones U.S. Real Estate Index measures the performance of the real estate industry of the U.S. equity market. All calculated period of Dow Jones U.S. Real Estate Index is shown in figure 14.

<sup>30</sup> Data calculated in USD as of end of March, 2016.



**Figure 14. Dow Jones U.S. Real Estate Index (Source: Google Finance, 2016)**

***Dow Jones U.S. Real Estate Investment Trusts Index***

Dow Jones U.S. Select Real Estate Securities Index (RESI), which represents equity real estate investment trusts (REITs) and real estate operating companies (REOCs) traded in the U.S. The indices are designed to serve as proxies for direct real estate investment, in part by excluding companies whose performance may be driven by factors other than the value of real estate. All calculated period Dow Jones U.S. Real Estate Investment Trusts Index is shown in figure 15.



**Figure 15. Dow Jones U.S. Real Estate Investment Trusts Index (Source: Google Finance, 2016)**

### ***Dow Jones Europe Select Real Estate Securities Total Return Net Index***

Dow Jones Europe Select Real Estate Securities Total Return Net Index stated objective is to measure the performance of publicly traded real estate securities. The indices are designed to serve as proxies for direct real estate investment, in part by excluding companies whose performance may be driven by factors other than the value of real estate. The Dow Jones Europe Select Real Estate Securities Total Return Net Index represents equity real estate investment trusts (REITs) and real estate operating companies (REOCs) traded in the European region. Dynamics of Dow Jones Europe Select Real Estate Securities Total Return Net Index is provided below in figure 16.



**Figure 16. Dow Jones Europe Select Real Estate Securities Total Return Net Index**

**(Source: Google Finance, 2016)**

### ***SSE Real Estate Index***

SSE Real Estate Index is consisted of securities of real estate companies listed in Shanghai Stock Exchange. The index was launched on March 26, 1999. All calculated SSE Real Estate Index is shown in figure 17.



**Figure 17. SSE Real Estate Index (Source: Google Finance, 2016)**

The next subchapter illustrates the framework of the thesis.

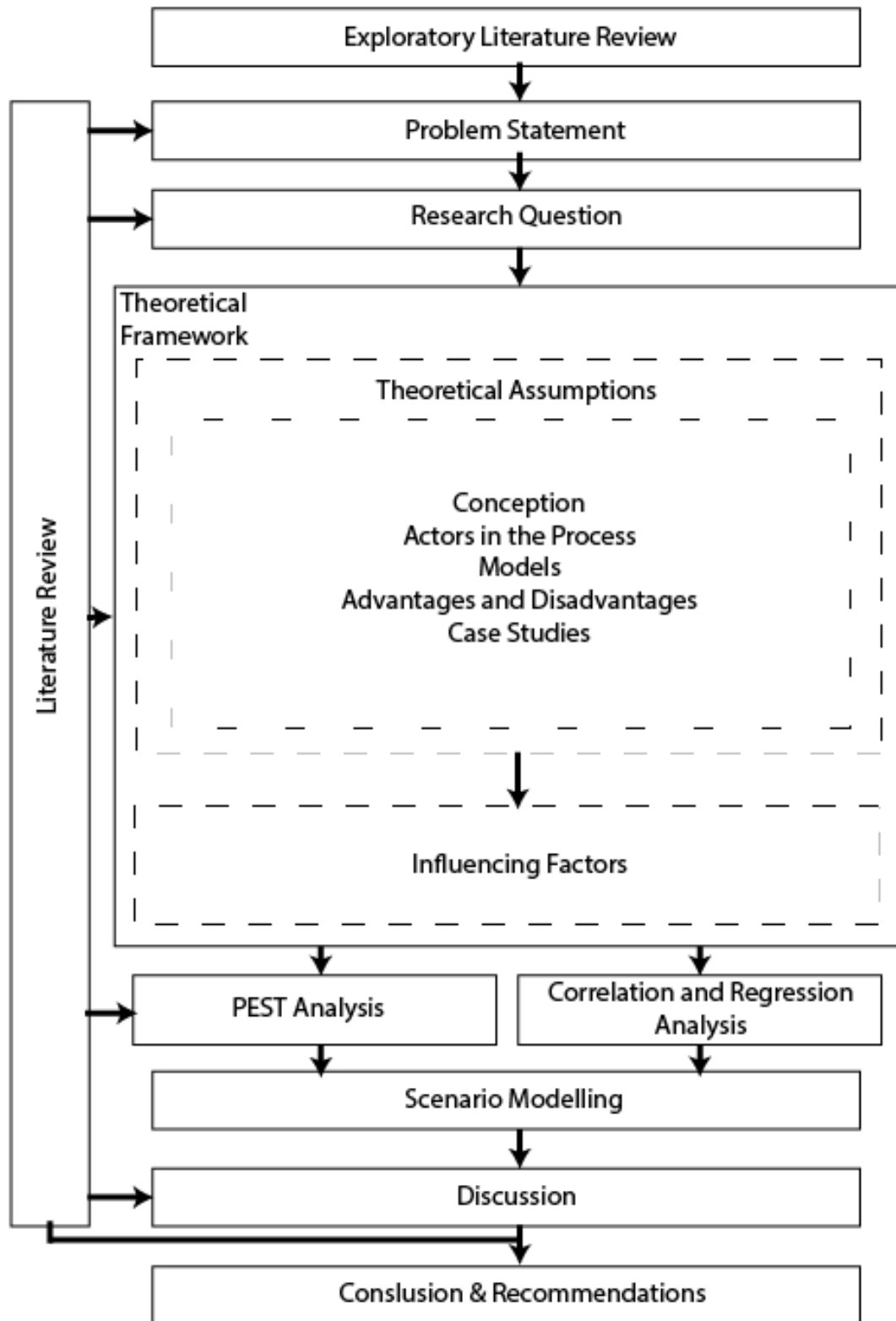
## **2.7. Theoretical Framework of Real Estate Crowdfunding**

The idea this research was formulated trying to bridge the broad spectre of author's interests: real estate, innovation and networking. This study has begun with exploratory literature review. After exploring various sources of literature the problem was stated and the research question was set.

Theoretical assumptions were laid down by analysing the conception of research object from two different perspectives: as capital source and as an investment. Then actors in the process were indentified and described. Literature defined four different models of crowdfunding phenomenon. Accompanied by literature analysis cons and pros of whole crowdfunding and real estate crowdfunding specifically were described. In order to see clear picture case studies were analysed. After that, main influencing factors affecting the development of real estate crowdfunding phenomenon were identified, which were used further in the research.

Dependence was verified with correlation analysis and regressional models were built. PEST analysis was included to demonstrate broader spectre of influencing factors. And scenarios were modelled in order to answer the research question. The results and limitations were discussed. And summarizing conclusions and recommendations were provided. Literature was constantly reviewed during all the study.

Theoretical framework of the research is provided bellow in figure 18.



**Figure 18. Framework of Real Estate Crowdfunding Research (Composed by Author, 2016)**

The next chapter explain the research methodology.

### **3. RESEARCH METHODOLOGY OF REAL ESTATE CROWDFUNDING**

This chapter describes research methodology used conducting this thesis. The chapter divided into subchapters as follow: mixed methods research; research design; data types and data collection procedures; sample selection strategy and data analysis and validation procedures.

#### **3.1. Mixed Methods Research**

Mixed methods research is more specific in that it includes the mixing of qualitative and quantitative data, methods, methodologies, and/or paradigms in a research study or set of related studies. The concept of mixing different methods probably originated in 1959, when Campbell and Fiske used multiple methods to study validity of psychological traits (Creswell, 2003). Recognizing that all methods have limitations, researchers felt that biases inherent in any single method could neutralize or cancel the biases of other methods (Creswell, 2003).

The essential goal of mixed methods research is to tackle a given research question from any relevant angle, making use where appropriate of previous research and/or more than one type of investigative perspective. Sometimes referred to as mixed methodology, multiple methodology or multi-methodology research, mixed methods research offers you the best of both worlds: the in-depth, contextualized, and natural but more time-consuming insights of qualitative research coupled with the more-efficient but less rich or compelling predictive power of quantitative research.

These approaches are far more comprehensive than attacking a problem from only one point of view and, with the emergence of strategies and tools for blending these different types of data, allow for the crossing of disciplinary boundaries like never before.<sup>31</sup>

The main quantitative scientific tools adopted to tackle research question is correlation and regression analysis, and scenario modelling. Fill the gap left by quantitative tools, qualitative PEST (Political, Economic, Social, and Technological) analysis was applied.

#### **3.2. Research Design**

The type of this mixed method research design is Sequential explanatory design. This design involves the collection and analysis of quantitative data followed by the collection and analysis of

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<sup>31</sup> Dedoose. Retrieved from: <<http://dwww.dedoose.com/blog/2012/10/what-is-mixed-methods-research/>>



qualitative data. The priority is given to the quantitative data, and the findings are integrated during the interpretation phase of the study.<sup>32</sup>

The structure of this research began with exploratory literature review from where problem statement and research question arose. To get better understanding of real estate crowdfunding phenomenon theoretical assumptions, such as conception; actors in the process; models; advantages and disadvantages and cases were analyzed. After that influencing factors of real estate crowdfunding were indentified. Correlation, regression and PEST analysis were used to model possible scenarios. Then discussed issues and limitations of the research, and finally provided conclusions and recommendations.

