

## Financial Contracting in Crowdfunding: Lessons from the German Market

*By Lars Hornuf,<sup>\*</sup> Lars Klöhn,<sup>\*\*</sup> and Tobias Schilling<sup>\*\*\*</sup>*

### Abstract

The present Article aims to shed light on the question whether crowdfunding regulation should favor a specific legal form or contract type for crowdfunding. To this end, it analyzes the conditions which legal forms and contract types must fulfill to be used in crowdfunding. As crowdfunding in Germany benefits from a high degree of contractual freedom, the Article gives an overview not only of the types but also of the contents of crowdfunding contracts that are in use in Germany and traces how they have evolved. Based on a sample of 81% of all crowd financing in the German market, it evaluates 255 crowdfunding campaigns held on 18 different platforms in the period from August 1, 2011 to December 31, 2015.

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<sup>\*</sup> University of Bremen, Wilhelm-Herbst-Straße 5, 28334 Bremen, Germany; Max Planck Institute for Innovation and Competition, Marstallplatz 1, 80539 Munich, Germany; CESifo, Poschingerstraße 5, 81679 Munich, Germany.

<sup>\*\*</sup> Humboldt University of Berlin; Unter den Linden 6, 10099 Berlin, Germany

<sup>\*\*\*</sup> Humboldt University of Berlin; Unter den Linden 6, 10099 Berlin, Germany

## A. Introduction

Much has been written about the regulation of crowdinvesting.<sup>1</sup> Even so, the legal form and the contract types which are used to realize crowdinvesting and which vary between different countries have never been subject to critical scrutiny. There is also relatively little known about the content of the contracts that form the basis of crowdinvesting.<sup>2</sup> This is a serious gap in the academic literature because whether and to what extent crowdinvesting needs to be regulated depends on two factors: The conditions under which investors commit their money and how such conditions have emerged over time. Furthermore, to get a deeper understanding of crowdinvesting, there needs to be detailed and reliable information about the legal agreements that bind investors, start-up businesses, and Internet platforms. From a regulatory perspective, it is of particular importance to understand whether regulation should promote a specific legal form or type of investment contract or whether regulation should be neutral in this regard.

Whereas in most countries equity securities are the predominant type of contract, German crowdinvesting platforms currently offer subordinated profit participating loans, which qualify as hybrid securities and benefit from extensive contractual freedom.<sup>3</sup> The use of hybrid securities instead of equity securities is due to the current legal and regulatory framework in Germany. With respect to this, industry lobbyists and crowdinvesting platform representatives are calling for amendments, which enable platforms to offer equity securities in Germany. They suggest, for example, to introduce a new form of the German Stock Corporation (*Aktiengesellschaft-AG*), which better suits both the needs of start-up companies and the requirements of crowdinvesting.

This Article aims to shed light on the questions of whether German regulation should favor equity securities or hybrid securities and whether crowdinvesting needs its specific legal form. To this end, we analyze how financial contracting has taken place in the German crowdinvesting market. We focus on Germany for two reasons. First, we have

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<sup>1</sup> For German crowdinvesting, see Lars Klöhn & Lars Hornuf, *Crowdinvesting in Germany*, 2012 J. BANKING L. & BANKING 237 (2012). For the American legal context, see C. Steven Bradford, *Crowdfunding and the Federal Securities Laws*, 2012 COLUM. BUS. L. REV. 1. See also Lars Hornuf & Armin Schwienbacher, *Should securities regulation promote equity crowdfunding?*, 49 SMALL BUS. ECON. 579 (2017).

<sup>2</sup> See Lars Klöhn, Lars Hornuf, & Tobias Schilling, *Equity Crowdfunding Contracts*, 2016 J. BANKING L. & BANKING 142 (2016) (discussing crowdinvesting contracts in Germany); Jack Wroldsen, *Crowdfunding Investment Contracts*, 11 VA L. & BUS. REV. 543 (2017) (discussing contracts used in the US). *But see* Dorfleitner/Kapitz/Wimmer, DBW 2014, 283, 287 *et. seq.*; Gregor Dorfleitner, Jonas Kapitz, & Maximilian Wimmer, *Crowdinvesting as a Financing Alternative for Small and Medium-Sized Enterprises*, 74 BUS. ADMIN. 283 (2014); Wolfgang Weitnauer & Josef Parzinger, *Crowdinvesting as a New Form of Corporate Finance*, CORP. & COM. L. [GWR] 153 (2013).

<sup>3</sup> This is also the reason why equity crowdfunding in Germany is referred to as crowdinvesting—a term which encompasses all financial instruments found in practice—regardless of whether they are classified as equity, hybrid, or debt. *Cf. supra* Klöhn & Hornuf, n. 1 at 239.

hand-collected contract data on 81% of the entire German crowdfunding market since its start. Second, unlike in any other crowdfunding market, German platforms have brokered and developed investment contracts for almost six years. By focusing on Germany, we can thus refer to a representative sample that covers a considerable timespan. Therefore, the lessons that can be drawn from Germany might not only have implications for the German market, but also other crowdfunding markets such as the United States, where crowdfunding by non-accredited investors only became possible in May 2016.

To discuss the requirements a legal form or contract type must fulfill to meet the needs of crowdfunding in general<sup>4</sup>, it is necessary to understand the economic conditions<sup>5</sup> and institutional structure of the crowdfunding market in Germany—and in particular the crucial role of crowdfunding platforms—which simultaneously serve as gatekeepers, information intermediaries, and drafters of contracts.<sup>6</sup> We then give an overview of the legal framework in Germany and illustrate how it favors a particular form of hybrid instruments while it restricts *de facto* competition between different legal forms.<sup>7</sup> In the following Section, we provide empirical evidence of the contract types used on the German market.<sup>8</sup> We further analyze the contract terms that are currently used in the industry and how they have evolved since crowdfunding started in Germany. In Section G, we discuss amendments to German law, which have been suggested to allow crowdfunding platforms to use other legal forms and enable the offering of equity securities.<sup>9</sup> The Article finally concludes with an evaluation and a summary of the most important findings.<sup>10</sup>

## B. Market Volume

Between the first crowdfunding campaign—which took place in August 2011—and the end of 2015, there have been 313 crowdfunding offerings on 25 different Internet platforms. Of these, 217 campaigns were successful, meaning they met the funding goal established by the platform.<sup>11</sup> The total amount of capital raised was EUR 52,908,276.

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<sup>4</sup> See *infra* Section D.

<sup>5</sup> See *infra* Section B.

<sup>6</sup> See *infra* Section C.

<sup>7</sup> See *infra* Section E.

<sup>8</sup> See *infra* Section F.

<sup>9</sup> See *infra* Section G.

<sup>10</sup> See *infra* Section H.

<sup>11</sup> This number does not include projects funded in the environmental, real estate, and film sectors. For a definition of the term “crowdfunding”, see *supra* Klöhn & Hornuf, n. 1 at 239. Financings on the platform Deutsche Mikroinvest are not considered due to lack of availability of the relevant data.

In 2011, Seedmatch and Innovestment were the only two platforms offering crowd financing, but by 2012 there were already eleven. In the following years, some platforms disappeared from the market, whereas new ones came to take their place. By 2015 investors could choose between 14 different platforms, mainly offering investment opportunities in young companies—also known as start-ups.

**Figure 1** gives an overview of German platforms that hosted at least one crowdinvesting campaign in the relevant years between August 2011 and December 2015.<sup>12</sup> (Figure 1 is produced in full on the next page.)

**Figure 2** shows the number of offerings per quarter by each platform. (Figure 2 is produced in full on the page after the next page.)

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<sup>12</sup> All Figures are based on data that was collected from the respective crowdinvesting platforms. For details on the data collection and coding, *see infra* Section F(I).

Platform	2011	2012	2013	2014	2015
Aescuvest					X
Bankless24		X	X	X	X
Bergfürst			X		X
BerlinCrowd		X			
BestBC		X			
Companisto		X	X	X	X
CrowdNine			X		
Crowdrange			X		
Deutsche Mikroinvest		X	X	X	X
DUB				X	
FunderNation				X	X
Fundsters			X	X	
Geldwerk1					X
GründerPlus		X			
Innovestment	X	X	X	X	X
Lightfin				X	X
Mashup Finance		X	X	X	X
MyBusinessBacker		X	X		
Seedmatch	X	X	X	X	X
Startkapital Online			X	X	
Startnext					X
United Equity		X	X		
Unternehmerich					X
Venturate					X
WelcomeInvestment				X	

Fig. 1: Active Crowdfunding Platform in Germany.

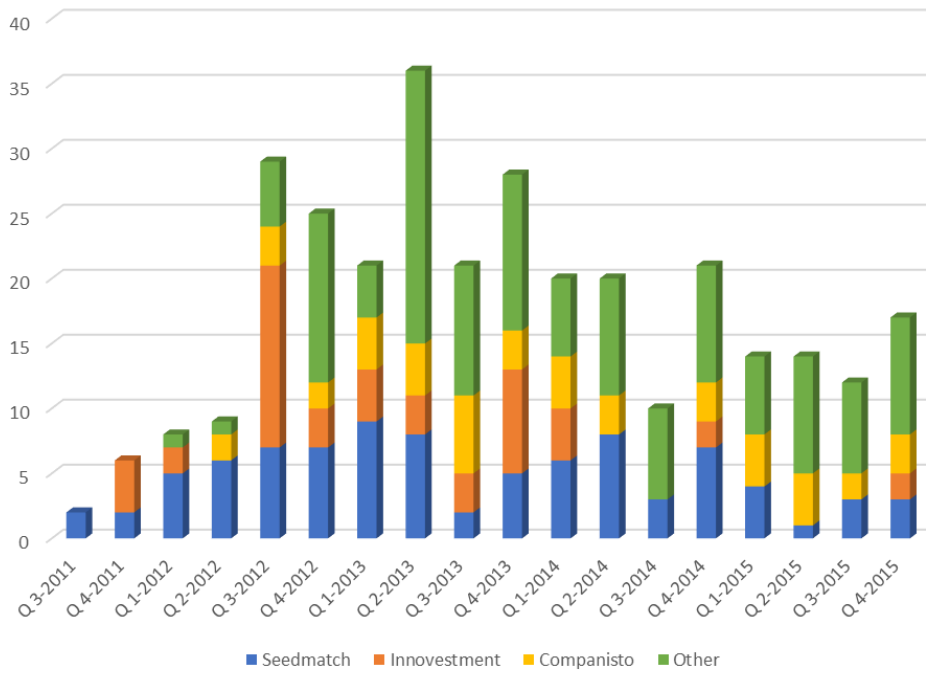


Fig. 2: Number of offerings per quarter on each platform.

Although there was a significant increase in the number of active crowdfunding platforms, the number of successfully funded, high-volume funding campaigns was concentrated in a small number of the platforms. **Figures 3 and 4** show the number of successful and unsuccessful campaigns hosted by each platform.<sup>13</sup> (Figures 3 and 4 are produced in full on the next page.)

The platforms Seedmatch and Companisto not only brokered the largest number of offerings, but they were also the most successful. All of the offerings on Companisto and 95% of those on Seedmatch were successfully funded. By contrast, nearly half of the campaigns offered through Innovestment failed to meet the funding goal.<sup>14</sup> With respect to the other platforms, the rate of campaigns that were not funded successfully increased with the number of campaigns that were offered.

<sup>13</sup> Offerings on the platform Deutsche Mikroinvest are not considered due to the lack of availability of the relevant data.

<sup>14</sup> For the auction mechanism initially used by Innovestment and how it differed from those on other platforms, see Lars Hornuf & Matthias Neuenkirch, *Pricing Shares in Equity Crowdfunding*, 48 *SMALL BUS. ECON.* 795 (2017).

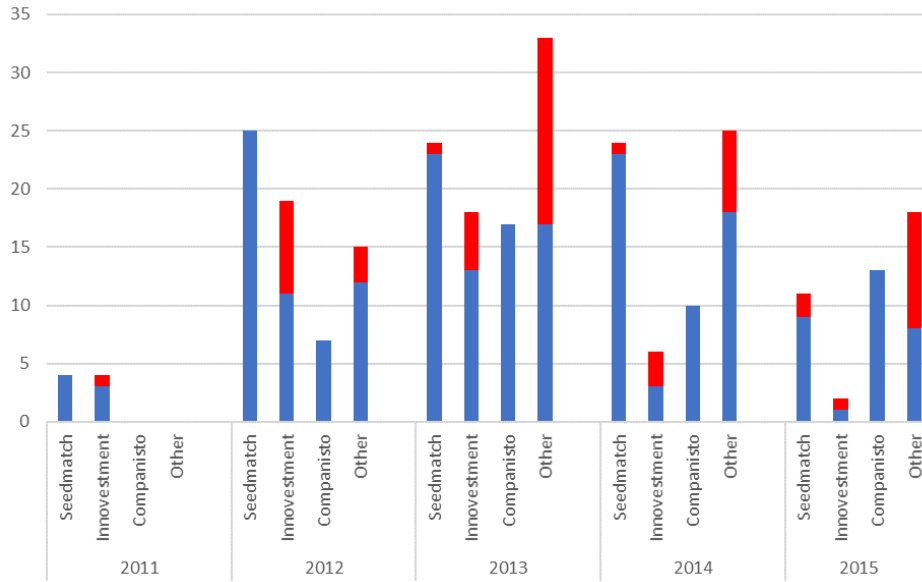


Fig. 3: Number of successful and unsuccessful funding campaigns per platform per year (excluding Deutsche Mikroinvest).

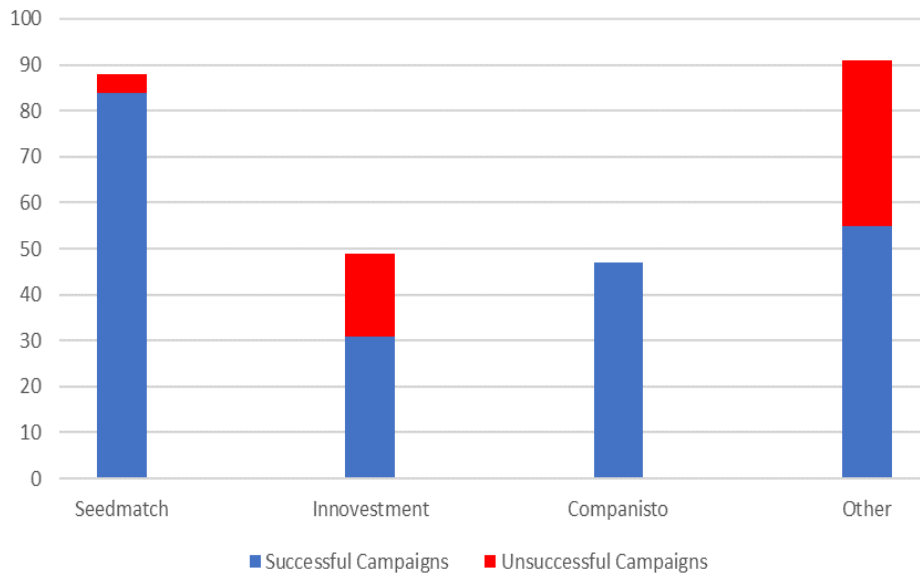


Fig. 4: Number of successful and unsuccessful campaigns by platform during the observation period.

If one compares the amount of capital raised by the various platforms, the dominance of Seedmatch and Companisto becomes even clearer. In 2011, start-ups obtained almost EUR 350,000 on Seedmatch, compared with approximately EUR 230,000 on Innovestment. Companies on Seedmatch raised EUR 2.8 million in 2012 and EUR 7.5 million in 2013. By 2014, companies were raising EUR 11.8 million through Seedmatch and EUR 5.3 million on Companisto. Only EUR 1.9 million was collected on all of the other platforms put together. In 2015, Seedmatch raised EUR 3 million and Companisto raised EUR 7.1 million; the remaining platforms only raised EUR 1.9 million. This is demonstrated by **Figure 5**. (Figure 5 is produced in full on the next page.) **Figure 6** shows that Seedmatch has so far raised a total of almost EUR 26 million, while the funding goal of all unsuccessful campaigns amounted to approximately EUR 650,000. Innovestment attracted around EUR 2.5 million, and the funding goal of unsuccessful campaigns totaled EUR 650,000. (Figure 6 is produced in full on the page after the next page.) On Companisto, companies secured capital investments amounting to EUR 16.5 million. On all other platforms, companies obtained a total of EUR 8.2 million, while the funding goal of the campaigns that failed to achieve the mandatory goal amounted to EUR 2.3 million.



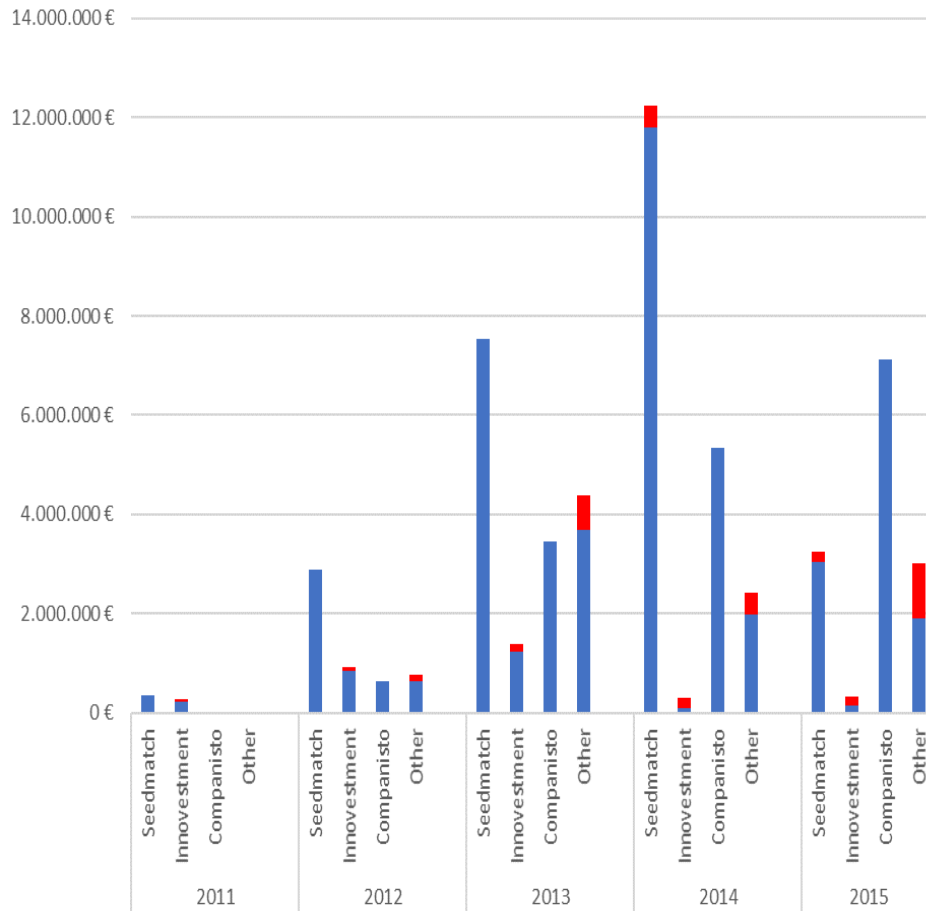


Fig. 5: Amount of successfully raised capital per platform in comparison with the funding goal of unsuccessful campaigns (excluding Deutsche Mikroinvest).

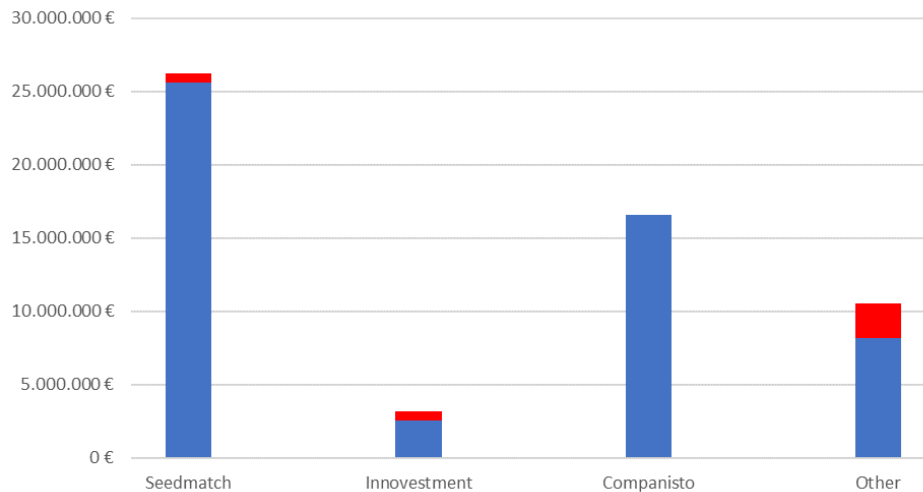


Fig. 6: Total acquired capital per platform in relation to the sum of unsuccessful campaigns.

