Information Economics and Policy 33 (2015) 11–28

Contents lists available at ScienceDirect

Information Economics and Policy

journal homepage: www.elsevier.com/locate/infoecopol

The economics of crowdfunding platforms[☆]

Paul Belleflamme[a], Nessrine Omrani[b], Martin Peitz[c,*]

[a] *Université catholique de Louvain, CORE and Louvain School of Management, Belgium, and CESifo, Germany*
[b] *Paris School of Business, France*
[c] *University of Mannheim, Mannheim Centre for Competition and Innovation (MaCCI), Germany*

ARTICLE INFO

Article history:
Received 8 April 2015
Revised 8 July 2015
Accepted 26 August 2015
Available online 16 September 2015

JEL classification:
L13
D62
G24

Keywords:
Crowdfunding
Platform markets
Network effects
Asymmetric information
P2P lending

ABSTRACT

This paper provides a description of the crowdfunding sector, considering investment-based crowdfunding platforms as well as platforms in which funders do not obtain monetary payments. It lays out key features of this quickly developing sector and explores the economic forces at play that can explain the design of these platforms. In particular, it elaborates on cross-group and within-group external effects and asymmetric information on crowdfunding platforms.

1. Introduction

Crowdfunding has attracted a lot of coverage in the popular press. While in terms of overall funding volume, crowdfunding should still be considered currently as a niche phenomenon, it is rapidly expanding in many countries and it is seen by many as a hope to fund innovative projects that would not be carried out otherwise. Total funding volumes in 2014 were around 16.2 billion US$ worldwide; they were 0.8 billion US$ in 2010, 1.4 billion US$ in 2011, 2.5 billion US$ in 2012, and 6.1 billion US$ in 2013 (see Massolution, 2013; 2015). While these numbers appear negligible in light of the trillions of investments which are made, they nevertheless demonstrate that this is currently a rapidly growing market. Crowdfunding platforms have appeared across the globe with many platforms being created in Europe and the U.S. According to a survey by Iizuka (2014), conducted in December 2014, 60% of the CFPs have been created in Europe, and around 20% in North America. In Europe, UK is leading with 2.3 billion euros collected in 2014, which represent 79% of the total amount collected in Europe; France, Germany and Sweden come next with, respectively 154, 140 and 107 million euros collected (see Wardrop et al., 2015).[1]

☆ We would like to thank two reviewers and the Editor Lisa George for helpful comments. Peitz gratefully acknowledges support from the Deutsche Forschungsgemeinschaft (PE 813/2-2).

* Corresponding author. Tel.: +49 621 181 1835.
E-mail address: martin.peitz@gmail.com (M. Peitz).

[1] In the remainder of this survey, not only well-known U.S.-based CFPs but also several French CFPs will be used as examples. According to Iizuka (2014), in France, CFPs first appeared in 2008 (two had started in 2008), the number of CFPs reached 26 in 2012. In April 2014, we identified 77 French CFPs based on data collected through CFPs websites (sources: allo-prod.com; tousnosprojets.fr; crowdfundingmonamour.wordpress.com). According to the data that we collected, around two fifth of the French CFPs are reward-based and donation-based (or a mix of both of them), 30% are equity-based, 19% are lending-based or royalty-based and 12% are a mix of the different platforms. Iizuka (2014) provides similar numbers. According to this survey, French CFPs are distributed as follows: 36% are reward-based,

http://dx.doi.org/10.1016/j.infoecopol.2015.08.003

Crowdfunding can be seen as an open call to provide financial resources. Crowdfunding mostly takes place on crowdfunding platforms (CFPs), i.e., Internet-based platforms that link fundraisers to funders with the aim of funding a particular campaign by typically many funders.[2] This paper aims at providing insights into the functioning of crowdfunding platforms. As it uncovers the functioning of and business models in these markets it may provide a better understanding as to the prospects of this market.

Crowdfunding comes in a variety of fundraising activities and what is offered in return for the funds. This attracts different types of participants. It is useful to distinguish between investment-based, reward-based, and donation-based CFPs. We note that many real-world investment- or reward-based CFPs include some donation-based elements of warm glow.[3] Depending on the individual campaign, part of the motivation to participate may come from non-monetary considerations to support a particular idea.[4]

A common feature of all CFPs is that, on the fundraiser's side, participants come with the hope to obtain access to additional funding. Projects have different features and funders have heterogeneous preferences over these projects. Thus CFPs belong to the class of two-sided platforms, which provide a matching service between two sides of a market. Arguably, in many cases CFPs create markets that did not exist before – the extent to which this has happened is an empirical question. Different from, e.g., dating and real-estate platforms, CFPs do not provide one-to-one matching but one-to-many matching since a project requires more than one funder to be successful, i.e., to reach the funding target. While this feature is shared by most CFPs, the incentives of funders are rather different across the different types of CFPs, as are the incentives of the fundraisers who propose a certain project.

