# **Bachelor** thesis

First and last name Kim Anna Kempendorf

Title:

Crowdfunding with mezzanine capital – a comparison of German platforms from investors' perspective

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Thesis advisor: Prof. Dr. Christian Decker

Second examiner: Prof. Dr. Michael Gille

# Faculty of Business and Social Sciences

Department of Business

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#### Abstract

Mezzanine-based crowdfunding, or crowdinvesting, is a return-oriented form of crowd financing where many investors participate with small amounts for example in companies. Platforms typically act as intermediaries between capital seekers and providers. Since the latter can choose between several platforms on the German market, a comparison of the active ones is necessary. Thus, this paper assesses similarities and differences between Companisto, Kapilendo and Seedmatch from the perspective of investors. First, it is compared how the platforms preselect the available investment options, followed by the investors' opportunities for diversification and their access to information about the projects. Secondly, a comparison of aspects of contract design including financial instruments, control and information rights, maturity as well as profitability is carried out. Lastly, the risks are briefly compared especially focusing on the platforms themselves as one possible source. In conclusion, the offers on the German crowdinvesting platforms have things in common, but differences can also be observed. For example, while all three platforms offer profit-participating (subordinated) loans, the contractual arrangements differ among other things in terms of information rights and return opportunities.

Keywords: crowdinvesting, financial intermediaries, financial instruments, investment decision, mezzanine-based crowdfunding, venture capital

JEL classification: G11, G23, G24, O16

# I. Outline

l. (	Ou	ıtlin	е		. iii
II.	Lis	st c	f fig	ures and tables	V
Ш.	. Li	ist (	of at	obreviations	. vi
1		Intr	odu	ction	1
	1.1	1	Res	search problem	1
	1.2	2	Res	search methodology	1
	1.3	3	Cou	urse of investigation	2
2		Fo	unda	tions of mezzanine-based crowdfunding	3
	2.′	1	Def	inition and differentiation from other forms of crowdfunding	3
	2.2	2	Оре	erating principle	5
	2.3	3	Par	ticipating players	7
3	(	Ge	rma	n market	10
	3.′	1	Dev	velopment	10
	,	3.1	.1	Popularity and market volume	10
	;	3.1	.2	Legal framework	12
	3.2	2	Pla	tforms	14
	;	3.2	.1	Selection	14
	;	3.2	.2	Overview	15
4	(	Со	mpa	ring German platforms	17
	4.′	1	Pre	conditions	17
		4.1	.1	Preselection of investment options by the platforms	17
		4.1	.2	Opportunities for diversification	19
		4.1	.3	Access to information	23
	4.2	2	Asp	pects of contract design	26
		12	1	Financing instruments	26

	4.2	2.2	Control and information rights	.31
	4.2	2.3	Maturity	.33
	4.2	2.4	Profitability	.34
	4.3	Ris	ks	.39
5	Со	nclu	sion	.41
	5.1	Sur	nmary	.41
	5.2	Crit	tical acclaim	.44
	5.3	Out	tlook	.45
٧.	List	of re	ferences	. vii
VI	. Dec	larat	tion of originality	X
VI	I. De	clara	tion of consent	xi

# II. List of figures and tables

Figure 1: Forms of crowdfunding	. 3
Figure 2: Concept of crowdinvesting	. 5
Figure 3: Volume of the German market for crowdinvesting	11
Figure 4: Number of crowdinvesting projects in Germany	21
Table 1: Equity and mezzanine crowdfunding of companies in Germany (2017) 1	14
Table 2: Characteristics of mezzanine-based forms of financing2	27
Table 3: Financing instruments available on the platforms	30
Table 4: Overview of the return potential	38

## III. List of abbreviations

AG Stock company (Aktiengesellschaft)

BaFin Federal Financial Supervisory Authority (Bundesanstalt für

Finanzdienstleistungsaufsicht)

CAGR Compound Annual Growth Rate

EBIT Earnings Before Interest and Taxes

GewO Trade, Commerce and Industry Regulation Act

(Gewerbeordnung)

GmbH Limited liability company (Gesellschaft mit beschränkter Haftung)

HGB German Commercial Code (Handelsgesetzbuch)

SMEs Small and medium-sized enterprises

VermAnlG German Capital Investment Act (Vermögensanlagegesetz)

VIB Investment Information Sheet (Vermögensanlagen-

Informationsblatt)

#### 1 Introduction

## 1.1 Research problem

Mezzanine-based crowd financing, also called crowdinvesting, is a form of returnoriented crowdfunding and a relatively new investment opportunity. Multiple private backers participate e.g. in a company with small amounts invested via the Internet. They aim at receiving a financial return through a form of profit-sharing, depending on the financing form used. In most cases, a platform acts as intermediary between capital seekers and investors.

The German market for crowdinvesting achieved high growth rates over the last years with € 1.4 million invested in 2011 and € 200 million in 2017. With rising popularity, not only new platforms emerge, but also in 2015 the legal environment in Germany reacted correspondingly and contracts changed substantially. Although there are multiple German platforms which specialize in crowdfunding, not all of them offer a mezzanine-based form of financing. Additionally, some platforms did not record any successful deals in the last two years. Still in 2017, 17 platforms successfully performed an equity-or mezzanine-based crowdfunding for a company in Germany.

Even though the investment decision is very individual, backers should compare different platforms before making investments. Thus, to make a profound choice, among others the preconditions, aspects of contract design as well as risks have to be considered carefully.

Consequently, this bachelor thesis aims at assessing similarities and differences between German crowdfunding platforms which offer mezzanine-based financing instruments. The comparison will be made from the perspective of investors.

## 1.2 Research methodology

This bachelor thesis compares German platforms, offering mezzanine-based crowdfunding from the perspective of investors. While chapters two and three are solely based on a literature research approach, chapter four additionally contains aspects of qualitative research as non-standardized data from the platforms' websites was mainly used for the comparison.

The criteria applied in this chapter were selected based on their significance in literature. Further, the selection of platforms for the comparison was made based on their market share, volume and number of projects in the last two years (see chapter 3.2.1).

## 1.3 Course of investigation

Based on the research question discussed previously, the second chapter will focus on foundations of mezzanine-based crowdfunding. To begin with, the concept will be defined and distinguished from other forms of crowdfunding. Afterwards, the operating principle of crowdinvesting will be explained, and the participating players will be introduced.

Chapter three will concentrate on the German market for crowdinvesting starting with its development. First the popularity and market volume, also in an international context, will be described, followed by a presentation of legal aspects that have changed recently. The third chapter will be concluded with information about the selection of the platforms for the comparison and a brief overview of them.

Finally, the platforms will be compared in the fourth chapter and each subchapter will also contain an evaluation of the discussed criterium. Starting with the preconditions, the preselection made by the platforms, the opportunity for diversification on the platforms as well as the access to the information about the projects will be compared. This will be followed by the comparison of the contract design including financial instruments, investors' rights, the duration of the investments as well as the profitability. However, since every investment also includes risks, this topic will be addressed briefly by focusing on the platforms as one possible source of risks.

The last chapter will comprise a summary of the main findings from the thesis including an answer to the research question from chapter one. In addition, a critical acclaim will indicate potential restrictions and limitations of the discoveries. To conclude the thesis, an outlook will be provided.

## 2 Foundations of mezzanine-based crowdfunding

## 2.1 Definition and differentiation from other forms of crowdfunding

To better understand the concept of mezzanine-based crowdfunding, a differentiation from other forms of crowdfunding is needed. Starting with the core principle, crowdfunding is based on the idea of crowdsourcing which implies collecting contributions from many people to reach a common goal. But in contrast to crowdsourcing, crowdfunding does not use the crowd to obtain information, but to obtain financial resources (Beck, 2014, p. 158; Meisner, 2017). In general, crowdfunding is defined as "the practice of funding a project or venture by raising money from a large number of people who each contribute a relatively small amount [...]" (Oxford University Press, n.d.). As illustrated in Figure 1, the general term crowdfunding encompasses four types of financing models which are very heterogeneous (Wilson & Testoni, 2014, p. 2). However, until today no generally accepted uniform differentiation between them exists since the phenomenon is comparably new and hybrid forms are present (Schedensack, 2018, p. 49).

Figure 1: Forms of crowdfunding

Crowdfunding			
Non-financial crowdfunding		Financial (return-oriented) crowdfunding	
Donation-based:	Reward-based:	Crowdlending:	Crowdinvesting:
Idealistic support without a material reward	Product or project participation based on a material reward	Investment based on interest payments and repayment	Investment based on performance related payments
<ul><li>Artistic projects</li><li>Events</li><li>Product ideas</li><li>Other (creative) project</li></ul>	s	Loans to private individuals and companies	<ul><li>Participation in companies</li><li>Credits to companie</li></ul>

Own figure based on Beck, 2014, pp. 25; 28; Meisner, 2017, pp.167 f. and Schedensack, 2018, pp. 49 ff.

Foremost, crowdfunding can be differentiated into non-financial and financial forms (Meisner, 2017, p. 157). The former encompasses donation and reward-based crowdfunding while the latter, which is also subsumed under return-oriented crowdfunding, includes crowdinvesting and crowdlending (Müller-Schmale, 2014; Schedensack, 2018, p. 49).

First, during a donation-based crowdfunding, also referred to as fan funding, donations are made without expecting a compensation and often the funders receive only an expression of thanks in return (Beck, 2014, pp. 25 f.; Schedensack, 2018, p. 50; Wilson & Testoni, 2014, p. 2). Here, the crowd acts altruistically and social or philanthropic projects are the main supported concepts (Schedensack, 2018, p. 50). Secondly, a reward-based crowdfunding, also called crowd supporting, additionally includes a nonmonetary incentive, the so-called reward (Pöltner & Horak, 2016, p. 3; Schedensack, 2018, p. 52). This could for example be an invitation to a premiere of a movie that was financed through the project or a CD which was recorded with the money raised (Beck, 2014, p. 26). The third form of crowd financing can be classified as a financial form of crowdfunding (Meisner, 2017, p. 157). It is called lending-based crowdfunding or crowdlending and the investors expect repayment of the loan at maturity as well as interest payments of the invested capital as well as a fixed periodic income (Beck, 2014, pp. 26 f.; Wilson & Testoni, 2014, p. 2).

Finally, crowdinvesting is a form of crowdfunding, where equity or mezzanine financing instruments are issued to small investors over the internet (Hornuf & Klöhn, 2012, p. 239). Typically, the crowd "holds a mezzanine financial instrument [...], which ranks above ordinary shares and shareholder loans but below all ordinary liabilities" (Hornuf & Schwienbacher, 2017, p. 3). In addition, investors are entitled to receive a proportional payment of the company's profits or they participate in the company's value enhancement (Schramm & Carstens, 2014, p. 7). However, any privileges that are usually connected to an equity share, for example voting rights, are not awarded to the investors in the concept of a mezzanine-based crowdfunding (Hornuf & Schwienbacher, 2017, p. 3).

The differentiation between crowdlending and crowdinvesting is often unclear, but common opinion states that the missing subordination of the repayment claim and the lack of participation in future cash flows or increasing company value constitute the main differences (Schedensack, 2018, pp. 55 ff.). Furthermore, crowdinvesting is often referred to as equity crowdfunding (Beck, 2014, p. 28; Pöltner & Horak, 2016, p. 4). However, the term can be misleading when analyzing the German market, because mezzanine instruments like silent participations or subordinated profit-participating loans are usually used (Hornuf & Schwienbacher, 2017, p. 3).

Thus, a more precise term to describe the market for equity crowdfunding in Germany is "quasi-equity" (ibid). In this thesis, the terms mezzanine-based crowdfunding and crowdinvesting will be used synonymously.