### **3.3. Data Types and Data Collection Procedures**

Data types aggregated in this research are quantitative and qualitative. By mixing both quantitative and qualitative research and data, the researcher gains in breadth and depth of understanding and corroboration, while offsetting the weaknesses inherent to using each approach by itself. One of the most advantageous characteristics of conducting mixed methods research is the possibility of triangulation, i.e., the use of several means (methods, data sources and researchers) to examine the same phenomenon. Triangulation allows one to identify aspects of a phenomenon more accurately by approaching it from different vantage points using different methods and techniques.<sup>33</sup>

Quantitative data were collected from various research reports, databases and financial terminal. Qualitative data were collected synthesized through exploratory literature review and experts' interview review.

### **3.4. Sample Selection Strategy**

As the best fit to answer main research question, dependent variable was selected investment value of real estate crowdfunding (in US\$). The timeline of these investments is quite short. It stands from 2010 to 2015. Influencing factors of real estate crowdfunding and of total amount of investment were indentified through literature review and theoretical assumptions. Namely, they are legal environment; venture capital investments to real estate crowdfunding platforms; internet penetration; social media penetration; and real estate market conditions. As independent variables, to represent these factors for the analysis stand internet users; Facebook users; LinkedIn users; Dow Jones Global Select Real Estate Securities Total

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<sup>32</sup> Resource Centre. Retrieved from: < [http://resourcecentre.foodrisc.org/mixed-methods-research\\_185.html](http://resourcecentre.foodrisc.org/mixed-methods-research_185.html)>

<sup>33</sup> Resource Centre. Retrieved from: < [http://resourcecentre.foodrisc.org/mixed-methods-research\\_185.html](http://resourcecentre.foodrisc.org/mixed-methods-research_185.html)>

Return Gross Index; Dow Jones Real Estate Titans 30<sup>TM</sup> Index; Dow Jones U.S. Real Estate Index; Dow Jones U.S. Real Estate Investment Trusts Index; Dow Jones U.S. Real Estate Investment Trusts Index; Dow Jones Europe Select Real Estate Securities Total Return Net Index; SSE Real Estate Index.

No method is used to quantify the legal environment of real estate crowdfunding. The author searched this area, but answer wasn't found how to get quantitative data for the research. The amount of venture capital invested to real estate crowdfunding platforms was calculated using several available sources. But the author could not verify that is relevant for further analysis. To represent social media penetration Facebook was selected as leading social media platform and LinkedIn as leading business social network. Whereas this study analyses real estate crowdfunding as global phenomenon, to represent global real estate market conditions six real estate market indices were selected.

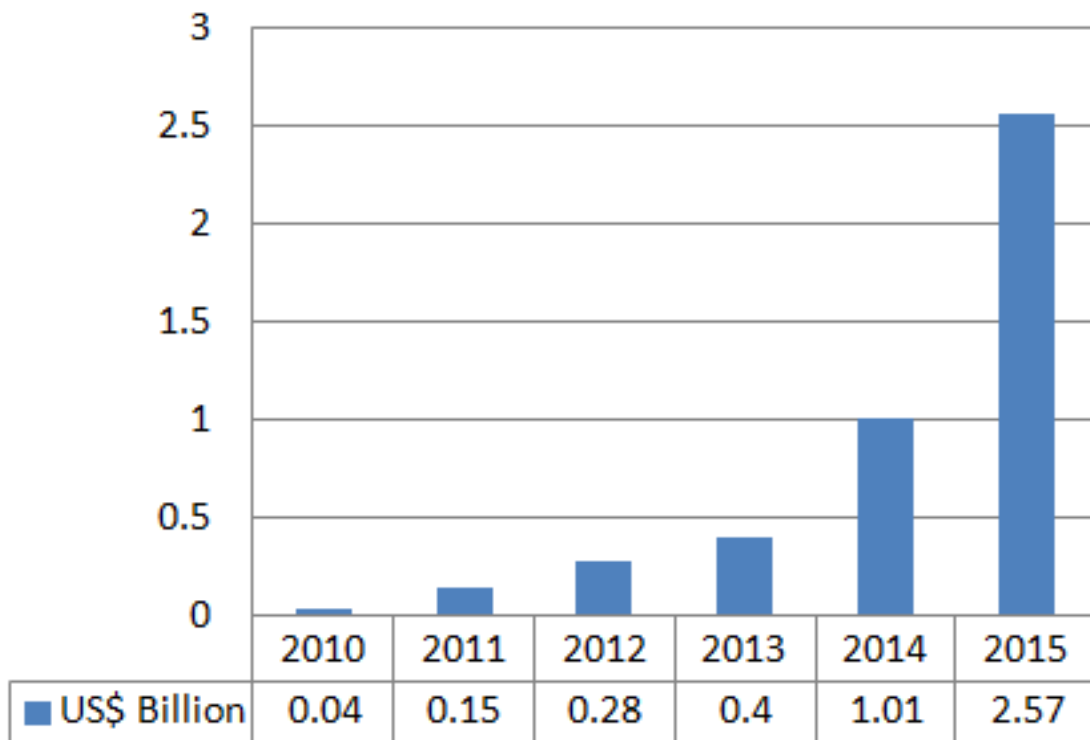
### **3.5. Data Analysis and Validation Procedures**

Numeric data collected in a research project can be analyzed quantitatively using statistical tools (Bhattacharjee, 2012). This research used correlation and regression analysis with MS Excel computer software. After considering research results to be irrelevant, PEST analysis was applied. One of the most important issues of the development of real estate crowdfunding is legal environment. And PEST analysis takes it into account. The next chapter examines the results of the research.

## 4. RESULTS OF REAL ESTATE CROWDFUNDING RESEARCH AND DISCUSSION

This chapter explain and discuss the results of real estate crowdfunding research. And is composed as follow: firstly, data of influencing factors were analysed; then correlation analysis between impact factors and amount of investments was charted; regression model of real estate crowdfunding investment were built; scenario modelled and PEST analysis of real estate crowdfunding included; to summarize, the result and limitations were discussed.

The timeline of this research is from 2010, the launch of Fundrise in U.S., the first real estate crowdfunding platform, to 2015, the last year data are possibly available. The value of real estate crowdfunding was selected as a dependent variable in this research. Data show the exponential growth of real estate crowdfunding investments. The value of real estate crowdfunding investments by year is illustrated bellow in figure 19.

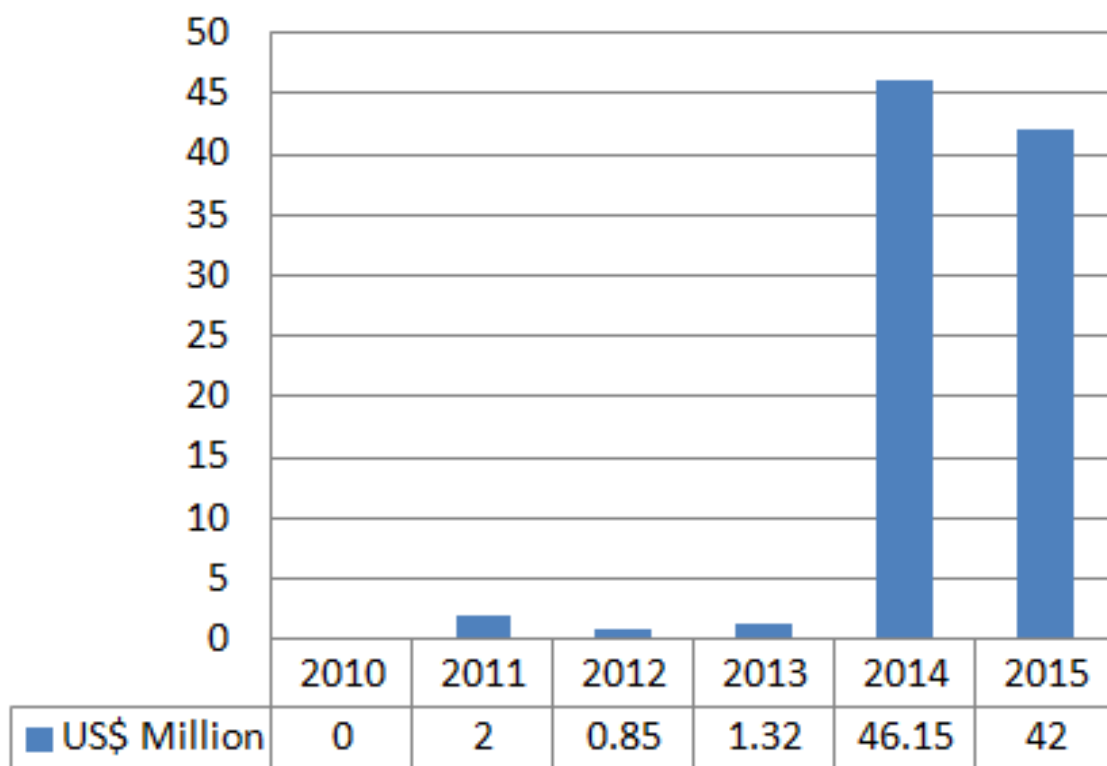


**Figure 19. Value of Real Estate Crowdfunding Investments**  
(Sources: Massolution; Crowdbnk, 2016)

The next subchapter explains data of influencing factors of real the development of real estate crowdfunding.

## 4.1. Data Analysis of Influencing Factors

Bellow are provided data that represents influencing factors. That is venture capital investments to real estate crowdfunding platforms (Figure 20.); internet users' growth (Figure 21.); Facebook users' growth (Figure 22.); LinkedIn users' growth (Figure 23.); Dow Jones Real Estate Titans 30 Index (Figure 24.); Dow Jones Global Select Real Estate Securities Total Return Gross Index (Figure 25.); Dow Jones U.S. Real Estate Index (Figure 26.); Dow Jones U.S. Real Estate Investment Trusts Index (Figure 27); Dow Jones Europe Select Real Estate Securities Total Return Net Index (Figure 28.); and SEE Real Estate Index (Figure 29.). The values of real estate market indices are calculated by highest point in given year.

