A Critical View on Equity Crowdfunding

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Abstract

While crowdfunding has been praised as positively impacting early stage funding options for innovation and entrepreneurship, potential negative aspects have been ignored or downplayed by policy makers and researchers.
Contrary, based upon literature studies and interviews with key actors in the entrepreneurial financing eco-system, this paper provides an explicit assessment of equity crowdfunding to clarify potential problems. Some of these relates to the nature of equity crowdfunding, others are subject to debate on national and super-national regulation. The national/regional dimension seems at first sight of little relevance in crowdfunding, as it is an on-line mediation of investments, but research indicates that also at on-line platforms investors have preferences for investments in close proximity to where entrepreneurs are active.
Therefore, the research in this paper explores the widespread enthusiasm around crowdfunding, and links this to a question on geographical (national) embeddedness of crowdfunding platforms.
The paper contributes to the existing knowledge in several ways, most importantly pointing out six potential problem areas of crowdfunding and, related, contributing to a critical perspective on crowdfunding, including assessing the relevance of regional/national policies and the question if a national location of the platform matter.
The research focuses on crowdfunding in Denmark, where crowdfunding is a relatively new phenomenon and policies and regulation is not yet very developed. It is questioned if equity crowdfunding is an expedient way to alleviate (regional) funding gaps. Discussions on common EU-regulations that balance investor protection and better framework conditions for crowdfunding platforms are finalised recently, but still there are worries that some (small) countries cannot maintain control over this instrument, which is potentially important in the early stage of the funding escalator.

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1. Introduction: Crowdfunding – Hip or Hype?

Recent discussions in entrepreneurial finance focuses on development of new modes of financing, in particular how microfinance, peer-to-peer lending and crowdfunding has entered and changed the financing landscape (Wright et al., 2016, Assenova et al., 2017, Bruton et al., 2015, Block et al., 2018). Potentially, these new ways of financing could alleviate some of the financing gap, which hinder development of entrepreneurial ventures and innovation. Moreover, they appeared as part of the entrepreneurial finance landscape driven by market forces without much interference by government. Indeed, there has been entutiasm around especially crowdfunding. Despite its' young age, crowdfunding has now gained substantial popularity and attention even if in most countries crowdfunding is still make up a very small proportion of the start-up financing,. For example, Wang et al. (2019) point out that equity crowdfunding is the second largest investment category in the UK measured as the number of firms funded (after venture capital). Moreover, the growth of crowdfunding is expected to continue following increased awareness and more supportive legislation (Wald et al., 2019, Miglo and Miglo, 2019). In turn, this is argued to benefit SME growth (Eldridge et al., 2021).

While crowdfunding has generally been praised as positively impacting early stage funding options (e.g. Mollick, 2014) the potential negative aspects have been ignored or downplayed amongst policy makers and researchers alike. The academic literature on crowdfunding has virtually exploded since 2011 (Cumming and Johan, 2017, Martinez-Climent et al., 2018, Wald et al., 2019, Mochkabadi and Volkmann, 2020)[1], but by far the majority of papers either implicitly assumes, or explicitly express, positive attitudes to the growth of crowdfunding. This is perhaps no wonder – how can anyone have troubles with new funding opportunities for very early start-ups, apparently even without imposing a burden on tax payers? A natural evolution of financial systems should include the upsurge of new actors and funding mechanisms? Moreover, crowdfunding has been considered a welcomed democratization of financing (Wang et al., 2019, Stevenson et al., 2019, Mollick and Robb, 2016, Cumming and Johan, 2021) and a counter-reaction to the dominance of large players in the financial markets in that crowdfunding provides opportunities for groups at the financial markets (nacent entrepreneurs) who are potentially otherwise marginalised and rationed (Estrin et al., 2018, Cumming and Johan, 2021).

Whereas there are a number of positive sides of crowdfunding, this paper takes a different perspective. Based upon literature studies and interviews with key actors in the entrepreneurial financing eco-system it identifies what are potential problems in equity crowdfunding. Even if the past 10 years of crowdfunding has mediated funding to a large number of small firms and entrepreneurs it has not been without problems, some of which still remains (Schwienbacher, 2019). It is argued in this paper that solving, or at least being aware of and alleviating these problems, is important to a further development of this funding instrument and, related, to a positive attitude among public regulators of crowdfunding mechanisms.

[1] Cumming and Johan (2017, p.366) note that '….crowdfunding research started later than it perhaps should have, while crowdfunding is now one of the most active and fastest-growing research areas in entrepreneurial finance.'