In conclusion, crowdinvesting embraces a monetary reward in contrast to no award in a donation-based and a non-monetary reward in a reward-based crowdfunding scenario (Schedensack, 2018, pp. 55 ff.). The four forms do not only differ with regard to the rewards offered, but also in terms of the complexity and uncertainty of the investment decisions (Schramm & Carstens, 2014, pp. 7 f.). While both aspects are small in donation-based crowdfunding, both aspects increase from reward over lending- to mezzanine-based crowd financing (ibid).

## 2.2 Operating principle

In general, crowdinvesting is used to finance start-ups, (high-growth) companies, real estate as well as renewable energy facilities (Schedensack, 2018, p. 70). However, as this bachelor thesis concentrates on platforms offering mezzanine-based crowdfunding for companies, real estate and energy projects will not be considered in the following chapters. Figure 2 illustrates the operating principle of the crowd financing method. It includes the three main participating players of the process which are capital seekers, capital providers and intermediaries (Hahn, 2018, p. 190; Löher, Schell, Schneck, Werner, & Moog, 2015, p. 33).

Crowdinvesting Crowd Intermediary Founder **Investor 1 Investor 2** Sum of all Company (e.g. Platform investments startup) Investor 3 Investment Investor 4 Fees Share in results

Figure 2: Concept of crowdinvesting

Own figure based on Beck, 2013, p.9; Hahn, 2018, p. 189 and Kortleben, 2016, p.29

In principle, a web-based platform collects funds for the capital seeking company, provided by a vast number of investors (Beck, 2014, p. 9). The crowd investors individually only contribute small amounts, but the entire crowd can contribute a significant share of the financing needed (Hahn, 2018, p. 189). In return, the backers for instance participate in future profits (BaFin, n.d.; Beck, 2014, p. 9). The platform often supports the capital seeker in an advisory capacity, but primarily it takes the position of an intermediary (Sixt, 2014, p. 130). Currently, no uniform financing model exists for mezzanine-based crowdfunding and the arrangements continuously develop (Hahn, 2018, p. 190).

Although the process of crowdinvesting can theoretically also take place without platforms acting as intermediaries, in practice only campaigns executed indirectly, meaning over platforms, are significant (Schedensack, 2018, p. 143). Starting with the application and ending with receiving the funds, the process can take several months depending for example on the number of documents needed, the speed of the platforms and the interest of the crowd (Schramm & Carstens, 2014, p. 83).

Before applying at a platform, the founders have to decide which intermediary to use by for example comparing the selection criteria and investment focus (ibid, p. 19). Afterwards, they apply at their favored platform by submitting different documents like a business plan, an annual report and a presentation about their project (Schedensack, 2018, pp. 55 f.; Schramm & Carstens, 2014, p. 92). Usually there is a category especially for capital seekers on the platforms' website where they can see which information and documents need to be provided (Beck, 2014, pp. 19 ff.; Pöltner & Horak, 2016, p. 7).

During the next phase, the platform operators examine the project documents and decide if the project will be placed on their website (ibid). If the investment proposal is accepted, the funding has to be extensively prepared by the capital seeker (Pöltner & Horak, 2016, pp. 8 f.; Schramm & Carstens, 2014, pp. 97 f.). For instance, it needs to be decided which information to disclose for potential investors, finding a balance between nondisclosure requirements of the company and the demands of the crowd (Beck, 2014, pp. 19 ff.). Moreover, the funding threshold, the maximum amount or funding limit as well as a funding period have to be determined (Beck, 2014, pp. 19 ff.; Pöltner & Horak, 2016, pp. 8 f.). The threshold pledge system or funding threshold, which is the minimum amount that has to be reached in order for a financing round to

be successful, is one fundamental aspect of crowdinvesting (Hahn, 2018, p. 196; Schedensack, 2018, p. 75; Sixt, 2014, p. 65). If the threshold is not reached during the funding process, backers get their investments back (Schramm & Carstens, 2014, p. 125; Sixt, 2014, p. 65).

The following step starts with the activation of the deal online to make it visible for potential investors who can then apply for an investment during the specified funding period (ibid). Platforms often simultaneously offer multiple investment opportunities which can be compared by potential investors (Schedensack, 2018, p. 57). The success of the campaign can also be influenced by the dedication of the company's team which has to e.g. answer the questions of interested investors to build trust (Pöltner & Horak, 2016, p. 9; Schramm & Carstens, 2014, p. 142) (see chapter 4.1.3). Finally, during the last stage the capital seeking company receives the achieved amount of the crowdinvesting process (Beck, 2014, p. 19; Hahn, 2018, p. 195). Afterwards, investors are updated at regular intervals about by contract required information (Beck, 2014, p. 21; Pöltner & Horak, 2016, p. 9) (see chapter 4.2.2). Additionally, the investors can claim an agreed premium which often consists of a participation in annual profits and/or an increase in the company's value reached until the exit of the investor after a minimum time period (Beck, 2014, p. 19)(see chapter 4.2.4).

## 2.3 Participating players

As indicated in the previous subchapter, an essential part of crowdinvesting are the three formerly mentioned participants (Hahn, 2018, p. 190; Schramm & Carstens, 2014, p. 6).

Firstly, for companies crowdinvesting acts as an additional form of financing that can be used at various stages of their, when different levels of capital requirements and availability are evident lifecycle (Beck, 2014, p. 29; Hahn, 2018, pp. 27 f.). Here, it mainly plays a role during the early and expansion stages where capital requirements increase steadily and the capital availability remains rather low (Kortleben, 2016, p. 10). However, companies can also make use of this source of financing at any later stage of their lifecycle (Hahn, 2018, p. 190). Sometimes companies prefer strange investors who typically do not receive a right to say or to vote, because they do not interfere with the company's plans (Beck, 2014, p. 69). Finding a balance between the

aims of capital seekers and providers is crucial to successfully complete a crowd investment which can offer various advantages (ibid, f.). For example, the funding process can be a marketing research instrument indicating product maturity or satisfactory development of the business idea if the funding threshold is reached quickly and the visibility of the company can be increased when investors spread the idea (Hahn, 2018, p. 189; Sixt, 2014, p. 129).

But, based on the founders' aspirations about the development of their company, the objectives for the arrangement of the investment are typically in conflict with the investors' goals since companies aim at low payments to backers as well as low rights to say, to control and to information (Beck, 2014, p. 70). On the contrary, a high return in relation to the invested capital is the main goal of the investors (Beck, 2014, p. 70; Schedensack, 2018, pp. 136 f.).

Secondly, the crowd can be described as all potential investors willing to spend their money to support the business idea of the capital seeker (Hahn, 2018, p. 191). Heretofore, only 4.9 % of the German population are integrated into the funding of innovative projects by holding stocks or participating as business angels (Sixt, 2014, p. 65). However, the concept of investing only small amounts of money makes it generally possible for all people who are interested in investing in innovative companies to take part in a crowd investment (ibid, p. 130) (see chapter 4.1.2).

According to Leicht, crowd investors are semiprofessional backers who consciously finance risky investments (Schramm & Carstens, 2014, p. 61). Generally, they are open-minded about the Internet and thus ready to conclude transactions, including making payments and signing contracts, via the world wide web (Beck, 2014, p. 87). They aim at effectively investing money which they can spare, but they are also aware of the fact that they risk losing their investment (ibid). Still, the reasons for supporting the capital seeker differ, also including an ideational commitment to the business idea or other emotional motives (Hahn, 2018, p. 191; Schedensack, 2018, pp. 134 f.). Moreover, the platform Companisto offers the following detailed description of their investors.¹ In general, backers are male, aged mid-to-late 40s with previous experience in investing primarily and the majority has "an annual net income of € 50k or more per household". Being interested in start-ups from the technology sector, the typical

<sup>&</sup>lt;sup>1</sup> This information was retrieved March 14, 2019 from https://www.companisto.com/en/for-founders.

investor on Companisto participates because he believes in the funded companies and aims at encouraging innovation. In addition, "79 % would be willing to mobilize their network for the start-ups".

However, Beck suggests that in the future the investors will be average consumers who invest small amounts (2014, p. 88). Overall, the speed at which investors need to make decisions in a crowdinvesting scenario can result in an irrational process and since the platforms often arrange their contracts differently, investors need to critically compare the offers (Sixt, 2014, p. 130).

Thirdly, from the investors' perspective, the crowdinvesting platforms act as portal for information, communication and processing (Schedensack, 2018, p. 75). As mentioned above, it primarily takes the position of an intermediary between the company and the crowd or individual investor (Hahn, 2018, p. 191; Sixt, 2014, p. 130). Thus, the website can be described as an electronic marketplace where information for capital seeking companies and investors is provided and a basis for a systematic and simplified communication between them is laid out (Beck, 2014, p. 115). At first, the platform provides the technical necessities and on top of this, services like public relations activities or marketing (Hahn, 2018, p. 191). Further, the platforms typically also predetermine a frame for the legal relationship between companies and investors (Beck, 2014, p. 115).

Capital seekers and investors have to register on the website, usually free of charge, since the monetization is based on a success-related fee which is paid in relation to the funding volume (Hahn, 2018, p. 191; Sixt, 2014, pp. 130 f.). Thus, the platform operators aim at offering as many large and successful projects as possible (Beck, 2014, pp. 115 f.). According to Jansen and Pfeifle, legally, the platforms act as so-called independent investment brokers who are obligated to provide information relevant for the investment decision in a complete and correct manner (Hahn, 2018, p. 192). However, they are not obliged to do further investigations, but the intermediaries want to maintain a good reputation and hence, examine the companies which apply for a funding (Beck, 2014, pp. 115 ff.; Hahn, 2018, p. 191). Since the process of selecting projects is also important to the investors, it will be discussed in detail in chapter 4.1.1.

#### 3 German market

## 3.1 Development

## 3.1.1 Popularity and market volume

The crowdfunding culture was mainly established in the United States starting in March 1885, when Josef Pulitzer successfully introduced a campaign raising, USD 100,000 to finance the pedestal of the Statue of Liberty (Hahn, 2018, p. 188; Müller-Schmale, 2014; Sixt, 2014, p. 58). In Germany, the financing of the movie Stromberg in December 2011 is a well-known example of such a campaign, that successfully collected one million Euros within one week (Müller-Schmale, 2014). Accordingly, donation and reward-based crowdfunding are the origin of crowd financing platforms and the Internet as a new channel facilitated the enthusiasm of many possible investors (Hahn, 2018, p. 188; Sixt, 2014, p. 58).

The first platforms for crowd investments emerged in Australia, Great Britain and the Netherlands, since legal restraints in the United Stated were strict (Sixt, 2014, p. 58). In 2010, on the European market, the first platforms included the Swiss company Investiere, British Crowdcube, WISEED from France as well as the Dutch platform Symbid (Beck, 2014, p. 37). While in 2011 only Seedmatch and Innovest offered crowdinvesting on the German market, a year later already eleven platforms existed in this country (Hornuf, Klöhn, & Schilling, 2018, p. 512). The first German vendor, Seedmatch, had its breakthrough in May 2012 when exceeding the threshold of € 1 million and by December 2013, the platform already reached € 10 million mediated capital (Beck, 2014, p. 37).

In general, crowdfunding experienced an outstanding international development (Beck, 2014, p. 34). In 2011, USD 1.5 billion were collected worldwide through crowdfunding and by 2015, the volume substantially increased to USD 34.4 billion (CrowdExpert, 2016). In Germany, the total volume amounted to € 0.5 million in 2011 and about € 3 6 million by the fourth quarter of 2016 (Für-Gründer.de, 2017). However, the deviating definitions of the term crowdfunding as well as the constant emerge of new platforms and missing information about the funding volumes reached, lead to a negative impact on the accuracy of the statistical data (Beck, 2014, p. 36). Hence, the data of the following numbers should be carefully interpreted.