## C. Institutional Background

### I. Forming a Contract

Crowdfunding contracts usually come into existence between investors and start-ups. Crowdfunding platforms provide the contracts and broker the investments. Sometimes platforms make use of indirect financing structures in which a special purpose vehicle (SPV) functions as an intermediary for matching investments with the given start-up. In such cases contracts are concluded between the SPV and a start-up on the one hand, and between the SPV and investors on the other. If the platform does not have an indirect investment structure, investors sometimes form a pooling agreement in accordance with which they submit to a collective decision-making procedure that defines a majority rule in certain circumstances. This has been the case at Companisto since the beginning of 2013, for example.

Crowdfunding platforms are much more than merely investment brokers and facilitators of pooling solutions, however. They fulfill three additional functions. They act as *gatekeepers* because they decide which start-ups can run crowdfunding campaigns on their platforms. Platforms' rejection rates vary, with some turning away up to 99% of the companies that apply to them.<sup>15</sup> It can be assumed, however, that less prominent platforms have much

<sup>15</sup> Lars Hornuf & Armin Schwienbacher, *Internet-Based Entrepreneurial Finance: Lessons from Germany*, 60 Cal. Man. Rev. 150, (2018).

lower rejection rates. Furthermore, these platforms are *information intermediaries* because they evaluate start-ups,<sup>16</sup> stipulate what information they have to provide to investors, and channel communications between investors and businesses in an investor-relations portal. Finally, they are *drafters of contracts* because they develop the contracts that are concluded between investors and businesses.

## II. Practical Considerations

Platforms use standard contracts for every offering. Start-ups are seldom allowed to introduce special terms to contracts.<sup>17</sup> Investors also cannot negotiate the contents of contracts; all investors are bound by the same terms. In the course of time, platforms have introduced significant changes to the otherwise boilerplate contract. Contractual developments within the industry could be generally characterized as a homogenization process, with the various platforms gradually producing contracts that are similar in most fundamental respects. Nevertheless, there can still be significant differences with respect to particular details and to the number of provisions contained within them.<sup>18</sup>

On the platforms Seedmatch and Deutsche Mikroinvest, start-ups are additionally required to supply investors with a “self-declaration” (*Selbsterklärung*), a kind of personal warranty in which they guarantee the accuracy and completeness of the details in their disclosure documents. The declaration that start-ups provide to Seedmatch also discloses any pending or imminent legal proceedings pertaining to the ownership of important rights, as well as existing links to other parties that may affect the status and participation rights of investors.

## III. Competition Between Platforms

The volume of the transactions done on crowdfunding platforms determines the platforms’ profits. They receive a service fee from any successful campaign, which depends on the amount of capital raised. Commissions range up to 13%. Increasingly, platforms also participate in the future success of the companies because investors have to pay a certain proportion of any revenue—deriving from participation in profits, enterprise value, and exit proceeds—to the platforms (e.g. carried interest).<sup>19</sup> Platforms accordingly compete to

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<sup>16</sup> For details, see *infra* Section F (0).

<sup>17</sup> Negotiations take place regarding the funding goal, the specific investment amount and the investment ratio derived from it, and deadlines pertaining to the funding process and the duration of the contract. Sometimes, as for instance on Seedmatch, the multiples that are used to determine enterprise value will be adjusted for the individual start-up.

<sup>18</sup> For details, see *infra* Section 0.

<sup>19</sup> In accordance with the “Pooling and Carry Agreement” used by Companisto, the platform currently receives 10% of all proceeds distributed to investors, with the exception of proceeds from the loan and from the fixed interest

broker funding. The crowdinvesting market has characteristics that are typical of network economies:<sup>20</sup> The more investments that are brokered by a crowdinvesting platform, the more market participants will know the contracts offered by the platform, and ultimately the more attractive the platform will be for future campaigns and investments. Successful crowdinvesting platforms can therefore expect to earn larger profits even if the market volume remains stable. For the same reason, it is increasingly difficult for new crowdinvesting platforms to enter the market.

What are the implications of competition between platforms for the contents of crowdinvesting contracts? There are three plausible scenarios:

- 1) *Race to the top*<sup>21</sup>: In the most optimistic scenario, platforms try to develop optimal financing agreements. Put simply, these are contracts that minimize the total costs of the financing. The level of investor protection in these contracts is neither maximal nor minimal, but optimal. These are the contractual rules to which companies and investors would agree if they were rational, fully informed, and could negotiate with each other without transaction costs.<sup>22</sup> Of course, nobody knows exactly what these rules would be. Nevertheless, competition between platforms would ensure that they would constantly strive to discover them.

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payment. These claims are assigned to Companisto by the investors in advance at the conclusion of the crowdinvesting contract.

<sup>20</sup> See Jeffrey Rohlfs, *A Theory of Interdependent Demand for a Communications Service*, 5 BELL J. ECON. 16 (1974); See also Michael Katz & Carl Shapiro, *Network Externalities, Competition, and Compatibility*, 75 AM. ECON. REV. 424 (1985). For company contracts and debt securities, see Klausner, 81 VA. L. REV. 757 (1995); Marcel Kahan & Michael Klausner, 83 VA. LAW REV. 713 (1997); Andreas Engert & Lars Hornuf, *Market Standards in Financial Contracting: The Euro's Effect on Choice of Law in European Debt Securities*, 85 J. INT'L MONEY & FIN. 145 (2018).

<sup>21</sup> See Ralph Winter, *State Law, Shareholder Protection, and the Theory of the Corporation*, 6 J. LEGAL STUD. 251 (1977); see also Daniel Fischel, *Race to the Bottom Revisited: Reflections on Recent Developments in Delaware's Corporation Law*, 76 NW. U. L. REV. 913 (1982); Roberta Romano, *Law as a Product: Some Pieces of the Incorporation Puzzle*, 1 J. L. ECON. & ORG. 225 (1985).

<sup>22</sup> This is nothing other than an application of the Coase Theorem, which is fundamental to economic analysis. Cf. R. H. Coase, *The Problem of Social Cost*, 3 J. L. ECON. 1 (1960).

- 2) *Race to the bottom*<sup>23</sup>: According to a more pessimistic view, platforms would create the laxest contracts possible in order to attract start-ups. The contracts would unilaterally favor the interests of the companies, so that they could exploit investors as much as possible. This scenario would be most likely to arise if the crowdfunding market was characterized by a small number of companies and a large number of potential investors eager to engage in crowdfunding.<sup>24</sup>
- 3) *No race at all—or a race to nowhere in particular*<sup>25</sup>: In the final alternative, there is no competition between platforms to design contracts, or else such competition results in divergent aims and practices. In this scenario, contracts do not change at all or only due to exogenous factors (tax law, regulations, etc.). It is also conceivable that all platforms would simply follow the market leader, copying the design of contracts currently in use and thereby stifling the urge to innovate.

On a theoretical level, there are good reasons to take all three scenarios seriously. A *race to the top* scenario is plausible insofar as the crowdfunding market represents a two-sided market.<sup>26</sup> Platforms can only remain in the market so long as they satisfy the demand of both successful start-ups and a sufficient number of investors. To favor the interests of either companies or investors would result in the disadvantaged group eventually abandoning the platform. In addition, platforms profit from successful start-ups due to carried-interest agreements, which gives them an extra incentive to host successful funding campaigns.

The *race to the bottom* scenario might be supported by the nature of the companies that tend to be financed by crowdfunding. In its seed stage, a start-up essentially consists of an idea. It may be more or less attractive to investors, but it has not really been tested in the

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<sup>23</sup> See William Cary, *Federalism and Corporate Law: Reflections Upon Delaware*, 83 YALE L. J. 663 (1974); see also Lucian Bebchuk & Assaf Hamdani, *Vigorous Race or Leisurely Walk: Reconsidering the Competition over Corporate Charters*, 112 YALE L. J. 553 (2002).

<sup>24</sup> The phenomenon is known in the private equity literature as “money chasing deals”. See Paul Gompers & Josh Lerner, *Money Chasing Deals? The Impact of Fund Inflows on Private Equity Valuations*, 55 J. FIN. ECON. 281 (2000).

<sup>25</sup> See William Bratton, *Corporate Law’s Race to Nowhere in Particular*, 44 U. TORONTO L. J. 401 (1994).

<sup>26</sup> See Marc Rysman, *Competition Between Networks: A Study of the Market for Yellow Pages*, 71 REV. ECON. STUD. 483 (2004); see also Ulrich Kaiser & Julian Wright, *Price Structure in Two-Sided Markets: Evidence from the Magazine Industry*, 24 INT’L J. INDUS. ORG. 1 (2006); Marc Rysman, 23 J. ECON. PERSP. 125 (2009).

marketplace. Moreover, it is almost always advisable for owners to reinvest all of their profits in order to grow their businesses. The value of an investment in a start-up therefore generally only emerges after a protracted period. In the meantime, it is very difficult to distinguish between *good* and *bad* start-ups<sup>27</sup>—for example, those with potential for growth and managerial integrity, and those that merely exist to enrich themselves at the expense of the investor.

The present competitive situation of the crowdfunding platforms might also support the final scenario, in which there is a lack of competition and, thus, *no race at all or a race to nowhere in particular*. To the extent that the German crowdfunding market is dominated by only two platforms, Seedmatch and Companisto, it could fairly be described as a duopoly. Nevertheless, because the crowdfunding industry necessarily behaves as a two-sided market, in which platforms always have an incentive to maximize the number of successful funding campaigns that they broker, even a monopoly situation would not be subject to the traditional inefficiencies.<sup>28</sup>

#### **D. Requirements for Legal Forms Enabling Crowdfunding**

The main characteristics of crowdfunding impose important restrictions on the contractual forms that can be used for crowdfunding. Crowdfunding is a form of financing in which companies—mostly start-ups—raise small amounts of money from a large number of investors via the internet.<sup>29</sup> Because not only the offering but also the conclusion of the investment contract takes place online, as a first requirement, it must be possible to conclude the contract via the internet without any personal presence of the parties involved. Secondly, the amounts contributed by each investor can be very small, starting with 5 Euro depending on the platform. At the same time, contractual relationships are established between many parties. Thus, the transaction costs resulting from the conclusion of each single investment contract must be very low, tending towards zero. The same is true for the total costs of the issuer. As most of the companies still are in their early stage and the amount of money raised in total is small compared to later stages of venture or expansion financing, costs of the crowdfunding campaign and the funding in total—such as advertising expenses, legal and advisory fees, etc.—must not exceed a certain amount. Finally, also due to the early stage of the company, the capacity of the start-ups to bear the transaction costs of financing, which result from producing information, reporting, auditing

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<sup>27</sup> See George Akerlof, *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*, 84 Q. J. ECON. 488 (1970).

<sup>28</sup> Jean-Charles Rochet & Jean Tirole, *Platform Competition in Two-Sided Markets*, 1 J. EUR. ECON. ASS'N. 990 (2003).

<sup>29</sup> For a definition of crowdfunding, see *supra* Klöhn & Hornuf, note 1, at 239; *supra* Hornuf & Neuenkirch, note 14 at note 1, Section 2.1.

financial statements, and other disclosure requirements, is very low. Therefore, the contractual form of the financing should be transaction cost minimizing.

To sum up, crowdfunding requires a contract type, that (1) can easily be concluded via the internet without any form of physical presence of investors or founders; (2) that is easily scalable, which means that it does not evoke a considerable amount of transaction costs regardless of how many contracts between how many parties are concluded.;(3) the total costs of the set-up of the crowdfunding campaign and the public offering must not be disproportionate to the financial resources of start-ups and the amount of money intended to be raised via crowdfunding; and (4) the organizational effort and administrative cost must be in line with the capacities of a start-up. Whether a legal form meets these requirements depends primarily on the legal framework that is set by corporate and capital markets law.

## **E. Legal Framework in Germany**

### *I. Legal Forms and Contract Types Under German Law*

German law provides two main forms of corporation for business purposes, the Limited Liability Company (*Gesellschaft mit beschränkter Haftung—GmbH*) and the Stock Corporation (AG). To raise capital from outside sources, a corporation can either issue equity, debt, or hybrid instruments.

If a corporation raises capital by issuing equity shares, the funders become shareholders (owners) of the corporation. This membership encompasses a variety of individual rights and duties. With respect to the GmbH, the most important way of financing in this context is an ordinary increase of the registered share capital and the subscription to the capital contribution by new shareholders. The registered share capital of the AG can also be increased by an ordinary capital increase against contributions and the issuance of new shares. In the case of debt financing, the company can either obtain loans by concluding loan contracts or issue different types of bonds. Finally, there are hybrid instruments, which combine elements of debt and equity, and which can be structured in various ways. Dependent on the concrete design of the instrument, under German law, hybrid instruments can be structured, among others, as silent partnerships (*stille Gesellschaft*), participation rights (*Genussrechte*), or profit-participating loans (*partiarische Darlehen*).

## *II. Legal and De Facto Restrictions Under German Law*

As not all forms of financing meet the requirements of crowdinvesting,<sup>30</sup> some are, regardless of economic factors and the financing policy of the company, legally and de facto less suitable for crowdinvesting than others.

### *1. Offering of Shares in a Limited Liability Company (GmbH)*

One of the most significant obstacles for entrepreneurs who seek to offer shares in a Limited Liability Company (GmbH) to crowdinvestors is the specific form requirements regarding the subscription to the capital contribution by new shareholders in the case of a capital increase and the transfer of shares.

To acquire shares of a private limited liability company within the scope of a capital increase, each new shareholder must conclude a subscription agreement with the company. German Law requires that the declaration of the subscriber is officially certified by a notary or notarized.<sup>31</sup> This requires not only the written form of the declaration, but the subscriber must also sign the declaration in the presence of a notary, who then must certify that the person indicated signed the document in his presence. Alternatively, the declaration can be notarized, which means that the notary drafts the declaration, provides advice about the legal consequences, and confirms the identity of the person willing to buy a share of the company. The transfer of shares of a Limited Liability Company also requires notarization with the difference that both parties must personally appear in front of a notary.

As there is no exemption of the mandatory written form and the involvement of a notary, the issuance of shares in a Limited Liability Company is very cumbersome and cost intensive. The fees of the notary usually depend on the price of the share transferred, but, irrespective of the price, amount to a minimum of about EUR 150 for each transfer. Not surprisingly, none of the campaigns in the German market were offering shares in a Limited Liability Company to investors.

### *2. Offering of Shares in a Stock Corporation (AG)*

Different rules apply if the corporation that seeks financing is organized as a Stock Corporation. To start their businesses, most entrepreneurs chose the legal form of the small version of the private limited liability company (*Unternehmergeellschaft (haftungsbeschränkt)*), which requires a minimum share capital of only EUR 1, or a regular Limited Liability Company with a minimum share capital of EUR 25,000. Thus, already the

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<sup>30</sup> See *supra* Section D.

<sup>31</sup> See Gesetz betreffend die Gesellschaften mit beschränkter Haftung [GmbHG] [Limited Liability Act], July 17, 2017, BGBL I. at 2446, § 55 para. 1.



transformation in a Stock Corporation is likely to be a first obstacle from a financial point of view. Without taking into account the costs of the transformation, the minimum capital requirement of EUR 50,000 might overburden the founders of a start-up company.

On the upside, unlike in the case of a Limited Liability Company, the sale and transfer of primary shares of a Stock Corporation do not require a special form—neither a written form nor the involvement of a notary. On the contrary, its shares are easily transferable is an essential feature of the Stock Corporation.

Instead, the organizational structure, administrative effort, operating costs, and the higher complexity of the stock corporation in general have a dissuasive effect and are likely to overburden the founders of start-ups and the management of small companies. Moreover, the public offering of shares is subject to the prospectus requirement pursuant to the German Securities Prospectus Act (WpPG). An exemption applies if the offering does not exceed the threshold of EUR 100,000 per year. Consequently, shares of a stock corporation are rarely used in crowdfunding. To date, Urbanara on the platform Bergfürst was the only crowdfunding campaign where shares were offered to investors.

### 3. Hybrid Instruments

Besides equity finance, another possibility of financing is the issuance of hybrid instruments. In general, there is a high degree of contractual freedom under German law, which allows the structuring of hybrid instruments in various different forms.

On the basis of a silent partnership, investors provide capital as silent partners to a business. While the silent partnership agreement does not require a certain form, and, thus, can be easily concluded via the internet, limitations with regard to crowdfunding result from capital market law. As a silent partnership qualifies as an investment under the German Investment Act, the public offering is subject to the obligation to publish a prospectus according to the German Investment Act.<sup>32</sup> Taking into account that the drafting of a prospectus costs typically between 30.000 and 50.000 EUR,<sup>33</sup> and the average sum raised by a crowdfunding campaign in Germany amounts to 286.629 EUR, a crowdfunding campaign under the prospectus requirement would be too cost intensive. There is, however, an exemption from the prospectus requirement, if the offering does not exceed the threshold of EUR 100,000 per year. Most of the first crowdfunding offerings in Germany took place based on this exemption.

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<sup>32</sup> Lars Klöhn, Lars Hornuf, & Tobias Schilling, *The Regulation of Crowdfunding in the German Small Investor Protection Act: Content, Consequences, Critique, Suggestions?*, 13 EUR. CO. L. 56, 58 (2016).

<sup>33</sup> *Stellungnahme des Bundesverband Crowdfunding e.V. zum Kleinanlegerschutzgesetz*, [Opinion of the Federal Association Crowdfunding to the retail investor protection law] 10 (Sept. 8, 2016), [http://www.bundesverband-crowdfunding.de/wp-content/uploads/2016/09/20160908\\_Bundesverband\\_Crowdfunding\\_KASG\\_Evaluation.pdf](http://www.bundesverband-crowdfunding.de/wp-content/uploads/2016/09/20160908_Bundesverband_Crowdfunding_KASG_Evaluation.pdf).

Another possibility is the use of profit-participating loans. Profit participating loans are loans which are characterized by an interest rate that depends on profits or revenue of the borrower, whereas the lender is not exposed to losses of the borrower. Further, the lender has no rights in management of the borrower. Usually, contracts provide a subordination clause, so that they rank below other debts in an insolvency proceeding.<sup>34</sup> Under current German contract law, this form of investment is largely unregulated. This is the case because §§ 491 et seq. German Civil Code (*Bürgerliches Gesetzbuch – BGB*) do not apply within the crowdinvesting industry, because it is not the consumer but rather the start-up that is the borrower and ought to be protected. Neither is the industry constrained by regulations supplied by corporate law, at least if the investments referred to as profit-participating loans do actually not qualify as silent partnerships (§§ 230 et seq. German Commercial Code (*Handelsgesetzbuch – HGB*)).<sup>35</sup> Since the Small Investor Protection Act (*Kleinanlegerschutzgesetz – KASG*)<sup>36</sup> came into force, capital market law provides for a prospectus requirement for profit-participating loans in § 6 and § 1 par. 2 no. 3 of the German Investment Act (*Vermögensanlagengesetz – VermAnlG*). There is, however, an exemption from the prospectus requirement if the offer is made via a crowdinvesting platform and does not exceed EUR 2.5 million.<sup>37</sup>

### III. Profit-Participating Loan as Legally Favored Contract Type

To sum up, the issuance of equity shares via crowdinvesting is practically not feasible under current German law. While shares of a Limited Liability Company cannot be subscribed via means of distance communication, the organizational effort, and administrative costs of a Stock Corporation overburdens companies that seek financing via crowdinvesting. Hybrid instruments are, thus, a feasible means of financing. Considering recent changes

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<sup>34</sup> See Klöhn, Hornuf, & Schilling, *supra* note 32.

<sup>35</sup> See Weitnauer & Parzinger, *supra* note 2; see also Michael Nietsch & Nicolas Eberle, *Banking Supervision and Prospectus Issues of Typical Crowdfunding Models*, 32 DER BETRIEB 1788, 1793 (2014); K. Schmidt, in MüKo HGB, 3rd ed., 2012, § 230 HGB, par. 57 et. seq. For more on the distinction, see UWE BLAUROCK, HANDBUCH STILLE GESELLSCHAFT para. 8.39 et. seq. (7th ed. 2010).

<sup>36</sup> Kleinanlegerschutzgesetz [Small Investor Protection Act] July 3, 2015, BGBl. I at 1114 et. seq. 2015.

