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## **Crowdfunding – interplay between evolving organization and embedding institutions**

### **Abstract**

The paper explains the functioning of the economic crowdfunding (equity- and loan-based). One of the angles from which crowdfunding can be analyzed is institutional economics. Namely, it can be studied as a case of impossibility of spontaneous evolution of contractual forms and necessity of legislative intervention. The interests of three groups of agents involved (platforms, fundraisers and funders) and the diverging risks they bear are explained. The radical asymmetry of power, to the advantage of the platform, is inherent in this type of business.

The spontaneous development of strategies by the platforms (in particular, pricing and some non-price strategies relating to fundraisers) and recent developments in the direction of automatic decisions taken by the platform instead of funders, promotes development of crowdfunding business, but does not ensure protection of other parties against risk. Moreover, the major source of risks for funders and partly also for fundraisers is absence of liability of platforms themselves. In those conditions, spontaneous move towards better adjustment of interests of the parties seem unfeasible and legislation is necessary.

**Keywords:** crowdfunding; two-sided markets; asymmetry of information; evolution of institutions

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## **Introduction**

Crowdfunding is a manner of organizing transfer of funds between funders and fundraisers, enabled by a platform. This kind of arrangement used to be qualified as two-sided markets (according to the theory developed by Tirole). However, the crowdfunding business developed in some particular direction. Relying on Internet and exploiting sophisticated methods of data analysis to create portfolios for funders, the crowdfunding platform slowly takes active and not only enabling role, up to replacing funders in their decisions. Thus, besides network effects and economy of search costs, a strong asymmetry of information and of decision power between the platform and the participants emerges, making a platform similar to a bank or an investment firm, without being regulated like them. The paper will assess suitability of private arrangements designed by platforms themselves from the point of view of protecting participants and of ensuring viability of platforms themselves. On this basis, I will identify the needs for more formal rules spelled out by the stakeholders.

Up to now platforms tried to escape legislation even if it partly applied to them. For example, as platforms transfer money between funders and fundraisers, but do not wish to be supervised as payment institutions, they sub-contract payment activity to a third party. Similarly, equity based platforms which do not wish to respect regulation for investment intermediaries, pretend not executing investors' orders, but only communicating their "expression of interest".

However, growing activity of crowdfunding platforms raises demand for specific institutions. This stems from investors conscious about risks they are subject to (often for decisions taken by the platform on their behalf) and also from platforms suffering from reputation spoiled by failures of their peers. This is an interesting case of the evolution of institutions. Due to asymmetry of power between the parties (fundraisers, funders and the platform) only the platform could propose any efficient rules of behavior. However, taking into account the interests of the platform (the necessity to grow fast, in highly competitive environment) individual platforms may be either not interested or unable to propose such rules. Thus, an external regulation is necessary.

Legislation existing in some countries focuses on security of funders supposing that they choose actively the projects funded. The requirement of skills of funders and of basic sound governance of platforms are typically proposed. I will identify needs for further going regulation, among others for clearer regulation of decision rights and responsibilities of all participants, including platforms.

My analysis will be limited to so called economic crowdfunding, so crowdlending and equity-based crowdfunding. I will not deal with other kinds of crowdfunding (as donations or reward-based crowdfunding). I will take into account only the functioning of professional platforms, disregarding platforms run by individual fundraisers (as artists or innovators). I will limit my factual analysis to the territory of the European Union and similarly the scope of existing and foreseen legislation.

## **Crowdfunding – a platform between lenders and borrowers**

### **Concept**

Crowdfunding (funding projects by a "crowd") is a manner of putting together a large number of funders. On the other side there may be one beneficiary (as in the case of donations) or, typically, a number of potential users of funds. In crowdfunding an entity called a platform plays an essential role. This manner of organizing financial flows developed together with the Internet, as

crowdfunding platforms use this tool extensively to raise money. Beside this technical reason, it is claimed that crowdfunding fills in the gaps in existing organizations of financial flows, for example enabling previously under-served needs to be fulfilled. It either substitutes or complements them (Oxera, 2015: 2). This was also one of the elements proposed in the Autumn 2015 by the EU under the initiative of Capital Markets Union, to facilitate access of SME to finance.

Four theories are relevant for analysis of crowdfunding:

- Two-sided markets
- Information asymmetry
- Behavioural finance (theory of behavioural biases)
- Theory of institutional evolution.

Crowdfunding platforms are examples of two-sided markets (Rochet and Tirole, 2004 ; Martens, 2016). Platforms of different kinds enable a meeting of two types of users (buyers and sellers, funders and fundraisers/borrowers). Their involvement reduces transaction costs, which is a clear advantage for both types of users, who would otherwise have to spend time and money searching for partners for future transactions. There are also other outcomes of the activity of platforms. They induce the so called indirect network effects. One is cross-group external effect (for example between the group of fundraisers and the group of funders) meaning that an increasing number of clients on each side are beneficial to the other side (sellers benefit from the growing number of buyers, and buyers are better off if the number of sellers is large).

A platform is also a kernel of crowdfunding activity, enabling meeting the demand side (potential borrowers) with the supply of funds side (investors). However, the business model of crowdfunding platform differs from the typical "search and matching" platforms (like Google, Amazon, eBay who enable one-to-one matching) and there are also different business models among crowdfunding platforms. Such a platform is an organization (or is managed by an organization), usually registered as a company, extensively (or sometimes exclusively) using software tools for communication with customers. It puts together a number of funders each of whom, individually, would in principle not be able to finance any projects, and gathers funds from them. It accepts different projects for funding and channels (or helps channel) funds to them.

Besides cross-group external effects there are however also within group external effects (Belleflamme et al. 2015: 15 -19; Belleflamme et al. 2016: 7-8). As to fundraisers, they compete between themselves for funding, so the effect is in principle negative. They may however draw profit from experiences of other fundraisers, under some conditions. As to funders, they in principle draw profits from big number of other funders, because of increasing probability that the chosen project will succeed in being funded. There may be also positive (or negative) external effects within the group of funders from following behavior of the others (for example "herding", or free-riding). The negative sides of those effects should be managed by the platform.