Figure 3 shows that the German market for crowdinvesting, represented by the grey bars, amounted to a volume of € 200 million in 2017, which is equivalent to an increase of 171 % compared to the year before (crowdfunding.de, 2018, p. 4). While most deals belonged to the segment of investments in companies with 488 projects, the highest volume is achieved in the real estate sector amounting to 65 % of the total volume (ibid, f.). Overall, between the years 2011 and 2015, the German market for crowdinvesting increased by an average of 220 % p.a. (Bundesministerium der Finanzen, 2017, p. 38). Additionally, the number of investors increased steadily between 2011 and 2014, leading to over 13,000 people investing in mezzanine-based crowdfunding projects in 2014 (Dorfleitner & Hornuf, 2016, p. 29).

225 ■ Equity and 199.6 200 mazzaninebased crowd 175 investments in companies 150 ■ Successfully 125 financed crowd investments 100 73 7 68.4 75 50 14.5 33.9 27.3 15 18.1 18.8 25 5 0.4 1.4 0 2011 2013 2014 2015 2016 2017

Figure 3: Volume of the German market for crowdinvesting

Own figure based on crowdfunding.de, 2018, p. 4,10

Having a closer look at the market for equity- or mezzanine-based crowdfunding of companies represented by the blue bars in Figure 3, the German market volume added up to about € 33.9 million in 2017, which is equivalent to a growth of 81 % compared to 2016 (crowdfunding.de, 2018, pp. 10 f.). In 2018, the volume increased again, amounting to about € 44 million (crowdinvest.de, n.d.). The level of start-up financing added up to circa € 15 million each year between 2013 and 2017, while especially the investments in growth companies significantly contributed to the total volume since 2015 (crowdfunding.de, 2018, p. 10). Overall, crowdfunding is firmly established on the German market (Deloitte, n.d.).

## 3.1.2 Legal framework

Generally, crowdinvesting has always been permitted in Germany (Beck, 2014, p. 42). However, the legal background for crowd investments has changed over the years and until the amendment of the Retail Investor Protection Act (Kleinanlegerschutzgesetz) in July 2015, crowdfunding as well as crowdinvesting was not specifically regulated (Löher et al., 2015, p. 34). Before, many investors suffered losses on the so-called unregulated financial market after investing in products which were not completely supervised by the German Federal Financial Supervisory Authority (in the following BaFin) (Bundesministerium der Finanzen, 2017, pp. 36 f.). Consequently, the legislator decided to improve investors' security by introducing the act, which implemented for instance the prospectus requirement for additional investment products like subordinated or profit participating loans (ibid). Until then, many intermediaries used these forms of financing to offer investments above the amount of €100,000 without having to prepare a prospectus (Löher et al. 2015, p. 34). Still, the legislator wanted to avoid a frustration of purpose for the intermediaries by introducing an exemption for the prospectus requirement (Bundesministerium der Finanzen, 2017, pp. 36 f.).

In general, a prospectus is necessary for the protection of investors since it provides them with extensive and reliable information needed to make an investment decision (BaFin, 2012). According "to § 6 of the German Capital Investment Act (in the following VermAnIG), a provider who publicly offers capital investments in Germany is obliged to publish a prospectus" (BaFin, n.d.) leading to substantial costs for the company (Hahn, 2018, p. 188). These costs can add up to a fee for approval and retention between € 1,500 and € 15,000, plus charges in the five-digit span of law firms for drafting the prospectus (Ebenrett, 2016). But there are two main exemptions to the requirement of the VermAnlG applicable for crowd financings with investments in the meaning of § 1 (2) VermAnIG including the "minimis threshold exemption" (§ 2 No. 3 VermAnlG) and the exemption for crowd funders (§ 2a VermAnlG) (BaFin, n.d.; Ebenrett, 2016). The former is based on the number of shares, the selling price of all shares or the price of each share offered which fall under this exemption if it does not exceed 20 shares, a total price of € 100,000 within one year or equals at least € 200,000 per capital provider (BaFin, n.d.) (ibid). The latter specifies "that there is no obligation to publish a prospectus for the capital investments offered if they are brokered via an internet-based services platform and the selling price of all capital investments of the same issuer offered by an offeror does not exceed € 2.5 million" (BaFin, n.d.; Ebenrett, 2016). Moreover, according to § 2a No. 3 VermAnlG to be exempted from the prospectus requirement, platforms must assure that an investment complies with the so-called single investment threshold which specifies that an investor are permitted to invest up to € 10,000 if he owns at least € 100,000 in freely available assets or if the investment does not exceed the sum of two times his monthly income (Ebenrett, 2016).

However, the requirement to assign investments on the unregulated capital market with a warning notice on the first page of the Investment Information Sheet (in the following VIB), a short information on maximum three pages about the investment, was introduced with the Retail Investor Protection Act (BaFin, n.d.; Bundesministerium der Finanzen, 2017, p. 39). This regulation is supposed to lead to a thorough examination of chances and risks before making an investment decision (Bundesministerium der Finanzen, 2017, p. 39). According to an empirical study commissioned by the Federal Ministry of Finance, which examined the success of the warning notice, especially people with little financial education react in a more intensive way to the notice (ibid, pp. 38 ff.). However, in principle, all users, including highly educated ones started to think about risks and chances of investments in more detail (ibid).

In conclusion, the legislator had to find a balance between the interests of capital seekers and investors (Deloitte, n.d.). Nevertheless, on the one hand, crowdinvesting associations and some financial organizations still advocate for an exemption of all kinds of mezzanine-based crowd financing instruments as well as equity-based investment forms like stocks and bonds because the current limitation to a few instruments leads to growth hindrances and location disadvantages for Germany (Bundesministerium der Finanzen, 2017, p. 40). On the other hand, consumer protection associations demand that a promotion of such investments stays limited and criticize the lack of transparency standards for crowdinvesting platforms (ibid). Still, due to the change in law, small and medium-sized enterprises (in the following SMEs) and start-ups can now quickly and simply acquire capital needed without the formerly mentioned high costs related to the creation of a prospectus (Ebenrett, 2016).

#### 3.2 Platforms

## 3.2.1 Selection

Over the years some crowdinvesting platforms exited and new ones entered the market (Hornuf et al., 2018, p. 512) addressing new types of investors (Schramm & Carstens, 2014, p. 55). While the number of platforms significantly increased over the years, projects with a high volume are still conducted by a small number (Hornuf et al., 2018, p. 56). Thus, based on the following Table 1, only the most active platforms will be compared in the course of the next chapter. Due to the limited scope of a bachelor thesis, it was decided to concentrate on the top three platforms in terms of market volume, share and number of projects in the years 2017 and 2018.

Table 1: Equity and mezzanine crowdfunding of companies in Germany (2017)

	Platform	Volume	Market share	Projects
1	Companisto	10,367,350 €	30.6 %	16
2	Kapilendo	8,344,200 €	24.6 %	10
3	Seedmatch	4,179,000 €	12.3 %	7
4	SEEDRS	3,855,269 €	11.4 %	4
5	Finnest	1,500,000 €	4.4 %	1
6	GLS Crowd	1,050,000 €	3.1 %	3
7	Econeers	1,001,750 €	3.0 %	2
8	Green Rocket	557,430 €	1.6 %	3
9	WIWIN	500,000 €	1.5 %	1
10	FunderNation	488,200 €	1.4 %	4
11	aescuvest	487,140 €	1.4 %	3
12	Katrim	400,000 €	1.2 %	4
13	Conda	384,100 €	1.1 %	2
14	Medifundo	358,850 €	1.1 %	1
15	bettervest	164,850 €	0.5 %	1
16	transvendo	129,450 €	0.4 %	1
17	Unternehmerich	127,750 €	0.4 %	1
	Total	33,895,339 €	100.0 %	64

Own table based on crowdfunding.de, 2018, p. 11

With an added market share of 67.5 %, the top three platforms Companisto, Kapilendo and Seedmatch performed over half of all crowdinvesting deals in Germany in 2017 (crowdfunding.de, 2018, p. 11). The three platforms funded 33 projects with a total volume of almost € 23 million (ibid). The following year, overall circa € 44.2 million for 84 projects were raised by platforms in form of equity or mezzanine capital in Germany (crowdinvest.de, n.d.). From that, Kapilendo reported a funding sum of about € 13.8 million for 20 projects, Companisto funded 14 projects with almost € 9 million and eleven projects amounting to circa € 9 million were conducted on Seedmatch (ibid). Thus, the three platforms accounted for a investment volume of € 27.7 million in 2018 leading to an added market share of 62.6 % (ibid). Currently, overall 14 projects were reported in 2019 with a volume of circa € 11.7 million (effective: March 6, 2019) (ibid).

## 3.2.2 Overview<sup>2</sup>

First, Seedmatch, a platform from Dresden has been active since the end of 2011 and it can be considered as one of the two pioneers in the German crowdinvesting sector (Schramm & Carstens, 2014, pp. 23 f.). The Seedmatch GmbH was founded in 2009 by Jens-Uwe Sauer who funded the platform itself with different crowdfunding activities (Schramm D. M., 2014). Nowadays, the platform finances itself by receiving a remuneration from the capital seeking company amounting to between 5 % and 10 % of the funding sum and investors can use the platform without charges. Seedmatch offers so-called "Seed Investments" as well as venture debt and has over 61,500 registered users with more than € 43.7 million being invested in 122 projects. Examples of successfully funded start-ups via are the platform are LeaseRad, erdbär and Lottohelden. Moreover, until October 2018, 93 start-ups and nine high-growth companies were financed via Seedmatch, 16 start-ups received a follow-up financing on Seedmatch while 21 start-ups failed. The average investor on the platform participates in 2.9 projects with € 1,193 per project but with 54 % the majority invests in one start-up. The average funding sum on Seedmatch amounts to about € 346,400 financed by 327 investors in 75 days on average.

<sup>&</sup>lt;sup>2</sup> The upcoming overview is based on information from the following websites: www.companisto.com/de, www.kapilendo.de and www.seedmatch.de (latest access on March 6, 2019). If additional sources were used, they will be marked directly in the text.

Secondly, Berlin-based Companisto was founded only a few months after Seedmatch in June 2012 by David Rhotert and Tamo Zwinge (Schramm & Carstens, 2014, p. 24). According to the platform, over 94,000 people or so-called "Companists" are registered and in 118 financing rounds more than € 60 million were invested. The platform offers investments in limited liability (GmbH) and stock (AG) companies for high-growth enterprises as well as virtual participations and venture loans for start-ups. Examples for successfully financed companies include Foodist, doxter and America. During the fastest financing round on Companisto € 2 million were raised in 72 hours. Investors can register and use the platform free of charge but in contrast to Seedmatch, Companisto realizes profits when the investors also generate profits from their investment, by earning 10 % of the distributed profits or sales proceeds. Additionally, the platform asks for a commission of 15 % and an administration fee of 0.4 % of the funding sum. Furthermore, the platform introduced the Companisto Angel Club for business angels and wealthy investors who have the chance to participate in closed financing rounds and at preferential conditions along with other benefits.

Finally, Kapilendo, which belongs to the Comvest Holding GmbH (Lücke C., 2015), offers loan financings marked by "KF" and (profit-participating) subordinated loans with the tag "NF". The former can be classified as crowd lending and the latter as crowdinvesting. The platform started its business in 2015 and since then, over € 43 million were invested through 141 projects in Germany-based SMEs (including crowdlending and crowdinvesting). Crowdinvesting projects accounted for 36 out of the 141 projects and about € 25.1 million. Successfully financed crowdinvesting projects are for example nextbike, Veganz and littlelunch. Additionally, investors can engage in crowd lending and crowdinvesting at the same time by investing in both types of financing within one project. Like Seedmatch and Companisto the registration as well as the usage of Kapilendo is free of charge, but the platform does not disclose the amount of fees that capital seeking companies have to pay if they choose to use a mezzanine-based crowdfunding.