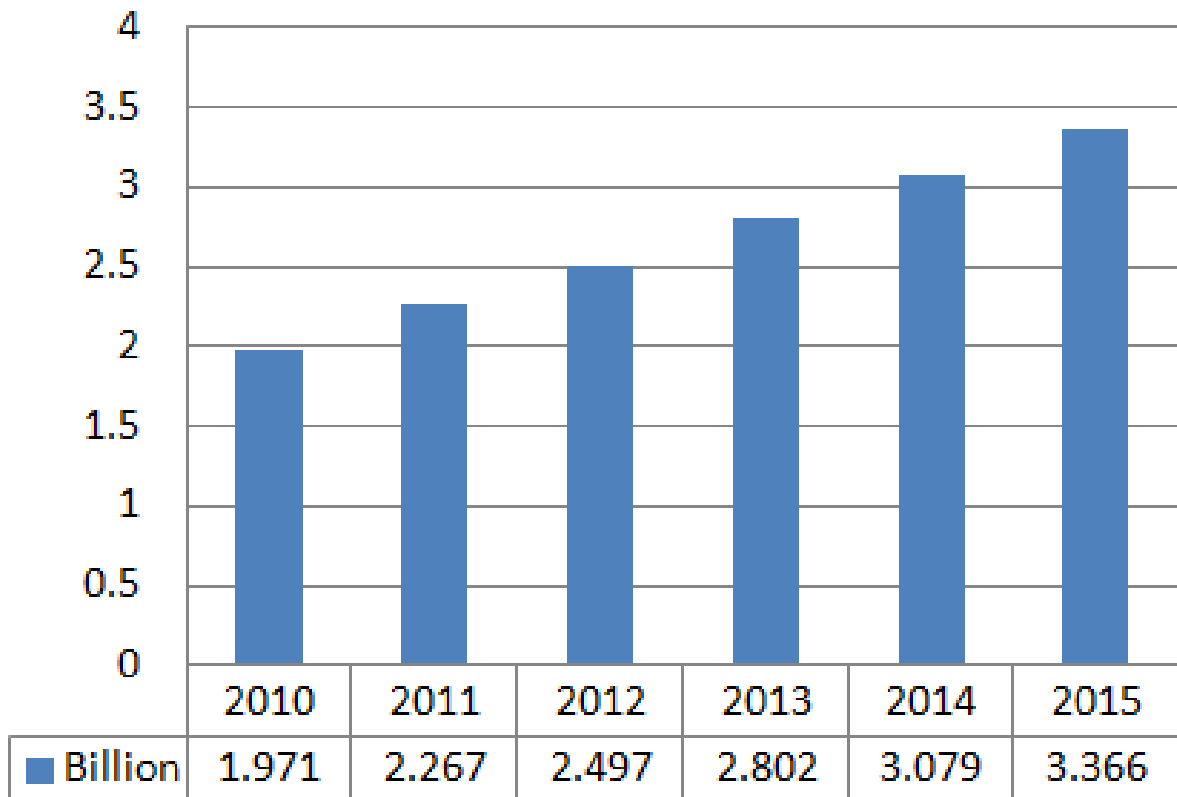


**Figure 20. Global Venture Capital Investments to Real Estate Crowdfunding Platforms**  
(Composed by Author; Sources: Angel.co, Wall Street Journal, 2016)

Various sources were used to find data of venture capital investments to real estate crowdfunding platforms, but reliability of the results is questionable, because not all data are publicly announced. For 2010 no data about venture capital investments to real estate crowdfunding platforms were found; for 2011 2 million USD, according these data, were invested from venture capital; 0.85 million USD in 2012; 1.32 million in 2013; 46.15 million USD in 2014 and 42 million USD in 2015. There is highly probable,

that these findings not represented clear picture about venture capital investments to real estate crowdfunding. Therefore, these results are not used for further analysis.

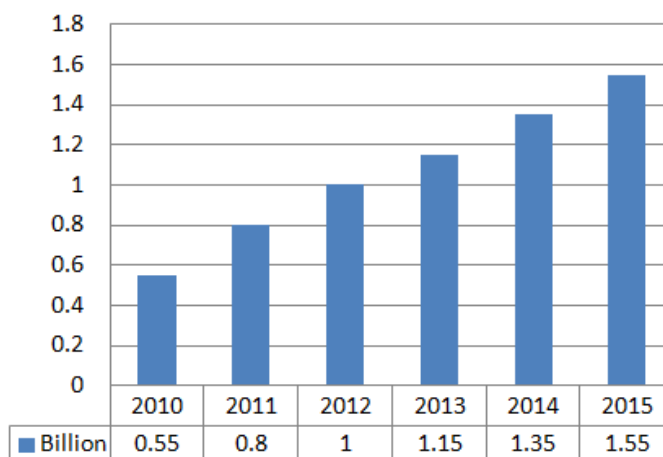
This statistics in figure 21 provide information of the total number of worldwide internet users from 2010 to 2015. As of the most recent reported period, the number of internet users worldwide was 3.366 billion, up from 3.079 billion in the previous year and up from 1.971 from 2010. The year 2011, 2012 and 2013 represent the worldwide internet user respectively: 2.267, 2.497 and 2.802 billion.



**Figure 21. Internet Users Growth Statistics**  
 (Composed by Author; Source: Internet World Stats, 2016)

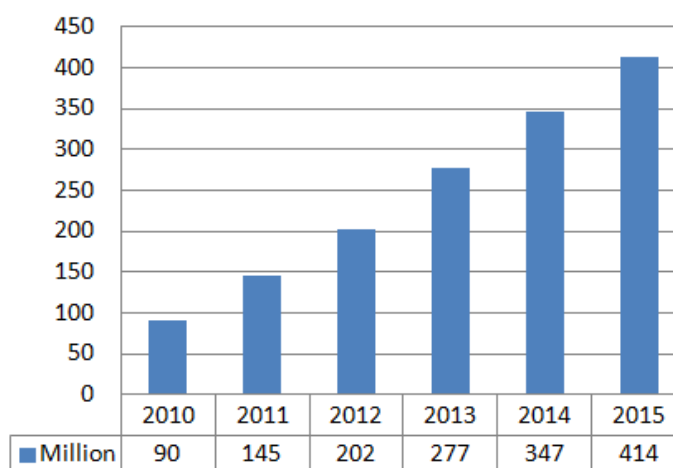
The results show constant growth of internet users worldwide by 11 % moderately. There likely will be constant growth of these data, at least until it reach the mark of 7 billion or even more knowing that world population is constantly growing too.

Figure 22 shows Facebook users' growth statistics. These data are collected from Ben Foster calculations. The last given number in given years was taken. The graph represents the number of Facebook users' from 2010 to 2015. In 2010 were estimated 0.55 billion Facebook user; in 2011 – 0.8 billion; in 2012 – 1 billion; in 2013 – 1.15 billion; in 2014 – 1.35 billion and in 2015 – 1.55 billion. It seems Facebook CEO, Mark Zuckerberg, do not has intention to stop adding users for his social network.



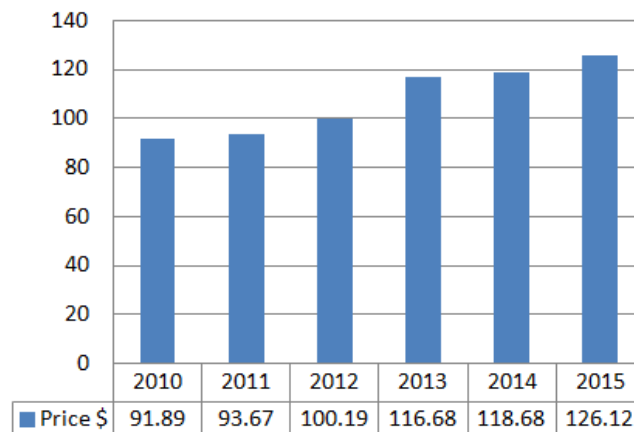
**Figure 22. Facebook Users Growth Statistics (Composed by Author; Source: Ben Foster, 2016)**

Figure 23 represents LinkedIn users' growth statistics. These data are collected from Statista database. The graph represents the number of LinkedIn users' from 2010 to 2015. In 2010 were estimated 90 million LinkedIn user; in 2011 – 145 million; in 2012 – 202 million; in 2013 – 277 million; in 2014 – 347 million and in 2015 – 414 million. The number of LinkedIn users is and likeably remain not as high as Facebook users, because LinkedIn is business orientated social network and users here are not so active as in Facebook, but the net worth of these individual are presumably much higher.



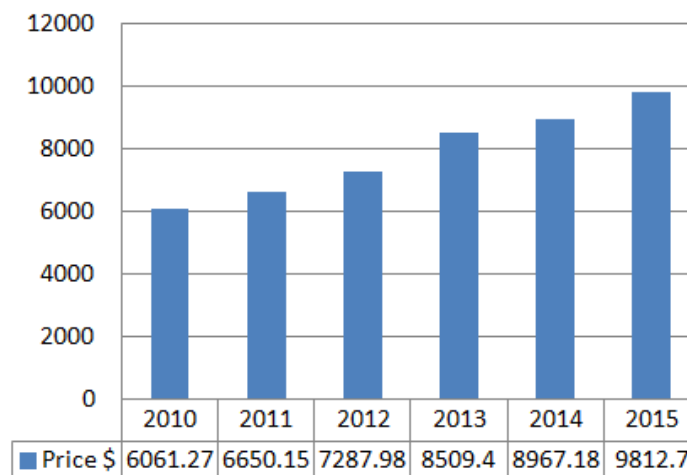
**Figure 23. LinkedIn Users Growth (Composed by Author; Statista, 2016)**

Figure 24 shows Dow Jones Real Estate Titans 30<sup>TM</sup> Index. These data are collected from Google Finance database. To represent index value of given year the highest year point of the index was taken. The graph illustrates index value from 2010 to 2015. The highest point of Dow Jones Real Estate Titans 30<sup>TM</sup> Index in 2010 was at 91.89; in 2011 – at 93.67; in 2012 – at 100.19; in 2013 – at 116.68; in 2014 – at 118.68 and in 2015 – at 126.12.



