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The Incentive Problems with the All-or-Nothing Crowdfunding Model

Garry A. Gabison*

This paper discusses how the all-or-nothing model can disincentivize crowd investors to perform due diligence over the fraud or failure risks of a crowdfunding campaign. Specifically, the major upside of this model is that a project cannot be funded without a critical mass investing. If enough individuals in this critical mass of crowd investors perform their due diligence to check whether projects will become successful, then the model functions correctly; instead, this paper argues that this model incentivizes the crowd to produce noisy information that cannot be relied upon. In the all-or-nothing model, sequential investments encourage rational investors to not perform their due diligence because they relied on the self-interest of prior investors to perform their own due diligence while non-fully rational investors may rely on the belief that prior investors have better information than they might gather. Allowing campaigns to be overfunded can exacerbate some of the all-or-nothing model characteristics. This paper concludes by discussing how the platforms, campaign creators, and crowd investors can be incentivized to better filter projects — in order to assure that crowdfunding fulfills its potential.

I. INTRODUCTION

Crowdfunding is “a new and evolving method to raise money using the Internet.”¹ For the purpose of this paper, crowdfunding means the process through which an individual or an entity raises funds using an

* J.D. from the University of Virginia School of Law and Ph.D. in Economics from Yale University. Research Fellow at the European Commission’s Joint Research Center Institute for Prospective Technological Studies. This paper was written with the financial support of the European Innovation Policies for the Digital Shift, a project jointly launched in 2013 by JRC-IPTS and DG CONNECT of the European Commission. The content of this report does not reflect the official opinion of the European Commission. Responsibility for the information and views expressed in the report lies entirely with the author. All errors and opinions are my own.

1. Crowdfunding, 78 Fed. Reg. 66,428, 66,430 n. 20 (Nov. 5, 2013) (to be codified at 17 C.F.R. pts. 200, 227, 232, 239, 240 & 249). The rules became final on Oct. 30, 2015. *See* Press Release, SEC, SEC Adopts Rules to Permit Crowdfunding (Oct. 30, 2015), <http://www.sec.gov/news/press/release/2015-249.html>.

internet website, called a fundraising portal, from a large number of individuals, referred to as the crowd.²

Crowdfunding comes in four varieties.³ Most of them use a model called the all-or-nothing model to fundraise through online portals: the all-or-nothing model specifies that a fundraising portal only disburse the funds to the fundraiser if the crowd's investment reaches or exceeds a preestablished threshold; otherwise, the portal returns their investment to the crowd.

The all-or-nothing model has been used in various settings. Kickstarter, the most successful crowdfunding reward-based platform, uses this model.⁴ In 2012, the United States passed the Jumpstart Our Business Startups Act ("JOBS Act").⁵ The JOBS Act puts in place measures to regulate equity crowdfunding with the goal to help startups raise funding.⁶ The Securities and Exchange Commission ("SEC") implements the JOBS Act and as part of this regulation, crowdfunding platforms must use the all-or-nothing model.⁷

This model owes its popularity to one major upside as compared to a

2. For a more in depth discussion of crowdfunding, see GARRY A. GABISON, JOINT RESEARCH CENTRE, EUROPEAN COMMISSION, UNDERSTANDING CROWDFUNDING AND ITS REGULATIONS (2015) [hereinafter UNDERSTANDING CROWDFUNDING], <http://publications.jrc.ec.europa.eu/repository/bitstream/JRC92482/lbna26992enn.pdf>; Garry A. Gabison, *Equity Crowdfunding: All Regulated but Not Equal*, 13 DEPAUL BUS. & COM. L.J. 359 (2015) [hereinafter *Equity Crowdfunding*].

3. Contributors to *donation based crowdfunding* campaigns do not receive anything for their contributions. Contributors to a *reward based crowdfunding* campaign receive some good or service in exchange for their contributions. Contributors to a *lending based crowdfunding* campaign receive interest payments in exchange for financing a project. Lending based crowdfunding is a form of micro-lending, where contributors can select a project with an associated rate of return and maturation date. Contributors to *equity based crowdfunding* receive capital equity into a venture in exchange for their contributions. C. Steven Bradford, *Crowdfunding and the Federal Securities Laws*, 2012 COLUM. BUS. L. REV. 1, 15 (2012).