Since this thesis concentrates on mezzanine-based crowdfunding, mostly aspects concerning this funding method will be evaluated in the next chapter. If a differentiation of the information between this and other methods is not possible, it will be marked in the text.

## 4 Comparing German platforms

## 4.1 Preconditions

## 4.1.1 Preselection of investment options by the platforms

It is crucial for a platform to establish criteria for the selection of projects in order to stay competitive and to prevent malpractices (Beck, 2014, p. 195). Also, the selection has become one of the main quality aspects of the platforms (Sixt, 2014, p. 131). Thus, in practice, the platforms operate as gatekeepers by choosing to present only a small proportion of applicants on their websites (Beck, 2014, pp. 195 f.; Hornuf et al., 2018, p. 518). Hence, investors can only choose a project which has been selected by the employees of the crowdinvesting platform (Kortleben & Vollmar, 2012, p. 23).

The decision process, intensity and selection criteria vary from platform to platform (Beck, 2014, pp. 19 ff.). Generally, they assess potential projects, starting with a quick preselection followed by gathering additional information through different methods like questionnaires, interviews or third-party perspectives and finally meeting the management team (Löher, 2016, p. 15). Especially aspects relating to the applicant's business model, product as well as financial considerations are evaluated (ibid).

All three platforms compared in this bachelor thesis disclose information about process of selecting suitable projects on their websites<sup>3</sup>. First, on Seedmatch the selection process starts when a company sends a pitch deck via email which then serves as a basis for an internal evaluation. The platform states that the preselection is based on their investment focus as well as specific formal criteria which are not directly disclosed on the website. However, Seedmatch releases the prerequisites that the start-up must be in the legal form of a GmbH or a company with limited liability and insufficient share capital (Unternehmergesellschaft), headquartered in Germany and has an existing website. The funding needs of applicants should amount to between € 100,000 and € 2,500,000. Also, they mention important characteristics for business ideas including a potential to excite people, an innovative product or service with unique features, a proof of concept, a capable team of founders as well as a scalable and sustainable business model. Additionally, an external investment team supports the platform (Sixt, 2014, p. 136). If the start-up is selected, Seedmatch evaluates detailed documents like

<sup>&</sup>lt;sup>3</sup> The upcoming comparison is based on information from the following websites: www.companisto.com/de, www.kapilendo.de and www.seedmatch.de (latest access on March 10, 2019) as well as Jasch, 2018. If additional sources were used, they will be marked directly in the text.

the business plan. Lastly, the founders are invited to a personal meeting before a standardized funding preparation process can start. Overall, Seedmatch states that less than 1 % of all applications will later appear as investment options on the website. During an interview with Robert Kunz, the head of investment, the selection process of Companisto was elaborated. He explained that the entire process is divided into five phases taking about four weeks from the first contact to concluding the negotiations. Firstly, Companisto examines the business plan before asking for a pitch deck as an additional basis of information. Next, the founders are contacted via email and telephone to get to know the people behind the idea. After asking for additional documents, a personal meeting with the founders takes place. The internal exchange of thoughts about the project is supplemented by experts of the sector when necessary in order to assess the potential of the start-up. The fourth phase includes the decision by the investment committee whether to select the company for negotiations. Finally, negotiations about the campaign, capital requirements and company evaluation take place. Basic criteria for a funding include that companies are in their seed and early stages with € 350,000 to € 2,500,000 funding requirements. These companies can be registered in Germany, Austria or Switzerland. Like Seedmatch, Companisto does not disclose specific criteria for the internal selection process. Still, Kunz explains that an unprofessional behavior of the founders or an unclear business model are deal breakers. In addition, the start-ups must have potential for a long-term success and for example a product which improves the quality of life might be able to draw attention immediately. Altogether, from about 1,000 business plans which Companisto receives each year, only 1 % is approved for a crowd investment on the website.

Finally, Kapilendo offers information about the selection of projects as well, but the process is not described in detail. The platform states that applicants undergo a screening process with multiple steps carried out by financial experts and partners. Each application undergoes three steps, starting with the qualification which includes a proof of concept as well as an analysis of the sector. After passing the first investigation, the rating team performs a credit analysis focusing on the sustainability of the business concept based on indebtedness before the enterprise value is determined. However, in contrast to the other two platforms, Kapilendo specifically discloses minimum application requirements including the fact that company is registered in Germany and does its accounting based on the German Commercial

Code (in the following HGB), it is at least three years old and achieves a minimum revenue of € 300,000 p.a. Additionally, requirements for subordinated loans on Kapilendo contain rapidly growing companies with over 10 % revenue growth (Compound Annual Growth Rate, in the following CAGR) and a financing need of over € 100,000 with a tenor of 36 to 60 months. Both other platforms do not list requirements based on key performance indicators or similar measures, but only general requirements.

In conclusion, the selection process of all three platforms consist of multiple steps including screenings. Seedmatch and Companisto emphasize the importance of a personal meeting with the capital seeker while Kapilendo focuses on a credit analysis. Nevertheless, a preselection of investment opportunities by the platforms does not indicate risk free investments because the invested money can still be completely lost (Hahn, 2018, p. 194) and based on the comparison, the quality of the process cannot be evaluated since the decision process takes place internally.

## 4.1.2 Opportunities for diversification

According to a study carried out by Seedmatch, Econeers and Mezzany, 85 % of the interviewees think that diversification is important or very important (Seematch, 2018a, p. 1). Each crowd investor needs to decide whether to invest in one project or to spread the risk by investing in many projects (Beck, 2014, p. 102). Thus, if there are enough investment alternatives on a platform, the possibility of diversifying the risks by using a portfolio approach might be an interesting aspect for the investor (Sixt, 2014, p. 130). Developed by Markowitz, the modern portfolio theory includes a methodology to construct portfolios, considering expected returns, risks characteristics as well as the investor's risk appetite (Lhabitant, 2017, p. 33). A diversified portfolio delivers results that are less volatile in contrast to a concentrated portfolio which leads to variations in returns for the investor (ibid, f.). Therefore, theory suggests that wealthy individuals who have different investment options, choose a combination of different investments (Meisner, 2017, p. 93). One example of portfolio diversification is categorizing investments by industry sectors since businesses from different sectors are not as much correlated and thus, they perform in different ways (Lhabitant, 2017, p. 47). Consequently, combining investments from different sectors in a portfolio leads to diversification and a reduced portfolio risk (ibid, f.). A second example of diversification

is based on diverse asset classes, in form of different financing instruments, which develop differently over time, also leading to a reduction of portfolio risks (Lhabitant, 2017, p. 56; Söhnholz, Rieken, & Kaiser, 2010, p. 23, 35) (see chapter 4.2.1).

Moreover, crowdinvesting can overcome a market niche by making the asset class venture capital available to small investors (Schedensack, 2018, p. 94). The small investment amounts make it possible for them to gain access to risk participation in innovative companies (Sixt, 2014, p. 130). Thus, they can use an alternative to traditional investment options and thereby have a chance to achieve high returns by investing in founding and growth projects (ibid). Generally, according to Leicht, each crowd investor has on average € 3,750 freely available for investment purposes each year (Schramm & Carstens, 2014, p. 61). 86 % of capital providers, invest less than € 1,000 in a project via a crowdinvesting platform, 14.9 % invest between € 1,000 and € 10,000 and the remaining 0.1 % invest more than € 10,000 (Bundesministerium der Finanzen, 2017, p. 38). An interview with a crowd investor revealed that he only invests small amounts between € 250 and € 1,000 in order to spread the risk (Schramm & Carstens, 2014, p. 67). Hence, only if the platform offers a low minimum investment amount, it is possible for investors to spread their risks on one crowdinvesting website (Beck, 2014, p. 104).

Overall, according to the study of Seedmatch, Econers and Mezzany more than 80 % of investors diversify their portfolio through investments in different forms of assets and 66 % diversify by investing in the same asset class on different platforms (Seematch, 2018a, p. 2). Also, many crowd investors try to diversify their risks by investing in many projects with small amounts (Schramm & Carstens, 2014, p. 57). However, practicing sufficient diversification can be challenging for investors and it is not trivial (Lücke C., 2018b; Söhnholz et al., 2010, p. 195). The following comparison of possible portfolio diversification through crowdinvesting will concentrate on the number of offered investment opportunities, investment focus and the possibility of investing only minor sums on each platform.

Firstly, the following Figure 4 shows the number of projects that each platform has reported from 2016 until March 2019 considering only German mezzanine or equity-based financing in the company sector.<sup>4</sup>

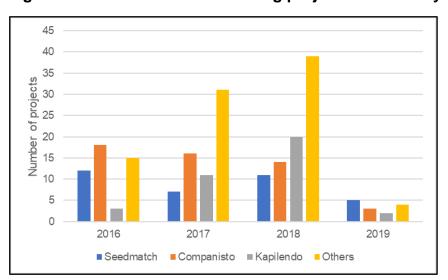


Figure 4: Number of crowdinvesting projects in Germany

Own figure retrieved from crowdinvest.de, n.d. on March 6, 2019

In the last years, the total number of crowdinvesting projects increased from 48 in 2016 to 84 in 2018 (crowdinvest.de, n.d.). While in the beginning Seedmatch and Companisto were responsible for over 60 % of all projects, in the recent years both platforms together with Kapilendo still accounted for half of the number of all German projects (ibid). Currently, Kapilendo offers two investment opportunities in form of subordinated loans, on Seedmatch also two options are available and Companisto presents one mezzanine-based opportunity as well as a GmbH participation in the Companisto Holding GmbH itself. Hence, crowd investors can choose from multiple investment options making risk diversification based on investing in a larger number of project possible on all three platforms.

Secondly, in contrast to the common high quantity of projects, which can also be explained by the fact that only the top three German platforms are compared, in terms of their investment focuses the platforms differ. Seedmatch offers investments in start-ups as well as high growth companies from all industries. Looking at their latest projects, for example the sector e-mobility has been represented four times since the

<sup>&</sup>lt;sup>4</sup> The upcoming comparison is based on information from the following websites: www.companisto.com/de, www.kapilendo.de and www.seedmatch.de (latest access on March 6, 2019). If additional sources were used, they will be marked directly in the text.

beginning of 2018. But companies from the sectors healthcare or hard- and software providers were financed on Seedmatch as well. On the contrary, Kapilendo does not offer financing for companies in founding and early stages or start-ups but only for SMEs and high-growth companies. They do not focus on a specific sector, but the majority of subordinated loan based investments on Kapilendo fall under the service sector followed by the industrial sector, but also companies from the commercial sector are financed on the platform (Lücke C., 2018a). Especially firms from the fields of catering and technical supports as well as the food industry and healthcare can be found on Kapilendo (ibid). Lastly, Companisto focuses on companies in their seed and early stages from all sectors. For example, 15 capital seeking companies were part of the food and beverage industry and over 20 companies belonged to the electronics industry, but several other sectors like pharmaceuticals or online service portals were funded as well. In conclusion, all three platforms offer investments from multiple industries, but Companisto and Seedmatch rather focus on start-ups whereas Kapilendo concentrates on SMEs.