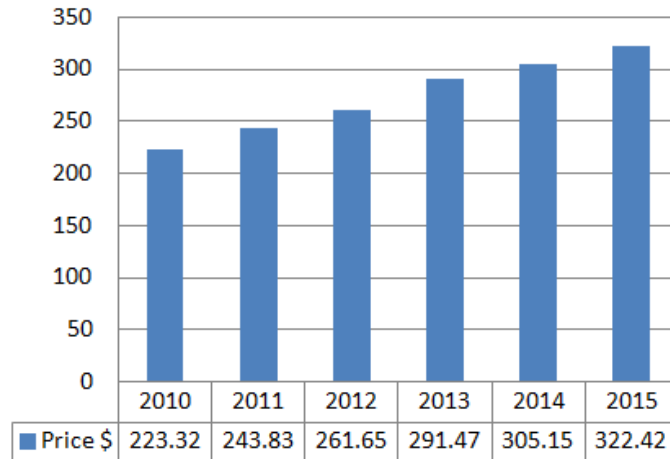
**Figure 24. Dow Jones Real Estate Titans 30<sup>TM</sup> Index**  
(Composed by Author; Source: Google Finance, 2016).

Figure 25 shows Dow Jones Global Select Real Estate Securities Total Return Gross. These data are collected from Google Finance database. To represent index value of given year the highest year point of the index was taken. The graph illustrates index value from 2010 to 2015. The highest point of Dow Jones Global Select Real Estate Securities Total Return Gross Index in 2010 was at 6061.27; in 2011 – at 6650.15; in 2012 – at 7287.98; in 2013 – at 8509.4; in 2014 – at 8967.18 and in 2015 – at 9812.7.



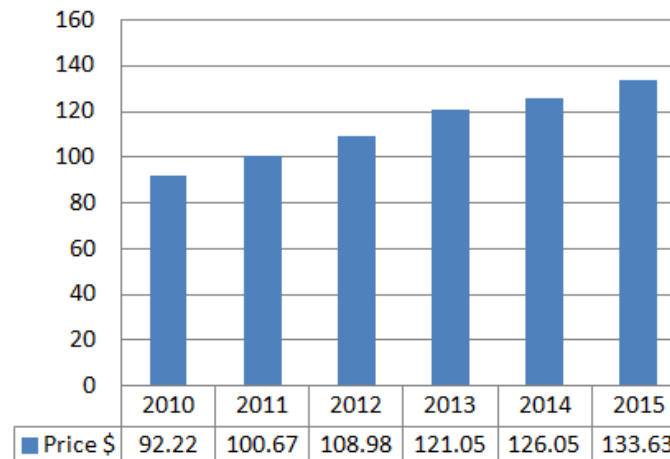
**Figure 25. Dow Jones Global Select Real Estate Securities Total Return Gross Index**  
(Composed by Author; Source: Google Finance, 2016).

Figure 26 shows Dow Jones U.S. Real Estate Index. These data are collected from Google Finance database. To represent index value of given year the highest year point of the index was taken. The graph illustrates index value from 2010 to 2015. The highest point of Dow Jones U.S. Real Estate Index in 2010 was at 223.32; in 2011 – at 243.83; in 2012 – at 261.65; in 2013 – at 291.47; in 2014 – at 305.15 and in 2015 – at 322.42.



**Figure 26. Dow Jones U.S. Real Estate Index (Composed by Author; Source: Google Finance, 2016)**

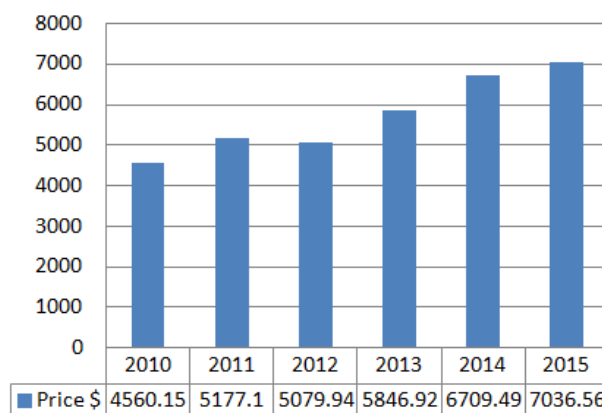
Figure 27 shows Dow Jones U.S. Real Estate Investment Trusts Index. These data are collected from Google Finance database. To represent index value of given year the highest year point of the index was taken. The graph illustrates index value from 2010 to 2015. The highest point of Dow Jones U.S. Real Estate Investment Trusts Index in 2010 was at 92.22; in 2011 – at 100.67; in 2012 – at 100.98; in 2013 – at 121.05; in 2014 – at 126.05 and in 2015 – at 133.63.



**Figure 27. Dow Jones U.S. Real Estate Investment Trusts Index (Composed by Author; Source: Google Finance, 2016)**

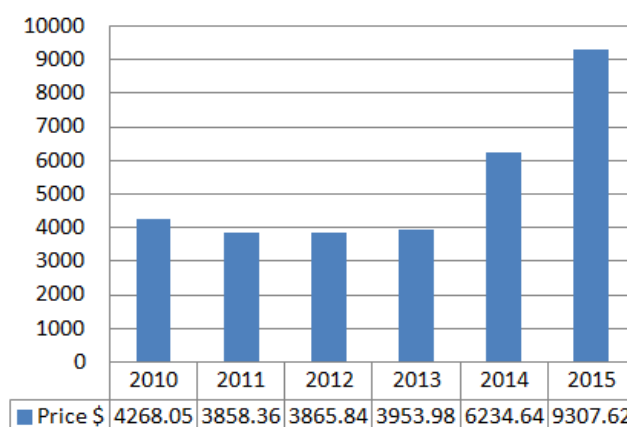


Figure 28 shows Dow Jones Europe Select Real Estate Securities Total Return Net Index. These data are collected from Google Finance database. To represent index value of given year the highest year point of the index was taken. The graph illustrates index value from 2010 to 2015. The highest point of Dow Jones Europe Select Real Estate Securities Total Return Net Index in 2010 was at 4560.15; in 2011 – at 5177.1; in 2012 – at 5079.94; in 2013 – at 5846.92; in 2014 – at 6709.49 and in 2015 – at 7036.56.



**Figure 28. Dow Jones Europe Select Real Estate Securities Total Return Net Index**  
(Composed by Author; Source: Google Finance, 2016)

Figure 29 shows SEE Real Estate Index. These data are collected from Google Finance database. To represent index value of given year the highest year point of the index was taken. The graph illustrates index value from 2010 to 2015. The highest point of SEE Real Estate Index in 2010 was at 4268.05; in 2011 – at 3858.36; in 2012 – at 3865.84; in 2013 – at 3953.98; in 2014 – at 6234.64 and in 2015 – at 9307.62.



**Figure 29. SEE Real Estate Index** (Composed by Author; Source: Google Finance, 2016)

All findings provided above represent the growth trend. The next subchapter analyze correlation between these data.

## 4.2. Correlation Analysis between Impact Factors and Amount of Investments

Dependant variable (y) is real estate crowdfunding investments. Correlation analysis conducted with independent variables (x) such as internet users' penetration; social networks Facebook and LinkedIn users' penetration; and real estate market indices like: Dow Jones Real Estate Titans 30 Index; Dow Jones Global Select Real Estate Securities Total Return Gross Index; Dow Jones U.S. Real Estate Index; Dow Jones U.S. Real Estate Investment Trusts Index; Dow Jones Europe Select Real Estate Securities Total Return Net Index and SSE Real Estate index. Data used in correlation analysis provided in table 8.

**Table 8. Data Used in Correlation Analysis (Collected and composed by Author, 2016)**

	Unit	2010	2011	2012	2013	2014	2015	
y (dependant variable)	Real Estate Crowdfunding Investments	\$BN	0.04	0.15	0.28	0.4	1.01	2.57
x1 (independent variable)	Internet Users Penetration	\$BN	1.971	2.267	2.497	2.802	3.079	3.366
x2 (independent variable)	Facebook Users Penetration	\$BN	0.55	0.8	1	1.15	1.35	1.55
x3 (independent variable)	LinkedIn Users Penetration	\$BN	0.09	0.145	0.202	0.277	0.347	0.414
x4 (independent variable)	Dow Jones Real Estate Titans 30 Index	\$	91.89	93.67	100.19	116.68	118.68	126.12
x5 (independent variable)	Dow Jones Global Select Real Estate Securities Total Return Gross Index	\$	6061.27	6650.15	7287.98	8509.4	8967.18	9812.7
x6 (independent variable)	Dow Jones U.S. Real Estate Index	\$	223.32	243.83	261.65	291.47	305.15	322.42
x7 (independent variable)	Dow Jones U.S. Real Estate Investment Trusts Index	\$	92.22	100.67	108.98	121.05	126.05	133.63
x8 (independent variable)	Dow Jones Europe Select Real Estate Securities Total Return Net Index	\$	4560.15	5177.1	5079.94	5846.92	6709.49	7063.56
x9 (independent variable)	SSE Real Estate Index	\$	4268.05	3858.36	3865.84	3953.98	6234.64	9307.62

The results of correlation analysis are provided in table 9.