Investment-based CFPs can be seen as alternative financial investment instruments, in particular, to finance start-ups and SMEs.[5] We distinguish between equity-based, royalty-based and lending-based CFPs. Fundraisers on equity-based CFPs offer equity to funders, while fundraisers on royalty-based CFPs offer a royalty for the funds they obtain. In both cases, remuneration depends on the performance of the project when it is successful at the funding stage. Fundraisers on lending-based CFPs offer interest payments in return for a loan. An apparent hope of firms using investment-based CFPs is that they obtain access to a larger set of funders than if they used classical funding instruments such as the backing of an individual investor or loans from a bank. There may be other advantages (and possibly disadvantages) from CFPs, as we will explore in this paper.

Perhaps more novels are reward-based and donation-based CFPs. Fundraisers on reward-based CFPs do not offer a stake in the project or a monetary payment, but offer other rewards to funders. The funder may then be partly driven by her motivation to support a cause or particular project, but also by the personal benefits offered. It is up to the fundraiser to define those benefits. For example, in case of video games, depending on the contribution this may simply be a free copy of the game or even a personalized version of the game. Donation-based CFPs do not include personal benefits, even though it is sometimes difficult to draw an exact dividing line between the two because, e.g., the mentioning of the funder can already be seen as a reward.

In Section 2 of this article we classify and exemplify existing business models in crowdfunding. In Section 3 we survey the existing literature on crowdfunding (with a particular focus on platform activities)[6] and we mobilize, more broadly, the literature on the industrial organization of the digital economy to understand better the functioning of crowdfunding platforms. Section 4 concludes.

2. Business models in crowdfunding

In this section, we present different business models and some descriptive statistics on the crowdfunding platform market. It is useful to distinguish between two broad classes of CFPs, (i) investment-based CFPs and (ii) reward- and donation-based CFPs. The first class includes equity-based, royalty-based, and lending-based CFPs, where funders are investors in a campaign and may obtain monetary benefits. In the second class, funders cannot expect a monetary compensation; they fund a campaign because they obtain a product or because they support its cause (or a combination of the two).

Initially, the vast majority of CFPs were donation-based, followed by lending-based and reward-based platforms. Since then the number of reward-based CFPs has grown strongly. As of 2014, the share of newly created platforms that are reward-based is 40%, followed by donation-based platforms and lending-based platforms (each around 20% in 2014). As regards funding volumes of different types of

25% are peer-to-peer CFPs, 20% are equity-based platforms, 9% are donation-based platforms, and the remaining ones are classified differently.

2 Lambert and Schwienbacher (2010) provide a more specific definition of crowdfunding as "an open call [...] for the provision of financial resources either in form of donation or in exchange for some form of reward and/or voting rights in order to support initiatives for specific purposes." See also Schwienbacher and Larralde (2012). For a different view and some discussion on how to define crowdfunding, see Mollick (2014). Further below we note that many crowdfunding projects contain a combination of donation-based and reward-based elements, which suggests to remove the word "either" from the definition by Lambert and Schwienbacher (2010).

3 Based on micro-lending data from Kiva, there is some evidence that funders find a project more attractive when it is described as a project to help others rather than as a business opportunity (see Allison et al., 2014). For an additional investigation of the warm-glow effect, see Allison et al. (2013).

4 An interesting issue in this context is whether and to which extent monetary incentives crowd out non-monetary incentives, a topic which has received some attention by economists and psychologists, in particular, in the context of labor markets (see, e.g., the survey by Frey and Jegen (2001)). Several recent papers have shown that monetary incentives do not necessarily crowd out intrinsic motivations of an agent within a principal-agent relationship (e.g., Thompson et al., 2010). However, based on survey evidence to fund film and video projects, Cecere et al. (2015) conclude that, in their sample, monetary incentives partially crowd out the positive effect to contribute to a project that is based on intrinsic motivation and warm glow. By contrast, considering equity-backed projects, Cholakova and Clarysse (2015) did not find evidence that non-monetary motives played a significant role.

5 As such, they may be subject to financial regulation. For instance, the Financial Conduct Authority in the UK is in the process of establishing a regulation. See Financial Conduct Authority (2013).

6 We do not claim to be the first to survey the emerging literature. For an excellent, complementary article, see Agrawal et al. (2013a). Morse (2015) provides a survey that focuses on P2P lending.