Therefore, the research in this paper explores the widespread enthusiasm around crowdfunding, and links this to a question on geographical (national) embeddedness of crowdfunding platforms.

The paper contributes to the existing knowledge in the field by identifying six potential problem areas of crowdfunding, contributing to a more nuanced perspective on crowdfunding and contributing to some areas of attention that need to be dealt with before we join the excessively optimistic and positive attitude to crowdfunding. Specifically, these problem areas and question marks to established beliefs include 'coordination and dilution', 'investor protection and regulation', 'dumb money'?, 'adverse selection', 'promoting innovation', 'testbed for ideas'. The discussion of these issues is essentially providing a research agenda for potential problems in crowdfunding and a policy agenda for regulation. Moreover, the paper contributes to putting crowdfunding in a policy context, including assessing the relevance of regional policies. Whereas a regional dimension at first glance seem to have little relevance, then on the other hand, research also indicates that even when investment takes place via on-line platforms (e.g. ebay (Hortacsu, 2009)), investors have preferences for close proximity and a home bias (among others, see e.g. Lin and Viswanathan, 2016, Giudici et al., 2018, Yu et al., 2017). In fact, research indicates that crowdfunding may have disproportionally positive effects on alleviating financial constraints in the outer regions (Stevenson et al., 2019, Sorenson et al., 2016). The discussion on possible geographies of crowdfunding is relevant to a question of regulation and at what level of geographical aggregation regulation should be pursued.

Hence, the present study and the recent evolution at the crowdfunding market accentuates a discussion around whether there is a risk of loosing national control over an important part of the funding escalator. Currently there is a highly fragmented European market where 11 of the member states have special regulation for crowdfunding and the rest is using the existing common EU regulation of financial institutions. The EU has identified a number of problems stemming from this situation and proposed a harmonised regulation (EC, 2018). However, there is not agreement among member states on whether this is an expedient way forward.

After a short introduction to the context and approach of the research, the paper is structured around these contributions. Even if crowdfunding encompasses four distinct types, equity crowdfunding is the focus, although many of the arguments also apply to crowdfunding of rewards, donations, lending.

2. Context, approach and data

The research focuses on equity crowdfunding in Denmark where crowdfunding is a relatively new phenomenon and where policies and regulation is not yet very developed. There is only one source of information on the aggregate crowdfunding activity in Denmark, which is an annual mapping provided by the Danish Growth Fund and the Danish association of crowdfunding (Det danske crowdfunding marked anno 2018, Vækstfonden og Dansk Crowdfunding Forening, 2019). According to this source, in Denmark, from the beginning in 2011, there were very sparse activities and only from 2015 onwards, there are noteworthy activities in the market. Danish firms and entrepreneurs raised more than 15 million Euro in 2016 and 2017 through crowdfunding (including both Danish and foreign platforms, and both equity and lending). Half the loans are in the 7.5-10.0% interest rate range and 70% of loans are below 70.000 Euro in 2018 (Det danske crowdfunding marked anno 2018, Vækstfonden og Dansk Crowdfunding Forening, 2019).

The development of crowdfunding in Denmark has largely followed the growth in the global market up to 2016 although in Denmark there is a relatively small share of activities within equity crowdfunding with only one platform (Crowdinvest) opened in October 2013 (this platform failed due to lack of demand and tight regulatory framework and handed over assets and activities in 2018 to SMGCapital, who from 1.february 2019 launched a new, unsuccessful attempt to get an equity crowdfunding market going). Following this first platform, another two opened but only one of these three survived for a short period. Currently there are no equity platforms and 4-5 loan based platforms. There has been inquiries from potential platform owners to the Danish Financial Supervisory Authority who explained requirements for being registered as an equity platform, but without resulting in establishment. It is expected that interest will increase when new, less strict regulation is in place. According to interview information, one reason for the limited equity crowdfunding activity is that legislation has not been in place for this type of crowdfunding.