On the market for financial products (loans and equity) organized by crowdfunding there is information asymmetry between funders and fundraisers. It was studied already for a long time in the context of relations between lenders and borrowers (Stiglitz and Weiss, 1992: 694-724; Mayer, 1994:113). On top of the inherent risk of a project, lenders (funders, in crowdfunding) are at a disadvantage with respect to borrowers (fundraisers) as they do not have access to the information

about all the particularities of the borrower's business and his projects to be funded and maybe even, in some cases, subject to disloyalty in providing information by borrowers (Sharpe, 1990). Moreover, lenders are subject to agency problem, as they cannot easily monitor how the funds are spent. Information asymmetry and high ex-ante transaction costs are the source of financial intermediation (Bhattacharya and Thakor, 1993). An additional reason for intermediation is economy of ex-post costs of monitoring which leads to delegation to a specialized intermediary (Diamond, 1984).

The problem of information asymmetry has been discussed for at least 20 years. However, no optimum solution to this problem (and to the problem of transaction costs involved) has been found. In practice, there are two basic manners of the organization of the flow of money between lenders and borrowers in contemporary economies: through banking intermediation and by financial markets<sup>2</sup>.

Banks act as intermediaries between the people who make deposits and those wishing to borrow. Banks don't lend their own money, but that which was entrusted to them by depositors. Depositors are not parties to the lending contract; they normally do not even realize who their money is lent to. From the point of view of final lenders (depositors, in the banking business) the advantage is that they do not bear any risk individually, as this is borne by the bank who is the party to credit contract. However, because of their exposure to risk, banks are usually<sup>3</sup> rather risk averse, unwilling to fund either riskier or more expensive projects in terms of monitoring (Akiba and Lissowska, 2006). Sometimes it may also happen that banks could abuse their power and unfairly discriminate between potential borrowers, lending to certain borrowers they have close ties with.

As to asymmetry of information, the advantage of banks is their privileged access to information. It may be their own information about their clients (if they wish subsequently to borrow) or publicly available (or restricted – such as credit databases) information about prospective borrowers. Another advantage is also their ability to professionally analyze this information and the information provided by the borrower for the creditworthiness analysis. As to the phase after awarding credit they can monitor use of funds better and cheaper than individual lenders who usually delegate this monitoring to them (Diamond, 1984).

The third relevant theory to analyze crowdfunding is that of behavioural finance and, more generally, behavioural economics. As a matter of fact, funders (and also sometimes fundraisers) may be subject to different behavioural biases leading them in different directions<sup>4</sup>. They may be over-optimistic about the results of a project or risk-averse. Not having abundant information about projects and not being able to analyse it sufficiently, funders may apply "rules of thumb" instead of rational calculation, or follow the decisions of other funders, either those who decided before them, or those that are considered more knowledgeable. They may even go „herding" and ignoring information they have.<sup>5</sup>In particular, they can be misled by false signals issued on purpose by fundraisers. This may

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<sup>2</sup> Song and Thakor (2010) claim that currently those two forms of financing compete, complement one another and co-evolve.

<sup>3</sup> Securitization, allowing to sell out risk, modified this attitude (Shin,2009). Banks may be thus less cautious about project risks.

<sup>4</sup> As reported by Camerer and Loewenstein (2003) people may be subject to different biases leading them into different behaviours. In practice it is impossible to produce a general model of human actual behaviour

<sup>5</sup> Belleflamme 2015:32

result in positive correlation between decisions taken in different moments of time (in extreme case, it would be herding, following the decisions of early funders), but also negative correlation (free-riding, avoiding to contribute to a project which already received support assuming that someone else will complete financing needed). Those tendencies are contradictory and it was found that both exist, so it is difficult to indicate prevailing pattern.

Crowdfunding, as all business activities, is based on contracts and internal rules and also is impacted by institutional framework. According to the classification of Williamson (2000), the private rules (contracts and rules of governance) are on level 3, below informal and formal rules of general application, to which they should be subordinated. This is a static approach and it will be shown in the following what are the private rules applied by individual crowdfunding platforms (to the degree they can be observed externally), what are the formal rules potentially applicable to platforms (in European and national legislation) and what is the attitude of platforms to them. In principle, as the relationships between the players do not fall directly under sectoral European legislation, platforms prefer to escape it.

As to the dynamic aspect, many authors claim that the process of change of formal rules is endogenous, driven by change of informal rules. This is the position of Hayek, and also of North (1995, 1997). North (1990: 83-91) describes the process of institutional change as driven by marginal adjustments in contractual relations driven by changes of prices, preferences, technology, relative costs, or tastes. It is in principle assumed that the parties to contracts are equal<sup>6</sup>. However, North underlines that this process may be complicated by, for example problems of power. As an example of importance of power, existing organizations and lobbyists may make pressure for emergence of new formal rules, or for preservation of existing ones, because the shape of formal rules impacts on their costs and benefits<sup>7</sup>.

Legal institutionalism underlines that only informal rules are insufficient for the functioning of modern societies and enforcement by the State is necessary. Spontaneous bottom-up mechanism usually can not suffice for the emergence of formal rules of general application because this process requires resolution of conflicts (Hodgson, 2009: 146; Deakin et al. 2017: 190-191).

Looking at the dynamics of legislative process it is difficult to oversee the importance of game of interests of different stakeholders. The element of asymmetries of power and its reflection in the process of elaboration of formal rules is particularly underlined by the historical institutionalism as described in (Hall and Taylor, 1996). Also the "functional" branch of Law and Economics (Parisi, 2004, 265-266) states that preparation of a law is based on the game of interests and power.

As to crowdfunding, it is interesting to identify the diverging interests of different groups of stakeholders (fundraisers, funders and platforms) and asymmetry of power between them. Platform is one, while participants are many and usually they cannot negotiate contracts with the platform. Moreover, some organizational changes (as imposing upper thresholds on participation of funders in equity of projects, to protect them against risk, or arranging contracts between funders and fundraisers on the basis of anonymity) deepen this asymmetry of power. Thus, it cannot be expected

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<sup>6</sup> This is a classical assumption in game theory often applied to study spontaneous change of institutions

<sup>7</sup> „To the degree that there are large payoffs to influencing the rules and their enforcement, it will pay to create intermediary organizations (trade associations, lobbying groups, political action committees) between economic organizations and political bodies to realize the potential gains of political change” (North 1990: 87)

that private rules will adjust spontaneously to the changes of incentives and to the interests of participants. Intervention of the legislator may be requested by some groups of participants, or pressure may come in the name of general public interest (as financial stability).