<sup>37</sup> See § 2a, Vermögensanlagengesetz [VermAnlG] [Law on Investments] Dec. 6, 2011, BGBl. I at 2481; Klöhn, *supra* note 32 (discussing the regulation of crowdinvesting by the Small Investor Protection Act); Casper, *The Retail Investor Protection Law—Between Legitimate and Exaggerated Paternalism*, 2015 J. BANKING L. & BANKING 265 (2015); Christopher Danwerth, *Crowdinvesting—Is the Retail Investor Protection Act the young End of an Innovative Form of Financing?*, 2016 J. BANKING L. & BANKING 20 (2016); Lars Klöhn & Lars Hornuf, *The Regulation of Crowdfunding in the RegE of the Retail Investor Protection Act*, 1 DER BETRIEB 47 (2015). For an American perspective with reference to the German law, see C. Steven Bradford, *Regulating Investment Crowdfunding: Small Business Capital Formation and Investor Protection*, 2015 J. BANKING L. & BANKING 376 (2015).

implemented by the Small Investor Protection Act (*Kleinanlegerschutzgesetz – KASG*),<sup>38</sup> the only possibility for crowdfunding platforms to issue more than EUR 100,000 in a public offering is to structure their contracts as profit-participating or subordinated loan. In this case, they can benefit from the crowdfunding exemption and issue up to 2,5 million Euro without prospectus.

## F. Empirical Findings on Types and Content of Crowdfunding Contracts in Germany

### I. Data Sample

This study encompasses 255 offerings on 18 German platforms in the period between August 1, 2011 and December 31, 2015.<sup>39</sup> The analysis covers 81% of the crowdfunding contracts available in the German market, amounting to 91% of the total volume of the market—and consequentially, of the successfully collected capital. It only takes into account start-up financings brokered by internet platforms<sup>40</sup>—investments which entitle investors to profit from future cash flows of the companies they invest in.<sup>41</sup> The analysis does not consider contracts for financing real estate, films, and projects, or subordinated loan agreements without profit participation.

Our sample encompasses crowdfunding contracts in their original form from 148 of the 255 offerings. The texts of the other 107 contracts could be inferred by investigating standard contracts as well as those used in previous and subsequent offerings. Unless otherwise noted, agreements from all available crowdfunding campaigns are included, regardless of whether or not they succeeded in meeting their funding goal.

Every crowdfunding campaign was examined with reference to almost 300 criteria, with 250 of these criteria being rules stipulated in crowdfunding contracts. The dataset includes information about the given start-up, the type of contract, the modalities of capital investment and repayment, the duration of the contract, and the possibilities for terminating it early. All participation rights of the investors were recorded with their respective regulations, including calculating procedures, the admissibility and effects of follow-up financing, and the position of the investor in the event that the start-up—or legal intermediary—becomes insolvent. Contract provisions pertaining to the existence and design of participation and control rights, information and inspection rights of the investor,

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<sup>38</sup> Cf. Klöhn, *supra* note 32.

<sup>39</sup> These platforms are Aescuvest, Bankless24, Bergfürst, BerlinCrowd, Companisto, Deutsche Mikroinvest, FunderNation, Fundsters, Geldwerk1, GründerPlus, Innvestment, Lightfin, Mashup Finance, Seedmatch, Startnext, United Equity, Unternehmerich, and WelcomeInvestment.

<sup>40</sup> Not subject to investigation are the shares initially offered on Bergfürst.

<sup>41</sup> Cf. Klöhn & Hornuf, *supra* note 1, at 239.

and the business conduct guidelines for companies' executive officers were also collected. Finally, there is analysis of the legal relationship with potential SPVs.

## *II. Overview*

Over the course of the crowdfunding industry's brief history, German platforms have offered three different kinds of investment.<sup>42</sup> Initially, financing occurred through silent partnerships (*stille Beteiligungen*) and sometimes with non-securitized participation rights (*unverbriefte Genussrechte*). Now crowdfunding platforms almost exclusively broker subordinated profit-participating loans (*partiarische Nachrangdarlehen*). Nearly all contracts include the same components regarding the rights and responsibilities of the investor.<sup>43</sup>

First, it is customary that the investor assures to make capital contributions, in accordance with rules pertaining to the maturity of the investment.<sup>44</sup> His participation rights<sup>45</sup> and loss sharing<sup>46</sup> are laid down in accordance with a subordination agreement<sup>47</sup> as well as control and information rights.<sup>48</sup>

Furthermore, there are business conduct guidelines of the investor, such as restraint on competition and confidentiality obligations. Occasionally contracts include business conduct guidelines for the founder and managing directors of the start-up toward the investor. Usually the contracts also contain rules about the effects of further financing rounds on the investment of crowdfunders, especially regarding the dilution of participation rights.<sup>49</sup> Another common component is the exclusion or restriction of the transferability of investments, especially by reserving a right of assent for start-ups.

Rules about the termination of contract serve as an important part for the subordinated profit-participating loans. Basically, there are two major units: First, the rules of ordinary and

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<sup>42</sup> In what follows, it is assumed that the classifications contained in contracts are also legally correct. For the difficulty of distinguishing between profit-participating loans and silent partnerships, cf. *supra* note 35.

<sup>43</sup> At the beginning of 2016, which is outside the observation period, Companisto introduced a kind of staging-mechanism, with which at first only a certain proportion of the funding sum is paid to the business. The residual amount is paid out as a second instalment only when the majority of investors vote for it within a specified period of disbursement.

<sup>44</sup> See *infra* Section F.V.

<sup>45</sup> See *infra* Section F.VI.

<sup>46</sup> See *infra* Section F.VI.4.

<sup>47</sup> See *infra* Section F.X.

<sup>48</sup> See *infra* Section F.VIII.

<sup>49</sup> See *infra* Section E.VII.

extraordinary termination rights of the investor and of the company; second, rules about the procedures for disbursements, the due date of the repayment claim, as well as mechanisms for deferrals and installment plans.

Additionally, a loan of this sort holds as a rule a carried-interest agreement, in which the crowdfunding platforms participate in any financial benefits the investor secures through company profits, growth, and exits.<sup>50</sup> Ultimately, in some cases, there is a pooling agreement, which establishes a voting procedure for enacting certain decisions that are subsequently binding for all investors.<sup>51</sup>

The design of most of these components has changed significantly over the last couple of years. The following Sections—Sections F(III)–F(IX)—lay out the historical development and current best practices in these contracts.

### *III. Types of Contract*<sup>52</sup>

At present, only subordinated profit-participating loans are being offered on the German crowdfunding market.

That has not always been the case. The first crowdfunding investments brokered on the German market were silent partnerships pursuant to §§ 230 ff. Commercial Code (*HGB*).<sup>53</sup> Until the third quarter of 2012, the platforms Seedmatch, Innvestment, and Companisto<sup>54</sup> offered a total of 47 silent partnerships. Within that same period, only the platforms MashupFinance and Deutsche Mikroinvest facilitated financing with non-securitized participation rights.<sup>55</sup> In the fourth quarter of 2012 there were 13 crowdfunding offerings involving silent partnerships and five with non-securitized participation rights.<sup>56</sup>

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<sup>50</sup> See *infra* Section C.3.

<sup>51</sup> See *infra* Section F.IX.

<sup>52</sup> The following analysis is based on the type designations chosen in the contracts. *Cf. supra* note 35.

<sup>53</sup> *Cf.* the contracts of Seedmatch (since Q3/2011), Innvestment (since Q4/2011), and Companisto (since Q2/2012). In addition, the platforms BerlinCrowd, Deutsche Mikroinvest, GründerPlus, and UnitedEquity offered silent partnerships from at least Q4/2012.

<sup>54</sup> On Companisto, investors were involved by means of sub-participation in the silent partnerships held by an investment vehicle. *Cf. infra* Section F.IV.2.

<sup>55</sup> For example, in offerings of MashupFinance, Deutsche Mikroinvest, Bankless24, and UnitedEquity. For the distinction between non-securitized participation rights and silent partnerships, see Blaurock, *supra* note 35, at para. 8.36.

<sup>56</sup> The platforms Bankless24, Mashup Finance, and Deutsche Mikroinvest brokered non-securitized participation rights.

In November 2012, Seedmatch for the first time brokered three subordinated profit-participating loans.<sup>57</sup> Because prior to the enactment of *KASG* no prospectus was required for the public offering of subordinated profit-participating loans,<sup>58</sup> Seedmatch could realize greater volumes with this form of investment. From the fourth quarter of 2012 the share of subordinated profit-participating loans grew steadily while silent partnerships as a form of financing gradually disappeared. Since the fourth quarter of 2014, no silent partnerships have been offered; contracts were almost entirely in the form of subordinated profit-participating loans, though until the second quarter of 2015 occasionally in the form of non-securitized participation rights.

As regards the volume of the capital raised by the various kinds of offering, by far the largest amount was raised by subordinated profit-participating loans, from which more than EUR 40 million have been collected.<sup>59</sup> Platforms raised EUR 6.5 million from silent partnerships and almost EUR 1 million from non-securitized participation rights. **Figures 7 and 8** show the development of the different types of financing since the beginning of crowdfunding in Germany, and **Figure 9** shows the respective amounts of capital that they raised. (Figures 7 and 8 are produced in full on the next page. Figure 9 is produced in full on the page after the next page.)

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<sup>57</sup> These were the campaigns for the start-ups Protonet, LeaseRad 2, and miBaby.

<sup>58</sup> Cf. Klöhn & Hornuf, note 37.

<sup>59</sup> For basic information about the evaluated contracts, cf. Section (D). This total does not include campaigns hosted by Deutsche Mikroinvest, because accurate numbers about their funding volume were not available from the platform.

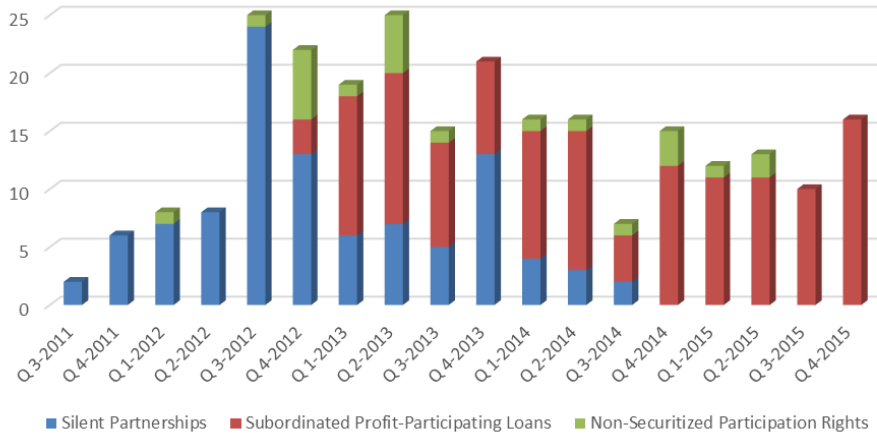


Fig. 7: Development of contract types (number of campaigns by contract type per quarter).

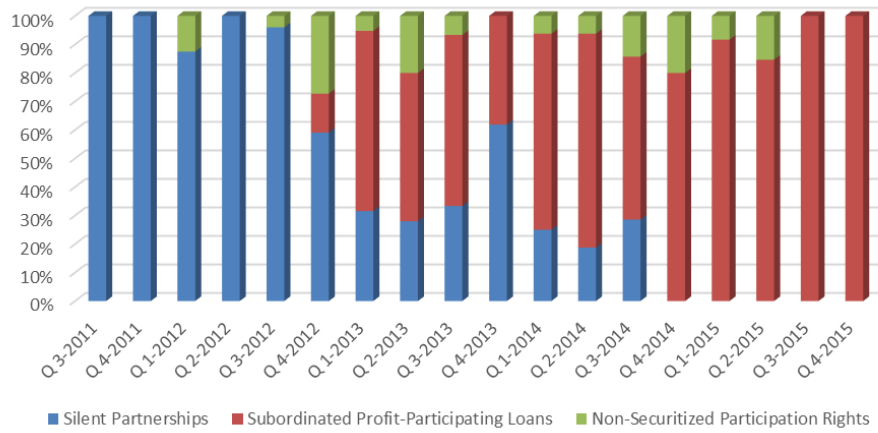


Fig. 8: Development of contract types (share of campaigns by contract type per quarter).

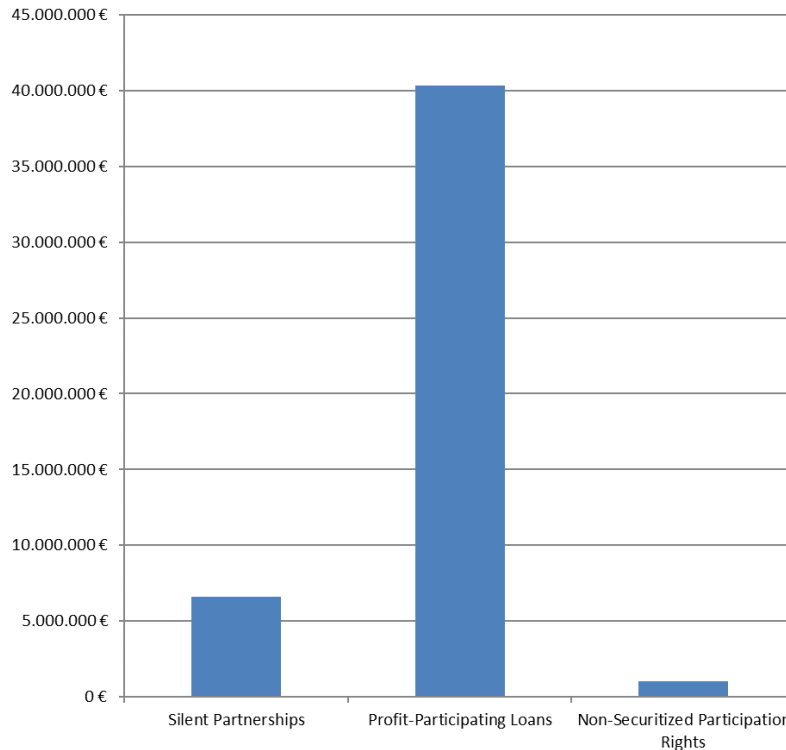


Fig. 9: Capital raised by contract type (2011 to 2015, without Deutsche Mikroinvest).

#### IV. Direct and Indirect Investments

As mentioned in the introduction, it is possible to distinguish between direct and indirect financing structures.<sup>60</sup> Currently, most crowdfunding consists of direct forms of investment. Only the platform Innvestment currently offers an indirect method for investing. On Innvestment, a special purpose vehicle (SPV) participates as a shareholder in financing a start-up. Investors then grant the SPV subordinated profit-participating loans.

Overall, crowdfunding were designed as direct contractual relationships in 231 cases. In 24 cases, there was an indirect financing structure. This was notably the case in the first eight offerings on Companisto. To this end, the *Companisto Venture Capital GmbH* entered into a silent partnership with the start-up to be financed. The *Companisto GmbH*, the operator of

<sup>60</sup> See *supra* Section C.I.



the crowdfunding platform, then brokered sub-participations<sup>61</sup> in the relevant silent partnership to the investors. With the change to subordinated profit-participating loans, Companisto switched to a direct-investment structure.

While investors using Innovestment initially entered into direct contractual relations with the company seeking funding, with the financing of the start-up Scolibri in the fourth quarter of 2014 the platform introduced an indirect structure. The SPV provided by Innovestment, the *Special Purpose v01 UG haftungsbeschränkt*, participated as a shareholder in the start-up seeking funding, in order then to issue non-securitized participation rights to the crowdfunders.<sup>62</sup> Since the fourth quarter of 2015, the SPV no longer issues non-securitized participation rights, but concludes subordinated profit-participating loan contracts with investors. In contrast to the variant initially employed by Companisto, Innovestment placed a separate SPV at the disposal of each start-up seeking funding through the platform.

For its whole history, Seedmatch has offered crowdfunding opportunities in which investors—without the mediation of an SPV—enter into direct contractual relationships with start-ups. **Figures 10 and 11** show the development of the number and ratio of indirect and direct financing structures offered on crowdfunding platforms. (Figures 10 and 11 are produced in full on the next page.)

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<sup>61</sup> A sub-participation (*Unterbeteiligung*) is characterized by the fact that a shareholder of a corporation, partnership, or a silent partnership, as a key participant grants a third party the right to participate in profits in return for a capital contribution. Sub-participation is a purely internal matter and accordingly does not pertain to the ownership of assets. For additional information, see Blaurock, *supra* note 35, at para. 30.1. *et seq.*

<sup>62</sup> The offering was not successful, however. Crowdfunders only staked EUR 34,000 of the stipulated funding goal of EUR 50,000.

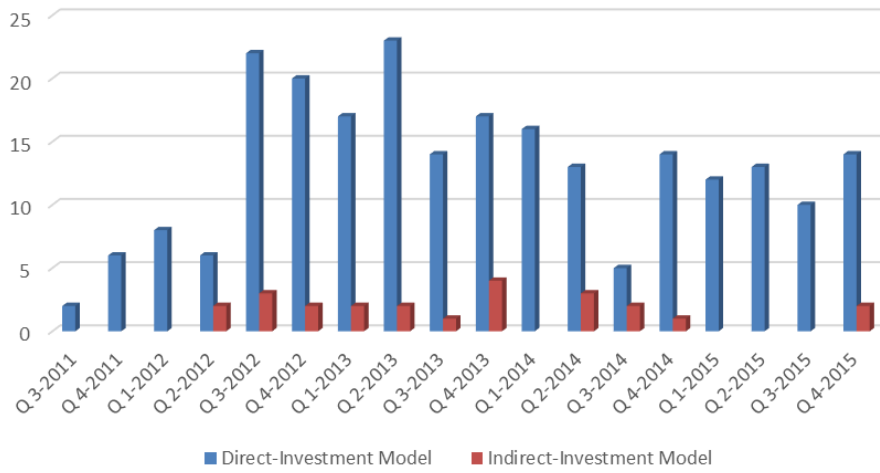


Fig. 10: Number of crowdinvestings with indirect and direct structures.

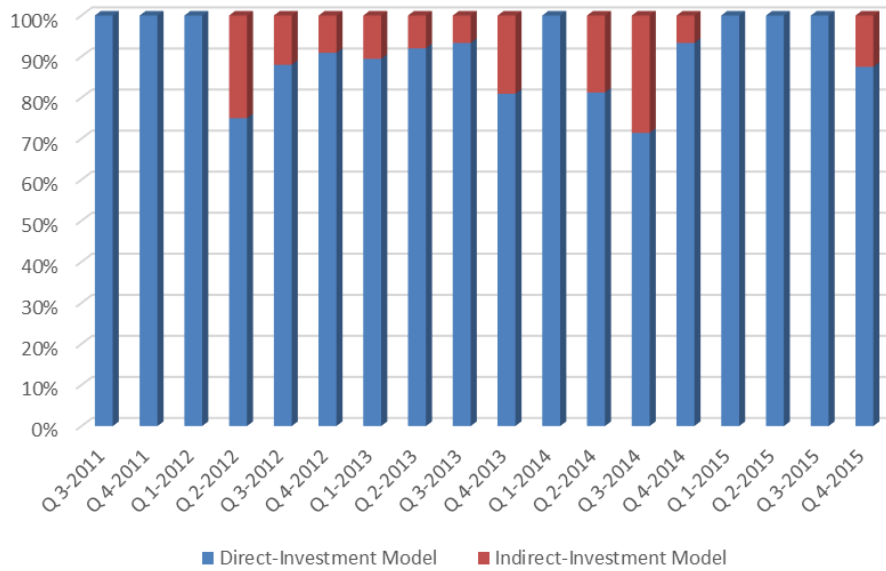


Fig. 11: Percentages of crowdinvestings with indirect and direct structures.

*V. Duration of Contract*

At present, the duration of crowdfunding contracts is governed by two types of provisions. In both cases the contribution of capital is made for a specified period, during which the contract cannot be terminated, otherwise known as a minimum duration. In the first variant, the contribution of capital is open-ended. The contracts include a deadline, prior to which neither party may make an ordinary notice of termination. Following this minimum duration, either side may terminate the contractual relationship. In the second variant, contracts are concluded for a fixed duration. During this period, termination is prohibited. With the expiration of the fixed—and in this respect also the minimum—term the investment is concluded without the need of a formal notice of termination. Current crowdfunding contracts have durations of between five<sup>63</sup> and seven<sup>64</sup> years.

The first crowdfunding contracts were offered without fixed durations, so they had to be terminated after the minimum duration by one of the parties. Since the fourth quarter of 2014, however, there have been contracts with fixed durations.<sup>65</sup> **Figures 12 and 13** show the development of crowdfunding offerings with and without fixed durations. (Figures 12 and 13 are produced in full on the next page.)

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<sup>63</sup> On the platform Seedmatch, for example. Note, however, that here there is a different minimum duration for the investor and the issuer. Currently the duration of an investment is five years for investors and eight years for issuers.

<sup>64</sup> Companisto and Innoventment.

<sup>65</sup> Cf. the crowdfunding campaigns on the platforms Bankless24 and UnitedEquity.