Accounts of the market development shows a 20% decrease in activities in Denmark from 2017 to 2018. This is surprising in light of the above-mentioned international growth and expectations to further high growth rates (e.g. Miglo and Miglo (2019) referring to an expected 28% growth rate and soon exceeding venture capital in importance for start-up finance, and NESTA listing annual growth rates in the UK of 150-160% between 2012 and 2015). Remarkable, there is activity by Danish entrepreneurs' use of equity crowdfunding, but all through foreign platforms, and still on a low level of volume. By 2021, 9 campaigns have run, but through foreign platforms (Invesdor, Finland; Funderbeam, Estonia, Seedrs, UK; Crowdcube, UK). Presumably this trend of slow growth of the market, even decreased activities and use of foreign platforms, is caused by the small volume of the national market, and a tight Danish regulatory environment. Additionally, there is in Denmark perhaps a lack of culture around 'ordinary' people investing in businesses and entrepreneurs (interview information and Keystones, 2019).

The approach adopted in this work is firstly inductive and, in order to obtain a nuanced picture of potential problem areas of crowdfunding and a policy assessment, qualitative methods are used where insights from the literature is supplemented with expert interviews with key actors in the financial system. Relevant public authorities are included in who is interviewed as well as platform managers and the Danish crowdfunding association. Generally, diversity in the information provision is sought (Eisenhardt, 1989). Minutes and notes of each interview are made immediately after interviews. Information from Danish Crowdfunding Association supplement policy documents, which, together with interviews with business angels associations, and business development agencies, inform the policy discussion.

3. Crowdfunding problem areas

3.1. Dumb money?

The first problem area that needs further clarification and awareness has to do with the type of value adding from crowdfunding activities. It is generally difficult to convey competence building to small, entrepreneurial businesses. Therefore, venture capital and business angel financing has been praised for their supply of the combination of capital and competencies. These value-adding activities help entrepreneurs and businesses upgrade their strategies, execution and management capabilities, and entrepreneurs can leverage the networks that venture capital firms and business angels bring into the development of the venture. In contrast, when businesses are large enough to go public, they are less reliant upon external sparring and can obtain finance from anonymous investors on the stock markets.

At first glance, crowdfunding entails many of the same characteristics as market based funding. The on-line mediation between investor and entrepreneur means that the entrepreneurs' skill set is not developed in the same manner as when interacting directly with business angels (a 'dis-intermediation', Harrison, (2013)). This way of portraying crowdfunding has, though, been contested. For example, Wald et al. (2019) address the assertion in the literature that equity crowdfunders are regarded as passive investors (Block et al., 2018). They point to an important distinction between interaction and communication and find that indeed entrepreneurs and crowdfunding investors not only communicate but also interact and that this results in enhancing the benefits for entrepreneurs due to the contribution from investors' experience and expertise (also Brown et al., 2017, 2019).

The judgements of the crowd can be questioned as well. Many investors do not have any business background, rather could be characterized as consumers (Armour and Enriques, 2018), and are attracted to the particular investment for a host of reasons, some of which are unrelated to the pure financial sustainability of the businesses proposed (Bretschneider and Leimeister, 2017, Lin and Viswanathan, 2016). Consequently, project owners report that they had to deal with many different queries around the business as funders had poor understanding of the proposal (Brown et al., 2017).

In addition to poor quality of investors, the signals provided to guide competent crowdfunding investments are poor. In many cases investments are guided by herding behavior (Astebro et al., 2018, Vismara, 2018), which means that investments are allocated to projects that early adopters found attractive (Brown et al. 2017, Schwienbacher, 2019). Early adopters are known to have a large proportion of family and friends who are not valuable for guiding investments (Ordanini et al., 2011). Moreover, investors have no information on who and how many considered a proposal but did not invest, only the time an investment proposal has been open compared to the number of investors who signed up may indicate if it is a valuable signal of whether it is an investment worth pursuing. In this sense, and if this is correct, crowdfunding is a step back regarding the simultaneous development of capital and competence among entrepreneurs, and the crowdfunding process may actually distort rather than guide the allocation of capital. On the other hand, as also indicated above, research finds that the crowd does provide expertise guidance, hence conflicting views on this indicates that this is an issue for consideration when assessing pros and cons of equity crowdfunding.

An aspect of this is whether crowdfunding generally is a complement or substitute for alternative funding such as business angels, something we currently know very little on (Block et al., 2018) even if Yu et al. (2017) did find correlation between Kickstarter projects and increased business angel activity in regions. A UK study (Wang et al., 2019) go some way down that road as the authors find both value adding from business angels who invest at equity crowdfunding platforms alongside the crowd. The business angels provide signals to the crowd through their investments and they fulfill a complementary role by investing in larger ventures compared to the rest of the crowd[2]. Similarly, Mac an Bhaird et al., (2019) find that crowdfunding in the

[2] Business angels are defined in broad terms in the literature, but at crowdfunding platforms there are precise definitions of who are 'sophisticated' investors and non-sofisticated investors. The EU proposal for harmonized regulation (EC, 2018) specify that sophisticated investors are either legal enties who either own funds of at least Euro 100.000; has a net turnover of at least 2.000.000 EUR or a balance sheet of at least EUR 1.000.000. Or it is

Irish craft beer industry complement rather than substitute other funding sources, and Butticè et al. (2020) find a correlation between successful crowdfunding and the attraction of venture capital funding.