### **Practices of the crowdfunding platforms**

It should be kept in mind that crowdfunding platforms are in principle profit-oriented agents, acting in the interest of participants but first and foremost in their own interest. This interest may be gaining profits or developing activity (also for future profits). For this good reputation is helpful. Thus their interests may be coherent with the interests of participants (all or some), but may be in contradiction. Another problem is the unclearness of the role of the platform itself – it can be purely a market place or an intermediary. With the role of intermediary, in particular under strong information asymmetry, the problem of the liability of the platform arises.

As to resolving the problems linked to cross-group and within group external effects crowdfunding platforms may apply price and non-price strategies (Belleflamme et al. 2015; Belleflamme et al, 2016). The principal price strategy is to charge only one group of participants and not the other. Typically, fundraisers are charged and not funders. This cross-subsidization of the parties, by price preferences, is aimed at attracting the parties which are of insufficient number. Funders are in some way charged indirectly by foregone interest on the funds they contribute before they are attributed to any project. Typically transaction fees are charged on successful fundraisers and not subscription fees, to attract more fundraisers.

Platforms may also apply non-price strategies (Belleflamme et al. 2015; Belleflamme et al, 2016). Platform may propose two different funding mechanisms to fundraisers. One of them is called All-Or-Nothing (AON) and means that fundraisers have to declare a minimum threshold of financing. They would receive funds if this threshold is met, but nothing otherwise. The other possible mechanism is Keep-It-All (KIT), meaning that all funds collected are transferred to fundraiser.

AON is perceived as potentially discouraging fundraisers, but providing additional information to funders (that fundraisers imagine how much they can collect). Within AON a platform may also apply some measures inciting funders to join projects close to meet the threshold. This may smoothen within-group of fundraisers external effect (competition) and also on herding behavior of funders.

As to the problem of asymmetry of information, the advantage of platforms is the economics of scope of data collection and analysis. However, the other side of this effect is strong information asymmetry between the platform (gathering important stock of data) and its clients. This advantage is similar to the one of banks, who have privileged access to information. However, contrary to the bank, a crowdfunding platform is not a party to financial transaction. It does not bear any risk, even it is not sure if it is an intermediary. It is not sure neither that the platform is interested in using this information.

The platform is expected to provide some initial screening of projects. It is in the interest of the funders and of the platform itself (for reputation reasons). However, the interest of development may prevail resulting in platform accepting weaker projects. The other reason of loose screening is cost of screening, quite high if a number of projects is high. The reason of poorer assessment of standing of projects may be also reticence of fundraisers to disclose information publicly (while

information channeled to banks is by definition subject to banking secret), in fear of competitors (Gleasure, 2015: 223).

Actually it is known that platforms perform some risk assessment at the initial stage (similarly to the creditworthiness assessment of banks and to admission to issuing securities on capital markets) and even decline a high majority of proposed projects (70 to 99% - Oxera, 2015: 6), but the quality of risk assessment may be lower than that of the banks. They cannot carry out deeper assessment because of high costs.

In some business models of crowdfunding the matching of parties is entirely carried out by the platform and the transfer of funds is based on the anonymity of both funders and fundraisers. Thus in this case the platform is not simply a marketplace, but an active agent, taking decisions on behalf of the parties. The decision may be based on the automated optimization of portfolios of funders or taken manually by the representative of the platform. Some recent sources indicate that automation of decisions covers 82% of consumer loans, 78% of traded invoices and 38% of business loans (Zhang et al., 2016: 20). In such a situation a platform can hardly be called an intermediary, because technically the funders are not active creditors or financial investors. Their role is rather similar to that of passive depositors in banks. However, contrary to a bank, the platform is not a party to any loan contracts, and does not bear the financial risk of transactions. A separation of a decision of taking risk from the actual risk bearing takes place. A platform is active in selecting borrowers and matching them with funders, but risk, in these business models, is fully borne by the parties of the transaction, even though they do not know each other. The outcome for funders depends entirely on the rules and behavior of the platform.

This is not the only business model of crowdfunding platforms. The platform may just enable searching by funders and in this situation funders choose investment opportunities themselves. They may rely on some elements of selection and/or ranking of projects provided by the platform. In this model, transaction costs for funders are higher (due to search costs) and the problem of information asymmetry is still not solved. In this business model funders may have projects presented to select, but still only within the range of information transferred by the platform. Platforms may wish to avoid free riding by funders, for example by arranging a transfer contract outside the platform after having used information provided by the platform. For this reason it is logical that the full identity of fundraisers may be not disclosed.

One of the potential advantages of crowdfunding platforms is using the "wisdom of the crowd" in the sense of collectively identifying the most promising projects and preferred innovations. However, taking into account the potential passivity of funders (at least in lending platforms) and automatic attribution of portfolios to them, it seems that this advantage may not materialize.

There are different caveats to the operation of platforms. One of them is a strong tendency to concentration, due to the importance of indirect network effect which depends on the size of business organized by a platform. This may encourage platform to prioritize growth of their activity against quality of accepted projects.

The differentiation of platforms makes their regulation difficult. In some ways they tend to self-regulate, as at least they set principles on their interactions with clients. Dealing with funds and funders is subordinated to the rules established by the platform, which should be made known to the

funders. The performance of funded contracts is fully managed by the platform. Funders may have individual accounts from which funding is drawn and to which repayments accrue. However, in some business models all payments are outsourced to third parties (legally authorized payments entity).

Thus the activity of crowdfunding involves three types of entities: fundraisers, funders and platforms. There is however a strong asymmetry of power to the advantage of the platform. The platform is the only party able to propose the rules of conduct, while the two others may accept (by joining the business) or not (by not joining). They may be also not fully aware of the rules they (tacitly) accept. Thus the chance of spontaneous emergence of efficient rules of conduct by renegotiation is limited.