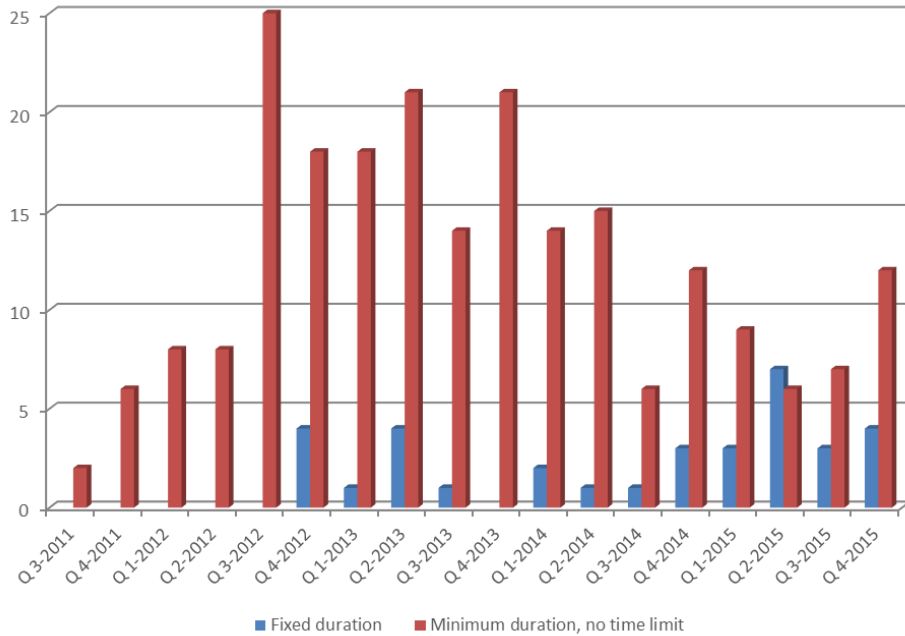


Fig. 12: Number of contracts with fixed durations, and with minimum durations without a time limit.

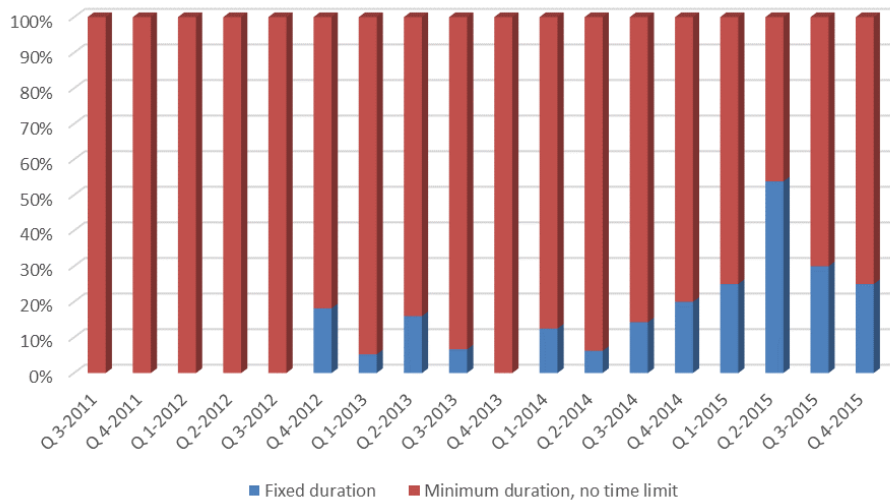


Fig. 13: Percentage of contracts with fixed durations, and with minimum durations without a time limit.

In the course of the development of the minimum duration<sup>66</sup> stipulated within crowdfunding contracts—the period until the first possibility of termination or until the end of a fixed-term contract—there was a clear increase of their average minimum duration. This is demonstrated by **Figure 14**. (Figure 14 is produced in full on this page.) Although at first investors had to invest their capital for an average of 1,461 days, by the fourth quarter of 2015 the average was 2,182 days. The average minimum duration has thus increased by nearly two years over the course of the observation period.

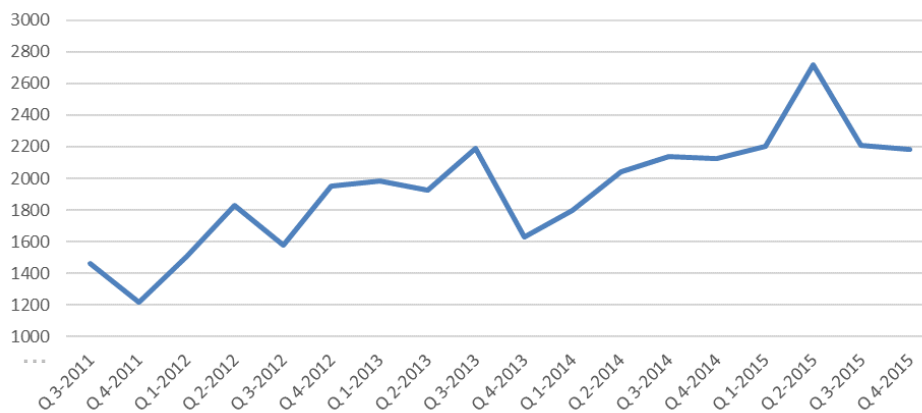


Fig. 14: Average minimum duration in days.

If one evaluates the average duration of contracts with reference to the various crowdfunding platforms, what had initially been very significant variation narrows to a standard of about five to seven years. This is demonstrated by **Figure 15**. (Figure 15 is produced in full on the next page.) According to contracts produced for the first offerings on Seedmatch, investors could terminate their contracts after four years—1,461 days between the start of the campaign and the earliest possibility for regular termination.<sup>67</sup> Toward the end of the observation period, the minimum duration for investors on Seedmatch was five years. On Innvestment, the first contracts had a minimum duration of three years for investors and seven years for companies; the last contracts have a minimum duration of seven years for both parties. According to the contracts used in the first crowdfunding campaigns on Companisto, a regular termination was only possible at the

<sup>66</sup> Specifically, the number of days from the opening of the initial offering on the crowdfunding platform to the end of the minimum or fixed term for the investment.

<sup>67</sup> The silent partnership in the start-up Neuronation, the first offering on Seedmatch, could be terminated by investors following the expiration of four years. They were required to give notice of termination six months prior to the end of the fiscal year. The start-up, by contrast, could only proceed with an ordinary termination of the partnership after six years. Cf. § 13 of the participation contract.

end of the eighth year. Companisto increased the minimum duration of its contracts first to ten, and once even to twelve,<sup>68</sup> years, but then subsequently lowered it again to between seven and eight years. By the end of the observation period contracts had a minimum duration for the investor of between approximately five years (Seedmatch) and seven or eight years (Innvestment, Companisto).

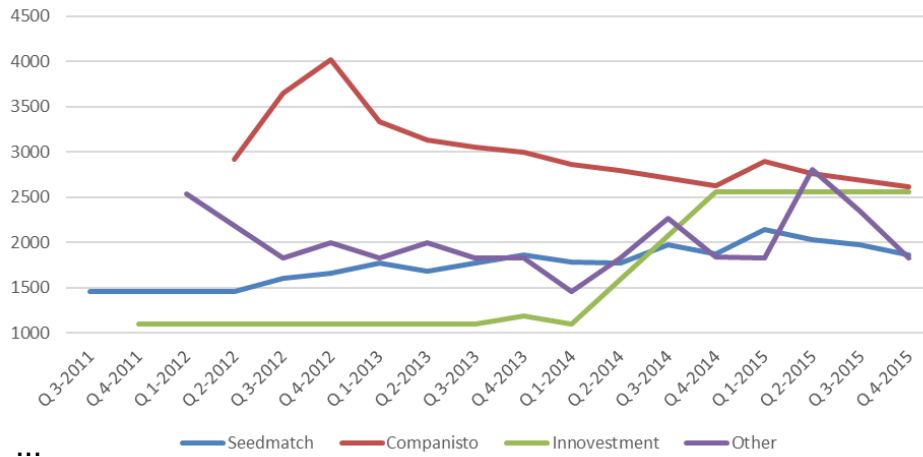


Fig. 15: Average minimum duration of contract by platform.

## VI. Participation Rights of Investors

Crowdfunding contracts grant investors various participation rights. There are four main distinctions in the kinds of rights they can have: (1) Fixed interest payments, occurring at fixed intervals or in a single installment, typically at the end of the contract; (2) variable interest payments, depending on the profit of the start-up; (3) a share in the value of the company at the time of the regular termination of the contract; and, finally, (4) exit rights—rights to receive some share in exit proceeds, such as when a venture capital fund acquires the start-up. Crowdfunding platforms generally calculate an investor's share of exit proceeds by making use of a contractually stipulated investment ratio.

<sup>68</sup> The minimum duration of the sub-participation agreement to finance the start-up BetterTaxi was twelve years. The contract stipulated, however, that the sub-participation could also be terminated earlier with the approval of Companisto.

### 1. Fixed Interest Payment

Nowadays, most contracts provide investors with fixed interest payments. The design of such payments varies significantly. On Companisto and Seedmatch the annual fixed interest is payable at the end of the term, independent of the revenue of the respective year, though it is nevertheless subject to withholding in the case of imminent over-indebtedness in insolvency law.<sup>69</sup> Fixed interest in the contracts of Mashup Finance and Deutsche Mikroinvest is payable yearly, but it is only drawn from a yearly net income; when the annual net income is not sufficient for the purpose of paying fixed interest, a surcharge claim arises for the following year. On other platforms, rules regarding the time of payment range from quarterly or annual maturity to a final payout of the accrued interest at the conclusion of the contractual relationship. The rate of fixed interest varies between 1% p.a.<sup>70</sup> and 7–8% p.a.<sup>71</sup>

In comparison, the first crowdfunding contracts that were used by Seedmatch and Innovestment did not include fixed interest payments. In the first quarter of 2012, Mashup Finance<sup>72</sup> offered non-securitized participation rights in the start-up Munich Distillers, which in addition to a variable interest payment also contained a yearly hurdle rate of 7% of the amount invested.<sup>73</sup> In September 2012 the platform Deutsche Mikroinvest offered non-securitized participation rights in the company Fortnox; the deal also included interest of 8.75% p.a. on the capital investment.<sup>74</sup>

In using subordinated profit-participating loans for the first time for financing the start-up Protonet in the fourth quarter of 2012, Seedmatch introduced a fixed interest payment alongside the variable interest payment. Investors were entitled to a revenue-independent fixed interest payment with a rate of 1% of the amount invested p.a., payable at the end of the term. Companisto, with the changeover to subordinated profit-participating loans, also

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<sup>69</sup> Cf. *infra* Section F.X.

<sup>70</sup> For example, with Companisto and Seedmatch.

<sup>71</sup> For some offerings on the platform Deutsche Mikroinvest or Aescust, for example. Investors in the start-up SnakeFX on the platform Aescuvest were even promised 18% for two payment periods; a share in the value, however, was not included in the contract.

<sup>72</sup> In December 2014 Mashup Finance merged with the Austrian platform CONDA and subsequently operated under this name.

<sup>73</sup> Cf. para. 5 of the conditions of participation rights of Munich Distillers from 20/01/2012. The payment of interest, however, was contingent on there being adequate net annual profits from which to make disbursements. If it did not suffice, the payment claim was carried over in subsequent years.

<sup>74</sup> The interest payment was also contingent on there being a sufficient annual surplus. When the annual surplus was not sufficient, a claim to additional payment would carry over in succeeding years. Compensation above this “ordinary dividend” was not offered.

introduced a revenue-independent fixed interest rate of 1% of the sum of the investment. This occurred for the first time in connection with the financing of the start-up swabr in the first quarter of 2013. The contracts of Innvestment, however, did not include fixed interest payments.

Overall, there has been a clear trend toward contracts with a fixed-interest component. This development is probably primarily due to the fact that until the end of the observation period investors only had seven opportunities to participate in the success of a company due to the premature termination of the financing agreement.<sup>75</sup> Contracts with fixed interest payments grew by leaps and bounds in the fourth quarter of 2012, whereas just a year earlier no crowdinvesting contracts included a fixed-interest element. Since the second half of 2014, over 80% of contracts provide investors with the right to a fixed interest payment.

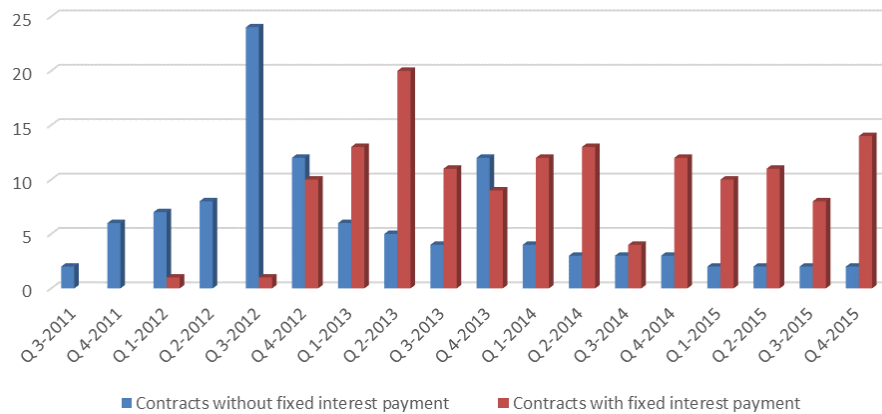


Fig. 16: Number of contracts with and without a right to fixed interest payment.

<sup>75</sup> Lars Hornuf & Matthias Schmitt, 16 CESIFO DICE REPORT 2/2016 21 (2016).



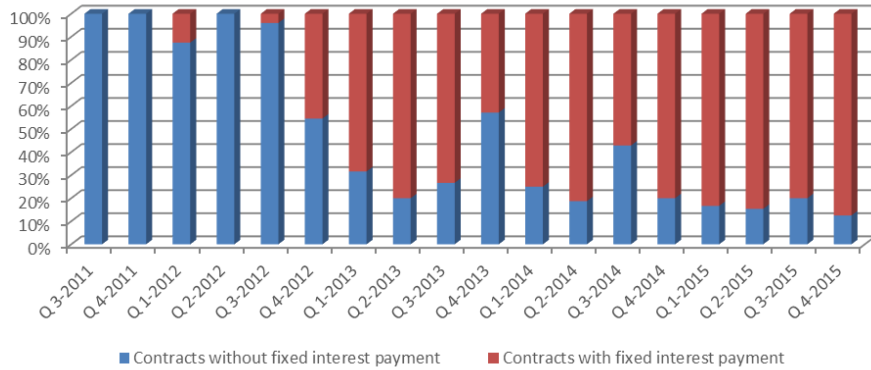


Fig. 17: Percentage of contracts with and without a right to fixed interest payment.

In general, there was an increase in the average promised fixed interest rate in crowdfunding contracts from 0% to almost 4% in the course of the observation period.

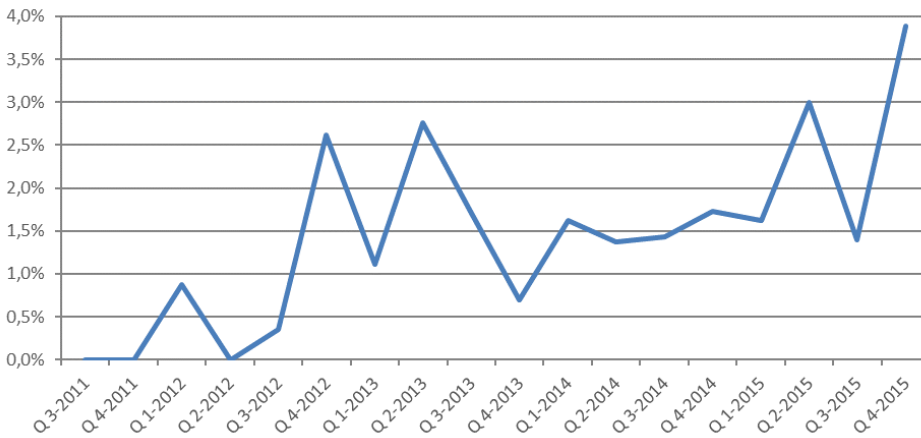


Fig. 18: Average promised fixed interest rate (all contracts).

Taking into account only those contracts with a fixed interest payment, the average promised interest rate fell from 7–8% to approximately 2% before slightly rising again by the end of the observation period.

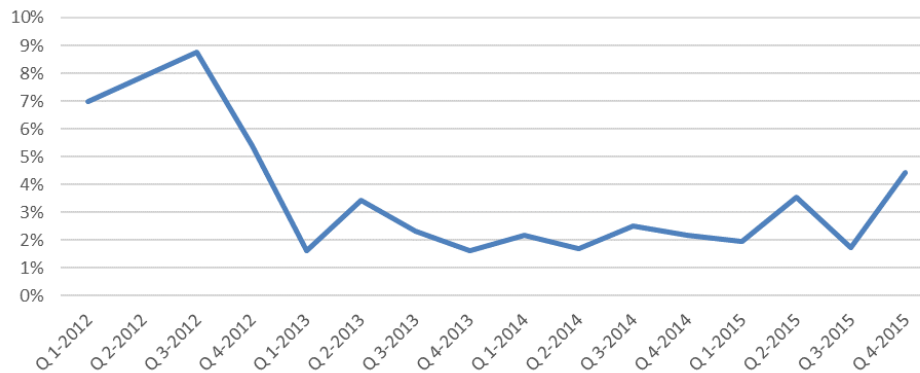


Fig. 19: Average fixed rate of interest (only contracts with a right to fixed interest payment).

A similar picture emerges when taking into account only those contracts that in addition to a fixed interest payment also grant the investor a variable interest payment, which allows the investor to participate in the profits of the company to an unlimited extent: The initially relatively high fixed interest rate of 7% p.a. falls to approximately 1% and then rises slightly toward the end of the observation period.

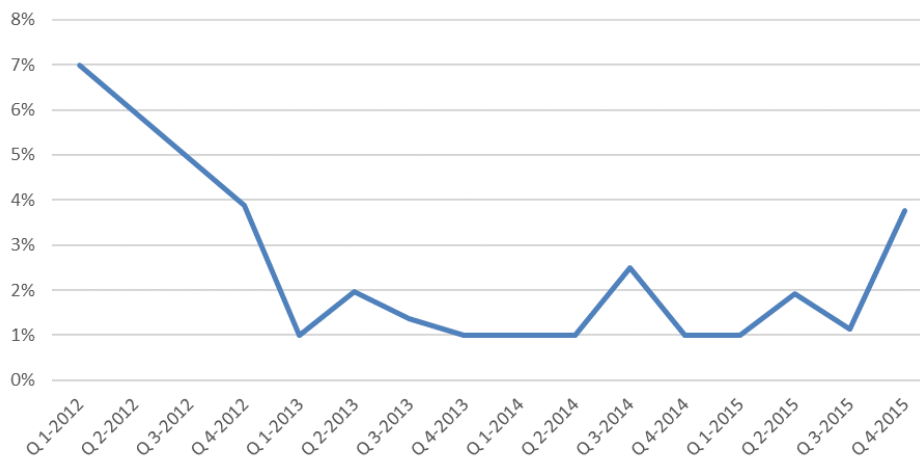


Fig. 20: Average fixed interest rate (only contracts with both a fixed interest payment and a variable interest payment in the form of an uncapped profit participation).

## 2. *Investment Ratio*

In order to determine the share of the investor in the yearly profits of the start-up, contracts make use of an investment ratio—or participation ratio. It represents effectively a virtual share of the investor in the start-up, mimicked by contract law. Thus, contractually the investor is placed in a position as if he were a shareholder of the company, which he is not under the applicable company law. The investment ratio is calculated by the time of the completion of the crowdfunding campaign from the ratio between the amount the investor has contributed and the pre-money valuation of the start-up plus the total capital raised—currently called the loan sum.<sup>76</sup> The previous equity providers of the start-up reserve a share in the future success of the company for new lenders, who are subsequently paid a share in profits.

In contrast to traditional venture capital financing, in crowdfunding the start-up does not enter into negotiations with investors about the pre-money-valuation, which determines the investment ratio and accordingly the level of the participation rights of the investors. Instead, the value of the start-up is established in consultation with the crowdfunding platform. Complex methods of evaluation are generally not used because companies seeking financing through crowdfunding generally only consist in an idea, not yet having substantive assets or revenue. Investors must simply decide whether or not they want to invest at that valuation of the company.

## 3. *Variable Interest Payment*

Today, most crowdfunding contracts provide investors with a variable interest payment, which allows investors to participate in the profits of the company. The design of the variable interest payment differs considerably. In essence, there are two types of contractual designs: In the first type, the investor participates in a basically unrestricted manner in the profits of the company—real or uncapped profit participation; in the second type the investor only participates in a certain percentage of the amount invested—capped profit participation.