3.2. Coordination and dilution – the many stakeholders

It follows from the definition of crowdfunding[3] that many stakeholders becomes involved, that is, become owners. In equity crowdfunding, a large number of people are forming the group of owners, in many cases anonymously and without any possibilities to coordinate. The coordination problem is present also on the side of the project owner who in a study of Brown et al. (2017) report that they spend excessively many hours having to deal with many small investors each with different interests and business knowledge (also Mac an Bhaird et al.,2019). This has led to a side-business of crowdfunding as there is now developed a software (CapDesk) offered to crowdfunding platforms that assist in admin regarding complying with financial regulation and laws and in admin of the communication with the funders. According to interview information, this has led to considerable alleviation of the problem regarding the many requests for additional information.

As crowdfunding is only a first step on the financing ladder later stage financiers will have to consider entering a business with a large number of owners that are difficult to coordinate and are likely to be vastly different than other early stage financiers. Asymmetric information problems are particular prevalent here rendering agency problems (Wang et al., 2019, Cumming et al., 2019, Miglo and Miglo, 2019). Business angels, for example, could therefore be reluctant to engage in firms who are crowdfunding backed. Indeed, Signori and Vismara (2018) find that crowdfunded projects with a dispersed ownership structure are less likely to obtain business angel and venture capital follow-up financing.

There are counter arguments to this proposition. As mentioned, Wang et al. (2019) find that UK business angels invest in equity crowdfunding and in doing so provides valuable signals to the rest of the crowd, hence <u>not</u> 'crowding out the crowd' (also Kaminski et al., 2019 and Droveret al., 2017). Vice versa, business angels and other investors may regard the crowdfunders as signaling that the market is ready to adopt the idea. Moreover, it is easier for business angels to get a controlling share for a minimal investment amount. Existing (crowd-) shareholders each have a small share and has no coordination and risks therefore both dilution and loose of any of the (otherwise small) control they may have had. They are therefore more exposed to the risk of agency costs compared to hands-on investors like venture capitalists. The risk of dilution is also present if project owners issue more shares to themselves rather than spending the proceeds from the campaign on relevant investments (Guenther et al., 2018)[4].

3.3. Promoting innovation?

natural persons who have either a) income above EUR 60.000 or deposits above EUR 100.000 or b) had worked in the financial sector for at least one year in a professional position requiring knowledge on financial transactions (p.88). Rossi et al. (2019) provides an overview of the current different definitions in the countries in their study.

[3] 'Crowdfunding is a method for obtaining project funding, by soliciting contributions from a large group of people, and especially from an online community' (Wikipedia). Equity crowdfunding is 'a form of financing in which entrepreneurs make an open call to sell a specified amount of equity or bond-like shares in a company on the Internet, hoping to attract a large group of investors' (Ahlers et al., 2015, p.955).

[4] This has caused regulators to suggest a 10% cap on own shares in campaigns (EC, 2018).

The projects proposed at crowdfunding platforms are vastly heterogeneous. Stevenson et al. (2019) find that crowdfunding benefit 'main street' entrepreneurs. Inherently there is a need for simple, non-technical messages when the proposal is presented on the platform, therefore one could presume that crowdfunded projects have relatively low innovation height. Eldridge et al. (2021) find no impact of equity crowdfunding on innovation but positive correlation with growth opportunities. On the other hand, Le Pedeven and Schwienbacher (2018) find that the crowd has greater interest in innovation proposals. Other research indicate that project owners were often creative and innovative (Brown et al., 2017). Again, the contrasting evidence warrants further consideration when assessing the pros and cons of crowdfunding. Related, it is a hypothesis for future research if crowdfunded entrepreneurs rely more on effectual than causal logic.

In crowdfunding, the idea is not easily protected through IP, in fact it is part of the core idea of crowdfunding that information on the idea is disseminated. Therefore, crowdfunding entrepreneurs face an inherent innovation sales dilemma between on the one hand publishing as much information as possible in order to make the investment attractive, and on the other hand not disclosing all information in order to prevent the idea to be copied. There have been several examples of copying ideas from crowdfunding campaigns.