Finally, the average investment of investors differs from platform to platform (Schramm & Carstens, 2014, p. 57). On Seedmatch and Companisto investments can be made starting from € 250 and followed by steps of € 2 50.5 Companisto has recently raised the minimum investment amount from € 100 to, according to the platform, achieve an increase in attractiveness for capital seekers and investors (Companisto, 2019). In contrast, Kapilendo has a minimum investment amount of € 100 following steps of € 100. Further, the maximum investment amount is limited as in order to be exempted from the prospectus requirement within the meaning of § 2a VermAnIG, the crowdinvesting platform has to ensure that it complies with the single investment threshold (see chapter 3.1.2), which is also mentioned on all three platforms. They also inform about the fact companies are not affected by the threshold and Companisto states that it can be of advantage to invest as a company for example in terms of taxes. As most crowd investors invest less than € 1,000, all three platforms can be taken into account for diversification by investing only small amounts. However, on Seedmatch and Companisto investors must spend at least 2.5 times more than on Kapilendo.

<sup>&</sup>lt;sup>5</sup> The upcoming comparison is based on information from the following websites: www.companisto.com/de, www.kapilendo.de and www.seedmatch.de (latest access on March 8, 2019). If additional sources were used, they will be marked directly in the text.

To conclude, many crowd investors assemble their portfolio across multiple platforms (Schramm & Carstens, 2014, pp. 57 f.). Overall, the opportunities for diversification are given on all three platforms. However, the investors' preferences and goals influence how investments should be allocated to different asset classes (Söhnholz et al., 2010, p. 37). Additionally, investors believe that the current opportunities for diversification in the field of crowdfunding are respectable but also improvable (Seematch, 2018a, p. 2).

## 4.1.3 Access to information

In order to make a profound decision, each investor must gather as much information about the investment project as possible (Schramm & Carstens, 2014, p. 16). However, all three participants of a crowd investment act on an imperfect market, causing the information to be spread asymmetrically since founders have more knowledge about their business than possible investors (Kortleben & Vollmar, 2012, pp. 20 ff.). This asymmetry plays a crucial role in the context of business finance, because the costs to eliminate it are often high, resulting in a so-called "equity funding gap" (Block, Hornuf, & Moritz, 2018, p. 5; Schramm & Carstens, 2014, pp. 15 f.). However, in a crowdinvesting scenario, the establishment of a personal relationships to decrease information asymmetries is not practicable (Block et al., 2018, p. 5). Thus, platforms try to close the funding gap by acting as information intermediary and providing standardized information about projects to decrease information asymmetries as well as costs for the information procurement (Kortleben & Vollmar, 2012, p. 30; Schramm & Carstens, 2014, p. 16).

There are three ways in which the information on platforms can improve the coupling of capital seekers and providers (Estrin, Gozman, & Khavul, 2017, p. 5). First, information is provided as a part of the pitch including a valuation and financial information of the business, as well as a standard presentation which includes data about the entrepreneurs themselves, their experience and a clarification of the business idea (ibid). If founders are not willing to reveal details about their business idea, usually not enough investors will be ready to provide money (Beck, 2014, p. 19). However, if platforms demand too much information, potential investors can be overwhelmed, and disclosure risks may arise for the founders (ibid).

The form of presentation and the allocation of the information differ, but in general this type of information is available on all three platforms including core elements like a pitch video, a business overview and information about the investment itself. According to Kapilendo, particularly the video clarifies details about the capital seeking company, the financial project and the purpose of the financing. Financial planning and other aspects of the companies' business plans like market overviews or SWOT analyses are available at all the platforms. In addition, investors can access documents like a model agreement, annual financial statements and the VIB. However, small differences between the platforms are e.g. information about the probability of default or the participation rate which only Companisto provides as well as data concerning the enterprise value which were available on Seedmatch and Companisto. Also, the possibility to calculate the rate of return by changing for example the amount invested and the company's expected revenue or Earnings Before Interest and Taxes (in the following EBIT) is given on Companisto and Seedmatch, while Kapilendo offers an example calculation of the return for the investment.

Secondly, information flows are created through the dynamics of the pitch process since a large amount of discussion and exchange is generated and investors collect information from the network itself (Estrin et al., 2017, p. 6). But, the so-called "90-9-1 rule", introduced by Jakob Nielson, can be applied to the information exchange during the campaign (Schramm & Carstens, 2014, p. 59). The rule implies that 90 % of the users in an online community do not actively participate, but instead hide in the background, 9 % contribute occasionally and only 1 % is responsible for a disproportionately big part of the content (Nielsen, 2006). A single question or comment can therefore represent the thoughts of many possible investors, who do not actively participate due to a lack of time or laziness (Schramm & Carstens, 2014, p. 59). Additionally, some backers appreciate the fact that others post challenging and intellectual questions, which can contribute to the collective intelligence that is often associated with the crowd (ibid).

<sup>&</sup>lt;sup>6</sup> The upcoming comparison is based on information from the following websites: www.companisto.com/de, www.kapilendo.de and www.seedmatch.de (latest access on March 7, 2019). If additional sources were used, they will be marked directly in the text.

For example, unexperienced investors can receive a comprehensive impression of the business by reading comments from experts (Kortleben & Vollmar, 2012, p. 25). Thus, being able to ask questions directly and to see the answers on the platform is an important feature for investors (Schramm & Carstens, 2014, p. 58).

Updates posted by the capital seeking company are available on all platforms.<sup>7</sup> However, in contrast to Seedmatch and Companisto, on Kapilendo users cannot comment or answer the updates posted. Moreover, the latter does not offer the possibility for investors to directly ask questions or post comments in a discussion forum. Still, investors can send their questions to the capital seeking company and these can be posted as an update later. Thus, the discussion and exchange as mentioned by Estrin et al. can only take place on Companisto and Seedmatch.

Lastly, users of the platform can observe the decisions of other investors who reveal their willingness to pay for equity (Estrin et al., 2017, p. 6). As they are informed about the amount which is already invested, they might be encouraged or discouraged to invest as well (ibid). This reaction is called heard behavior and it can be observed when people only base their investment decision on the size of the crowd that already invested (Harms, 2017). Platforms can support the psychological effect of this behavior by using a scale for the funding amount which does not have equal distances (Beck, 2014, pp. 113 f.). Hence, investors should not only look at the amount already invested but consider all information available and their own perception (ibid).

Again, there are differences about the information each platform provides concerning the investors and the invested amount.<sup>8</sup> While all platforms present information about the total amount, Companisto and Seedmatch also inform users about the number of investors and the amount each backer provides as well as the point in time of the investment. The former additionally discloses the investors' names and locations whereas the latter gives this information anonymized. Further, Companisto shows the portfolios of their so-called "Companists" and the platform introduced badges presenting the degree of activity as well as a ranking which is composed of the number of companies in the portfolio, the amount invested on the platform and the

<sup>&</sup>lt;sup>7</sup> The upcoming comparison is based on information from the following websites: www.companisto.com/de, www.kapilendo.de and www.seedmatch.de (latest access on March 8, 2019). If additional sources were used, they will be marked directly in the text.

<sup>&</sup>lt;sup>8</sup> The upcoming comparison is based on information from the following websites: www.companisto.com/de, www.kapilendo.de and www.seedmatch.de (latest access on March 8, 2019). If additional sources were used, they will be marked directly in the text.

completeness of the investor's profile among others. Similarly, Seedmatch also introduced badges for their investors indicating the first investors on the platform, the number of investments, the total amount invested and recommendations of interesting start-ups. Another difference between all platforms is the way the current funding status is visualized. On the one hand, Companisto and Kapilendo use percentages and a bar graphs, on the other hand a graph similar to a pie chart is used on Seedmatch. Also, the base for the presentation of the status differs among the platforms. Kapilendo calculates the percentage reached based on the funding threshold, Companisto uses the funding goal as a basis and Seedmatch shows both, but only in form of illustrations without any numbers.

In conclusion, investors have access to a variety of information on all websites and hence, the platforms act as information intermediary between capital seekers and providers. However, this comparison is only based on the information availability of three currently available projects including vanilla bean on Companisto, iGRC Holding GmbH on Kapilendo and Kluba Medical on Seedmatch. Additionally, the investors' expectations influence their cognition and due to this selective perception, each participant bases decisions on individual rules and for example an information overload can contribute to the fact that they cannot decide between relevant and irrelevant information (Daxhammer & Facsar, 2017, pp. 172 ff.). As narratives about the project are sometimes perceived as more important than a fundament evaluation, a large potential to manipulate users, based on the propensity to emphasize certain information, is given in a crowdinvesting scenario (Meisner, 2017, p. 159). Consequently, most users also carry out additional Internet research about the company before investing (Schramm & Carstens, 2014, p. 59).

## 4.2 Aspects of contract design

## 4.2.1 Financing instruments

Based on the existing options for the form of financing and contractual arrangements, investors have to carefully and critically compare the offers of different platforms (Sixt, 2014, p. 130) since the form chosen for the investment has e.g. a substantial impact on legal consequences for all participants (Beck, 2014, p. 135). Theoretically, there are numerous options for contract and legal structures of a crowd investment (Schedensack, 2018, p. 165). However, individual financing instruments differing from

standard solutions are used on a regular basis (Beck, 2014, p. 135). In most countries the main type of contract used for crowdinvesting is equity security (Hornuf et al., 2018, p. 510). But in Germany, mostly hybrid securities are offered due to high contractual freedom as well as the German legal and regulatory framework (ibid). Typically, equity and debt are the categories that different forms of financing can be allocated to (Hahn, 2018, p. 36). In practice however, there are several financing methods which cannot be clearly categorized, and which have characteristics of equity as well as debt (Meisner, 2017, p. 124). These forms are called hybrid or mezzanine-based financing methods (ibid).

According to literature, crowdinvesting is often based on one of the following three instruments which have the nature of equity as well as characteristics of debt: silent partnerships, profit participation rights or profit-participating (subordinated) loans (Beck, 2014, pp. 138 f.). The following Table 2 shows an overview of characteristics of these types of hybrid financing.

Table 2: Characteristics of mezzanine-based forms of financing

	Silent partnership	Profit participating rights	Profit-participating (subordinated) loans
Participation in profits	Yes	Yes	Yes (option: different success indicator)
Participation in losses	Yes, but usually restricted to the investment	Generally yes, but only up to the invested amount	No
Participation in value increase	Yes	No (can be contractually agreed on)	No (can be contractually agreed on)
Participation in proceeds of liquidation	Yes	Optional	No
Agreements under the law of obligations	No	Yes (subordinate to other creditors)	Yes
Right to vote and to say	Usually no	No	No

Own table based on Beck, 2014, p. 139 and Schramm & Carstens, 2014, pp. 43 f.

Firstly, a silent partner participates in form of a contribution of assets, which are transferred to the owner of a commercial business (HGB, § 230 (1); Meisner, 2017, p. 125). However, only the owners of the business have the rights and obligations which arise from transactions and thus, the silent partner does not act in external relationships (Hahn, 2018, p. 186; HGB, § 230 (2)). At the same time, the silent partner usually shares profits as well as losses, but the latter can also be excluded according to § 231 HGB (Meisner, 2017, p. 125). However, a typical silent partnership contains a profit participation and only if specifically mentioned a participation in losses (ibid). In addition, an atypical silent partnership also includes a participation in value increasement and proceeds of liquidation as well as rights concerning information, consent and control (Hahn, 2018, p. 186). Thus, the latter form is often used for crowd investments because investors automatically participate in profits and value increases while specific rights like control rights are disposable (Beck, 2014, pp. 141 ff.). Moreover, within the scope of crowdinvesting, silent partnerships usually include a minimum tenor and after maturity the investor gets back the initial commitment or a compensation in addition (ibid). However, silent partnerships are not part of the regulatory easement for crowd financing instruments within the meaning of § 1 (2) no. 1 according to § 2a (1) VermAnIG (Schedensack, 2018, p. 169). Hence, to be eligible for an exclusion from the prospectus requirement, an offering cannot exceed € 100,000 per year (Hornuf et al., 2018, p. 525).