The type of risks most commonly put forward is that for the lender/investor (FSUG, 2015). However, as I will explain below, projects funded by crowdfunding are subject to risks too.

The functioning of some types of platforms is similar to that of a bank. It is an entity gathering funds from third parties (similar to deposits) and awarding them to individual fundraisers/borrowers. Neither depositors nor borrowers have a say on the rules of conduct of the banking business. However, contrary to a bank, a platform is not involved in any lending or investing contracts and does not bear any lender's or investor's risk, even if it actually plays an active role in selecting projects and matching funders with projects.

The difference is also that the activity of crowdfunding platforms is not specifically regulated at EU level, contrary to the strong regulation both of banking activity and of capital markets. However, at EU level some pieces of legislation might apply to crowdfunding while in some countries national legislation applies as well. This legislation will be briefly summarized in the following.

## **Crowdfunding – state of play**

### Size and development

Crowdfunding emerged as a method of raising funds for charities through donations by a large number of people. It developed later as a channel for providing funds for development projects.

There are no comprehensive statistics provided by official statistical bureaus on crowdfunding. The information on crowdfunding comes from replies from platforms to surveys. As the scope of surveys (the number of platforms) is different, so the results differ. Thus only general information about the scale of this activity and on its trends can be drawn.

According to the research carried out for the European Commission (*Mapping*, 2015: 21-35) on 31 December 2014 a total of 510 active crowdfunding platforms were identified across the EU. The most popular were rewards platforms (in which the funders donate to projects with the expectation of receiving tangible but non-financial returns). Their number in the EU was 155. The second most popular platforms were those funding equity, 117, followed by funding loans (107). Donation platforms were at the substantial level of 94. The number of platforms was growing quickly (by 23,2% compared to 2013). The most important EU country where platforms are based is UK (where the platforms are also the biggest), followed by France, Germany, the Netherlands and Italy.

As to the projects funded by crowdfunding platforms, those successfully completed totaled 206.908, with funding of € 2.3 billion. The average amount of funds raised was €10000-12.000 and

the majority of projects were of small size (average €12.000 ), while some proportion of funded projects were around 120.000 and 180.000. Crowdfunding actually seems to fund SMEs most, but also consumer loans are funded by platforms. Funding was in the great majority focused on projects from the same country, with cross-border projects funding amounting to € 177m (but increasing by 87,3% in 2013). Cross-border funding was almost exclusively by loans.

The average amount raised in equity crowdfunding was substantially higher (€ 260.000 in 2014) than in loan crowdfunding (€ 10.600 in 2014) (*Mapping*, 2015: 40). Thus it seems that equity funding was dedicated to bigger projects.

According to another, more recent survey, conducted in May-June 2016 by Cambridge Centre for Alternative Finance together with Nesta, the value of the alternative finance market in Europe reached € 5.431 m, in which UK was the largest market with 4.412 million (81% share). The markets following the UK in size were France (€ 319 m), Germany (€ 249 m) and the Netherlands (€ 111 m). The market as a whole increased by 92% compared to 2014 (Zhang et al. ,2016: 24-28). According to this source the most popular type of alternative finance outside UK is peer-to-peer consumer lending (€ 365 m), then peer-to-peer business lending ( € 212 m), followed by equity-based crowdfunding (€ 159 m), reward-based crowdfunding (€ 139 m) and invoice trading (€ 80 m). The total value of funding raised by business outside UK amounted, according to this source, to € 536 million.

According to the same source, there is a big difference of average deal size, which in equity-based crowdfunding is now approximately €459,000, while for peer-to-peer business loans it is under €100,000 (and only €10,000 for peer-to-peer consumer loans not being devoted to mortgages).

While sizes are evolving, still equity-based crowdfunding focuses on bigger projects.

The scope of the survey differed from the previous one (367 crowdfunding platforms and alternative intermediaries covered, in 32 European countries and also outside the EU). It however confirms the dynamics and country distribution of this type of financial business.

Crowdfunding is still in its developing phase. Its total value in 2014 was around 0,02% of all loans to non-financial corporations and households (EFSIR, 2015: 16). This percentage was around 0,1% of loans to non-financial corporations in 2015 (EFSIR, 2016: 15). Taking into account the differentiation of data sources leading to differences in indicators and slowly relaxing lending conditions of banks, it can be confirmed that its size is still limited, except for some countries (UK and some Baltic countries).

### **Risks for investors and platforms**

The fact that crowdfunding is a two-sided business and that indirect network effects (interdependence between the interests of funders and fundraisers) exist makes the security of investors impact on the reputation of platforms and on the performance of business as such. As was said above, fundraisers (SMEs in particular) benefit from sufficient numbers of funders and the platform should be interested in their feeling of security. It is why the perception of platforms and of crowdfunding by funders and the actual risks they bear is a crucial condition for the future of this business model.

However, crowdfunding is a business involving three types of parties, the interests of which and the conditions of activity are not the same. The type of risks most commonly put forward is that for the

lender/investor. Some risks for platforms are the same as for funders, but also the platform may be a source of risks for the other two classes of participants.

Many risks for funders involved in crowdfunding have been identified (FSUG, 2015). The most important is that of non-performance of the projects funded. This could stem from the riskiness of the projects themselves (difficult to avoid in the case of start-ups) and from asymmetry of information between fundraisers and funders (or platform as their representative). The risk of the failure of projects is identified as potential by research and appears in the perception of funders, while it has not yet been confirmed by evidence, due to the too short history of the businesses<sup>8</sup>.

In all business models funders are potentially exposed to a high risk of non payments (European Commission, 2016: 16). On top of the risk of the project itself together with information risk there is a potential risk due to the platform failing to transfer money correctly, or even defaulting.

If the funders select projects themselves, they are potentially subject to high information asymmetry with respect to investment projects, but also with respect to the platform, which channels data between fundraisers and funders and may be not interested in facilitating data transfer or ensuring its high quality.