**Table 9. Results of Correlation Analysis  
(Calculated with MS Excel and composed by Author, 2016)**

	y	x1	x2	x3	x4	x5	x6	x7	x8	x9
y (Real Estate Crowdfunding Investments)	1									
x1 (Internet Users Penetration)	0.862407	1								
x2 (Facebook Users Penetration)	0.84979	0.997028	1							
x3 (LinkedIn Users Penetration)	0.869995	0.999026	0.993519	1						
x4 (Dow Jones Real Estate Titans 30 Index )	0.815448	0.972736	0.956789	0.977378	1					
x5 (Dow Jones Global Select Real Estate Securities Total Return Gross Index)	0.848963	0.994791	0.98657	0.995727	0.990883	1				
x6 (Dow Jones U.S. Real Estate Index)	0.822769	0.995699	0.991285	0.994455	0.984407	0.99764	1			
x7 (Dow Jones U.S. Real Estate Investment Trusts Index)	0.819098	0.994737	0.991484	0.993084	0.983526	0.996953	0.999704	1		
x8 (Dow Jones Europe Select Real Estate Securities Total Return Net Index)	0.871396	0.976361	0.963079	0.978767	0.94895	0.969013	0.96601	0.959831	1	
x9 (SSE Real Estate Index)	0.98091	0.799225	0.778801	0.813154	0.755333	0.783725	0.752364	0.745248	0.839508	1

There is seen strong correlation between all variables. The strongest correlation between dependent (y) and independent variable (x) is between Real estate crowdfunding Investment and SSE Real Estate Index. Real estate crowdfunding investments (y) are mostly U.S. based. SSE Real Estate Index (x<sub>9</sub>) is consisted of securities of real estate companies listed in Shanghai Stock Exchange, mostly of Asian real estate companies. This strong correlation might be only because of sharp growth of both variables in 2015 and this may be conditioned by distinct factors. Therefore, in building regressional models SSE Real

Estate Index ( $x_9$ ) is replaced by other variables. The next subchapter explains the results of regression analysis.

### 4.3. Building Regressional Models of Real Estate Crowdfunding Investments

Notwithstanding correlation analysis for regressional models are using independent variables which have logically the biggest impact for the development of dependant variable. Further for first regressional model are used independent variables such as internet users' penetration; LindedIn users' penetration and Dow Jones U.S. Real Estate Investment Trusts Index. First regressional model results provided in table 10.

**Table 10. First regressional Model Results**  
(Calculated with MS Excel and composed by Author, 2016)

Multiple R	0.951433073							
R Square	0.905224893							
Adjusted R Square	0.763062233							
Standard Error	0.466230261							
Observations	6							
<b>ANOVA</b>								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	3	4.15234202	1.384114007	6.367529219	0.138739098			
Residual	2	0.434741313	0.217370657					
Total	5	4.587083333						
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	12.7309653	14.94622464	0.851784689	0.484054563	-51.57744893	77.03937952	-51.57744893	77.03937952
x1	2.27916684	10.54324253	0.216173235	0.848897534	-43.0847444	47.64307808	-43.0847444	47.64307808
x3	24.11810828	38.8119218	0.621409793	0.597719288	-142.876113	191.1123296	-142.876113	191.1123296
x7	-0.210863824	0.129834063	-1.624102483	0.245843134	-0.769494707	0.34776706	-0.769494707	0.34776706

In order to create forecast scenarios P-value of dependent variables suppose to be less than 0.05. Therefore, this model is unusable for scenario modelling and the Author excluded dependent variable with the highest P-value. For second regressional model were used dependent variables such as, LinkedIn users' penetration ( $x_3$ ) and Dow Jones U.S. Real Estate Investment Trusts Index ( $x_7$ ). The results of second regressional model are provided in bellow table 11.

**Table 11. Second Regressional Model Results**  
(Calculated with MS Excel and composed by Author, 2016)

SUMMARY OUTPUT								
<i>Regression Statistics</i>								
Multiple R	0.95026861							
R Square	0.903010432							
Adjusted R Square	0.838350719							
Standard Error	0.385097058							
Observations	6							
<i>ANOVA</i>								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	2	4.142184101	2.07109205	13.96558074	0.030205605			
Residual	3	0.444899232	0.148299744					
Total	5	4.587083333						
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	15.27172149	7.626298775	2.00250763	0.138987874	-8.998564871	39.54200784	-8.998564871	39.54200784
x3	31.9078146	11.90891083	2.679322656	0.075092155	-5.991654678	69.80728387	-5.991654678	69.80728387
x7	-0.196666211	0.092507642	-2.125945555	0.123484481	-0.491066815	0.097734393	-0.491066815	0.097734393

In second regressional model P-value of dependent variables are still higher than 0.05. Therefore this model is also unusable for scenario modelling. And again, dependent variable with higher P-value is excluded from regressional model. This time Dow Jones U.S. Real Estate Investment Trusts Index (x<sub>7</sub>) is out of game. And we in regressional model are left only with one dependent variable. LinkedIn users' penetration (x<sub>3</sub>) is going till the end and the results of third regressional model are provided in table 12.

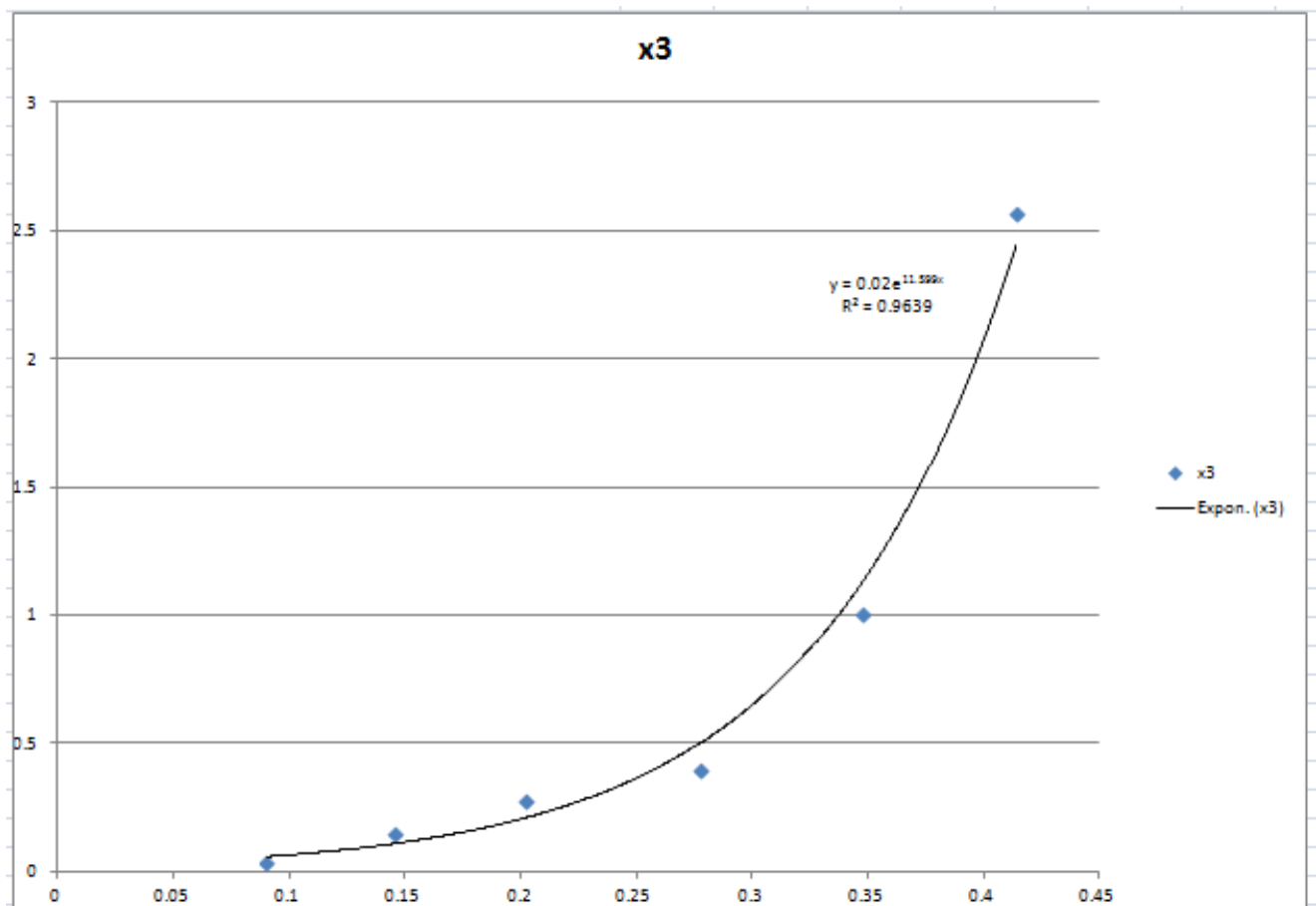
**Table 12. Third Regressional Model Results**  
(Calculated with MS Excel and composed by Author, 2016)

SUMMARY OUTPUT								
<i>Regression Statistics</i>								
Multiple R	0.869994813							
R Square	0.756890975							
Adjusted R Square	0.696113719							
Standard Error	0.528006003							
Observations	6							
<i>ANOVA</i>								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	1	3.471921978	3.471921978	12.45352329	0.024253391			
Residual	4	1.115161355	0.278790339					
Total	5	4.587083333						
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-0.92144982	0.518234869	-1.778054461	0.150024077	-2.360300485	0.517400844	-2.360300485	0.517400844
x3	6.765219607	1.91706033	3.528954986	0.024253391	1.442606839	12.08783238	1.442606839	12.08783238

This time P-value of LinkedIn users' penetration ( $x_3$ ) is  $0.024 < 0.05$ . This means we can create scenarios for future growth of independent variable. Although is quite unreliable rely only on LinedIn users' penetrations while forecasting entire Real estate crowdfunding investments. The next subchapter explain the results of scenario modelling.