3.4. Adverse selection?

Generally, the financial institutions are important as selection mechanisms in the financial system. Not all proposals should be funded; it would be societally inexpedient to have a large number of wannabe entrepreneurs pursuing hopeless projects. The main screening mechanisms of investors imposed by crowdfunding platforms are the initial minimum investment size requirements set by crowdfunding platforms and, in most crowdfunding models, that full funding should be obtained from the crowd if projects are to be granted funding, the 'all or nothing' principle (in other crowdfunding models the entrepreneurs keep the bids and there are auction models as well as first come first served principles for allocating the shares). Crowdfunding is a highly asymmetric information environment. Research has so far not been able to determine to what extent the firms on crowdfunding platforms have a history of being rejected elsewhere although a few papers do discuss if entrepreneurs use crowdfunding as a 'last resort' (Wald et al., 2019, Walthoff-Borma et al., 2018). If that is the case, then that could be for a reason, it might be that other sources of finance have a negative assessment.

Research (Brown et al., 2017, Bruton et al., 2015) suggests that small firms and entrepreneurs demanding crowd-funding equity finance are to a large extent classical discouraged borrowers. From other research, we know that demand for finance in general, and discouraged borrowers in particular, are unevenly dispersed geographically (Lee and Brown, 2017). It is an open question if crowdfunding provides possibilities for these (self-) excluded groups to enter the financial markets and if the crowd then in reality is choosing among projects that even before being presented to the crowd to a large extent have been subject to a classical adverse selection mechanisms. This is supported by Walthoff-Borma et al. (2018) who find that equity crowdfunding is more often used by firms who are less profitable, have higher debt rates, and have more intangible assets, indicating an adverse pre-selection of firms entering crowdfunding. The fact that project owners may have been rejected elsewhere can affect the reputation of those seeking crowdfunding. However, this is likely to be exacerbated in case the project does not reach the funding threshold and is withdrawn without positive assessment from the crowd.

A further aspect is the way geography affect these arguments. Generally, geographical proximity enhances possibilities for alleviating asymmetric information during the pre-investment screening phase and it facilitates smoothened post-investment monitoring and sparring activities. In turn, this may prevent adverse selection.

3.5. A testbed for ideas?

Crowdfunding is essentially a part of the broader termed 'crowdsourcing' where knowledge and ideas are also provided by crowds of e.g. key customers. The crowd makes up a panel of judges regarding whether the idea proposed is sustainable, hence in the case of funding, the successful crowdfunding campaign is a strong indicator that the market will adopt the idea. Although little is known on this aspect of crowdfunding, some studies point to that there is this effect of 'wisdom of the crowd' from crowdfunding, even that the crowd contribute to product development (Eiteneyer et al., 2019), and that indeed venture capital firms and business angels are interested in using this mechanism as a testbed for the projects they consider backing (Colombo and Shafi, 2017, 2020, Brown et al., 2017).

There are examples on local campaigns that are used as a first step and test before scaling up the business and broadening the geographic reach (interview information).

On the other hand, it is still not known if there is a strong correlation between what the crowd perceives as valuable investment proposals and what the market eventually accepts. There are studies that points to reluctance among crowdfunded entrepreneurs to take in ideas and suggestions from crowdfunding backers (Mac an Bhaird et al., 2019). As mentioned, the competences of the crowd can be questioned, and the investment behavior is often not rational according to a financial logic.

3.6. Investor protection and other regulation

The financial system is generally heavily regulated but the pace of installing regulation of crowdfunding has differed substantially between countries and continues to be vastly different among continents (Kshetri, 2018) and especially among EU member states (Rossi et al., 2019, Schwienbacher, 2019, EC 2018, Macchiavello, 2021). Public authorities may not need to get money out of the pockets directly but crowdfunding is nonetheless not particularly popular among some public authorities due to their general obligations to ensure investor protection and other complicated regulation related to the fact that equity crowdfunding operate in an area and in a manner that affects several different legislations. Rossi et al. (2019) and Schwienbacher (2019) holds that generally it is unclear what the implications are if fraud occurs, if crowdfunded businesses fail, or if crowdfunding platforms fail. There are several aspects of regulation, and it is handled differently in different countries (Dushnitsky et al., 2016, Armour and Enriques, 2018) with adverse effects on the development of the market (Cicchiello, 2019, Di Pietro and Butticè, 2020).