In the business model where the funders do not decide where their funds go, they bear risk but cannot take measures to limit it ex-ante. In this business model a platform may be a substantial source of risk. It is not funders who admit the projects to be funded neither to select the ones to whom their funds will be channeled. The platform which selects and takes decisions may be not liable for the risk to which it exposes funders. One way of limiting risk is the diversification of projects admitted for funding by the platform. On the funders side, the principal manner of reducing risk is splitting their contribution between different projects, which, in this business model, is however not decided by the funder, but by the rules of the platform. Sound application of this tool would depend on the platform – but would it be interested?

Information asymmetry may amplify exposure to the risk of the project itself in two ways. First, it may be a source of negative selection of projects. With insufficient information ex-ante, bad projects (less performing, with higher risk) may be selected. This situation may be even more frequent than in the case of bank lending if platforms are not liable for risk, thus less interested in the careful selection of projects. There could be also conflicts of interest between the platform and projects (e.g. personal involvement of managers of platforms in some projects) thereby increasing selection risk. Knowing about potential unfair selection may cause better projects to shy away<sup>9</sup>.

Asymmetry of information may result also in uncontrolled disloyalty of fundraisers (moral hazard). This disloyal ex-post behavior (in particular if platform, as non-labile, is not interested in monitoring) may result in nonpayment or delayed payments from fundraisers.

However, funders may be impacted by other risks, for example due to the organization of crowdfunding. One of these is liquidity risk, due to the absence of secondary market for crowdfunding securities and loans. Some risks stem from the functioning of platforms, not of

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<sup>8</sup> It seems, however, that a big proportion of projects do not meet their goals, but platforms may hide this information

<sup>9</sup> It was described in a well known article of Akerlof (1970).

projects, such as the possibility of cyber attack or insufficient initial screening of projects, or retention of payment by the platform or even its failure due to insufficiently professional management.

Those risks could be amplified by features of the funders themselves. The funders and their motivations are differentiated. Taking into account low interest rates on deposits they may look for more rewarding placements of their money, namely on capital markets. The reason of choosing crowdfunding and not buying securities may be emotional – interest in a particular project (when, in a given business model, details of the project are disclosed to them), or in this innovative manner of funding. According to research, for about 60% of funders the major motivation is emotional. They tend to take decisions quickly and “follow the herd” without rationally reflecting on investment decisions. However, these funders do not have the attitudes of gamblers. Most of them (around 60%) invest less than 10% of their savings in crowdfunding (Oxera, 2015: 4). Investors may be inexperienced and unaware not only of risks, but even of the rules of the functioning of the platform and of their rights. They are more concerned about security than about rewards but, interestingly, they do not have high risk awareness. Investors consider themselves often as being financial experts, while in reality they are not. The research confirmed the higher wealth and awareness of a part funders on equity platforms (Oxera, 2015: 29-30).

A way of protecting funders could be by requiring them to have some investment experience. This is particularly relevant if funders are given a choice of projects. As risk is often due to the motivation of funders – quite often it is an emotional motivation - limiting the amount of funds invested may be a suitable measure.

As it was said previously, the interests of platforms are key to the design of rules of conduct. The awareness and preferences of potential funders may impact on choices of platforms. Investors are more concerned about the security of their investment than about actual financial rewards (FSUG, 2016; Oxera, 2015: 55). Concerns about reliability of platforms and of potential fraud are the principal reasons for not investing in crowdfunding (Oxera, 2015: 5). Surveys and interviews also confirm that platforms are interested in their reputation, understanding that it is a necessary condition of their functioning and development. Platforms themselves are increasingly concerned about the risk of increasing loan defaults or business failure rates, and also about collapse or malpractice by one of their peers, which could destroy the reputation of the profession (Zhang et al., 2016: 47). In general, the managers of platforms reveal conservative attitudes and make efforts to enhance their risk management (FSUG, 2016; Oxera, 2015: 79). However, their willingness to grow fast and financial constraints they meet may make them downplay risk (Oxera, 2015: 25). Moreover, application of some tools limiting risk (as initial screening of projects and their further monitoring) may be prohibited by high costs.

Thus a clear conflict for each individual platforms appears and a difficulty to agree on self-regulation. As to the problem of liability of the platform, it would be difficult to expect it being solved by platforms themselves.

An emerging feature of crowdfunding is the increasing involvement of institutional investors (investment and pension funds) as funders. In the most recent survey 44% of alternative providers indicated the participation of this kind of funders. A new feature is also emerging institutional participation in platforms' shareholding, together with a growing prominence of bank-based FinTechs

(Zhang et al., 2016: 41-43). This changes the balance of power and, on the other hand, amplifies the risk of potential failure of platforms to more general, systemic risks, for the financial sector (Oxera, 2015: 13). There are also concerns on the side of the banks who perceive crowdfunding as a serious competitor to their activities, with a competitive advantage due to the lack of physical locations of their activities and not being subject to regulation (Oxera, 2015: 12). These issues may be an additional reasons for regulation of this activity.

As to regulation, stakeholders have diverging views. Consumers/investors usually require more external regulation, but platforms not always, and may prefer self-regulation instead. As to the attitude towards regulation as such, the opinions of platforms are mixed, with 38% perceiving existing regulation as sufficient, 28% as too strict and 10% as too relaxed (Zhang et al., 2016: 48). However, as in the case of the introduction of national legislation in UK, platforms could also request regulation for the reasons of reputation. Additionally, lack or insufficient harmonization of regulation is indicated as a deterrent to cross-border crowdfunding.

### **Crowdfunding from the perspective of SMEs**

The principal reason why SMEs need crowdfunding is the reduced willingness of banks to fund the real economy in recent years, after the financial crisis. This situation is particularly relevant for SMEs as banks are less keen to lend to them (*Economic Analysis*, 2015: 29). This is due to higher creditor risk stemming both from their projects (in particular, in the case of start-ups) and also from the higher difficulty of assessing risk, taking into account their smaller size (so more projects to assess for the same value of funding) and the lower capability of professional provision of information about the project by a SME. Thus the principal interest of SME is access to funds by crowdfunding.