The second instrument used in mezzanine-based crowdfunding is called profit participation right or participation paper (Beck, 2014, p. 143). It can be defined as a contractual agreement under the law of obligations which establishes pecuniary claims (Meisner, 2017, p. 125). As shown above in Table 2, it is typical for this financing instrument that the investors have the right to claim repayment and participate in profits, but they do not have the rights to vote or to say (Beck, 2014, p. 143). In contrast to the silent partnership, the legal relationship is based on the law of obligations instead of corporation law (Hahn, 2018, p. 51). If profit participation rights are chosen as an instrument for crowdinvesting, the drafting of the contract usually contains a defined tenor and the rights to receive a premium after maturity, which is based on an increase in company value and called "non-equity-kicker" (Beck, 2014, p. 144). Overall, silent partnerships and profit participating rights can be arranged similarly (ibid, f.).

Finally, the third instrument is called profit-participating (subordinated) loan (ibid). These loans do not only include a fixed interest rate but also, as indicated in Table 2, a participation on profits or revenues in case the capital seeking company is successful (Schramm & Carstens, 2014, p. 38). Contrary to profit participation rights, a participation in losses is not included (Hornuf et al., 2018, p. 526). However, as this participation can also be excluded from participation papers, the distinction between both instruments is not always clear (Beck, 2014, p. 144). Typical aspects about this type of legal relationships are the absence of control rights and thus the fact that the investor does not have any influence on the success of the company (Hahn, 2018, p. 198; Schedensack, 2018, p. 169). In order to make profit participating loans more suitable for crowdinvesting, a participation in increasing company value or a bonus payment is often arranged in form of exit or termination arrangements (Beck, 2014, pp. 146 f.; Schramm & Carstens, 2014, p. 38). Referring to Jansen and Pfeifle, Hahn also makes the remark that due to its distinctive elements of speculation, this hybrid financing instrument has a performance risk (2018, p. 198). In addition, if agreed on, the loan can be subordinated, meaning that in case of insolvency, it will be served after senior debtholders are paid out (Hornuf et al., 2018, p. 526; Kenton, 2018). As mentioned in chapter 3.1.2, profit participating loans are excluded from the prospectus requirements according to § 2a VermAnIG and therefore it is a flexible financing instruments with advantages for the capital seeking company (Hahn, 2018, p. 199). In practice, profit-participating subordinated loans are common on the market for crowdinvesting (Schedensack, 2018, p. 169). In November 2012, Seedmatch started

In practice, profit-participating subordinated loans are common on the market for crowdinvesting (Schedensack, 2018, p. 169). In November 2012, Seedmatch started to offer this type of financing followed quickly by Companisto (Schramm & Carstens, 2014, p. 36). Before, mostly silent partnerships were used on crowdfunding platforms, but the change of instrument made it possible to exceed the limit of € 100,000 that was in place (ibid). Thus, the form of participation shifted from silent partnerships to profit-participating (subordinated) loans (Bundesministerium der Finanzen, 2017, p. 39).

As indicated in Table 3, all three platforms offer at least two different forms of financing.<sup>9</sup> First, on Companisto there are three forms that the investors can choose from including profit-participating loans, venture loans and equity (Jasch, 2019). On

<sup>&</sup>lt;sup>9</sup> The upcoming comparison is based on information from the following websites: www.companisto.com/de, www.kapilendo.de and www.seedmatch.de (latest access on March 8, 2019). If additional sources were used, they will be marked directly in the text.

the contrary, Kapilendo does not offer equity-based participations, but in addition they provide the opportunity to invest in credits which can be classified as crowdlending. Lastly, Seedmatch offers subordinated profit-participation loans and venture loan, which in contrast to subordinated loans on Kapilendo and Companisto also include a revenue-based bonus interest.

Table 3: Financing instruments available on the platforms

Form of financing	Companisto	Kapilendo	Seedmatch
Profit-participating (subordinated) loans	Yes	Yes	Yes
Venture loans (subordinated loans without profit or exit participation)	Yes	Yes	Yes (include a revenue-based bonus interest)
Equity-based participation	Yes (GmbH/AG)	No	No
Crowdlending (credit financing)	No	Yes	No

Own table based on Jasch 2019; www.companisto.com/de, www.Kapilendo.de and www.seedmatch.de (latest access on March 8, 2019)

As mentioned in chapter 4.1.2, investors are interested in opportunities to diversify their portfolio for example by investing in different asset classes based on diverse financial instruments. On the one hand, the availability of different instruments illustrated in Table 3 allows the investors to diversify their portfolios. On the other hand, not all the available investment opportunities can be characterized as mezzanine-based crowdfunding or crowdinvesting. According to Beck, projects without a profit-sharing component rather fall under the term crowdlending instead of crowdinvesting (2014, p. 98). Following this approach, the subordinated loans offered by Companisto and Kapilendo cannot be classified as crowdinvesting. However, the classification of fixed interest-bearing financing instruments as crowdinvesting is ambiguous (Schedensack, 2018, p. 79). In accordance with the classification of Schedensack (2018, p. 80) and the platforms' differentiation (Jasch, 2019; Kapilendo, n.d.), subordinated loans will also be regarded as crowdinvesting or mezzanine-based crowdfunding. Thus, if not stated differently, the following subchapters will be based on both financing instruments. In addition, the equity-based participations, although classified as crowdinvesting (Beck, 2014, pp. 28 ff.), will not be included due to the focus of this thesis on mezzanine-based crowdfunding.

Overall, profit-participating (subordinated) loans are offered by all three platforms. In addition, subordinated loans without an exit or profit participation are also available on all platforms, but they include different features.

# 4.2.2 Control and information rights

The investors' rights depend on the form of financing used for the investment (Sixt, 2014, p. 137). As mentioned in the previous subchapter, one characteristic of the mezzanine-based financing instruments used for crowdinvesting, is the fact that the backers do not get granted the rights to say or vote (Schedensack, 2018, p. 163; Sixt, 2014, p. 137). Thus, they can be classified as passive investors (Schramm & Carstens, 2014, p. 59). Reasons for choosing this investment type as a company include on the one hand, that they do not want to grant these rights to the entire crowd because this would lead to an impractical decision-making process and the risk of disrupting single decisions. On the other hand, most backers only invest small amounts and thus their opportunities to influence would be slim (Schedensack, 2018, p. 163; Zwinge (a), n.d.). However, if an investor is an expert, the possibility to act as consultant is given (Kortleben & Vollmar, 2012, p. 34).

On the contrary, the right to information is very important for capital providers (Beck, 2014, p. 89; Schedensack, 2018, p. 163). Still, a typical mezzanine-based crowdfunding scenario does not include granting the right to information to investors for example because their ability to react to concerning news is limited since no secondary market to sell crowd investments exists (Schedensack, 2018, p. 163). Nonetheless, the right to information in case of a profit-participating loans is typically determined in the loan agreement (Zwinge (a), n.d.). The communication between crowd investors and the company is based on transparency and information as the backers want to know about the development of the company and the usage of their investment (Hahn, 2018, p. 196). In return, direct feedback from the investors can be helpful for the company (ibid). Thus, contracts include for example rights to receive quarterly reporting, annual financial statements and an overview of achieved profits as well as revenue participation (Hornuf et al., 2018, p. 565).

On all three platforms the investors get granted the right to information, however, its extend differs. <sup>10</sup> Moreover, the right to control is limited on the platforms. Seedmatch states that the capital seeking company is obliged to regularly inform the investors in form of quarterly report as well as annual reports and to communicate updates about the development of their company on an irregular basis. In addition, the platform tells capital seeking companies that they can communicate with their investors and therefore for example generate a wide reach. According to Seedmatch, investors also expect active discussions with the company via the investor-relations channel. Further, all decision rights remain within the company.

Similarly, Kapilendo mentions that the companies have to cede neither control nor company shares. Having a closer look at a model agreement from the platform, it is clarified that the investors do not have any rights to control, vote or to issue directives. However, in case of a successful campaign, the development of the company must be described in a semiannual report published on the platform. The report must include revenue numbers as well as remarks on liquidity and the current business situation without containing additional numbers. Thus, investors get information less often on Kapilendo than on Seedmatch.

Finally, on Companisto investors annually receive an overview of their total profits, exits proceed and other income generated on the platform. In addition, they can access the published annual reports of the companies they invested in as well as quarterly updates informing about the current development of the business. The investor updates must include information about financial figures like EBIT, gross profit, liquidity and revenues as well as facts concerning strategic focus, products, marketing, distribution, human resources and press. Hence, like on Seedmatch backers receive updates at least four times per year. Moreover, similarly to the lack of control rights on Kapilendo and Seedmatch, companies are also free to act and are not restricted in their self-determination on Companisto. However, in contrast to both other platforms, Companisto uses pooling agreements to bundle the single investments. The platform argues that the pooling e.g. simplifies a follow-up financing by venture capital companies. For example, in case the capital seeking company receive a transfer offer,

<sup>&</sup>lt;sup>10</sup> The upcoming comparison is based on information from the following websites: www.companisto.com/de, www.kapilendo.de, www.seedmatch.de (latest access on March 11, 2019) as well as Biesterfeldt, n.d. If additional sources were used, they will be marked directly in the text.

investors can vote on the website and a three-quarter majority is enough for the decision to end the loan agreement in return for a payment of the transfer fee. Thus, the company remains flexible and the crowd is treated as one investor.

Overall, almost all forms of participation can be arranged to minimize the control rights for investors (Kortleben & Vollmar, 2012, p. 34). In the beginning of German crowdinvesting, veto rights for the investors were included in the contracts, but in 2014 these rights disappeared from the contracts. Further, inspection rights were also removed from crowdinvesting contracts (Hornuf et al., 2018, p. 569). Still, on all examined platforms, investors have the right to certain information.

## 4.2.3 Maturity

When calculating the return, investors should consider the maturity of the investment because their own capital is committed for the entire period (Beck, 2014, p. 105). Thus, it is important for the investor to determine the minimum duration of the participation after which he can terminate the contract (ibid, p. 91,106). Theoretically, there are two types of provisions for the duration of mezzanine-based crowdfunding contracts, both including the contribution of capital for a minimum duration during which a termination of contract is not possible (Hornuf et al., 2018, p. 535; Pöltner & Horak, 2016, p. 106). First, an open-ended contribution contains a deadline before which neither the investor, nor the capital receiving company can ordinarily terminate the contract (ibid). The second option is a contract with a fixed duration after which it is terminated without a formal notice (ibid). Furthermore, since investors act return oriented, the tenor is often quite long and thus problematic, because a secondary market for trading crowd investments is not yet available (Sixt, 2014, p. 135). However, a longer maturity can be advantageous for the capital provider because the expected increase in enterprise value at the end of the investment is also higher (Beck, 2014, p. 106; Pöltner & Horak, 2016, p. 118). Mezzanine-based financing instruments often have a tenor between six to ten years, because it leads to a financial planning security for the capital seeker (Hahn, 2018, p. 184).

On Companisto, the minimum duration of a participation is eight years. 11 After this period, investors can terminate the contract, or the participation will continue. The platform argues that start-ups need planning security to become a successful company and hence, the capital seeker as well as the investors benefit from the long-term maturity. In addition, since July 2016 a termination of contract after maturity by the start-ups is not envisaged by the platform to ensure a participation throughout life if possible. Contrary, on Seedmatch the minimum duration of profit-participating loans generally is five years for the investors and eight years for the start-ups. Both parties can terminate the contract thereafter. For venture debt investments, the minimum period is up to five years during which only the capital seeker can terminate the contract afterwards. Moreover, the investor can also recall the loan. Similarly, Kapilendo offers profit-participating loans as well as subordinated loans with a maturity of three to five years.