For the most part investors participate in annual company profits in proportion to their investment ratio without a cap.<sup>77</sup> The variable interest payment is calculated on the basis of

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<sup>76</sup> If a business is valued at EUR 1,000,000 before the crowdfunding—a pre-money evaluation—and acquires a further EUR 1,000,000 through a successful offering, according to a typical crowdfunding contract the business now has a “post-money enterprise value” of EUR 2,000,000. An investor who loaned EUR 100 would have an investment ratio of 0.005%, that is EUR 100 / (EUR 1,000,000 + EUR 1,000,000).

<sup>77</sup> For example, in the current contracts offered by the platforms Seedmatch and Companisto (where it is called “profit-dependent annual bonus interest”).

the corporate income reported in the annual financial statement, though in some cases it is necessary to make certain adaptations.<sup>78</sup>

Investors on the platform Innvestment have unrestricted rights to participate in the profits of companies by variable interest payments. In this case, there is an indirect profit-participation structure—the investor lends to a SPV, which is a shareholder in the start-up.<sup>79</sup> The distributable income that the SPV receives from the start-up is allocated to investors according to the size of their investment. The investment ratio here corresponds to the value of the ratio of the amount of the loan and of the total funding. Distributable income is the amount actually paid to the SPV as shareholder in the particular case of an appropriation of net profit or a removal decision. After the deduction of a revenue share by the platform, also called carried interest, income is distributed to investors.

On other crowdfunding platforms variable interest payments are initially set as a fixed percentage of the net income of the start-up regardless of the specific amount of the investment. The interest is, however, then capped at a percentage of the amount invested.<sup>80</sup> In other cases, contracts provide investors with a variable interest payment in the form of a

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<sup>78</sup> The variable interest payment in the investment contract for the start-up Lightboys (level by level GmbH), which was financed through Seedmatch in December 2015, for example, is calculated on the basis of:

The profit and loss figures in the annual tax statements, prior to considering the bonus interest of the investor . . . and taking into account the following adjustments: a) The following items should be added: i. Extraordinary expenses; ii. losses from the disposal or destruction of assets that were acquired prior to the beginning of the profit-participation agreement; iii. yield reductions due to increased deductions or appreciations in accordance with tax legislation; iv. the creation of tax-free reserves, insofar as they exceeded an amount of 2,0% of annual sales (as is shown in the annual tax statements); v. remuneration for the management of the start-up, insofar as it exceeded in total an annual salary of EUR 100,000 per director; vi. expenses from other taxes; b) the following items are deducted: vii. Extraordinary income; viii. income from the disposal or destruction of assets that were acquired before the beginning [of the] profit-participating loan; ix. income from the liquidation of such reserves that were previously added in par. 4 iv); x. revenues from other taxes.”

§ 9 par. 4 of the investment contract.

<sup>79</sup> See *supra* Section E.III.2.

<sup>80</sup> Thus, the terms of the non-securitized participation rights provided by the platform Bankless24 for the start-up YAMAZOKi GmbH in 2015 include a “proportional annual profit-participation” for investors of 3 to 5% of the annual net profit, which however is capped at a “maximum 4% of the amount invested.” § 3 par. 3 of the conditions of participation-rights for YAMAZOKi GmbH.

fixed percentage of the amount invested once a certain corporate income threshold is reached.<sup>81</sup>

The first crowdfunding contracts developed by Seedmatch, which were silent partnerships, offered basically unlimited participation in the profits of the start-up in accordance with the investment ratio.<sup>82</sup>

With respect to Companisto, which initially used a sub-participation structure,<sup>83</sup> a sub-participation ratio was calculated from the rate between the contribution of capital in the investment vehicle, Companisto Venture Capital GmbH, and the total funding amount. In accordance with this sub-participation rate, the investors were involved in all actual disbursements from the income account of the investment vehicle. The participation rate of Companisto Venture Capital GmbH was formalized in the “contract for an atypical silent partnership” between the start-up and Companisto Venture Capital GmbH with the basis being the profits as reported in corporate income tax statements.

The platform UnitedEquity offered silent partnerships that were essentially the same as Seedmatch’s with respect to variable interest payments. On the contrary, non-securitized profit participation rights contracts offered on UnitedEquity provided investors only with a threshold and—subject to a sufficient annual surplus—an additional interest in the amount of a certain percentage of the amount invested.

Since the second half of 2012, Deutsche Mikroinvest has offered different kinds of contracts. In some cases, crowdfunders participated as silent partners.<sup>84</sup> In addition to a fixed interest component, such contracts also entitled investors to participate in the profits of the respective start-up by a variable interest payment. Depending on the contract, between 5 and 12% of the annual revenue of the start-up was allocated to crowdfunders in their entirety, of which the individual investor received a share corresponding to his investment.

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<sup>81</sup> Depending on the achievement of a certain threshold of the annual net profit which, depending on the start-up, could be between EUR 1 and EUR 3.5 million, contracts brokered by the platform Deutsche Mikroinvest gave investors an additional interest from the loan amount of between 2 and 5%.

<sup>82</sup> Cf. § 8 of the contract for a silent partnership in the start-up Neuronation on the platform Seedmatch; participation was similarly arranged on Innvestment. For calculating the investment ratio, see Section (F)(VI)(2).

<sup>83</sup> Cf. *supra* Section (F)(VI)(2).

<sup>84</sup> Thus, for example, the offerings of the start-ups HMF HausManufaktur, TARS, Glasfoto.com, Palaterra, and MyChoc.

In some cases, however, this participation was capped at a certain percentage of the amount invested.<sup>85</sup>

**Figures 21 and 22** report the number and share of contracts with real and capped profit participation.<sup>86</sup> (Figures 21 and 22 are produced in full on the next page.) Until the second quarter of 2012 all contracts included real profit participation. The first contracts with capped profit participation were offered in the third quarter of 2012. By 2015 there was a slight increase in contracts with capped profit participation.

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<sup>85</sup> Thus, investors in the start-up Palaterra collect a “profit preference” of 6.5% on the amount invested plus “profit participation” of 5% of the annual net profit, which however is capped at a maximum of 5% of the amount invested. *Cf.* § 8 of the agreement about on the establishment of a silent partnership.

<sup>86</sup> Regarding the terms, see *supra* Section F.VI.3.

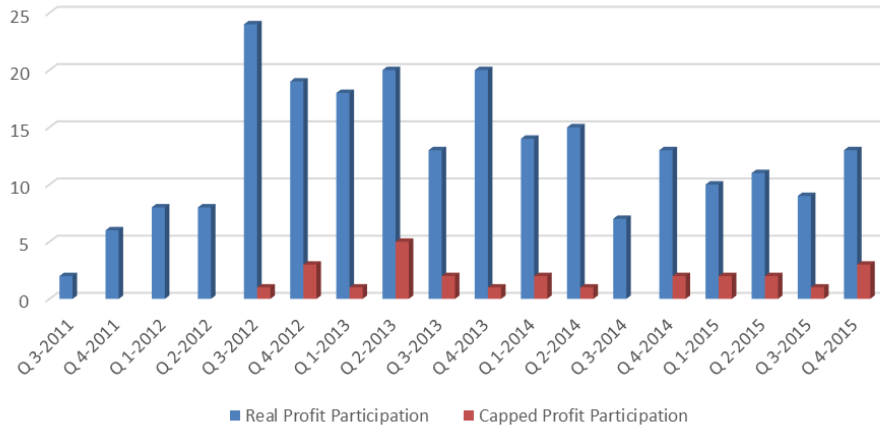


Fig. 21: Number of analyzed contracts with real and capped profit participation.

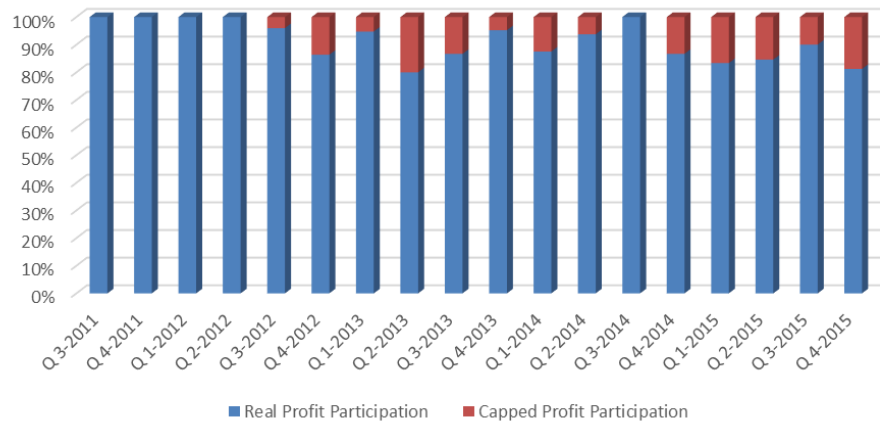


Fig. 22: Percentage of analyzed contracts with real and capped profit participation.

#### 4. Loss Participation

Loss participation—the mirror image of profit participation—is not included in current crowdinvesting contracts. Neither distributed profits nor the loan itself can be used to offset previous or subsequent losses.<sup>87</sup>

This part of the contract changed over time. Although none of the examined crowdinvesting contracts ever obliged the investor to make additional capital contributions beyond the original investment, the first contracts notably contained provisions of loss participation on the part of investors. The investment ratio accordingly not only represented the extent to which investors participated in the annual surplus but also the annual deficit of the start-up. The loss was then reserved from the loss account of the investor. Before a share of profits could be credited or paid to the investor's income account, the loss account first had to be balanced.

Until the transition to subordinated profit participating loans at the end of 2012, investors on Seedmatch participated in losses in accordance with their investment ratio—even if losses exceeded the amount of investment.<sup>88</sup> There was no obligation for investors to make additional capital contributions.

Sub-participation contracts provided by Companisto similarly required participation by the investor in losses exceeding the amount invested. These contracts also did not require additional funding from the investor.<sup>89</sup> With the change to subordinated profit participating loans at the beginning of 2013, loss sharing on Companisto ceased to exist. Until the end of 2014, Innovestment also included loss sharing in its participation agreements with crowdinvestors.<sup>90</sup> In this case, however, the loss participation was restricted to the amount of the investment and, as appropriate, to undisbursed profits.<sup>91</sup> Contracts without loss participation emerged at the end of 2012 and became increasingly common until the end of

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<sup>87</sup> This does not, of course, rule out the possibility that both the loan amount and the accumulated profits will be irrecoverable in the case of insolvency, in which case investors suffer a total loss.

<sup>88</sup> Cf. § 9 para. 4 of the contract for a silent partnership in the start-up Neuronation.

<sup>89</sup> Cf. § 6 and § 4 of the contract for an atypical silent partnership and § 6.4 of the sub-participation contract for the first crowdinvestment on Companisto.

<sup>90</sup> Cf. § 5 of the participation contract for an atypical silent partnership in the start-up sopen GmbH.

<sup>91</sup> Cf. § 5 para. 2 s. 2 of the participation contract for an atypical silent partnership with sopen GmbH: "The silent partner only participates in a loss of the amount of his paid contribution and (eventually) profits that have not been disbursed to him."



the observation period in 2015. In the second half of 2015, none of the contracts examined contained loss sharing.<sup>92</sup>

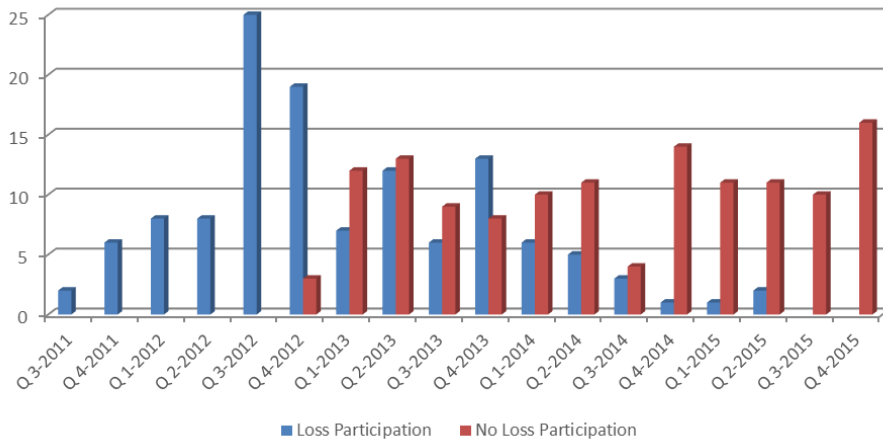


Fig. 23: Number of contracts with and without loss participation.

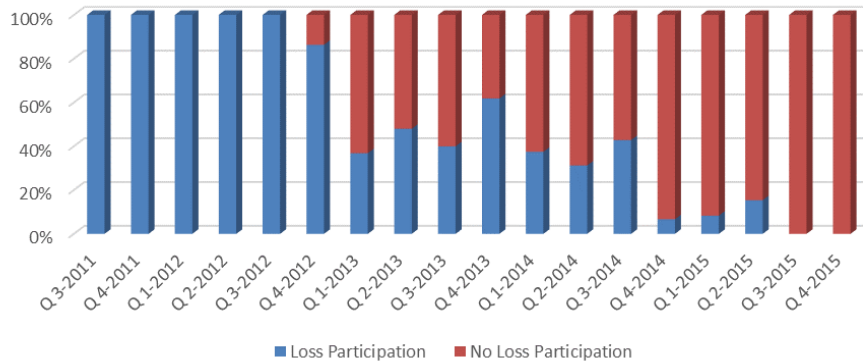


Fig. 24: Percentage of contracts with and without loss participation.

<sup>92</sup> Cf. Figures 23 and 24.

### 5. Share in Enterprise Value

Another participation right contained in the majority of crowdfunding contracts is the right to participate in the value of the start-up at the end of the investment. Although the legal relationship for the creditor of the subordinated profit-participating loan is of a purely contractual nature, investors do not only participate in the profit of the start-up through variable interest payments but also in its substance. Thus, investors are contractually treated as if they were equity holders of the company.

On the platforms Companisto and Seedmatch, investors receive at the end<sup>93</sup> of their investment a *bonus interest* payment which is calculated as the ratio between the value of the enterprise and the investment ratio<sup>94</sup> less the original contribution made by the investor. The various crowdfunding platforms have different methods for determining the value of the companies they deal with.

Companisto's contracts outline procedures that differ on the basis of who has terminated the agreement. If the start-up terminates its relationship with investors, the enterprise value is determined by using the accounting procedure described in the guidelines of the Institute of Public Auditors (*Institut der Wirtschaftsprüfer* or *IDW*; the guidelines are contained in *IDW S1*).<sup>95</sup> If investors terminate the relationship, they have the choice between a valuation in accordance with *IDW S1*—the costs for this are effectively born by all investors who want to terminate their investment at that time—and an EBIT—or sale—multiple evaluation. If the investor opts for the latter, the company's value is whichever of the following is greater: (a) The enterprise value calculated by multiplying the corporate income of the tax balance sheet (EBIT) of the last fiscal year by the EBIT-multiple;<sup>96</sup> or (b) the enterprise value calculated by multiplying the revenue figures in the tax balance sheet of the last fiscal year by the sales-multiple.<sup>97</sup>

The platform Seedmatch calculates enterprise value solely by using the multiple method so the respective higher value from EBIT and sales multiples is the decisive factor. Current contracts on the platform Innvestment include no share in the company's enterprise value after an ordinary termination of the investment because the investor only participates in the

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<sup>93</sup> The entitlement to a share in the value, however, is cancelled by Companisto and Seedmatch if the investor has culpably caused an extraordinary termination of the investment.

<sup>94</sup> Cf. *supra* Section F.VI.2.

<sup>95</sup> The auditor is chosen by Companisto. The costs arising from this are born by the start-up. The investor has the right to have the results reviewed at his own cost. There is no regular procedure for adjudicating between divergent appraisals.

<sup>96</sup> The EBIT multiple is 6.5 on Companisto and hovers between 5 and 8.5 on Seedmatch.

<sup>97</sup> The sales multiple is 1 on Companisto and hovers between 0.75 and 4 on Seedmatch.

amounts that are actually paid to the SPV. If, however, there is a so-called *payment event*<sup>98</sup> resulting in a disbursement of revenue<sup>99</sup> within six months after the termination of the investment and the initial loan has still not been fully repaid, then the investor participates in accordance with his investment ratio.

Although initially all crowdfunding contracts gave the investor a share in a company's enterprise value at the end of the investment, the first contracts without such participation appeared in 2012 and became increasingly common until the end of the observation period. In the entirety of the period, however, the vast majority of contracts allowed for the participation of the investor in the value of the business.

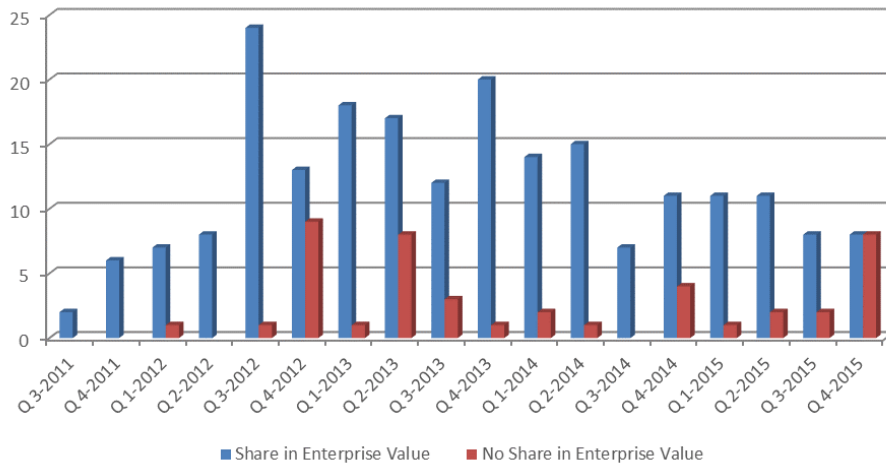


Fig. 25: Number of contracts with and without share in a company's value at the end of the investment.

<sup>98</sup> According to Innvestment's contracts, payment events are attributable to: a) Dividends from the shares in the possession of the SPV; b) repayment for the confiscation of shares; c) miscellaneous disbursements and withdrawals—having to do with the dissolution of capital reserves or the liquidation of the company, for example; d) payments due to the partial or complete sale of the company. Cf. para. 5.2. of Innvestment's contract for the granting of a subordinated profit-participating loan with qualified subordination for the financing of SugarTrends GmbH).

<sup>99</sup> See *supra* Section F.VI.3.

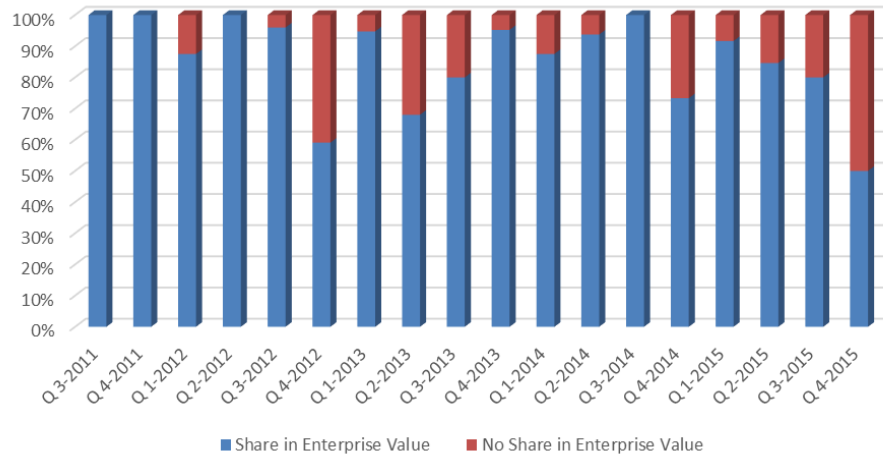


Fig. 26: Percentage of contracts with and without share in the company's value at the end of the investment.

With regards to the enterprise value, the contracts on Seedmatch initially only made use of an EBIT multiple; it then briefly employed a gross profit multiple as an alternative measure before settling on a sales multiple as the alternative to the EBIT multiple. According to the first contracts on Companisto, so long as the sub-participation of the investor ended before the silent partnership of the SPV,<sup>100</sup> the start-up's market value was evaluated in accordance with IDW S1.<sup>101</sup> With the change to subordinated profit-participating loans, Companisto introduced EBIT and sales multiples as an alternative method of valuation.<sup>102</sup> In the first contracts of Innvestment, enterprise value was determined in accordance with IDW S1. **Figures 27 to 29** show the development of EBIT and sales multiples by platform—only those contracts that included multiples for calculating enterprise value were included in the sample.<sup>103</sup> (Figures 27 to 29 are produced in full on the next pages.)

<sup>100</sup> For the structure of the participation, see *supra* Section F.IV.2.

<sup>101</sup> In an extraordinary termination for cause by Companisto, the review was carried out at book value notwithstanding.

<sup>102</sup> Cf. *supra* Section F.VI.5.

<sup>103</sup> N = 133.