In the context of the outcomes of the financial crisis of the previous decade, of the recession in some countries and of the small size of some of them, SMEs may be also interested in looking for cross-border funding. For those reasons crowdfunding was proposed in the framework of Capital Markets Union (*CMU*, 2015).

Crowdfunding is seen as an alternative to bank funding in the case of refusal by a bank<sup>10</sup>. Thus, there is by definition a negative selection of projects applying for this type of funding. As said previously, according to recent research, platforms reject the great majority of projects (up to 99%). Platforms perform some risk screening, which may be however less professional than that of the banks. One reason for this is lower technical experience, another – less easy access to external information on projects and probably the lower quality of information received from projects themselves. Finally, the number of small projects to be assessed amplifies costs.

One of the risks identified for fundraisers in the Opinion of the European Banking Authority is uncertainty as to how project risk assessment is carried out within crowdfunding (EBA, 2015). There may be no rules either about the required information that should be provided by the borrower or how the assessment is carried out. In the case of equity crowdfunding there is in principle no obligation to issue a prospectus by the project, so more superficial information is provided (*Mapping*, 2015). There may also be a conflict of interest between the management of the platform and the borrower. Thus there is a high risk of negative selection (projects of lower quality accepted and

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<sup>10</sup> It was even spelled out in UK regulation of crowdfunding (Mapping, 2015: 54)

projects of higher quality rejected, due to conflict of interest or the insufficient quality of assessment). SMEs may be rejected while providing good projects, but for example insufficiently or unprofessionally described. There may be also cases of acceptance of unfeasible projects, which should not be continued, also to avoid detriment to the fundraiser himself. The risk of biased selection is even higher if funders take decisions themselves because those decisions are often emotional (“excitement by the project”).

As to access to funds, crowdfunding platforms give a substantial advantage of the possibility of risk sharing. If the business model of the platform requires splitting funds between different projects, lenders/investors are substantially less exposed to the risk of individual projects they fund within their portfolios. The condition of using this opportunity by more risky projects without exposing funders to excessive risk is however a professional design of investment/lending portfolios. This is an advantage for fundraisers with riskier projects (as start-ups) which may be given the possibility of having them accepted for funding. To avoid excessive risks for funders and platforms the of risk should be carefully controlled.

If a platform carries out monitoring of the use of funds loosely (or does not ensure it at all), this situation can be in fact detrimental for the fundraisers. Starting from small delays in repayments or deviations in the implementation of projects they may fall into an over-indebtedness spiral or non-completion of projects.

Other risks for fundraisers are related to liquidity. As the payments are operated by the platform or a third party, the liquidity risk for fundraisers is due to defaults on the side of funders (delay in provision of funding) or of the platform itself. In the case of delays in transferring repayments from fundraisers to funders by the platform or a third party, there is a risk to reputation or even the possibility of litigation against a fundraiser. The major risk is discontinuation of the activity of a platform itself.

This last risk is related to the opacity of contractual relations between the parties. Fundraisers and funders may be unaware of their reciprocal rights and obligations as being different from the obligations and rights of the platform. For example, there is insecurity as to monitoring projects (who should do it – the funders, who may be many, or the platform?), implying moral hazard linked to the unsuitable use of funds. If all the payments are operated by the platform, fundraisers may be unaware of their payment commitments. They may be unaware (and appropriate arrangements may be missing) of their responsibility in the case of default to the platform itself. This may lead to long disputes and finally to losses to all parties, fundraisers included.

Moreover, cross-border activity of crowdfunding platforms is marginal (as indicated above), and this is due to fragmented regulatory frameworks (*Mapping*, 2015). Thus the need of SMEs to seek funds cross-border is not met.

In conclusion, it may be said that while crowdfunding addresses some needs of SMEs, it does not address all of them (for example cross-border financing) and moreover, exposes borrowers to substantial risks. It is important to note, that SMEs as fundraisers seem to deserve protection, as natural persons being borrowers. This is different from the usual principles of protection, where it is possible to distinguish between the stronger and the weaker party, and where the business is always considered stronger and not deserving protection.

## **Regulation of crowdfunding**

### Problems to be solved by regulation

Crowdfunding business is developing. Platforms are concentrating, trying to make the best use of external network effects. For this reason, they dominate more and more on the participants on both sides. Moreover, some elements of new business models driven by economy of transaction costs (participants being totally replaced in their decisions by platforms) amplifies asymmetry of power between the platform and the other two types of agents involved and makes unfeasible purely market driven adjustment of internal rules to the interests of all parties involved. However, involvement of big investors (investment firms and pension funds) on the side of funders changes the balance of power.

Platforms are between the two requirements – this of acquiring good reputation and the other, of growth faster than of the peers. Those two objectives are contradictory. Their risk is that of losing reputation, not of money engaged. Even if platforms may avail of tools to better select projects, the pressure to grow and to reduce costs may limit their willingness to use them. The type of their involvement (as a passive, not active party to transaction) makes their sensitivity to risk borne by other participants even lower. However, awareness of unfair practices of peer platforms makes the others request regulation.

There is request from some funders to enhance their security (in particular, institutional entities) – and in particular there emerges pressure from potential funders, who do not trust platforms and do not want to engage in crowdfunding. While fundraisers do not seem to be aware of risks they bear (except this of sharing information – as underlined by Gleasure, 2015), pre- and post-contract information asymmetry is underlined by funders. The most important concern of funders, and very important in the framework of new business models, is liability of platforms for decisions they actually take, impacting on funders and fundraisers. This cannot (or cannot fully) be solved by platforms themselves, as it clearly not in their interest. There is thus an objective need for external regulation, imposed top-down.

As the history of crowdfunding is short, the relevant legislation has not been fully developed yet. Additionally, on the side of legislators there has been an attitude of “wait and see” (European Commission, 2016: 6). However, in some countries specialized legislation is developing.

As crowdfunding platforms are growing and involving institutional investors, there is a more equal balance of power. Another interested parties enter into the game. Banks under pressure from platforms competing with them ask for a level playing field. The need for regulation (and for its enforcement) to ensure stability of the financial sector is spelled out by the representatives of supervisors and industry. Platforms themselves ask for regulation to ensure their reputation and to extend their activity cross-border.