#### 4.4. Real Estate Crowdfunding Scenario Modelling

Applied social sciences have used many methods for devising an understanding of the future, including predictions, projections and scenario modelling (Alcamo et al., 2006). A scenario can be defined as a possible future situation, including the path of development leading to that situation. Scenarios are not intended to represent a full description of the future, but rather to highlight central elements of a possible future and to draw attention to the key factors that will drive future developments. Many scenario analysts underline that scenarios are hypothetical constructs and do not claim that the scenarios they create represent reality (Kosow & Gasser, 2008).



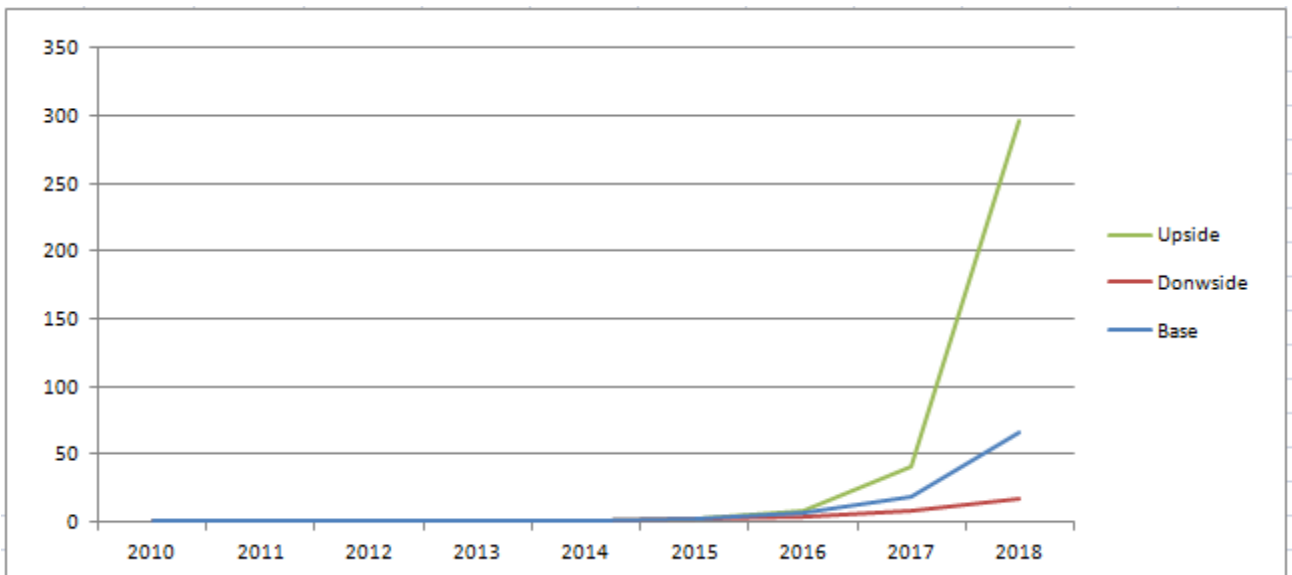
**Figure 30. Exponential Trendline between Real Estate Crowdfunding Investments and LinkedIn Users' Growth (Composed by Author, 2016)**

$$y = 0.02e^{11.599x} \quad [4.4.1]$$

There is clear exponential trendline between Real Estate Crowdfunding Investments and LinkedIn Users' Growth (Figure 30.). LinkedIn users' growth for base scenario of next three years was projected same as an actual growth in 2015, by 19 %, for upside scenario the growth was projected by 26 % and for downside scenario by 12 %. The projections using exponential regressional function (4.4.1) are provided bellow in table 13.

**Table 13. 2016-2018 Projections Using Exponential Regressional Function**  
(Composed by Author, 2016)

	2016F(B)	2016F(U)	2016F(D)	2017F(B)	2017F(U)	2017F(D)	2018F(B)	2018F(U)	2018F(D)
<b>Real Estate Crowdfunding Investments</b>	<b>6.088</b>	<b>8.522</b>	<b>4.349</b>	<b>17.9</b>	<b>40.79</b>	<b>8.231</b>	<b>65.63</b>	<b>296.5</b>	<b>17.09</b>
<b>LinkedIn Users Penetration</b>	0.433	0.522	0.464	0.586	0.657	0.519	0.698	0.828	0.582



**Figure 31. Scenarios Projected Using Exponential Regressional Function**  
(Composed by Author, 2016)

As we can see in figure 31, the projection calculated using exponential trendline is unrealistic and illogical. There hardly imaginable how possibly in upside scenario for 2018 can reach 296.5 billion USD.

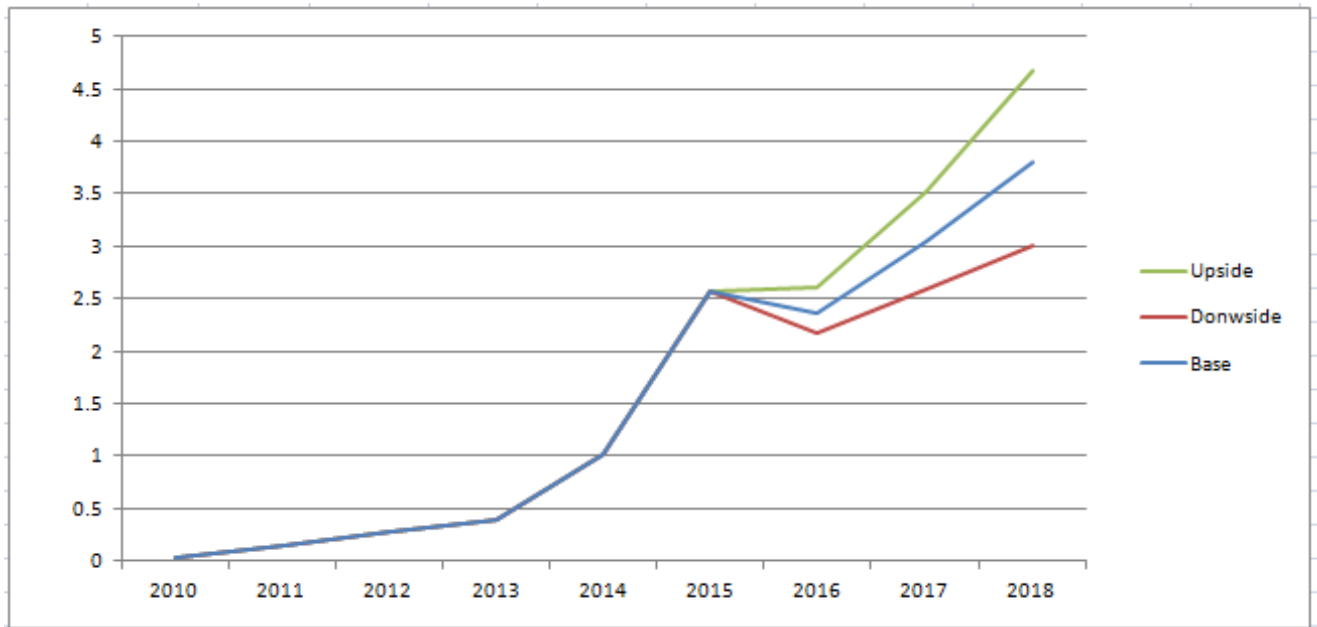
In order to reach more realistic results linear regressional function was embraced (4.4.2). There  $b_0 =$  intercept coefficient  $-0.92145$  and  $b_1 = x_3$  coefficient  $6.76522$ .

$$y = b_0 + b_1 \quad [4.4.2]$$

The projections using linear regressional function (4.4.2) are provided bellow in table 14.