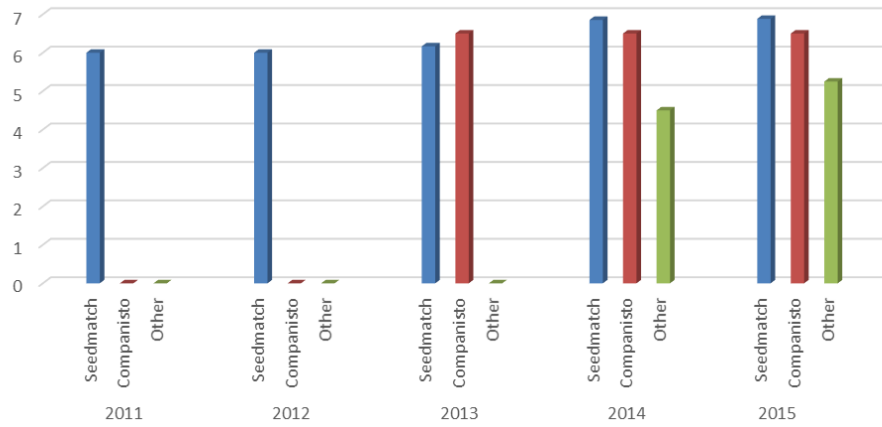


Fig. 27: Development of the average EBIT multiple by platform.

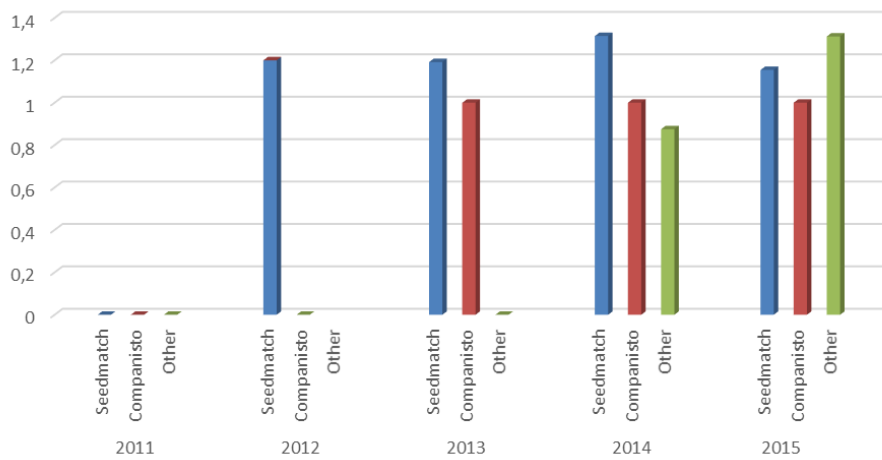


Fig. 28: Development of the average sales multiple by platform.

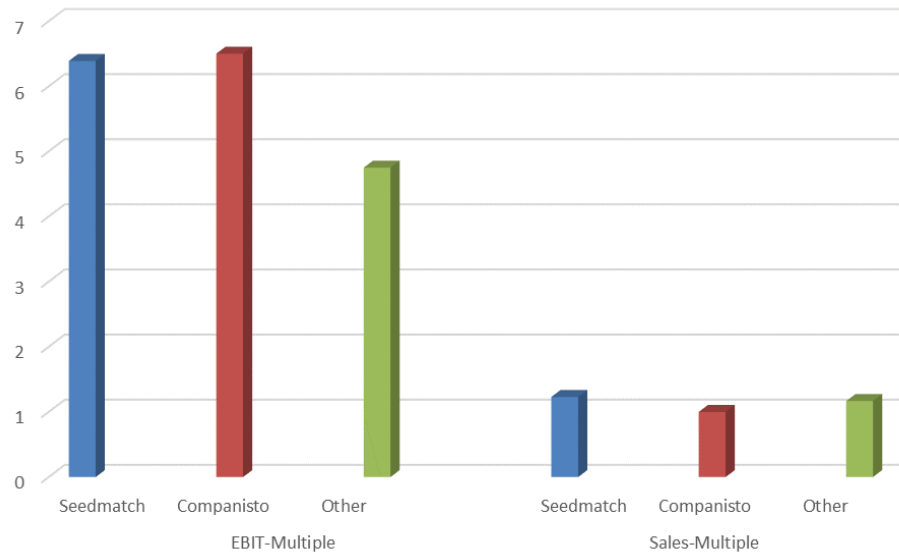


Fig. 29: Average EBIT and sales multiple by platform.

### 6. Exit Rights

Crowdinvestors are creditors, not equity holders of the company. Therefore, if the owner structure of the start-up changes, this does not in itself affect the legal status of the investor. Nevertheless, investors want to participate in the value increase realized by a sale of the company—this is often a key element in their calculations. In order to make this possible, the majority of crowdinvesting contracts provides for investors' participation rights in the exit proceeds in accordance with their investment ratio.

Every initial public offering or sale of the start-up—be it as an *asset deal* or a *share deal*—is understood as an exit, as long as at least 50% of the company shares or of its substantive

assets are transferred.<sup>104</sup> Exit proceeds are understood as any return from the transfer or sale of shares or assets, or from the public offering of shares.<sup>105</sup>

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<sup>104</sup> According to the contracts used by Companisto, there is an exit event:

If a third party other than the existing shareholder . . . [hereinafter “purchaser”] acquires, directly or indirectly, in one or more transactions, the majority of shares or of the substantive assets of the start-up, or if there is a public offering of new or already existing shares of the start-up on one or more recognized international stock exchanges.

Thus, for example, par. 13.2. of the “participation contracts in the form of a subordinated profit-participating loan” for financing TripRebel GmbH on the platform Companisto. In Seedmatch’s contracts, an exit event takes place:

[I]f more than 50% of the shares of the founders of the start-up are sold to third parties in a single process or in the course of a short time period . . . . A sale of the shares of the start-up . . . can also take place indirectly, for example, with the sale of shares of the founders themselves, if they are legal persons. For a sale it is irrelevant whether it comes about through a transfer of shares in the start-up to a third party in exchange for cash or through granting of shares or miscellaneous rights in the context of a merger, asset transfer, or similar transactions leading to comparable economic results, or through the public placement of new and/or already existing shares of the company on one or more stock exchanges.

Thus, for example, § 11 par. 2 of the “Investment contract in the form of a subordinated profit-participating loan” for the financing of Vidamo Handels GmbH on the platform Seedmatch).

<sup>105</sup> According to Companisto’s contracts, exit proceeds result from:

[A]ny direct or indirect return from the transfer or assignment of shares or assets, or from the public offering of shares. For the purposes of the exit, everything in relation to existing contractual agreements, especially deposits in a capital reserve of the start-up in accordance with § 272 par. 2 Commercial Code (*HGB*), any agreed-upon milestones and all payments to the shareholders or to the start-up, is taken into account. If the disbursement is not entirely or partly in the form of cash, then the market value is to be determined. The valuation takes into account all transactions through which the purchaser has acquired shares or assets.

Thus, for example, par. 13.4. of the “participation contract in the form of a subordinated profit-participation loan” for financing TripRebel GmbH on the platform Companisto. According to the contracts of Seedmatch, exit proceeds are:

[T]he totality of the compensation that the founders or shareholders obtain in the context of an exit due to the sale of shares of the start-up. It is irrelevant whether the compensation is in the form of money or any other form of economic benefit. If compensation is not rendered in cash, there is a calculation of the value of the company in its place.

According to Seedmatch's contracts, if more than 50% but less than 100% of company shares are sold by the company's founders, or more than 50% but less than 100% of the company's assets are transferred to a third party, the crowdinvestment is deemed to have ended; it is assumed that a 100% of the company's shares or assets have been sold. On the contrary, the contracts of Companisto allow the crowdinvestors to make a partial exit: The investor participates in the exit proceeds in accordance with his investment ratio. The investment ratio is reduced accordingly.<sup>106</sup> If, in one or more transactions, a buyer takes over at least three quarters of all the shares of a start-up financed on Companisto—a "qualified exit"—the start-up has the right to reduce the investment ratio of crowdinvesters to 0% in exchange for a compensation. Thus, the entire contract is terminated.

On the platform Innovestment, the investor participates in all of the payments that go to the SPV. These include in particular payments resulting from the partial or total sale of the start-up.

The first—silent partnership—contracts of Seedmatch entitled investors to a share in the company's funds in the event of the dissolution of the silent partnership. It included the balance of the investment, profit and loss account, as well as a share in the earnings (EBIT) on the company's tax balance sheet for the last fiscal year multiplied by 6, as a substitute for a share in the enterprise value. Hidden reserves and the enterprise value of the company were not considered, however. In particular, silent partners did not initially participate in the proceeds generated in case of an exit. Only later did Seedmatch introduce further participation in the case of an exit. For this purpose, the enterprise value had to be determined through an audit of the start-up in accordance with IDW S1. Since the beginning of 2013, investors were involved in the exit proceeds that were actually realized.

The first contracts on Companisto and Innovestment included a share for investors in the exit proceeds in accordance with the investment ratio. **Figures 30 and 31** show the development of contracts with regard to whether investors did or did not participate in potential exit proceeds. (Figures 30 and 31 are produced in full on the next page.)

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Thus, for example, § 11 par. 6 of the "investment contract in the form of a subordinated profit-participating loan" for the financing of Vidamo Handels GmbH on the platform Seedmatch.

<sup>106</sup> For the meaning of investment ratio, see *supra* Section F.VI.2.



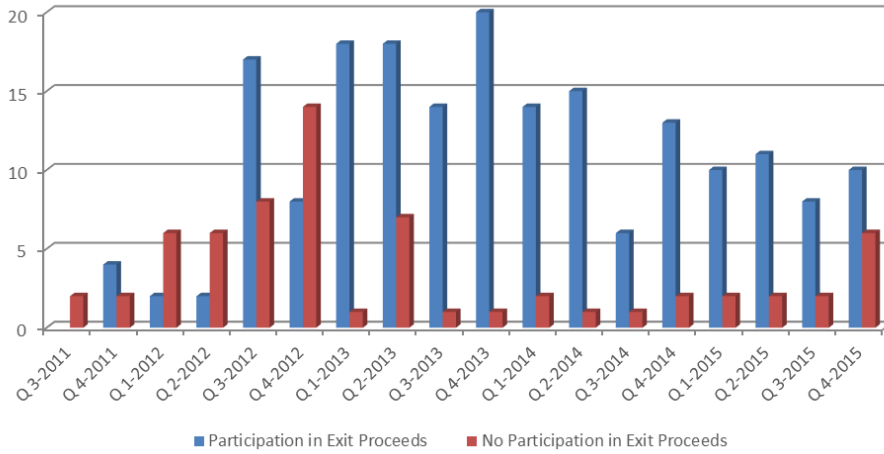


Fig. 30: Number of contracts with and without participation in exit proceeds.

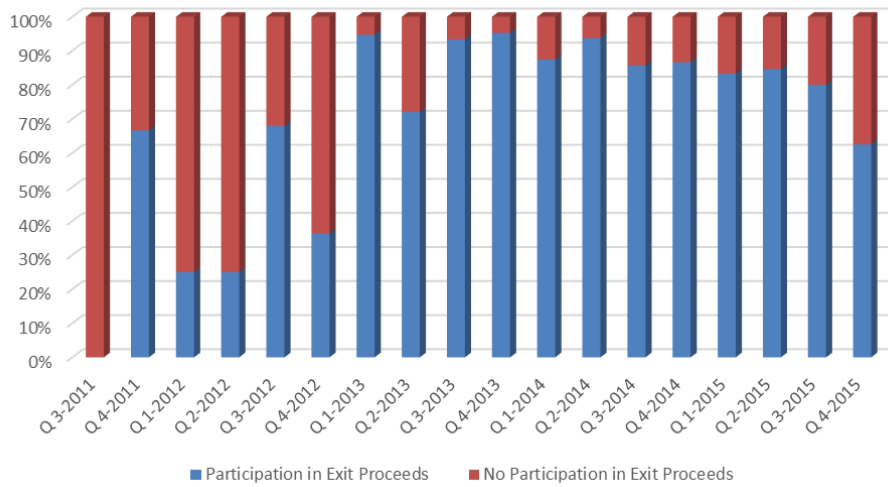


Fig. 31: Percentage of contracts with and without participation in exit proceeds.

### 7. Dilution Protection and Follow-up Financing

The funding of a start-up typically requires several rounds of financing. Even after the successful financing of a start-up through crowdfunding, additional capital will often be needed relatively quickly—whether because cash flows fail to materialize or because more capital is needed to expand the business. Follow-up financing is therefore permitted in all of the contracts that were investigated. Because crowdfunders usually have participation rights that are dependent on their investment ratio,<sup>107</sup> contracts must stipulate how subsequent financing will affect the investment ratio of investors.

If the investment ratio were fixed—that is if it remained unchanged during subsequent rounds of financing—it would seriously hinder the company's ability to attract funds from new investors. Crowdfunders would continue to participate in the company's profits to the same extent even though they would not be making additional financial contributions. To put it figuratively, crowdfunders would continue to receive the same share of a larger pie even as subsequent investors supplied all the additional ingredients. In this scenario the crowdfunders profit at the expense of new investors, whose incentive to participate in the start-up is thus correspondingly low. Insofar as it would discourage new investment, such a situation is hardly in the interest of the crowdfunders because their first priority will generally be to see the company grow and securely establish itself in the market.

For these reasons, all contracts stipulate that the investment ratio will be adjusted in the case of later equity financing.<sup>108</sup> This means that crowdfunding platforms all permit the proportional dilution of the investment ratio.

To say that crowdfunders are subject to proportional dilution does not necessarily mean that they consequently lose assets. This is only the case if the company is undervalued during a subsequent round of financing, the effect being particularly severe if the business is given a lower value than in the earlier funding round—also called a down round. Stock corporation law solves this problem by granting all shareholders a subscription right to purchase new shares.<sup>109</sup> Crowdfunding contracts, however, do not give investors

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<sup>107</sup> See *supra* Section F.VI.3. (Variable Interest Payment); *supra* F.VI.5 (Share in Enterprise Value); *supra* F.VI.6. (Exit Rights).

<sup>108</sup> Cf. para. 17.2. of the "Participation Contract in the Form of a subordinated profit-participating loan" for the financing of TripRebel GmbH on the platform Companisto: "In the case of a capital increase, the investment ratio is adjusted by multiplying with a dilution factor. The dilution factor is the ratio of the amount of capital prior to the increase (numerator) and the amount of capital after it (denominator)."

<sup>109</sup> See § 186 German Stock Corporation Act (*Aktiengesetz – AktG*). Or, in the case where there is not a subscription right, to make a valuation complaint (§ 255 par. 2 AktG).

subscription rights or purchasing rights, nor do they allow investors to review the evaluation of the company, but they do contain other anti-dilution measures.<sup>110</sup>

On Seedmatch, the investor's investment ratio is only reduced if the company has not been given a lower valuation during follow-up financing than it had had at the time of the initial offering. In the case of a down round the contractually specified investment rate is not proportionally diluted. Similarly, Companisto's contracts contain down round protection, which protects investors from dilution by adjusting the investment ratio.

In comparison to the current practice, the first silent partnerships offered on Seedmatch entitled investors to a variable interest payment which was calculated as a fixed share in the profits of the start-up and was not changed in the event of capital increase. It was agreed that the profit share of the silent partners was not affected by the company's acquisition of additional capital or the issuance of new silent partnerships.<sup>111</sup> With the change to subordinated profit-participating loans, Seedmatch introduced the adjustment of the investment ratio of crowdfunders in the case of capital increases.

In the event that a company sought follow-up financing, Companisto's first contracts provided for the proportional dilution of the sub-participation of crowdfunders as well as of the silent participation of the SPV. They did, however, provide an anti-dilution provision for silent partners in the event of a down round. In these first contracts, protection was limited to the point at which the start-up first received a certain sum of capital and was not valued lower than at the time of the crowdfunding.

The first contracts on Innvestment included dilution of the participation rate of the silent partners only if the capital was increased by at least 10%.

**Figures 32 and 33** include all contracts in which investors were granted variable interest payments in the form of uncapped profit participation in accordance with a virtual—that is, contractual—participation rate. (Figures 32 and 33 are produced in full on the next page.) They show how many of these contracts allowed a dilution of the virtual participation rate following a capital increase of the start-up.

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<sup>110</sup> For standard contractual practice outside of the crowdfunding sector, see Christoph von Einem, Stephanie Schmid, & Arnt Meyer, *Verwässerungsschutz bei Venture Capital-Beteiligungen Aufsatz [Dilution Protection in Venture Capital Participations Essay]* 59 *Betriebs-Berater* 2702 (2004).

<sup>111</sup> Cf. § 11 of the contract for a silent partnership in the start-up Neuronation on the platform Seedmatch.

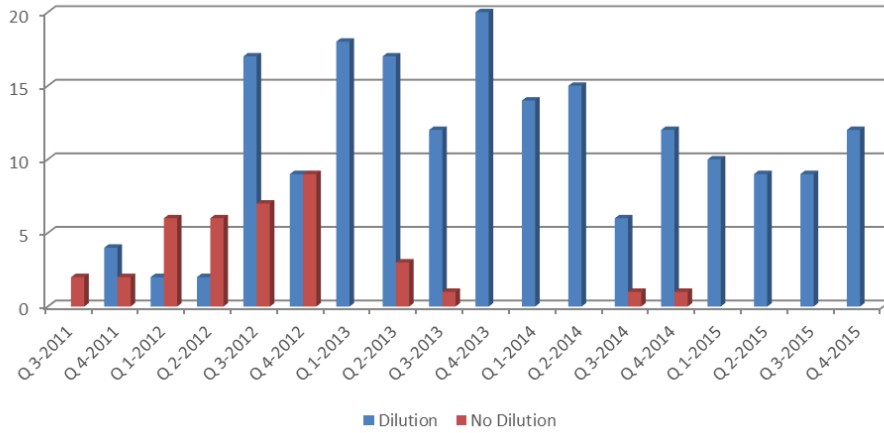


Fig. 32: Number of contracts that allowed a dilution of the participation rate due to a capital increase (only contracts in which the participation rate is dependent on real profit-participation).

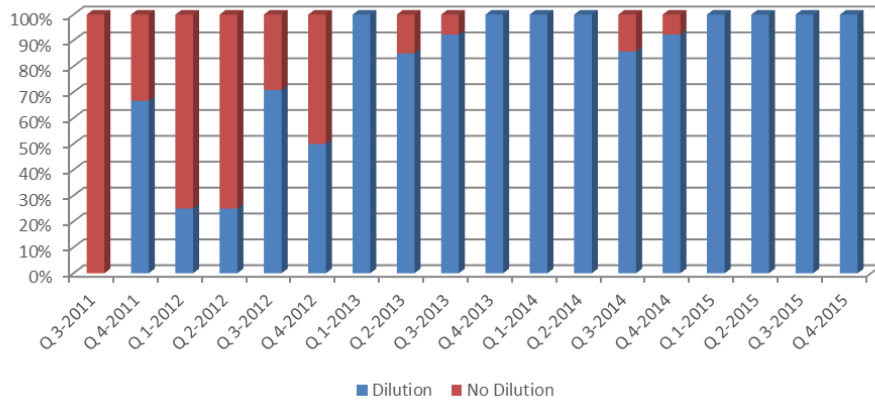


Fig. 33: Percentage of contracts that included dilution of the investment ratio due to a capital increase (only contracts in which the investment ratio is dependent on real profit-participation).

## VII. Control and Information Rights of Investors

### 1. Control Rights

While shareholders of a private limited liability company (GmbH) or a joint stock company (AG) have control rights and more particularly voting rights, creditors, regardless of the amount of their capital contributions, they have no rights that could have an effect on the management of the start-up. All crowdfunding contracts that are currently in use make it clear that investors have no say in managing the company.<sup>112</sup>

This was not always so. The first crowdfunding contracts gave investors relatively broad veto rights with respect to certain company activities. The first contracts on Seedmatch contained typical veto rights for atypical silent partnerships. As a result, the start-up was only permitted to take certain measures after securing approval from a majority of investors.<sup>113</sup> A similar catalog of actions requiring investor approval was contained in the first silent partnerships brokered by Innovestment.<sup>114</sup> Yet, in this case there was no majority approval, the approval for actions was binding only in the reciprocal relationship with the investor. Contracts on Companisto, which were at first in the form of sub-participations, did not contain any veto rights for investors. Nevertheless, the start-up needed the approval of

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<sup>112</sup> For example, there is almost the same wording in § 4 of the “Investment Contract in the Form of a Subordinated Profit-Participating Loan” for financing Vidamo Handels GmbH on the platform Seedmatch and § 6 of the “Participation Contract in the Form of a Subordinated Profit-Participating Loan” for financing TripRebel GmbH on the platform Companisto.