### Existing national legislation

According to (*Mapping*, 2015: 42 - 74) three EU Member States have introduced more comprehensive national legislation regulating the activity of crowdfunding platforms.

The earliest legislation (of June 2013) was introduced in Italy. It enabled the activity of equity crowdfunding platforms subject to registration with the regulator of the stock exchange (CONSOB). Platforms are obliged to comply with conduct rules and rules concerning offers made via the platform. The legislation enabled the funding of innovative start-ups (and was later widened). Access to platforms was limited to sufficiently knowledgeable investors and platforms were obliged to provide the investors with detailed information about projects funded. The funders of smaller contributions (below € 500) were less protected, while the bank or investment company with which the platform was obliged to cooperate (among others to operate transfers of clients' money) had some compliance obligations to funders providing higher amounts (*Mapping*, 2015: 45). As to lending platforms, the Bank of Italy's approval and licensing as a financial institution or payment intermediary was required. This legislation, introduced at a very early stage of crowdfunding, when the number of platforms was very low (8) was perceived as restrictive and did not stimulate its development.

The United Kingdom introduced regulation of crowdfunding platforms in April 2014. Both equity and lending platforms had to be authorized by the Financial Conduct Authority and obliged to declare sound client money management rules, disclosure requirements, prudential regulations and programs for platform failure. Participating in equity platforms was restricted to experienced investors or those who declared that they would not invest more than 10% of their assets. The regulation was prepared in consultation with the industry and was supported by platforms themselves, which wished to gain better reputations. The government intended to give through crowdfunding an alternative to SMEs turned down by banks. The launch of new crowdfunding platforms slowed down after the introduction of the regulation, but overall continued to grow.

France introduced regulation of platforms in May 2014. Prior to that, platforms operated as credit institutions or investment services providers. New regulations, preceded by a public consultation, gave the platforms an opportunity to operate either as equity, or lending platforms. An obligation to register as a payment services provider was introduced for platforms operating money transfers. Besides obligations of conduct and management competences, an obligation to check the financial understanding of investors and operate their "staged access" was introduced. The issuance both of securities and of loans was restricted (securities offered by the same issuer were limited to €1 m over 12 months). If prospectuses were not required, issuers had to provide investors with simple information about the project. The equity platforms had to ensure that investment was equal to investor experience, situation and preferences. For loan platforms only individuals could be lenders of interest-bearing loans. Loans funded by platforms were restricted in size to €1 m and to €4,000 per project and lender for interest-free loans and to €1,000 for interest-bearing loans.

#### Possible further regulatory remedies

Some aspects of the functioning of platforms may fall under existing European legislation. As to lending-oriented platforms it would be a case of transactions between legal or natural persons as funders and natural persons as borrowers.

However, crowdfunding is generally intended to be peer-to-peer, without excluding neither natural nor legal persons at any side. For this reason, for example with respect to loan-based crowdfunding, ,

consumer protection legislation (for example Consumer Credit Directive<sup>11</sup> or Mortgage Credit Directive<sup>12</sup> or else Distance Marketing of Financial Services Directive<sup>13</sup>) which addresses only business to consumers selling, does not apply to all users of platforms.

In cases of lending to natural persons by professional lenders the Consumer Credit Directive or Mortgage Credit Directive could apply, depending on the type of borrowing (consumer or mortgage credit). In this situation borrowers (only natural persons) would have the right to advertisements (e.g. on the website of the platform) in a standardized form. They should also obtain pre-contractual information before the signature of the contract, and a contract fulfilling legal requirements. They would have the right to withdraw from a lending contract within 14 days and to repayment of the loan earlier than planned.

Enforcement of those rights would however depend on the assessment of the role of funders as lenders. In cases where they are totally passive (do not choose borrowers), it would be difficult to apply the rules to them as creditors, and to the platform as an intermediary. Otherwise, the platform, as an active agent of the transaction, could be treated as a creditor. However, it would be also difficult, the platform clearly not being a party to the contract, while performing some creditor's duties (such as the assessment of creditworthiness).

Thus the protection to borrowers offered by the European legislation could hardly be applicable to loan-based crowdfunding. However, it could be needed because the financial knowledge of the smallest SMEs does not differ from this of households.

As to equity-based crowdfunding, potentially it could be regulated by the Prospectus Directive<sup>14</sup> and Markets in Financial Instruments Directive (MiFID)<sup>15</sup>. The Prospectus Directive obliges an issuer of securities (also equity fundraisers) to publish a prospectus before issuing. This would enhance the information provided to investors. However, the obligation to prepare prospectuses is limited to the issuance of transferable securities (in a broad sense, also those potentially sold), and also to offers exceeding €5 m. Thus probably the majority of projects financed in crowdfunding would not fall under this requirement.

As to MiFID, it is applicable to investment intermediaries<sup>16</sup>. If a platform intermediates in sales of transferable securities, it would fall under the requirements of MiFID which are substantial. First, the platform would need to be registered as an investment firm and have sufficient capital. It should, in principle, carry out an appropriateness assessment of securities sold to particular customers. The problem is what is actually the role of the platform in the contacts between investors and projects. If the platform simply communicates to projects the "expression of interest" of potential investors, it would not classify it as an investment firm. If the platform executes orders on behalf of investors, it would clearly fall under MiFID. ESMA (2015) underlines, that equity-based crowdfunding platforms often escape MiFID requirements, as too constraining. However, their adoption would enhance the security of investors and also of platforms (e.g. due to capital requirements). An additional advantage

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<sup>11</sup> Directive 2008/48/EC OJ L133 of 22.05.2008

<sup>12</sup> Directive 2014/17/EU OJ L60 of 28.02.2014

<sup>13</sup> Directive 2002/65/EC OJ L271 of 9.10.2002

<sup>14</sup> Directive 2003/71/EC OJ L 345 of 31.12.2003

<sup>15</sup> Directive 2004/39/EC OJ L 145 of 30.04.2004

<sup>16</sup> ESMA (2015)

for the platform is that registration under MiFID automatically involves receiving a passport to operate across the EU, which is very favourable as it enables platforms to grow by developing cross-border.