**Table 14. 2016-2018 Projections Using Linear Regressional Function (Composed by Author, 2016)**

	2016F(B)	2016F(U)	2016F(D)	2017F(B)	2017F(U)	2017F(D)	2018F(B)	2018F(U)	2018F(D)
<b>Real Estate Crowdfunding Investments</b>	<b>2.369</b>	<b>2.601</b>	<b>2.176</b>	<b>3.043</b>	<b>3.523</b>	<b>2.59</b>	<b>2.801</b>	<b>4.68</b>	<b>3.016</b>
<b>LinkedIn Users Penetration</b>	0.493	0.522	0.464	0.586	0.657	0.519	0.698	0.828	0.582



**Figure 32. Scenarios Projected Using Linear Regressional Function (Composed by Author, 2016)**

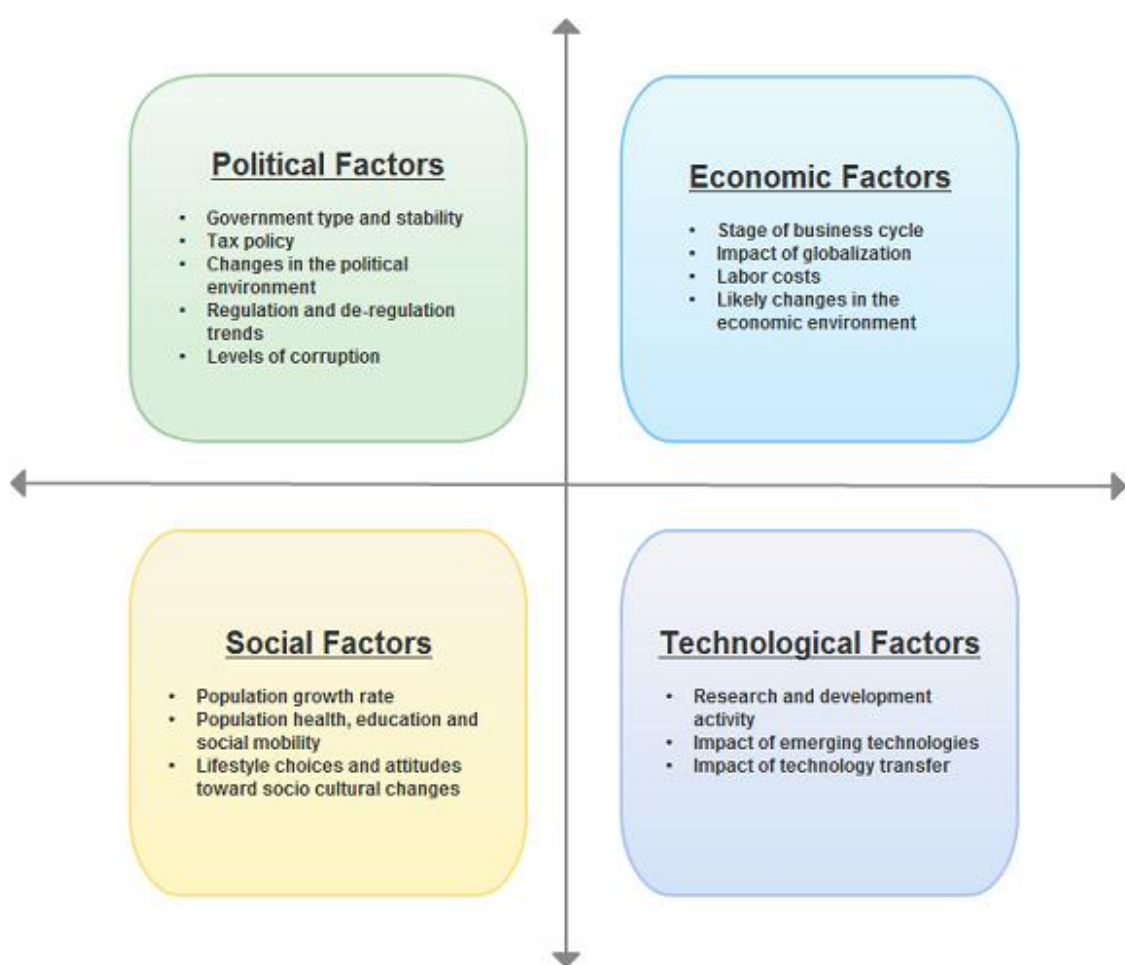
The projections using linear regressional function might be acceptable, but as we can see in figure 32 they do not explain the leap of period from 2010 to 2014. There is a need for additional methods, which take more factors into consideration. As an option PEST (Political; Economic; Social and Technological) analysis was chosen.

#### **4.5. PEST Analysis of Real Estate Crowdfunding**

The PEST analysis is the most common approach for considering the external business environment. PEST analysis stands for Political, Economic, Social, and Technological analysis and describes a framework of macro-environmental factors (Gupta, 2013). PEST analysis examines four categories of external environmental factors, namely: Political factors (P): these cover various forms of government interventions and political lobbying activities in an economy. Economic factors (E): these mainly cover the macroeconomic conditions of the external environment, but can include seasonal/ weather considerations. Social factors (S): these cover social, cultural and demographic factors of the external environment. Technological factors (T): they include technology related activities, technological

infrastructures, technology incentives, and technological changes that affect the external environment (Kim-Keung Ho, 2014).

According to contributors of IB Business (2016), PEST factors are as follows (Figure 33.), Political Factors: Government type and stability, Tax policy, Changes in political environment, Regulation and de-regulation trends, Level of corruption; Economic Factors: Stage of business cycle, Impact of globalization; Labour costs; Likely changes in the economic environment; Social Factors: Population growth rate, Population health, education and social mobility; Lifestyle choices and attitudes toward socio cultural changes; Technological Factors: Research and development activity; Impact of emerging technologies; Impact of technology transfer.

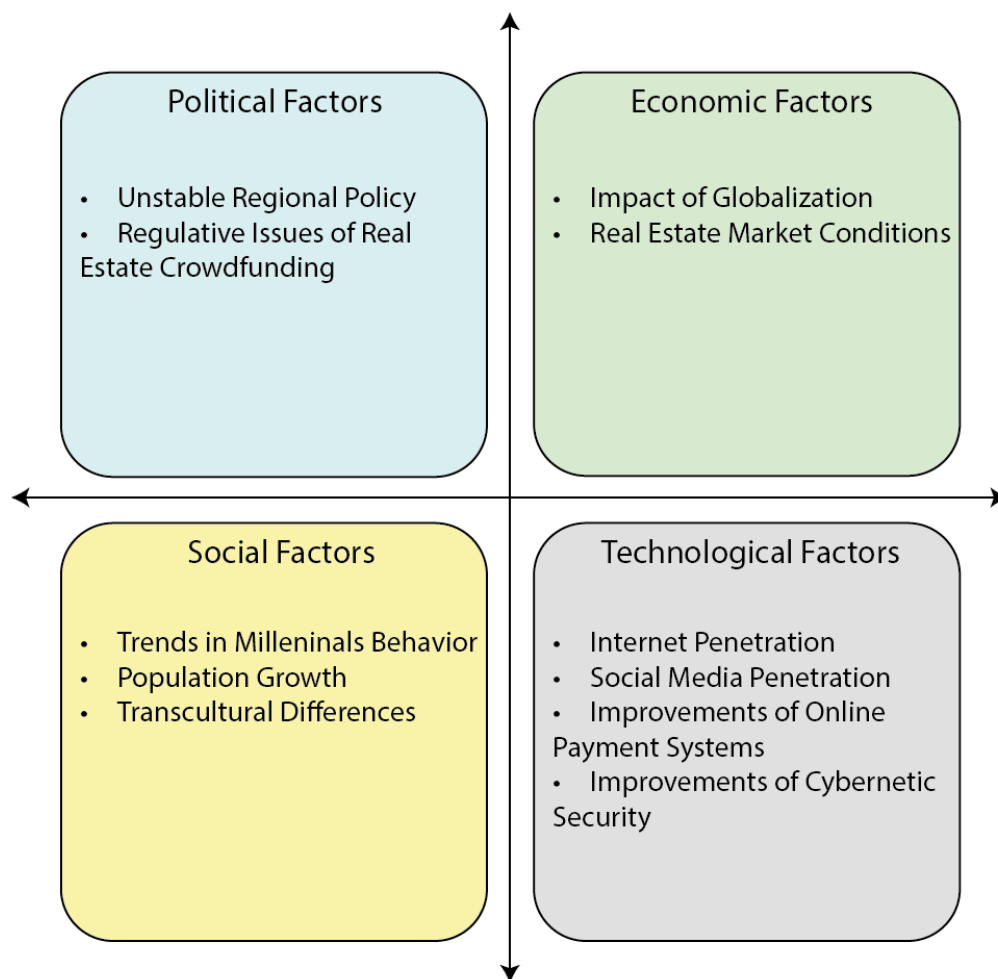


**Figure 33. Model of PEST Factors (Composed by IB Business, 2016)**

According to Author (2016), more specified to real estate crowdfunding PEST factors can be emphasized as follows (Figure 34.): Political Factors: Unstable regional policy; Regulative issues of real



estate crowdfunding; Economic Factors: Impact of globalization; Real estate market conditions; Social Factors: Trends in millenials behavior; Population growth; Transcultural differences; Technological Factors: Internet penetration; Social media penetration; Improvements of online payment systems; Improvements of cybernetic security.



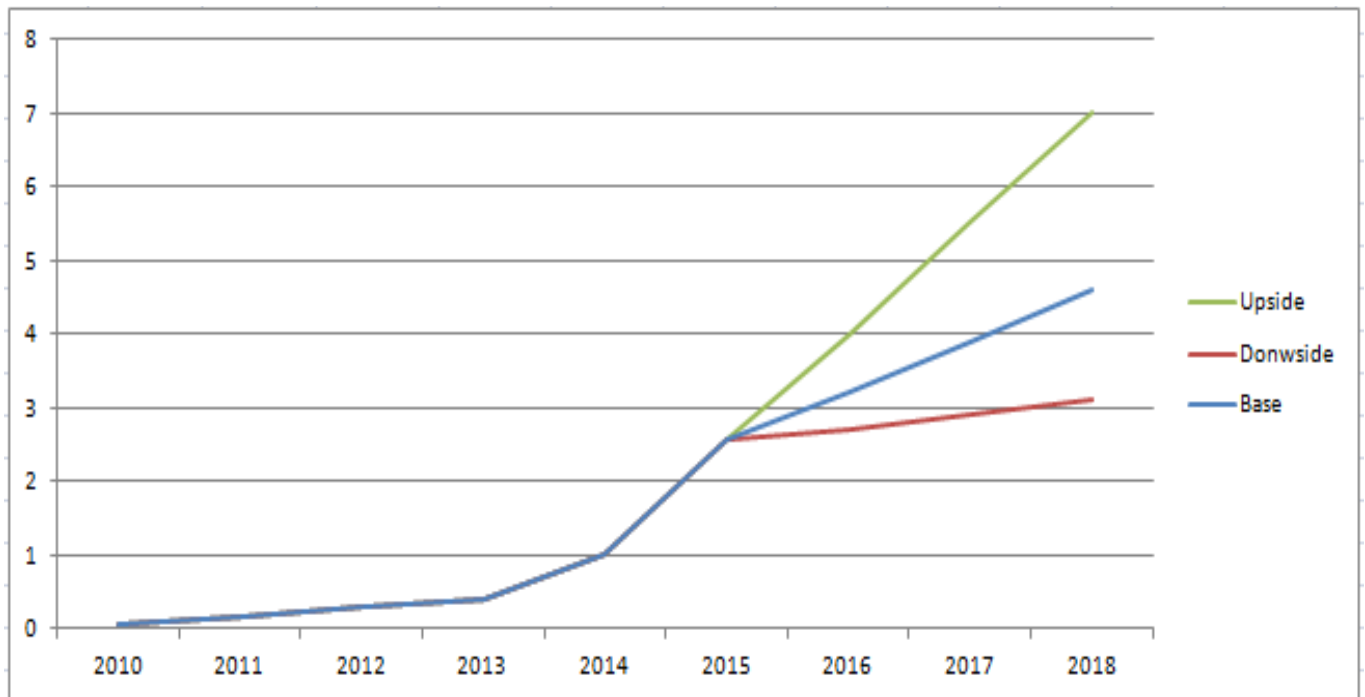
**Table 34. Real Estate Crowdfunding PEST Factors (Composed by Author, 2016)**