In conclusion, the range of possible maturities of investments is larger on Kapilendo and Seedmatch than it is on Companisto where only one duration of contract is offered. However, this evaluation is limited to the general statements from the platforms and multiple projects would need to be evaluated to see if the range of tenors is greater on Seedmatch and Kapilendo. Overall, backers should consider if they want to invest their money long-term since the possibilities of exiting, selling or transferring the participations are often limited (Verbraucherzentrale, 2018).

### 4.2.4 Profitability

On the one hand investors look for opportunities with high returns and adequate risks, while on the other hand the capital seeking company aims at receiving a financing which is as cheap as possible (Kortleben & Vollmar, 2012, p. 35; Schedensack, 2018, pp. 136 f.). However, an adequate return cannot be defined easily as in general, the possible return rate increases in accordance with the risk (Lücke C., 2018c). Nevertheless, a UK study revealed that the primary reason to invest through crowdinvesting was the potential for high returns (Estrin et al., 2017, p. 16). Moreover, three out of four crowd investors expect a minimum return of 10 % while 54 % regard a return rate of 27 % as realistic and almost all investors realize that there is a risk of

<sup>&</sup>lt;sup>11</sup> The upcoming comparison is based on information from the following websites: www.companisto.com/de, www.kapilendo.de and www.seedmatch.de (latest access on March 8, 2019). If additional sources were used, they will be marked directly in the text.

losing the entire investment if the capital seeking company fails (Schramm & Carstens, 2014, p. 60). Thus, investors accept the fact that they need to invest in several projects and hope that a few will generate returns whereas the rest will probably fail (Estrinet al., 2017, p. 16). They also understand that this risk is related to the investment in small start-ups and not associated with additional risks created by the platforms (ibid).

In order to evaluate the rate of return for different scenarios, the investor has to study the investment conditions in detail (Beck, 2014, p. 102). Some platforms offer information about the development of the return of a project, but it needs to be considered that the example calculations presented by the platforms are not always trustworthy and hence, investors should calculate the expected return themselves (ibid, pp. 104 ff.).

Taking profit-participating (subordinated) loans as an example, investors typically have four kinds of participation rights (Hornuf et al., 2018, p. 538). First, the profitability of the investment includes a small fixed interest rate, often as a bullet payment, in order to legally classify the form of financing as a loan (Hahn, 2018, p. 199; Meisner, 2017, p. 160; Schramm & Carstens, 2014, p. 41). The development of including a fixed-interest component can be explained by the fact that the financing agreements are often terminated prematurely (Hornuf et al., 2018, p. 540). However, the fixed interest is often quiet low, especially when also a variable component based on the company's profits exists (ibid, ff.). Thus, the interest usually only has a symbolic character (Schramm & Carstens, 2014, p. 41).

Secondly, most contracts include a variable interest payment, providing investors with a chance to participate in the company's profits (Hornuf et al., 2018, p. 543; Meisner, 2017, p. 160). However, most start-ups do not make profits in the beginning and hence, also the annual bonus interest rate only makes up a small portion of the potential profitability of a mezzanine-based crowdfunding (Meisner, 2017, p. 160; Pöltner & Horak, 2016, p. 107; Schramm & Carstens, 2014, p. 41). In contrast, loss participation is usually not a part of crowdinvesting contracts and prior or subsequent losses cannot be offset by the loan itself or distributed profits (Hahn, 2018, p. 199; Hornuf & Schwienbacher, 2017, p. 3; Hornuf et al., 2018, p. 548).

The last two participation rights relate to the fact that many investors hope to participate in an enormous increase in the enterprise value as the participation in regular profits typically only leads to small returns (Beck, 2014, p. 97). Consequently, a more vital

component of the return potential is the bonus interest that investors either receive when the contract is terminated at maturity or in the course of an exit event (Meisner, 2017, p. 160; Schramm & Carstens, 2014, p. 41). As mentioned before, investors do not participate in an increasing value when funding a project with a profit-participating loan by default, but this type of participation can be arranged in the contract in form of so-called "kickers" (Beck, 2014, p. 91; Hahn, 2018, p. 184). The inclusion of virtual non-equity kickers allows the investor to receive a bonus which depends on the development of the capital seeking company (Hahn, 2018, pp. 184 f.).

At first, the third right includes a participation in the company value at the termination of the investment (Hornuf et al., 2018, p. 550). In case no exit event occurs, most mezzanine-based crowdfunding contracts include a participation based on EBIT or revenue multiples after maturity in order to involve the investor in the economic success of the company (Schramm & Carstens, 2014, p. 167). Using multiples for the evaluation of a company value is based on the idea that the firm can be compared to similar ones whose market price is known (Bösch, 2016, p. 357; Pöltner & Horak, 2016, p. 111). However, it is challenging to identify suitable companies for a comparison but still the method is comprehensible (Bösch, 2016, pp. 357 ff.). Combining the multiple agreed on in the contract with the financial figure at maturity results in the company value and the value of the investment can then be calculated by multiplying the company value with the investment ratio (Schramm & Carstens, 2014, p. 41). However, not all capital seeking companies will exist until maturity, making the investment very uncertain (Meisner, 2017, p. 160).

Lastly, the right to participate in the exit proceeds is a crucial part of the investors' profitability calculations (Hornuf et al., 2018, p. 554; Meisner, 2017, p. 160). Generally, initial public offerings as well as a sale of the company are interpreted as an exit, if minimum 50 % of the shares or substantive assets are transferred and the exit proceed includes any return from transferring shares or selling assets (Hornuf et al., 2018, pp. 554 f.; Pöltner & Horak, 2016, p. 188). The bonus interest after exit can be calculated by multiplying the sales price with the share owned by the investor (Schramm & Carstens, 2014, p. 41). Thus, the company value at the time of the exit is especially important, because the return for the investors increases with a higher company value (ibid, p. 167). However, also the valuation of the company at the time the crowdinvesting is completed is crucial for potential investors since the investment

ratio is assessed based on it (Beck, 2014, p. 93; Meisner, 2017, p. 160). The investment ratio, which is used for the calculation of the bonus interest after exit or after termination, is evaluated by dividing the contributed capital from the investor by the pre-money valuation of the company plus the loan sum (Hornuf et al., 2018, p. 543). The pre-money-valuation of the company is typically agreed on by the platform and the capital seeker and the investors rely on the valuation from the platform (ibid). A comparison of the calculation methods for the company value used by the platforms would hence be another interesting aspect for further research. Overall, when investing in a start-up, the majority of returns is made at the end of the investment (Beck, 2014, p. 97; Schramm & Carstens, 2014, p. 42). Thus, for many investors the biggest motivator to invest is the possibility of an exit (Schramm & Carstens, 2014, p. 167).

Even though literature suggests that profit-participating (subordinated) loans include four participation rights, all three platforms follow a different approach when it come to the return for the investors. 12 Companisto states that there is a high range of potential profits when the investment is conducted in form of a profit participating subordinated loan. The fixed interest rate of the participation amounts to 1 % p.a. while investors also receive a variable interest rate component in form of an annual profit participation which depends on the success of the company. The rate differs from company to company and the platform also mentions that most start-ups do not generate profits within the first years. A participation in losses or a reserve liability do not exist on Companisto. Like in theory, the focus lies on an increasing value of the company. While Companisto includes participations in exit proceeds, the participation in the company's value at maturity is arranged differently. As mentioned in the previous subchapter, the platform introduced a so-called "lifetime participation". Generally, investors can participate in profits and exit proceeds throughout their lives since the contract will not be terminated by the start-ups at the end of the minimum maturity. However, if the investor ends the investment after the minimum duration, no valuation of the enterprise takes place and hence, investors do not participate in any value increase at termination like theory suggests. This special form of participation converges an equity-based

The upcoming comparison is based on information from the following websites: www.companisto.com/de, www.kapilendo.de, www.seedmatch.de (latest access on March 11, 2019) as well as Jasch, n.d.; Seedmatch Team, 2013 and Zwinge (b), n.d. If additional sources were used, they will be marked directly in the text.

form. Companisto argues that the potential return significantly increases since exit proceeds and profits rise over time.

On the contrary, the return on Kapilendo for profit-participating subordinated loans is composed of a fixed interest component and a so-called success interest rate. The former varies between 6 % to 10 % p.a. and the later can amount to a one-time bullet payment of up to 25 % measured by the company's revenues.

Finally, profit-participating loans on Seedmatch include fixed, variable and bonus interest payments. Like on Companisto, the fixed interest rate is 1 % p.a., also similarly the variable part depends on the company's profits and it is paid out after the breakeven has been reached. In addition, Seedmatch offers the so-called bonus interests "after termination" and "after exit" which are mutually exclusive. As described above, the bonus interest after the contract is terminated is based on EBIT or revenue multiples which are predetermined in the contract. The bonus interest after exit is paid out in four equal quarterly installments starting three months after the termination of the contract. Additionally, Seedmatch has recently introduced the so-called "Fundingindex", a scientific evaluation of the return from crowd investments in startups, resulting in a return of 15 % p.a. after CAGR (Seedmatch, 2018b). The study evaluated the return expectations in 2017 based on a fictional € 250 investment in all start-ups on Seedmatch between 2011 and 2014 and the assumption that all contracts were terminated at the end of 2017 (ibid). Overall, the participation on Seedmatch is aligned to the four rights of participation discussed in literature. The following Table 4 summarizes the previously analyzed return potential on the three platforms.

Table 4: Overview of the return potential

	Companisto	Kapilendo	Seedmatch
Fixed interest payment p.a.	1 %	6-10 %	1 %
Variable interest payment p.a. (profit-based)	Yes	No	Yes
Bonus payment if contract is terminated	No	Yes (up to 25 % success-based interest rate)	Yes (EBIT or revenue multiple)
Bonus payment in case of exit	Yes ("lifetime- participation")	No information available	Yes

Own table based on Jasch, n.d.; Seedmatch Team, 2013; Zwinge (b), n.d.; www.companisto.com/de; www.kapilendo.de and www.seedmatch.de (latest access on March 11, 2019)

Overall, the platforms differ in terms of arranging the potential return for the investors. While all three platforms include a fixed interest rate, the remaining components differ substantially. Seedmatch and Companisto both combine a profit-based variable interest and a bonus payment in case of an exit event. Contrary, Kapilendo offers a much higher fixed interest rate and the possibility of a revenue-based payment at maturity. However, to fully evaluate the potential return on all platforms, multiple contracts would need to be taken into consideration. Also, to make the different investments more comparable, a calculation based on the internal rate of return including the probability of the payments is necessary (Pöltner & Horak, 2016, pp. 105 ff.). Finally, calculating potential returns for investors is difficult since assumptions about the future must be made (ibid, p. 114).

In conclusion, the investor's expectation about returns increases with the risks of an investment (Schramm & Carstens, 2014, p. 43). But a high risk that the start-up will not be successful is present and therefore investors might not be able to obtain a monetary return or they might even lose their original contribution (Hornuf & Schwienbacher, 2017, p. 3).

#### 4.3 Risks

Investors have to carefully consider risks and opportunities before making an investment decision (Müller-Schmale, 2014). Crowdinvesting entails financial and legal risks, which can only be evaluated when measuring the companies according to their targets and it has not been clarified yet, whether all investors are able to correctly evaluate risks and chances (Löher et al., 2015, p. 33; Sixt, 2014, p. 209). Since most platforms do not require authorization by the BaFin, the investment is affiliated with the unregulated capital market (Müller-Schmale, 2014). Although investments via the unregulated capital market cannot automatically be linked to more risks, backers should keep in mind that the provider's integrity and financial standings are not supervised (BaFin, 2016; Müller-Schmale, 2014). Thus, one source for possible risks of crowdinvesting are the platforms since they collect all funds (Beck, 2014, pp. 169 f.). To avoid dishonest intermediaries, backers could use platforms which have been established for some time (ibid). Moreover, the BaFin (2016) advises investors to have a close look at the Internet presence of the intermediaries. The website crowdfunding.de, which describes itself as an information portal with the goal to create

transparent market overview, states that reliable platforms e.g. inform possible investors about risks (crowdfunding.de, 2016). As stated in chapter 3.1.2, the Retail Investor Protection Act requires a warning notice on the first page of the VIB (Bundesministerium der Finanzen, 2017, p. 39) and according to § 12 Abs. 2 and 3 VermAnIG, the advertisement of investments offered on the open market is subject to a duty of notice (Mayahi-Range & Vogel, 2018). However, referring to a study of 50 active crowdinvesting platforms, for example 62 % of the warning notices in accordance with § 12 Abs. 2 VermAnIG were not highlighted clearly (ibid). In addition, having a close look at the platforms' legal notice can help to identify reliable providers (crowdfunding.de, 2016).