Even though MiFID does not apply to nontransferable securities, Member States can extend some requirements of the directives (and namely MiFID) to platforms, for example those requiring their registration, application of rules of information disclosure and of avoidance of conflict of interest.

Crowdfunding platforms may handle money transfers between the parties to transactions (funders and fundraisers). In this case they should be registered as payment institutions and respect the Payment Services Directive<sup>17</sup>. The obligation to separate the funds of clients and own funds of the platform is important for the financial security of the parties. However, it is not the only business model. Transfer of funds may be outsourced to a professional organization registered as a provider of payment services.

In conclusion, existing European legislation does not seem to adequately cover the new activities being labelled under the different types of crowdfunding. It seems that this legislation could be more easily extended to all equity-based crowdfunding. On the contrary, European legislation seems technically very difficult to apply to loan-based crowdfunding.

Some suggestions as to potential regulatory measures for lending based crowdfunding were listed by European Banking Authority (EBA, 2015). The major concern was the status and operation of platforms<sup>18</sup>.

- Platforms should duly disclose information about borrowers/projects. They should carry out sufficient creditworthiness assessment, or inform lenders that it has not been carried out. They should require information from borrowers sufficient for this assessment and, in the case of negative outcome of assessment, reject the project from funding.
- The rights and obligations of parties should be clearly spelt out and standard contracts should be provided on websites. It has been suggested that the categorization of lenders according to their knowledge profile should be carried out.
- Platforms should be registered as financial providers. The professional capacities of managers should be checked. Conflict of interests (like involvement of platform staff in borrowers' businesses) should be prohibited or clearly declared to the potential parties.
- Platforms should take and disclose arrangements in case of their failure or discontinuation.
- Platforms carrying out payments services should separate their own money from the money of borrowers and lenders. In the case of transfers, Payment Services Directive applies and platforms should be registered.

The suggestions of the EBA help to understand how the crowdfunding business is different from the usual notion of lending, in particular to natural persons. Here EBA wishes to protect funders, among others by disclosing information about the borrowers. In bank lending it is the borrower (natural person) who is protected by disclosure of information about the loan offered. It shows how crowdfunding is different from bank lending, where the depositors are not even aware of what

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<sup>17</sup> Directive 2007/64/EC OJ L 319 z 5.12.2007

<sup>18</sup> The elements of this opinion indicate clearly the weaknesses of the operation of lending-based platforms

happens to their money and the bank protects itself as a party to the contract by the creditworthiness assessment of borrowers. Here it seems that a platform, not being a party to a contract, has to be externally obliged to carry out creditworthiness assessment to protect funders. While there are no particular measures to protect borrowers (except requirement of conduct for the platform and protection against its failure) the fact of going through creditworthiness assessment indirectly protects borrowers (SMEs in occurrence) against negative selection detrimental to them. There seems to be no intention to legislate on obligations to monitor contract fulfillment, which would be favorable for funders and also for borrowers (protecting them against moral hazard).

As to the European regulation potentially applicable for equity-based crowdfunding, it is also focused on the protection of funders, not fundraisers. The reason was that companies as fundraisers are considered sufficiently risk-aware and not requiring protection. As in practice bigger and more experienced projects are seeking funding equity by crowdfunding, this type of assumption may be adequate.

## **Conclusion**

Three groups of stakeholders directly involved in crowdfunding have diverging interests, bear different risks and their power is very unequal.

The most powerful stakeholder, the platform, seems to be interested in the first place in development of its business. The strategies it undertakes (pricing allowing for cross-subsidization, charging fees only after positively completed transaction) are shaped to attract participants. The recent developments, replacing funders in their decisions by the platform, enable reduction of transaction costs, but make power relations even more asymmetric. While platforms do not bear substantial risk of financial losses due to the manner the contracts are structured (and avoiding liability), it is reported that platforms carry out creditworthiness assessment of submitted projects. However, EBA opinion suggests that this assessment may be insufficient.

The interests of fundraisers are similar to the interests of platforms. They are mostly interested in access to funds (so in development of activity of platforms), but usually neglect or are not aware of risks they generate (mostly to funders). They may be reticent to share information about their projects, but do not seem to be aware that a platform may switch liability for its own defaults on them.

Clear conflict of interests emerges between the funders and fundraisers (due to risk of projects and asymmetry of information), and also between the funders and a platform (because of the quality of screening). Funders are aware of risk they bear (but not always of the fact that they may generate risk themselves by irrational choice). Most of them (except perhaps institutional investors recently appearing as funders) are at substantial disadvantage of power with respect to platforms.

Some risks for the parties (borrowers/fundraisers included) stem from the unclearness of the role of the platform (would it be a creditor or not? A fully responsible investment firm?) and thus unclearness of the role and obligations expected from it. Platforms may generate liquidity risk due to non-payment, for borrowers, as for funders. If the platforms do not gather sufficient capital, their failure would be detrimental to the parties.

The unclear role of equity-based platforms makes them escape harmonized European regulation and existing national legislation does not seem to address all the risks. There is actually no adequate regulation of loan-based peer-to-peer crowdfunding. Additionally, existing legislation both at national and at European level seems to exclusively protect funders, while fundraisers, in particular SMEs, who are not very different from households from the point of view of knowledge, also need adequate protection.

Diverging interests of the three types of agents involved in crowdfunding (fundraisers, funders and platforms) and, in particular, a dominance of platform over the other two makes self-regulation of this business incomplete and evolution to the contractual solutions to better adjust the diverging interests, unfeasible. Slow spontaneous bottom-up development of rules is not adjusted to the speed of development. In particular, it does not seem possible that platform agrees to take responsibility for its decisions. Thus, external legislative intervention is necessary.

Importantly, there is also a fourth group of stakeholders, not engaging directly in crowdfunding, but actually or potentially impacted by it. Those are other financial intermediaries, who are in competition with crowdfunding platforms, and the representatives of public interest, namely of financial stability. Their interest is limiting risk generated by platforms, and perhaps also limiting their activity. They may have significant influence on legislators.

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