The different types of crowdfunding has been governed under different regulations and laws. Sticking to equity crowdfunding, this is essentially issuing securities to investors and is consequently part of the securities law. Actors, firms, operating under this law are usually required to disclose all information according to Prospective Directives of the individual countries. For the majority of small firms complying with this involves prohibitive costs. Therefore, some countries imposed an exemption from these obligations. There are also requirements to the legal form of firms. For equity crowdfunding the firm should in Denmark be a limited company, whereas the majority of entrepreneurs (in Denmark) have other legel forms. Again, several countries have exemptions from this rule. The crowdfunding platforms need approval from the authorities supervising financial market regulations, the tax authorities and are supervised regarding risk of 'money laundering' and terror financing. If they deposit money, they are under the same rules as banks, involving a number of restrictions according to directive PSD2. Investors are under regulation of investor protection, which involves securing awareness among investors that they understand the risk involved, usually through a test of investors etc., however, there are in many countries' regulation an exemption from this at crowdfunding platforms as it is only necessary to answer a few questions on-line. In other countries, such as Denmark, the regulation follows the existing EU regulation (PSD2 directive and MiFED II directive) without special exemptions and regulation of crowdfunding. This means that test questions are not only many (28) but also difficult, resulting in that 98.7% fail the test (interview information). Danish financial regulators generally stick to existing (EU) regulation without special crowdfunding regulation and argues that the current EU regulation is sufficient as long as it is implemented across all member states without options for exemptions (interview information).

Generally, the fragmented EU-market regarding regulatory frameworks not only imposes admin burdens on cross-national operations of crowdfunding platforms, it also causes unequal terms of competition across borders. This has specifically caused Danish firms to flee from using the national crowdfunding platforms. As the Danish market is already limited in volume (Zetzshe and Preiner, 2018) this is a major threat to the survival of national crowdfunding platforms (interview information and Nationale Implementeringsråd, Dec. 2017). In turn, in a general perspective, the absence of a national entry to the funding escalator entails a risk of Danish firms being deprived of funding.

The EU (2018) policy proposal for a harmonized regulation was agreed upon in the beginning of 2020. The standardized regulation should be seen in connection with a general wish to promote market-based funding and is part of the EU Capital Market treaty. The text is currently being polished, and the content not publicly disclosed yet. But generally, previous requirements are substantially relaxed compared to earlier Danish regulation. This goes for prospect requirements, investor awareness tests, monetary limits for when special approvements are needed etc. Even if harmonized, less strict EU regulation is currently being fine-tuned after a political agreement has been reached, then it is uncertain if a long period where the domestic market has been stalled has caused detrimental effects on the equity crowdfunding market. The geography of the equity crowdfunding market is essential and closely connected to this debate, hence is elaborated below.

4. The geography of crowdfunding

Some of the literature on regional entrepreneurial financing argues that whereas existing theories in the field establish that investors prefer to invest in close proximity to investee in order to facilitate better information exchange, due diligence and investment decisions, and post-investment monitoring, then crowd-funding has different properties and geographies. Actors are often anonymous, much in the same manner as on stock markets, where investors and potential investee firms 'meet' at an electronic platform, hence need not have physical interactions and meetings, and geographical proximity seem to have little impact. Harrison (2013) even term crowdfunding a ‘dis-intermediation’ (also Agrawall et al., 2015). This is, though, a too simplistic view. For example, Brown et al. (2019) argues that equity crowdfunding is in fact highly relational. Moreover, in principle, investments are geographically unrestricted, and proposals in the periphery may not suffer from funding gaps as has otherwise been argued is usually the case (e.g. Lee and Brown, 2017). Indeed, some crowdfunding research finds that crowdfunding facilitates increased access to funding for U.S. entrepreneurs in peripheral regions, especially those who are not in high-tech industries, hence outside the traditional target of venture capital funding (Sorenson et al., 2016, Stevenson et al., 2019), and for the U.K. market similar findings are found by Cumming and Johan, (2021). On the other hand, some empirical studies confirm the irrelevance of geographies in crowdfunding. Thus, Agrawal et al. (2015) found an average distance between proposer and investor of 3,000 miles. The geographical effect found in the data showed out to stem from family and friends investing in the proposals.