<sup>113</sup> The first contract offered on Seedmatch required the approval of the majority of the silent partners for the following activities:

- a) Termination or substantive change of the planned innovation;
- b) Complete or partial adjustment of the business;
- c) Alteration of the business purpose;
- d) Complete or significant partial sale or mortgage of assets;
- e) Completion, modification, or termination of control and profit-transfer agreements;
- f) Provision of guarantees and debt promises, to the extent that they are not concerned with the ordinary business operations of the start-up;
- g) Extension of credit outside of the normal course of business operations;
- h) Changes to management contracts;
- i) Changes to the legal structure (the transition from UG (limited liability) to GmbH if it is not encompassed in this approval requirement); and
- j) Conversion measures.

<sup>114</sup> Strictly speaking, it justified certain procedures for performing an extraordinary termination by investors. By obtaining the prior approval of the silent partners, which, however, only took effect in the bilateral relationship, the start-up could avert the danger of the investment being cancelled.

Companisto Venture Capital GmbH in its role as holder of the silent partnership. When the form of contract was altered to subordinated profit-participating loans, veto rights disappeared from the contracts of both Seedmatch and Companisto. **Figures 34 and 35** show the development of the contracts that included investor veto rights for certain measures undertaken by the company.<sup>115</sup> (Figure 34 is produced in full on this page. Figure 35 is produced in full on the next page.) While in the beginning veto rights were included in all of the existing crowdinvesting contracts, the proportion of contracts with veto rights had already decreased by the beginning of 2012. Since the second quarter of 2014, almost no crowdinvesting contracts have offered investors veto rights.

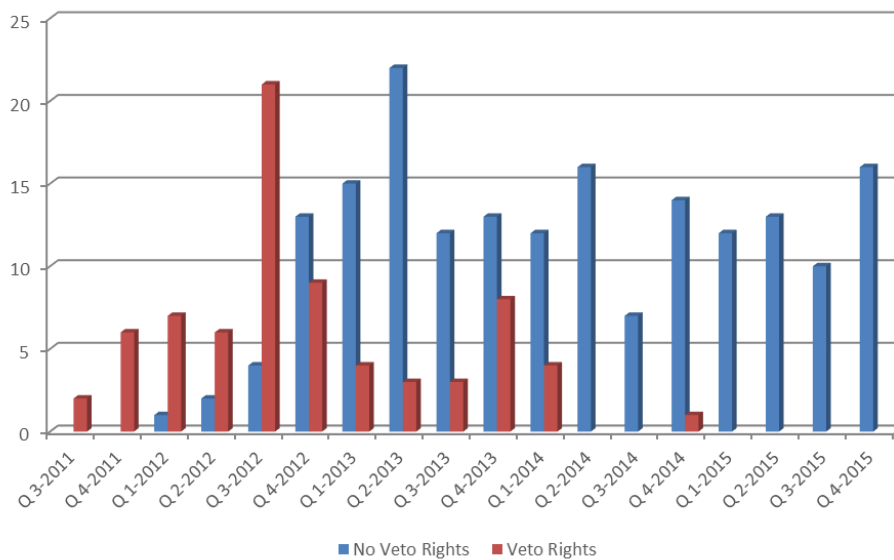


Fig. 34: Number of contracts with and without veto rights for investors.

<sup>115</sup> For present purposes, there is no distinction made between various types of regulation, or whether approval for a given course of action must come from a majority vote or from every single investor.

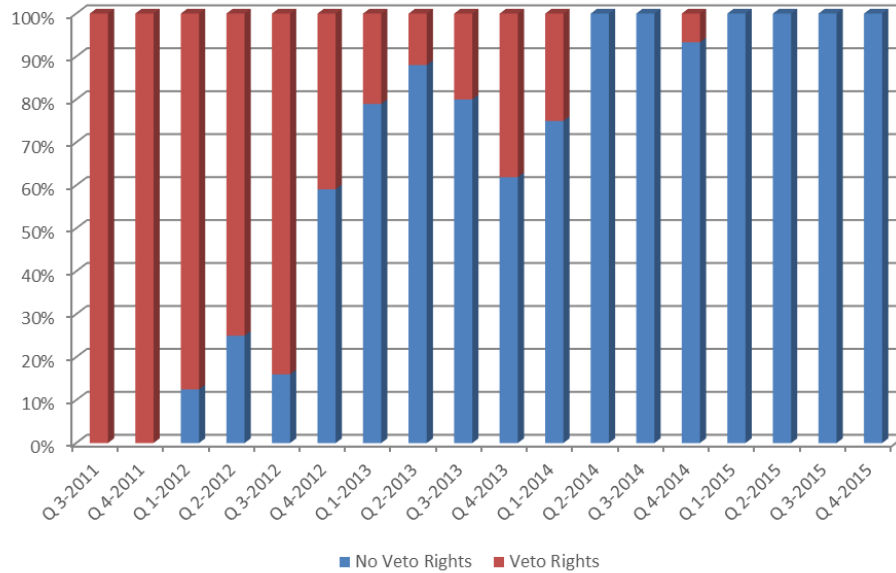


Fig. 35: Percentage of contracts with and without veto rights for investors.

In crowdfunding offerings that include the participation of an investment vehicle, the SPV can have certain veto rights, which can be exercised on behalf of the investors. **Figures 36 and 37** show the development of those contracts that either included veto rights for investors or else—in the case of an indirect financing structure—at least for the SPV. (Figures 36 and 37 are produced in full on the next page.)

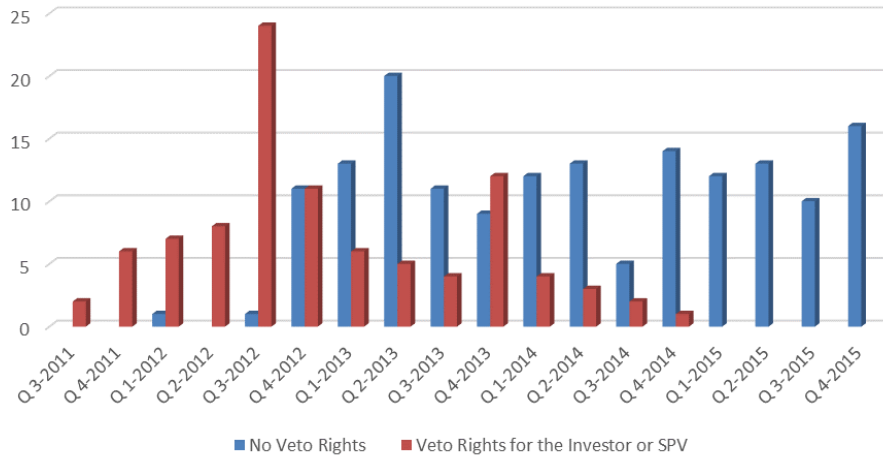


Fig. 36: Number of contracts with and without veto rights either for investors or for a SPV.

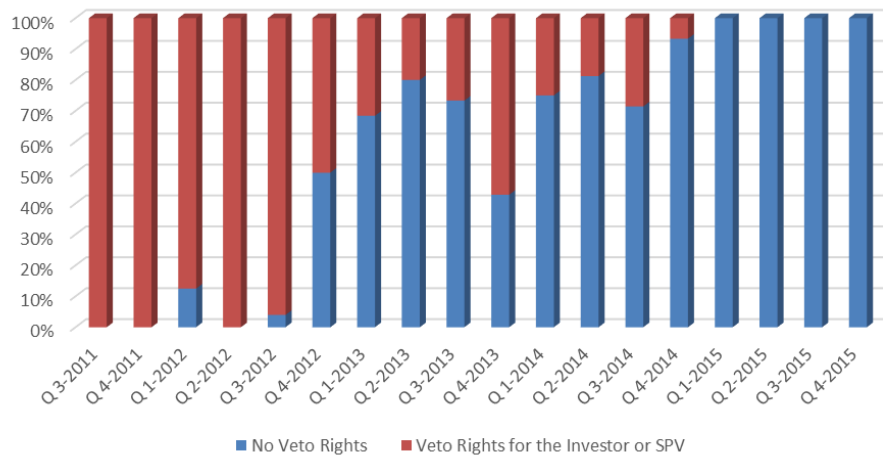


Fig. 37: Percentage of contracts with and without veto rights either for investors or for the SPV.



## 2. Information Rights

Current crowdfunding contracts provide investors with various kinds of intermittent information rights—in particular a right to quarterly reporting—a right to receive the annual financial statements, and the right to an overview of the achieved amount of profit and revenue participation. The information is provided via an investor-relations platform on the crowdfunding platform's website, or it can be sent to investors via email. Innvestment's contracts include an annual web-based investors' meeting.

According to Companisto's contracts, quarterly reports for investors must contain at least the following information: a) An account of the revenue, gross profit, and EBIT of the start-up for the last quarter—with the relevant numbers; b) information on the liquidity of the start-up—in text form, without detailed figures; and c) details regarding "strategy and product," "marketing and sales," and "personnel and press"—again without figures.

Start-ups financed through Seedmatch must inform investors about the progress of their innovative projects in their quarterly reports. The report must contain both a review of the past quarter and a preview of the next one. Start-ups have to provide details about the market, product, financing, competition, marketing and sales, research and development, profits and losses, and cash flow, as well as explanations regarding any unexpected results and the degree of progress made on forecasts for the current year, any important milestones that have been achieved, and any changes made to the capital structure. Finally, the company must specify the current investment ratio for every EUR 250 of investment.

The contracts on Innvestment oblige the SPV to provide investors with quarterly reports on the start-up. Reports must contain a current cash-flow statement and a review of progress made in the last quarter.

While Companisto's contracts do not contain penalties for the violation of information requirements, Seedmatch's include a mechanism for extraordinary termination should the start-up miss its reporting deadline by at least six weeks in two successive quarters, or otherwise fail to complete a quarterly report prior to the deadline for the next one. The introduction of this penalty mechanism in the third quarter of 2015<sup>116</sup> is thought to be mainly due to the bankruptcy of the company Vibewrite UG, which had previously failed to keep up with the requisite reporting. According to details supplied by Seedmatch, in the third quarter of 2014 20% of the 61 start-ups financed on the platform failed to submit their quarterly reporting on time.<sup>117</sup>

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<sup>116</sup> This stipulation appeared for the first time in the investment contract of a subordinated profit-participating loan during the financing of belsonno GmbH.

<sup>117</sup> Cf. Seedmatch Team, *Vibewrite: Application Filed for Insolvency*, Seedmatch Crowdfunding for Startups (Dec. 18, 2014), <http://blog.seedmatch.de/2014/12/18/vibewrite-antrag-auf-eroeffnung-insolvenzverfahrens/>.

Investors on the platform Innvestment also have the opportunity to participate in an annual web-based investors' meeting, at which the SPV and the start-up inform investors about matters pertaining to the business.

In the contracts of Seedmatch, companies are obliged not only to provide quarterly reports but also to make ad hoc announcements about any developments that are of essential importance via the platform's investor-relations portal.

**Figures 38 and 39** show that all crowdfunding contracts of the year 2011 provided for quarterly reports. The share of contracts with quarterly reporting obligations then declined steadily, however, so that by the third quarter of 2013 only a third of the contracts still had them. (Figure 38 is produced in full on this page. Figure 39 is produced in full on the next page.) Notably, the contracts of Companisto only began to demand quarterly reports in the first half of 2014, both for crowdinvestments involving silent partnership and subordinated profit-participating loans. Near the end of the observation period, the share of contracts that included responsibilities for quarterly reporting again increased.

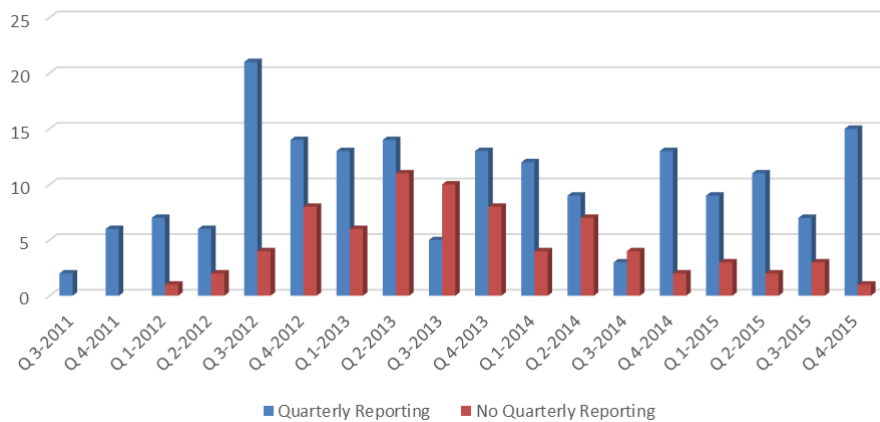


Fig. 38: Number of contracts with and without quarterly reporting.

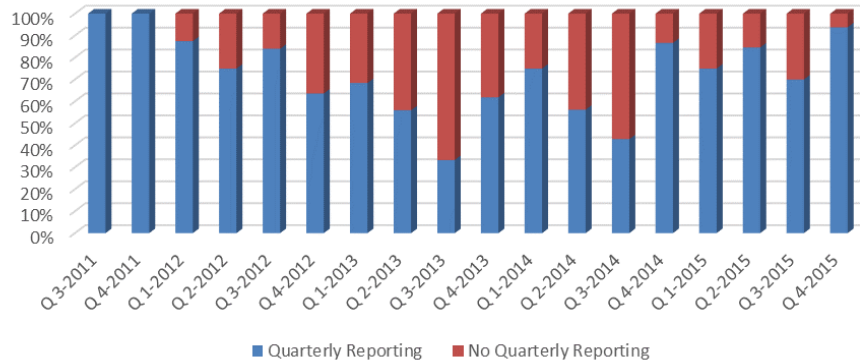


Fig. 39: Percentage of contracts with and without quarterly reporting.

Figures 40 and 41 show the development of those contracts that required start-ups to make their annual financial statements available through an investor-relation portal on the website of the crowdfunding platform. (Figure 40 is produced in full on this page. Figure 41 is produced in full on the next page.)

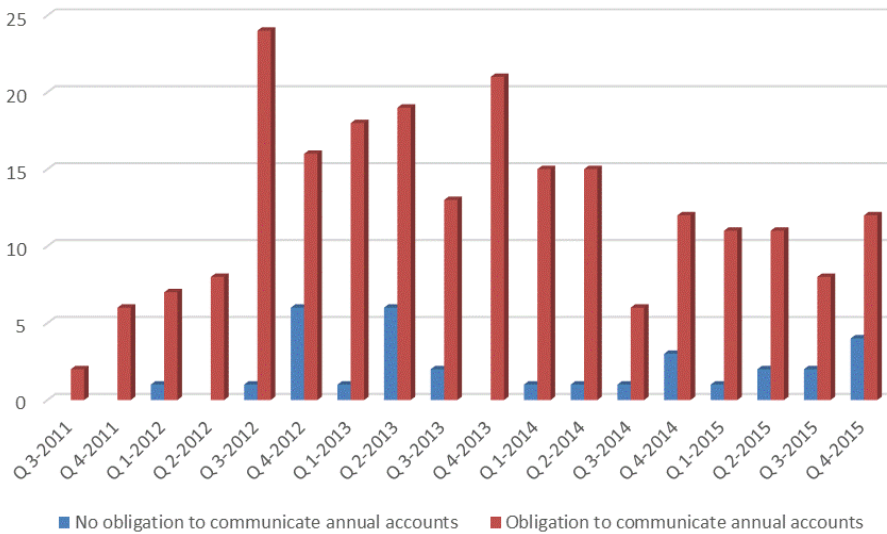


Fig. 40: Number of contracts with and without the obligation for start-ups to submit an annual financial report.

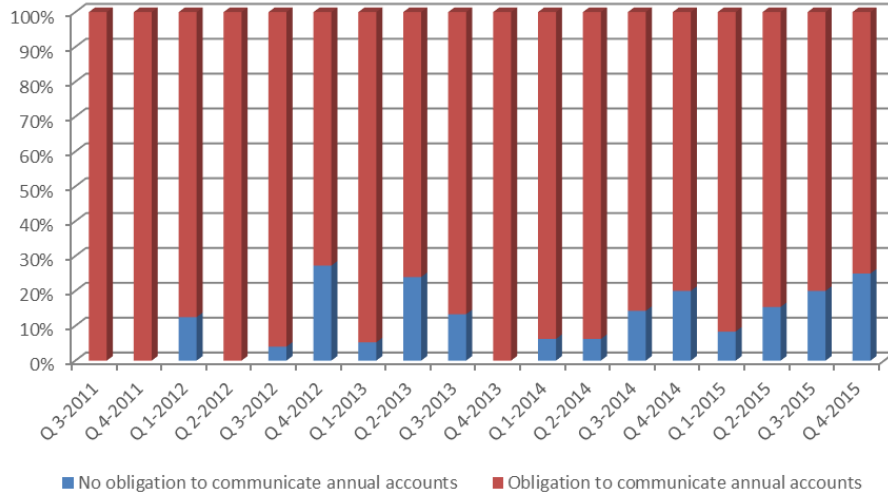


Fig. 41: Percentage Number of contracts with and without the obligation for start-ups to submit an annual financial report.

The right of investors to participate in a virtual investors’ meeting appeared for the first time in Innvestment contracts in the fourth quarter of 2014. **Figures 42 and 43** show the development of contracts with investors’ meetings. (Figure 42 is produced in full on this page. Figure 43 is produced in full on the next page.)

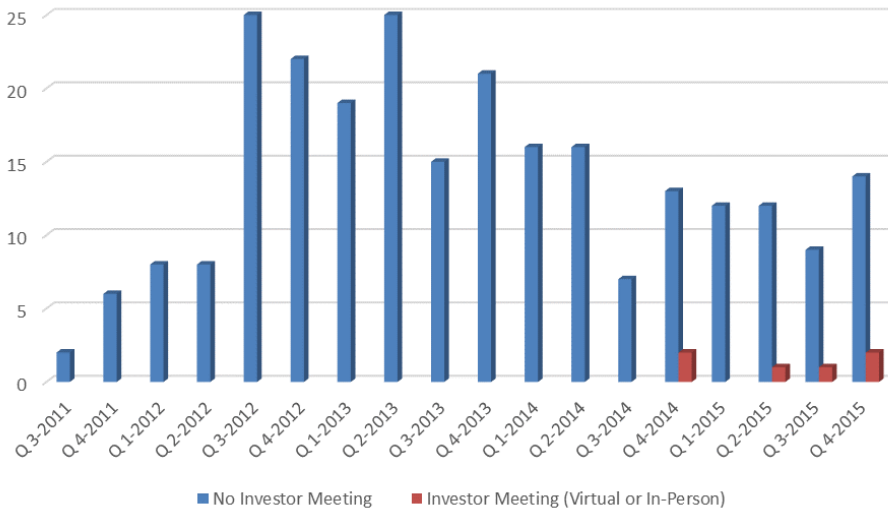


Fig. 42: Number of contracts that include investor meetings.

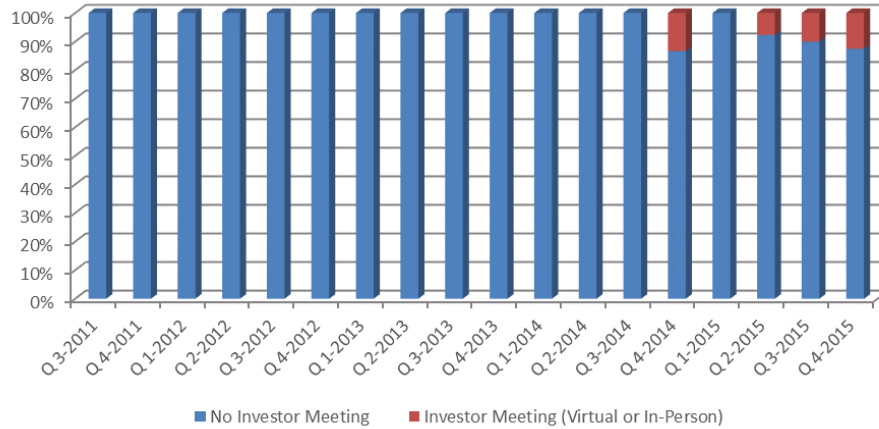


Fig. 43: Percentage of contracts that include investor meetings.

### 3. Inspection Rights

Aside from periodic rights to information, crowdfunders have very limited disclosure or inspection rights. None of the current contracts of Seedmatch, Companisto, or Innvestment contain such rights.

Again, this was not always so. The first silent partnership contracts on Seedmatch contained more extensive inspection rights for the investor. They guaranteed investors the right to check the accuracy of the annual financial report by investigating the books and papers at the site of the start-up. Investors also had information and inspection rights in accordance with § 716 German Civil Code (*BGB*). These rights continued to exist even after the termination of the silent partnership as far as this was necessary for liquidation purposes. Such investigations could be carried out by a lawyer, accountant, or auditor.