Considering PEST factors Author has given Real Crowdfunding projections that are provided in table 15.

**Table 15. 2016-2018 Projections Using PEST Qualitative Analysis (Composed by Author, 2016)**

		2016F(B)	2016F(U)	2016F(D)	2017F(B)	2017F(U)	2017F(D)	2018F(B)	2018F(U)	2018F(D)
y (dependent variable)	<b>Real Estate Crowdfunding Investments</b>	3.2	4	2.7	3.9	5.5	2.9	4.6	7	3.1
X3 (independent variable)	<b>LinkedIn Users Penetration</b>	0.493	0.522	0.464	0.586	0.657	0.519	0.698	0.828	0.582

PEST analysis was included in this thesis to explain the impact of more economic and non-economic factors. Base, upside and downside scenarios were provided (Figure 35.). Regulative issues in U.S. willing to protect general public have largely restricted real estate crowdfunding for non-accredited investors, and real estate companies are let raise only up to 1 million USD in 12 months period. For many real estate projects such an amount is too small for participating in real estate crowdfunding platforms. Also the real estate market price indices have reached the level of 2005-2007 boom period in these days, thus some investors might be not so confident about future return on investments. Having these assumptions in mind and knowing that internet and social media penetration have basically no other option like rise up, the growth of real estate investment by base scenario is projected not as high as in previous year. The value of real estate investments is projected to reach 3.2 billion USD in 2016, 3.9 billion in 2017 and 4.6 billion USD in 2018. Knowing that the biggest part of real estate investment are from institutional capital, and giving projection that it may start flowing through real estate crowdfunding platforms the upside scenario is projected as fallow: the value of real estate investments is projected to reach 4 billion USD in 2016, 5.5 billion in 2017 and 7 billion USD in 2018. Guessing that slowdown in real estate market investments may occur downside scenario is projected as fallow: the value of real estate investments is projected to reach 2.7 billion USD in 2016, 2.9 billion in 2017 and 3.1 billion USD in 2018.



**Figure 35. Scenarios Projected Using PEST Qualitative Analysis (Composed by Author, 2016)**

In the next subchapter discussion is provided and limitations explained.

## **4.6. Discussion and Limitations**

In next three years serious changes in real estate market might not appear, but knowing and historically proved that real estate market can't always rise up, presumable exactly after three years might be a slowdown scenario and can seriously affect real estate crowdfunding, but not permanently. As many other, real estate investment and financing will likely be the industry seriously disrupted by internet technologies. However, it may take. Relative regulative issues should be adjusted and approved by many countries.

While selecting data and searching for appropriate research methods many limitations have occur. It can be distinguished three types of limitations: short period; difficult to collect and difficult to evaluate. First of all research object is comparatively new and all historically operable data is only of six years period. Even this short period data is very difficult to collect. Several times was reaching all available sources and even asked directly to Bloomberg data centre. The answer was given that they have no real estate crowdfunding related data. In other sources data are very desultory, and not for all factors sufficient data are available. And some factors are might be very difficult to evaluate quantitatively, for this reason the Author was not capable to include legal environment to correlation and regression analysis.

However, the research is finished and the final chord of this thesis is provided in the next chapter in the form of conclusions and recommendations.

## CONCLUSIONS AND RECOMMENDATIONS

Real estate crowdfunding is a new emerging internet-based real estate investment and financing phenomenon. Real estate crowdfunding is one of the solutions how enterprises can overcome the difficult access to financial resources. Many real estate developers also consider real estate crowdfunding as a lead generation opportunity. It helps to reach potential business partners for future projects. Real estate crowdfunding greatly increases investments availability and process efficiency. Therefore, real estate crowdfunding might change real estate investment and financing. Real estate is just another one huge industry waiting for being disrupted by internet technologies and there is only a matter of time when vast amounts of institutional capital will start flowing through real estate crowdfunding platforms.

In the world are counted more than 230 Real estate crowdfunding platforms. Total investment value of real estate crowdfunding exceeded 0.4 billion USD in 2013, 1 billion USD in 2014 and 2.5 billion USD in 2015. Here the growth rate is 155%. Within this industry there are large differences among countries – both by size and allocation of capital. More than half of real estate crowdfunding investments are based in United States of America. In April of 2012, U.S. President, Barack Obama, signed into law The Jumpstart Our Business Start-ups (JOBS) Act, with the intention of allowing a greater number of Americans to invest in promising projects. One of the biggest concerns about rules of Title III in JOBS Act is that if a company is soliciting non-accredited investors, then they can only raise \$1 Million in 12 months period. This is clearly not sufficient amount of capital for many real estate projects, therefore many real estate companies, and especially reliable and experienced ones, might not be much interested in crowdfunding campaigns.

Crowdfunding is not an entirely new conception. It has emerged from theory of crowdsourcing and micro-finance in the late 2000s and early 2010s. During this period several definitions of crowdfunding were explicated in its current body of knowledge. Hardly any of these definitions essentially differ, most include the crowd as financing pool and the aim of collecting monetary funds for an individual's initiative. The crowdfunding process is usually divided into three different phases and each different phase has its own actor: initiators initiate a request for funding; intermediary technical platform that exchange funds and manage voting rights and funders browse offers and, if interested, invest the amount towards the funding goal. Two popular forms of real estate crowdfunding are debt and equity. There are many crowdfunding Web sites that have successfully raised capital for real estate initiatives. The process of crowdfunding very much depends on the way each intermediary perceives and organizes it. There appear significant differences in the application and project selection process – it can be done by just filling a form on the internet, include meeting with consultants or involving an exhaustive background check.

Some projects are of good underlying quality while others are not: thus investors face asymmetric information about the identity of projects. Many real estate crowdfunding platforms allow only experienced initiators to list their properties for potential investments.

The five main factors which affect the development of real estate crowdfunding have been identified: real estate market conditions; internet penetration; social media penetration; venture capital investments and legal environment. All identified factors have strong correlation with each other. According to Authors venture capital investments and legal environment have elevated the development of real estate crowdfunding. As real estate crowdfunding is internet-based and utilizes social media profiles to reach potential investors, internet and social media penetration are undoubtedly one of the main influencing factors. And while real estate crowdfunding is real estate investment and financing tool real estate market conditions are inseparable factor.

After evaluation of all identified influence factors, the Author has projected that the value of real estate investments by base scenario will reach 3.2 billion USD in 2016, 3.9 billion in 2017 and 4.6 billion USD in 2018. For upside scenario the value of real estate investments is projected to reach 4 billion USD in 2016, 5.5 billion in 2017 and 7 billion USD in 2018. And for downside scenario the value of real estate investments is projected to reach 2.7 billion USD in 2016, 2.9 billion in 2017 and 3.1 billion USD in 2018.

To conclude, few recommendations can be provided. Governments should prepare efficient regulations for real estate crowdfunding excluding equity and real estate crowdfunding from other crowdfunding models. There is highly recommended to sign into law more specified rules for different types and models of crowdfunding campaigns. To exceed investment amount that is let being raised through real estate crowdfunding platforms in 12 months period, because real estate is expensive projects and amount of 1 million USD is too small for most of real estate companies even to participate in crowdfunding platforms. Developers should be ready for raising capital via internet platform and consider timing of project publication and projected return on investment, because the internet is transparent place and unconsidered decisions can be harmful for long-term success. Investors should watch prudently the conditions of real estate market and select carefully projects for investments. The careful due diligence and educating general public is very important and necessary in order to achieve sustainable development of real estate crowdfunding.

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## **ANNEXES**



**2010-2015 Dow Jones Global Select Real Estate Securities Total Return Gross Index (Google Finance, 2016).**



**2010-2015 Dow Jones Real Estate Titans 30™ Index (Google Finance, 2016).**



2010-2015 Dow Jones U.S Real Estate Index (Google Finance, 2016).



2010-2015 Dow Jones U.S. Real Estate Investment Trusts Index (Google Finance, 2016).



**2010-2015 Dow Jones Europe Select Real Estate Securities Total Return Net Index (Google Finance, 2016).**



**2010-2015 SSE Real Estate Index (Google Finance, 2016).**