The possible geographical effect may justify certain optimism among regional policy makers who may expect that crowdfunding alleviate regional funding gaps because they are not subject to the same geographical skewness that characterise other parts of the entrepreneurial finance landscape, such as venture capital (Guenther et al., 2018). A similar argument was the point of departure for a study on business angels in Sweden (Avdeitchova, 2009). The title of a paper from this study ('False expectations: reconsidering the role of informal venture capital in closing the regional equity gap') referred to that there have been similar hopes among regional policy makers for business angel financing. Because business angels are much more dispersed throughout countries and because they are known to prefer investing in close proximity of their home or office, business angels were expected to contribute to closing regional funding gaps. The study showed, however, that the Swedish business angels had surprisingly strong tendensies to invest in metropolitan and/or university regions, a substantial proportion even internationally, regardless their geographically dispersed location. The contribution to closing regional funding gaps were, therefore, relatively small. This accentuates that in order to assess crowdfunding in a regional policy context, and therefore determining the appropriate level of policy making, we also need to know more of whether crowdfunding is footloose or geographically bounded (Mollick, 2014).

Contrary to what one might expect given the internet-base of crowdfunding, research indicates that also on-line platform-investors prefer close proximity in investments (e.g. Mollick, 2014, Lin and Viswanathan, 2016, Hornuf and Schmitt, 2016, Breznitz and Noonan, 2020)[5], but some studies do, though, maintain that geography has a marginal influence on crowdfunding (e.g. Armour and Enriques, 2018). Agrawal et al. (2011, 2015) did found preferences among backers on the crowdfunding platform sellaband.com to support local bands. However, the majority of the geographical effect stemmed from investments from family and friends, who naturally have preferences for close geographical proximity. Vulkan et al., (2016) found that UK equity crowdfund investors were primarily from the London area, close to where the platform they studies is located, but they also point out that non-London-based investors were dispersed across the UK, as also pointed to by Cumming et al., (2021).

A study by Guenther et al. (2018) found that overseas crowdfunding investors were not sensitive to distance when investing, but within country investors were. Mollick (2014) study data from 48,500 Kickstarter crowdfunding projects and point out that essentially investments are socially and regionally embedded, and there is a strong geographic effect even in crowdfunding investments. He finds that crowdfunding success is associated with a large number of friends

[5] However, previous research studies large markets such as the U.S., Australia, U.K., Italy, possibly affecting the extent to which there is an investment ‘home bias’.

and connections on social media, an indicator of individual social capital (also Lin and Viswanathan, 2016), and presence of a large proportion of creative people in the region. The crowdfunding activity is generally unevenly distributed, but with large variation among types of projects. Related, the geographic effect is related to the fact that investment proposals reflect the region-typical products and services rather than reflecting investor preferences for close proximity, examples include country music in Nashville, film production in Los Angeles, and technology, games, design in San Francisco. In the craft beer industry in Ireland Mac an Bhaird et al., (2019) find strong preferences for geographical proximity.

Similar conclusions that the geographical area where investors reside impact propensity to fund crowdfunding projects, are found in Giudici et al. (2018) and Colombo et al. (2015). The former argue that the social capital in the area increase fundraising success and ascribe this to the social relations among proposers and funders, whereas their compliance with local social norms had no effect. Colombo et al., (2015) find evidence for impact of networks (also Brown et al., 2019)[6]. Along the same lines Masciarelli et al. (2019) find that geography and cultural profiles of investors proxied by religiosity impact funding propensities locally and cross regional. Guenther et al. (2018) found no effect of social capital. In a Danish context 42 % of investors prefer to invest in close geographical proximity (interview information referring to a survey among platform participants). In sum, the literature has found evidence that the on-line design of this funding mechanism does not seem to totally dissolve the impact of geography.

5. Concluding remarks – a policy assessment

The above-mentioned problem areas make up a double agenda. First, it asks if regional policy actors are over-enthusiastic about crowdfunding. Second, the problem areas pointed to make up a research agenda calling for answers to a number of questions that in combination could shed more light on how we should normatively perceive crowdfunding. Through the review of existing knowledge in the field it was clear that there are contrasting research results. This is natural in an early stage of a research area. But it also calls for caution in jumping on the bandwagon of unreflected support for promoting equity crowdfunding.