In the following years these rights were gradually restricted and eventually completely removed from contracts. At first inspection rights could still only be exercised through third parties that were bound by professional secrecy. Seedmatch selected these third-party agents, but investors had to bear the costs. Despite the shift to subordinated profit-participating loans, investors on Seedmatch at first retained an inspection right in accordance with § 233 Commercial Code (*HGB*). Shortly thereafter, however, the exercise of this right was restricted to a maximum of once per year. Furthermore, it had to be exercised by all of the investors together. Finally, the inspection right was restricted in content and referred only to the immediate need to investigate books and papers directly related to the annual financial statement. Since the third quarter of 2014, inspection rights were removed entirely from Seedmatch's contracts.

The contracts of Companisto had always excluded any type of inspection rights for investors beyond regular information rights. While the platform had an indirect financing structure, however, the Companisto Venture Capital GmbH, as the investment vehicle, had information and inspection rights in accordance with § 51a Limited Liability Companies Act (*GmbHG*). **Figures 44 and 45** show the development of investors' inspection rights.<sup>118</sup> (Figures 44 and 45 are produced in full on this page.)

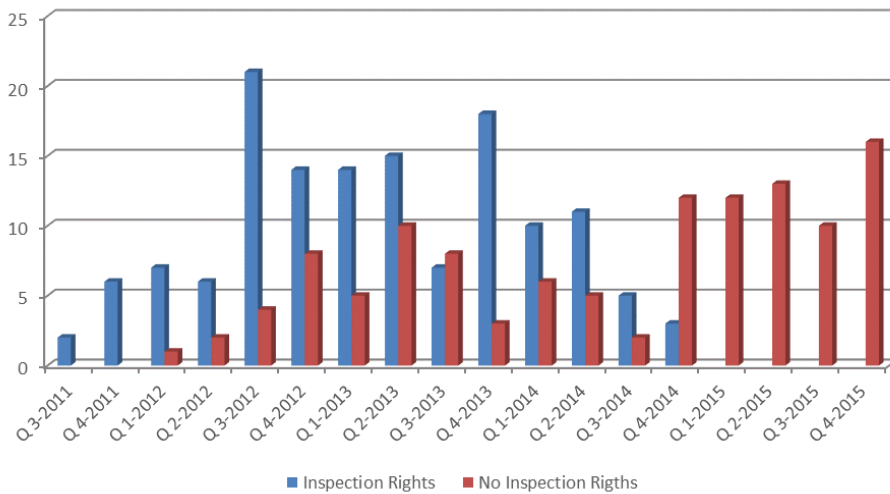


Fig. 44: Number of contracts with and without inspection rights for investors.



Fig. 45: Percentage of contracts with and without inspection rights for investors.

<sup>118</sup> Differences in the scope of inspection rights are not here distinguished. Inspection rights are understood as legal permission to review annual financial statements along with any relevant documents.

Figures 46 and 47 also take into account inspection rights of SPV on platforms that made use of an indirect financing structure. (Figure 46 is produced in full on this page. Figure 47 is produced in full on the next page.)

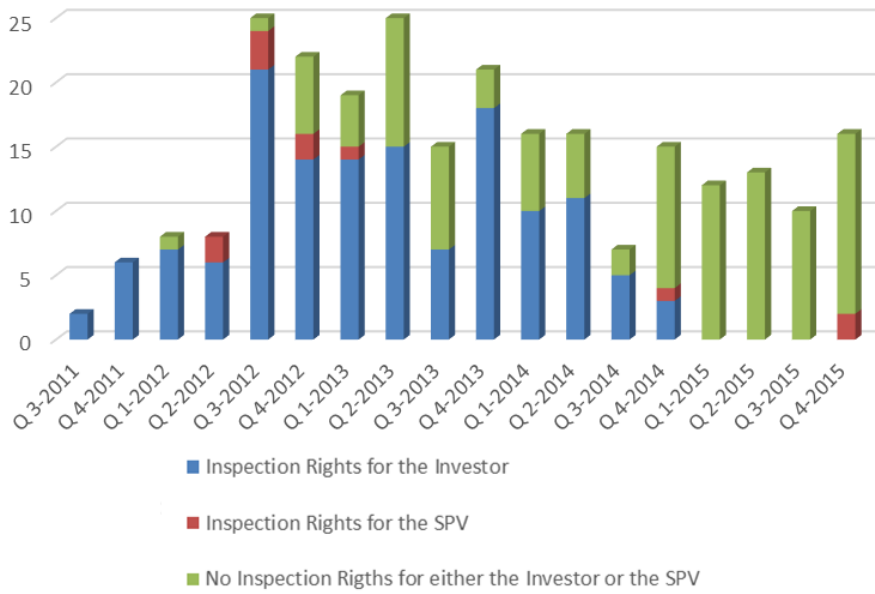


Fig. 46: Number of contracts with and without inspection rights for investors and/or a SPV.

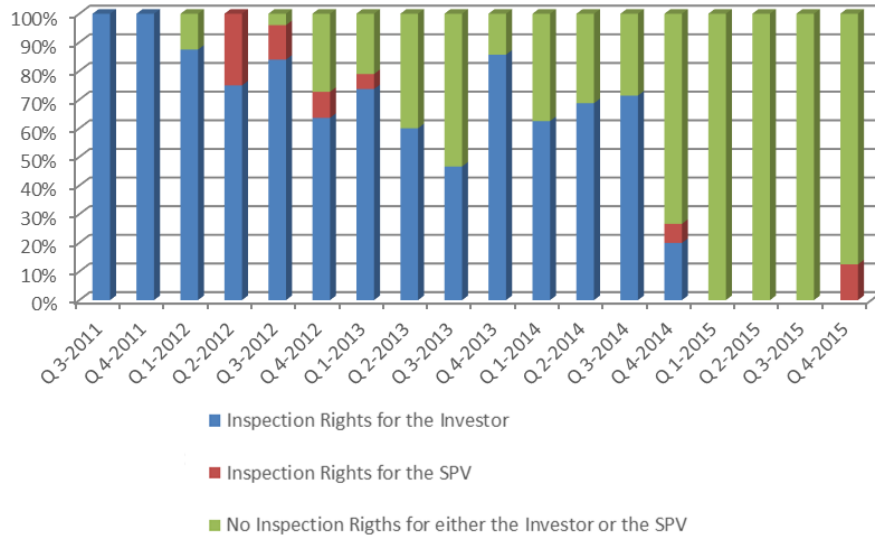


Fig. 47: Percentage of contracts with and without inspection rights for investors and/or a SPV.

### VIII. Vote Pooling

A portion of current crowdinvesting platforms include vote pooling for investors. Investors on Companisto simultaneously conclude a participation agreement and a pooling contract<sup>119</sup> with the Companisto Beteiligungs GmbH & Co. KG. In the pooling contract they submit to a collective voting procedure concerning: a) Offers for the purchase or replacement of subordinated profit-participating loans by third parties, and b) changes to the profit-participating loan contract.<sup>120</sup>

Votes take place on Companisto's website. Every investment ticket of EUR 5 gives one vote, and all of one's votes are to be cast at once. With a majority of 75% of collected votes on whether to permit a redemption offer or contractual change, the decision is binding for all investors, and there is no participation requirement. The announcement period for such voting is at least three days, and the vote itself takes at least seven days.

From the beginning, Seedmatch's contracts included binding voting procedures<sup>121</sup> representing the collective decision of silent partners. A vote representing the decision of

<sup>119</sup> In the "Pooling and Carry Agreement" it is at the same time agreed that Companisto will collect carried interest.

<sup>120</sup> Only the obligation of investors to make additional capital contributions cannot be addressed using this method.

<sup>121</sup> Cf. *infra* Section F.VIII.



the silent partnership—in which participation was in proportion to the size of the investor's financial contribution—was required for such things as a change to the CEO's employment contract. Such a procedure could not, however, be used to make contractual changes or a redemption offer.

The first contracts on the platform Companisto included the possibility of a majority decision about a "community exit." Three quarters of the collected votes indicating preferences regarding the termination or change to the sub-participation agreement—for a certain transfer fee—had a binding effect for all investors. In addition, the majority-decision mechanism was also available for offers pertaining to the conversion of sub-participation in a share of the start-up to public participation. By the third quarter of 2012, the use of majority voting was extended by allowing investors to make decisions about all amendments to the contract in the course of transforming the sub-participation agreement. In the fourth quarter of 2014, investors first had the possibility of voting on an exit when Lake of Constance Ventures GmbH wanted to buy the sub-participations in Companisto—the platform had previously raised funds for itself from the crowd.<sup>122</sup> Nevertheless, 68.1% of participating investors voted against accepting the offer, which promised a return of 100% in just two years. The turnout was 77% of investors.<sup>123</sup>

**Figures 48 and 49** show the development of those contracts that included at least approaches toward vote pooling and therefore had some possibilities for collective voting on certain questions pertaining to the investment that was binding for all investors. (Figures 48 and 49 are produced in full on the next page.)

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<sup>122</sup> See Hornuf & Schmitt, *supra* note 75.

<sup>123</sup> See *Companists Decide Against an Exit*, Companisto, (Dec. 17, 2014), <https://www.companisto.com/de/article/article-782> [accessed 19 June 2016].

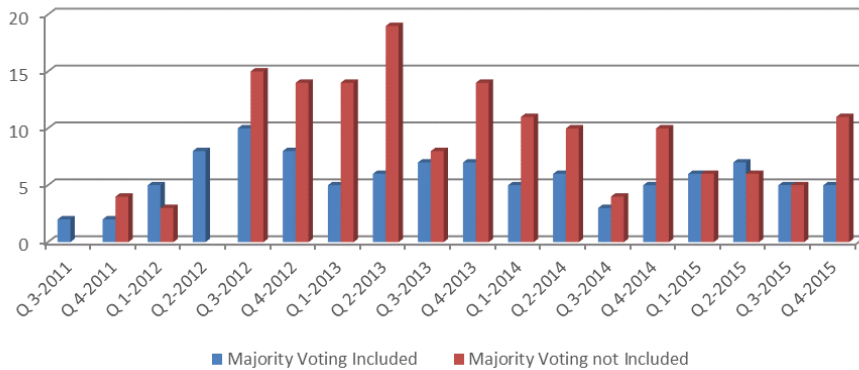


Fig. 48: Number of contracts that included majority voting.

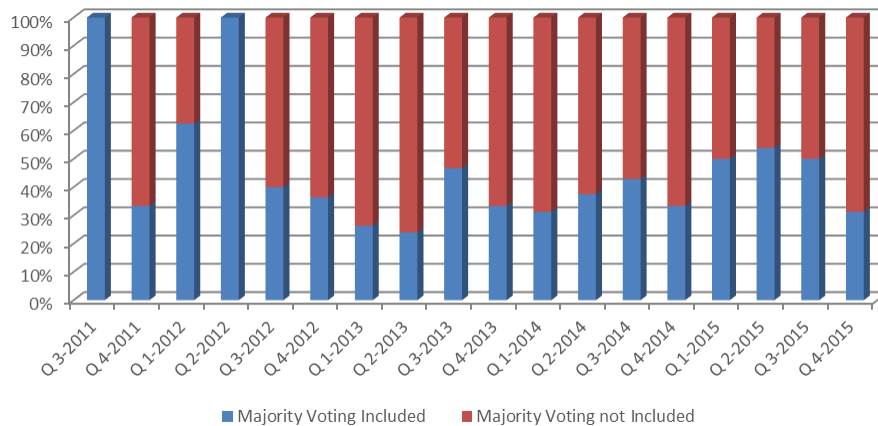


Fig. 49: Percentage of contracts including majority voting.

### IX. Subordination Agreement

The last essential component of all crowdinvesting contracts is the subordination agreement.<sup>124</sup> First, it aims to prevent over-indebtedness of the start-up (cf. § 19 par. 2 clause 2 Insolvency Statute (*Insolvenzordnung – InsO*)) and with it the opening of insolvency

<sup>124</sup> On the effectiveness of subordination agreements in general and the question of whether these can actually be arranged in standard business terms (*Allgemeine Geschäftsbedingungen*) [AGB]—current crowdinvesting contracts most likely qualify as standard business terms—see Georg Bitter, *Effectiveness of Rank Resignations and Pre-Insolvency Enforcement*, 8 ZIP 345, 353 et seq. (2015); see also Westpfahl/Kresser, *Subordination Agreements in the Consulting Practice*, 1 DB 33 (2016).

proceedings.<sup>125</sup> In the event of the insolvency of the start-up, all claims of the investors are subordinate and, thus, satisfied after the claims mentioned in § 39 par. 1 Nr. 5 Insolvency Statute (*InsO*).

### G. Proposed Amendments

With respect to the demonstrated legal restrictions—discussed in Section E—and the resulting concentration on the profit-participating loan as a means of financing on the German crowdfunding market—discussed in Section E(III) and F—stakeholders of crowdfunding platforms are demanding amendments of the German law to facilitate the use of other legal forms in crowdfunding.<sup>126</sup> They criticize that German law *de facto* does not enable the use of equity instruments in crowdfunding. Their suggestions, thus, imply amendments to both German corporate and capital market law.

Essentially, the three following possibilities need to be discussed:

1. At first sight, it seems appropriate to demand the removal of the notary requirement regarding the subscription or transfer of shares of a Limited Liability Company.
2. Stakeholders of crowdfunding platforms suggest the introduction of a “light version” of the German Stock Corporation, which reduces transaction costs resulting of the Stock Corporation Act, capital market law and accounting requirements.<sup>127</sup>
3. Regarding the costs resulting of the public offering of both, equity and hybrid instruments, one might further consider extending the exemption of the prospectus requirement to all investments within the definition of the Investment Act and to all securities within the definition of the Securities Prospectus Act (WpPG).<sup>128</sup>

#### *I. Involvement of a Notary in the Acquisition or Transfer of Shares of a Limited Liability Company*

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<sup>125</sup> Cf. Bitter, *supra* note 124.

<sup>126</sup> Cf. *Stellungnahme des Bundesverband Crowdfunding e.V. zum Kleinanlegerschutzgesetz*, *supra* note 33.

<sup>127</sup> *Id.* at 17.

<sup>128</sup> Cf. Klöhn, Hornuf, & Schilling, *supra* note 32, at 61, 66.

The claim to make the shares of a Limited Liability Company easily transferable is not new. It has long been debated in the context of facilitating access to capital markets of German SMEs and their adequate equity ratio.<sup>129</sup> Nevertheless, it is broadly recognized that the German Limited Liability Company is not intended to provide a corporation with freely tradable shares held by a large number of individuals without interpersonal relationships.<sup>130</sup> Conversely, the German Limited Liability Company is conceptualized as a closed corporation with long-term relationships of its shareholders. A main objective of the notary requirement is to restrict transferability and prevent the Limited Liability Company from becoming a substitute of the German Stock Corporation with its highly sophisticated legal regime. The abolishment of the notary requirement would therefore be not only in contradiction to a well-established legal practice, but also result in inconsistencies, which would require a total reform of corporate law and the system of investor protection.

## *II. Introduction of a "Light Version" of the German Stock Corporation*

A more consistent approach might be to adapt the German Stock Corporation to the specific conditions of crowdinvesting. The Stock Corporation is conceptualized as a corporation with freely tradable shares, which can be held by many investors. In return, the legal framework aims to balance the interests of the different stakeholders—the corporation and its shareholders, management and minority-shareholders—while, at the same time, granting an adequate level of investor protection. In contrast to the Limited Liability Company, the Stock Corporation is subject to mandatory legal provisions. A possible reform would therefore require identifying provisions which generate transaction costs that cannot be borne by start-up companies. At the same time, however, this would dilute the current level of investor protection and potentially destabilize the current balance of interests.

Moreover, the demands of crowdinvesting platforms representatives regarding the Stock Corporation have also been debated in German scholarly literature and practice in the context of facilitating access to capital markets for German SMEs. In 1994, this debate has led to amendments in the German Stock Corporation Act and certain simplifications for "small stock corporations".<sup>131</sup>

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<sup>129</sup> Cf. Carsten Claussen, *Stock Exchange for Medium-Sized Companies*, GmbHR 1988, 417; Dieter Reuter, *Welche Maßnahmen empfehlen sich, insbesondere im Gesellschafts- und Kapitalmarktrecht, um die Eigenkapitalausstattung der Unternehmen langfristig zu verbessern?*, 1 GUTACHTEN B ZUM 55. DEUTSCHEN JURISTENTAG 28 et seq (1984).

<sup>130</sup> On the different concepts, see John Armour, Henry Hansmann, & Reinier Kraakman, *What is Corporate Law? in THE ANATOMY OF CORP. L. 11 et seq.* (Reinier Kraakman & John Armour et al. eds., 2d ed. 2009).

<sup>131</sup> Cf. Gesetz für kleine Aktiengesellschaften und zur Deregulierung des Aktienrechts [Law for small public limited companies and deregulation of company law], Aug. 2, 1994, BGBL. I, at 1961.

### *III. Crowdfunding Exemption of the Prospectus Requirement Regardless of the Investment Type*

The exemption of the prospectus requirement should be available not only for profit-participating loans, subordinated loans, and similar investments but for all investments within the definition of the Investment Act and to all securities within the definition of the Securities Prospectus Act (WpPG). The current restriction of the exemption to certain legal forms is not only illogical—it also increases legal uncertainty—and creates risks for investors.<sup>132</sup> A broader applicability of the exemption regardless of the legal form of the investment would facilitate competition between legal forms and different approaches of crowdfunding platforms.<sup>133</sup>

### *IV. Discussion*

Whereas the abolishment of the notary requirement in the context of the German Limited Liability Company tends to disregard basic ideas of German Corporate Law, the claim to introduce a legal form—which facilitates equity financing for start-up companies or at least adapt some provisions of the German Stock Corporation Act to their needs—cannot be totally dismissed at first sight.

Supporters of modifications in favor of crowdfunding via equity shares argue that this would lead to better investor protection because in the case of profit-participating loans, there is no statutory system of investor protection. Moreover, shareholders of a Stock Corporation would have voting rights. Besides that, the standardization is likely to facilitate the emergence of a secondary market, which might benefit investor protection because investors could more easily sell their shares as under the current contracts in use.

Even if there were specific exemptions for start-up companies in the German Stock Corporation Act, it is very likely that even an adapted form of a Stock Corporation is not flexible enough to suit the needs of the rapidly evolving crowdfunding industry. It is the main advantage of hybrid instruments: They benefit from a large contractual freedom and can be structured in a very flexible manner. The position of the investor can be assimilated to the position of an equity investor by contractual design, not only in terms of participation rights, but also regarding voting rights and investor protection in general. Stock Corporation Law with its predominantly mandatory provisions can hardly provide a similar level of flexibility. At first sight, crowdfunding platforms seem to be the optimal drafters of the contractual relationship between crowdfunders and start-ups because they know the interests and needs of both sides—start-ups and investors. Considering that the crowdfunding market is a two-sided market and the platforms are repeat players, there

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<sup>132</sup> Cf. Klöhn, Hornuf, & Schilling, *supra* note 32, at 61.

<sup>133</sup> Cf. *id.*

are good reasons to believe that the competitive environment among platforms also leads to an investment contract competition. It should be assessed first, whether this results in optimal investment agreements. To facilitate this competition, on the one hand, law should restrain from favoring certain investment types by setting different thresholds for a prospectus requirement. On the other hand, there is—at least at this point—no need to provide further legal forms.

#### **H. Conclusion**

Crowdfunding contracts in Germany have undergone substantial change since the beginning of the market in 2012. As German crowdfunding takes place in an almost unregulated environment, the bulk of these changes were market-driven and not pushed by the regulator. This fact makes the German crowdfunding market particularly interesting for empirical studies in financial contracting.

In the beginning, crowdfunding platforms almost exclusively used silent partnerships as investment contracts, but by the end of the observation period completely replaced them by subordinated profit-participating loans due to regulatory reasons. Significantly more capital was raised as a result of the change to this new type of contract. Over the course of the observation period, the minimum duration of contracts increased from four years to between six and eight years. Investor protection clauses and investors' rights also changed significantly over time. Initially, no contracts contained a fixed interest component. Today nearly all platforms offer investors a fixed interest payment. Most contracts contain an additional variable interest payment, which entitles investors to "real" profit-participation without a cap. As a flipside, crowdfunding contracts have provided less and less decision and participation rights. Investors used to have some veto rights with respect to the company's management and relatively broad inspection rights. These rights no longer exist. A very important development concerns dilution protection. Notably, the first crowdfunding contracts did not allow dilution of the investment ratio of investors. Today such dilution is possible when companies secure follow-up financing from third parties. Nevertheless, crowdfunders enjoy contractual protection against dilution in the event of a down round.