While the integrity of the platforms cannot be fully assessed and compared and no commonly agreed on overview of reliable platforms exists, the following aspects are used as indicators based on the theoretical elements mentioned above. 13 As already specified by the overview of the compared platforms in chapter 3.2.2, Companisto, Seedmatch and Kapilendo have all been active for at least three years and they are very active on the German market. Also, all three platforms are registered companies in the German commercial register (Bundesanzeiger Verlag, n.d.) and they all obtained a permission in accordance with § 34f of the German Trade, Commerce and Industry Regulation Act (in the following GewO). This new classification for crowdinvesting platforms as financial brokers was established with the Retail Investor Protection Act leading to applicability of the Finanzanlagenvermittlungsverordnung which entails additional duties (Löher et al., 2015, p.38). In addition, Kapilendo has a permit in accordance with § 34c GewO. Further, warning information can be found multiple times on each platform and in the beginning of the VIBs. For instance, Seedmatch and Companisto provide a disclaimer as well as a warning on the bottom of the homepage. In contrast, on Kapilendo the warning is positioned directly underneath the current investment opportunities on the homepage. But the conformity with the requirements of § 12 Abs. 2 and 3 are not evaluated in this thesis. Overall, according to crowdfunding.de Companisto, Kapilendo and Seedmatch can be considered as honest platforms (crowdfunding.de, 2016).

<sup>&</sup>lt;sup>13</sup> The upcoming comparison is based on information from the following websites: www.companisto.com/de, www.kapilendo.de and www.seedmatch.de (latest access on March 13, 2019). If additional sources were used, they will be marked directly in the text.

Nevertheless, dishonest platforms are only one source for possible risks of crowd investments. Specifically, since mezzanine-based crowdfunding mostly takes place during the early stage of a company, it can be categorized as capital at risk (Sixt, 2014, p. 130). If the company fails, investors could lose their money completely (BaFin, 2016; Löher et al., p. 26). But especially investors who do not have much experience can quickly get the impression that the investment is secure because companies are preselected, business plans are detailed, and presentations are designed professionally on the platforms' websites (Sixt, 2014, p. 130). Overall, chances and risks are opposing each other in crowdinvesting scenarios (Schedensack, 2018, p. 222). Especially the danger of making investment decisions that are not in the interests of the investors exist since e.g. they are not qualified enough, or they do not completely understand the risks of the investment (ibid). Thus, comparing the total risks, especially those associated with the platforms, might be interesting for further studies.

#### 5 Conclusion

### 5.1 Summary

Crowdfunding is used to finance a project by raising small amounts of money from a vast number of people and it is typically completed via the Internet. The general term can be differentiated into four subtypes including donation, reward, lending and mezzanine-based crowd financing, also called crowdinvesting. In a crowdinvesting scenario, a platform collects funds from multiple investors on behalf of the capital seeker. In return for the provision of funds, investors e.g. participate in the firm's profits or value enhancement. The funding process starts with an application submitted by the capital seekers and it ends with a payment of the funding sum, if enough investors are interested and the threshold is reached. Capital seekers are often companies in their early stage asking for financial support, but also SMEs and high-growth companies. Their interests usually interfere with the investors' goals because they aim at making low payments and granting as few rights as possible. In contrast, investors want to achieve high returns, but they are also aware of the high risks. Typically, they are not professional investors and their participation is possible because only small amounts need to be provided. Thus, backers need to carefully choose their investments and the platform they invest on.

Since the platforms act as intermediaries, they are responsible for the availability of information, the communication and the process of the crowd investment itself. Additionally, platforms select the projects available as investments and they provide a contractual framework.

The idea of crowdfunding was already present in the 19th century, but mezzaninebased crowd financing developed mainly with the launch of the first platforms in 2010. The first intermediary on the German market was Seedmatch in 2011, but new ones emerge constantly. Although exact numbers about the development must be considered carefully, it is still clear that the market volume of crowdfunding in general and of crowdinvesting has increased rapidly worldwide over the decade. In Germany, the equity and mezzanine-based share of crowdfunding of companies amounted to about € 34 million in 2017. With the increasing popularity of this funding method, the German legal environment changed over the last years. Especially the Retail Investor Protection Act governed the formerly unregulated market and improved the investors' security while allowing companies to obtain a crowd financing in a fast and simple way. Although the number of projects on the German market increases, most of them are conducted by a small number of platforms. In 2017 and 2018, Companisto, Kapilendo and Seedmatch were the most active platforms with a market share of over 60 %. Whereas Seedmatch and Companisto belong to the pioneers of German crowdinvesting, Kapilendo was founded a few years later.

From the investors' perspective the preconditions on the platforms are the first aspects to consider. First, the preselection of the projects by the platforms is important, because it is a sign of quality. The process involves multiple steps on all platforms, however, because it takes place internally, the quality cannot be evaluated. Secondly, diversification plays an important role for the backers since they can spread their risks by investing in multiple projects, companies from different sectors or only small sums. Companisto, Kapilendo and Seedmatch account for over half of the investment opportunities on the German market. While all three platforms offer investments in many sectors and for high-growth companies, Seedmatch and Companisto rather focus on companies in their earlier stages like start-ups whereas Kapilendo concentrates on SMEs. Investing only small amounts of money is possible on all platforms, but with € 100 the minimum is much lower on Kapilendo than on Seedmatch and Companisto with € 250. Lastly, investors need access to as much information as

possible in order to make a profound decision. Since the capital seeking company knows more about its business, the platforms try to balance the information asymmetry and thus, they can improve the connection of capital providers and seekers. Although the form of presentation and the exact number of available facts differ, general information like the pitch video is available on all platforms. However, the information flow, including discussion, can only be created on Seedmatch and Companisto because Kapilendo does not offer the possibility to openly communicate on the website. Concerning the signaling effect of the heard, Companisto and Seedmatch display the current number of investors on their websites while Kapilendo only shows the sum that has already been invested.

Thereafter, the arrangement of the contract is crucial for the investors since e.g. the form of financing, the rights, the duration of the investment and the profitability can have a substantial impact on their decisions. While in theory silent partnerships, profitparticipating rights and profit-participating (subordinated) loans can be used for mezzanine-based crowdfunding, in practice the latter clearly prevails. Companisto, Kapilendo and Seedmatch all offer a different mix of financing instruments, but profitparticipating (subordinated) loans and subordinated loans are available on all of them. Moreover, crowdinvesting typically does not include any rights to control because a participation of the entire crowd is impractical for the capital seeking company and the investors. However, the right to information is important for the backers since they want to be informed about their investments' development. Whereas the rights to control are limited on all three platforms, information rights are granted to different extents. On Seedmatch and Companisto investors receive updates at least quarterly while on Kapilendo a semiannual report about the company's development must be published. In addition, the practice of pooling is only used on Companisto. Furthermore, the maturity needs to be considered because due to the absence of a secondary market, the investor's capital is possibly committed the entire time. Generally, the range of maturities covers three to five years on Seedmatch and Kapilendo. In contrast Companisto offers only investments with a maturity of eight years and the platform introduced a lifetime participation meaning that the contract will normally continue until an exit event occurs. Lastly, the profitability is a central element of an investment decision because the potential to receive high returns is a main motivator for engaging in crowdinvesting. However, it needs to be considered that the profitability differs not only based on the success of the capital seeker, but also on contractual arrangements. In literature profit-participating (subordinated) loans include a small fixed interest rate, a variable component depending on the company's profits as well as a bonus interest connected to a termination of contract or an exit event and relating to the fact that investors want to participate in an increase of the company's value. In practice, the three platforms have different approaches concerning the return. While a fixed component is included on all platforms compared, the remaining aspects vary substantially. Companisto and Seedmatch both integrate a profit-based variable interest and a bonus payment in the event of an exit. In contrast, Kapilendo offers a much higher fixed interest rate and the possibility of a revenue-based payment at maturity. Still, before making an investment decision, risks also must be considered thoroughly. Generally, crowdinvesting involves financial and legal risks. One possible source is the platform which therefor must be chosen carefully. However, Companisto, Kapilendo and Seedmatch can be considered as honest intermediaries since they are firmly established on the German market.

To conclude, platforms offering mezzanine-based crowdfunding in Germany differ for example in terms of their investment focuses, their minimum investment amounts, the information rights provided or the components of the return potential. Nevertheless, similarities can also be observed. Consequently, investors must decide which platform or platforms they want to make their investment on.

## 5.2 Critical acclaim

Since mezzanine-based crowdfunding is a rather new form of investment, the conditions and characteristics are constantly changing. This bachelor thesis concentrated only on a small portion of the phenomenon and hence, further research about for example the determination of the company value on the platforms or the level of risk would be very valuable. Also, the fact that the platforms do not only offer mezzanine-based financings could leave room for further comparisons.

Furthermore, to completely take the perspective of an investor, the conduction of a survey would be required. This could help to detect not only the aspects influencing the investment decision or the choice of a platform, but also their importance. However, crowdinvesting decisions are not as rational and usually not only profitability and security are considered, but also personal interests like beliefs or affinity.

Finally, the comparison is predominantly based on information which was provided by the platforms themselves. Hence, it is a snapshot in time and an assessment of all investment options and contracts over a longer period would be a useful supplement for the comparison.

#### 5.3 Outlook

The rising popularity of crowdinvesting will entail challenges and opportunities for intermediaries, capital seekers, regulators as well as investors and the sentiment about the digitalization of the financing sector will have a major impact on its success.

Based on the dynamics on the German crowdinvesting market, it can be assumed that more platforms will enter while others will exit or be bought. However, it is uncertain whether the market will experience a consolidation or stay fragmented.

Further, venture loans for high-growth companies and SMEs are increasing in popularity and therewith the share of crowd investments including a fixed interest rate rises. Hence, the sector of mid-sized companies has a high a potential for crowd financings also implicating new opportunities for the investors. Nevertheless, the strong growth of crowd investments in the real estate segment needs to be analyzed and observed as well.

Even more opportunities for investors arise since with the first emission of shares in a stock company, Companisto started to offer equity-based crowdfunding in Germany in 2019. Thus, it is likely that other German platforms will find a possibility to offer equity investment as well. But this development will be linked to regulatory easements and a possible exemption from the prospectus requirement for the issuance of bonds and stocks over crowdinvesting platforms.

Finally, as the number of investors increases, more studies about their characteristics, motives and goals will be carried out. Nevertheless, it is questionable if mezzanine-based crowdfunding will become a mainstream investment instrument for the general public.

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# VI. Declaration of originality

I hereby declare that this thesis and the work reported herein was composed by and originated entirely from me. Information derived from published and unpublished work of others has been acknowledged in the text and references are given in the list of references.

# VII. Declaration of consent

I	agree	that	а	copy	of	my	bachelor	thesis	will	be	included	in	the	library	of	the
d	epartm	ent.														

Hamburg, March 25 <sup>th</sup> , 2019	
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