Generally, we know rather little on the demand and effects of crowdfunding (Brown et al., 2017) and perhaps due to the young age of crowdfunding there is still not solid evidence that crowdfunding platforms are profitable (Schwienbacher, 2019). In this way, it could be discussed whether crowdfunding is as a way of 'democratising' the funding flows of new products and business models, or if it rather implies a de-coupling of finance and competences, as was also pointed out as a problem area. The former effect is a natural consequence of a large user involvement in not only product development inputs and problem solving, but also in the financing part of it. The latter effect stems from the fact that potentially 'ordinary' business angels with business experience and competences are crowded-out and are less interested in firms who in the early funding rounds raised funding through crowd-funding. This argument can, though, be reversed as some research point to that successful crowdfunding alleviates barriers to external second round financing sources (Brown et al., 2017), and that a crowding out effect on business angels cannot be found in the UK at least (Wang et al. 2019). Additionally, other non-financial benefits such as product valuation and network effects may compensate for the loss of the direct engagement that business angels often have.

[6] It should be beared in mind that there is probably a a difference in how important networks are in different types of crowdfunding. Brown et al., (2019) argue that because investors becomed involved in the set-up and development of the crowdfunded firm, networks are likely to be more important in equity crowdfunding funding.

Investments are made on the basis of criteria that are not necessarily rational from a business development perspective, e.g. herding and because of an appealing pitch and video or generally human capital signals through the internet (Piva and Rossi-Lamastra, 2018), and by individuals who often do not have the background for making a proper due diligence and assessment of the potentials of the proposal. Even compared to ordinary stock market investments where a bank underwrite the market introduction process and set an initial price, crowdfunding investors are worse off regarding available information and secondary market trading that ensure rapid incorporation of information and expectations into the prices. Equity crowdfunding investors do not generally have much information and even not changes in prices as these are fixed during the campaign (in most models). Generally, this induces a risk of mis-allocation of capital and that many unviable businesses and entrepreneurs are funded. This is in itself problematic. A further problem is that crowdfunding can make up an obstacle for further funding rounds due to complications in the ownership/control as well as IP rights. This said, there are also a number of studies that point to (and focus on) positive effects from crowdfunding and that in the course of maturing the equity crowdfunding market players are beginning to realise the role that crowdfunding may have in the entrepreneurial funding landscape (Kshetri, 2018).

More generally, it can be discussed to which extent there is a rationale for policy and regulation, or if bottom-up driven, private initiatives should be given room for unfolding opportunities for groups at the financial markets who are otherwise marginalised and rationed (Estrin et al., 2018). A further discussion is how regulation should be pursued. This is an area that policywise has attracted primary interest on a nation state level of aggregation, however, potentially could be relevant at a regional level, as outlined in several papers above and as indicated by the upsurge of local and regional attempts to implement crowdfunding.

Policy measures include a broad array. A Danish report (Erhvervsministeriet, 2014) list that it could be considered to make use of crowdfunding attached to existing policy schemes[7]; to provide guidance to all involved actors regarding the regulations and requirements; to extend existing loan guarantee schemes to lending crowdfunding platforms; to educate local, public business advisors; to monitor market development and be prepared and agile in adjusting regulation; to seek international collaboration (EU) on common regulations that balance investor protection and good framework conditions for crowdfunding platforms. Some of these instruments can be used at a regional scale. Concerning 'regional scale', this has two dimensions. One is the intra-country regional dimension where local and regional initiatives are popping up and where regional policy makers are considering the potentials in crowdfunding. While waiting for a common EU regulation there are scattered attempts to utilise crowdfunding locally.

A second dimension of 'regional' is the inter-state regional dimension. In the 'context' section on the development of the Danish market, it was mentioned how entrepreneurs in Denmark flee to foreign platforms due to Danish regulation being a straightjacket on funding activities. This raises a serious concern regarding whether there is in the future a missing link in the national financial funding escalator. If geographies were unimportant in crowdfunding, this needed not necessarily be a problem; Danish entrepreneurs could equally well be served by foreign crowdfunding platforms. However, we saw earlier in this paper that indeed geography is important even in internet-based electronic matching of entrepreneurs and funders.

[7] An example includes the crowdfunding associated with the Danish policy schemes Market Maturation Fund (Erhvervsministeriet, 2014).

Public policies have sought to alleviate regional funding gaps. It is, though, questioned if equity crowdfunding is an expedient way forward. The above-mentioned problem areas make up a research agenda that should be embarked on and resolved before potentials of new funding mechanisms are stimulated by way of regional policies. Related, regulation is still an unresolved issue, and the threats to crowdfunding platforms in small, strictly regulated countries need to be resolved. The recent change and agreement on regulation can perhaps alleviate some of the problems, but it remains to be seen if the domestic market has suffered enduring harm.

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