4. "Funding on Kickstarter is all-or-nothing — projects must reach their funding goals to receive any money. All-or-nothing funding might seem scary, but it's amazingly effective in creating momentum and rallying people around an idea. To date, an impressive 44% of projects have reached their funding goals." *Seven Things to Know About Kickstarter*, KICKSTARTER, <https://www.kickstarter.com/hello> (last visited Aug. 4, 2015).

5. Jumpstart Our Business Startups Act, H.R. 3606, Pub. L. No. 112-106, 126 Stat. 306 (2012) (to be codified in scattered sections of 15 U.S.C.) [hereinafter JOBS Act].

6. Equity crowdfunding is a form of crowdfunding where the investing crowd receives equity shares into a company in return for their investments. The JOBS Act intends to "increase American job creation and economic growth by improving access to the public capital markets for emerging growth companies." *Id.* The SEC "understand[s] that Title III was designed to help alleviate the funding gap and accompanying regulatory concerns faced by startups and small businesses in connection with raising capital in relatively low dollar amounts." Crowdfunding, *supra* note 1 (quoting the Congressional debate).

7. "[T]his rule was designed to prevent fraud 'either upon the person on whose behalf the distribution is being made or upon the customer to whom the payment is to be returned if the distribution is not completed.'" Crowdfunding, *supra* note 1; *see also* 17 C.F.R. § 240.15c2-4 (2016) ("Transmission or Maintenance of Payments Received in Connection with Underwritings"). The rules require that the offering specifies a minimum amount — the threshold — and may use as well as a maximum offering.

model where all funds are disbursed as they are raised (sometimes referred as a keep-it-all model): it is supposed to limit frauds. The model does not stop fraud in and of itself; the model relies on individuals to perform their private-incentive-driven due diligence and catch fraud.⁸ Some users may of course free ride upon the due diligence of others. Assuming that enough investors perform due diligence activities, fraudulent schemes should be detected; yet, some schemes get through these safety nets. For instance, in 2015, the Federal Trade Commission (“FTC”) settled its first internet crowdfunding case⁹ where the fundraising individual never delivered and used the funds for personal reasons.

Talks are underway in the U.S. Congress to extend the JOBS Act exemption even further.¹⁰ Policymakers may wish to reinvestigate the reliance on the all-or-nothing model to detect fraud and put in place other safeguards. Such safeguards can ensure that some crowd members perform enough due diligence. In Europe, for instance, Italian policymakers required that “at least 5% of the financial instruments offered are undersigned by professional investors or by banking foundations or by innovative start-up incubators.”¹¹ The implicit assumption is that professional investors have sufficient private incentives to perform their due diligence because their livelihood depends on it and they also have sufficient expertise to filter projects. In a sense, Italian regulators may not trust private individuals to perform due diligence.

In this optic, this paper questions whether the all-or-nothing model should be trusted on its own. The analysis in this paper is based upon the idea that if a crowdfunding campaign turns out to be a fraudulent scheme, it will not be privately efficient to rectify: The cost of privately suing outweighs the benefits because each individual suffers a small injury but the litigation costs are large. While the argument often focuses on fraudulent schemes, it can be extended to projects that cannot (blatantly) be completed.¹²

8. “Read what others say. If you’re not sure about something, you can look elsewhere on the web. Does the creator have an online presence, or past work you can look at? Do people say good things about them? If you’re curious about the thing they’re creating, you can look into that, too. Has it been tried before? What happened then?” *Trust & Safety*, KICKSTARTER, <https://www.kickstarter.com/trust> (last visited Mar. 13, 2016).

9. Rebecca R. Ruiz, *F.T.C. Reaches Settlement in a Kickstarter Scheme*, N.Y. TIMES, June 12, 2015, at B2.

10. Ruth Simon & Angus Loten, *Frustration Rises Over Crowdfunding Rules*, WALL ST. J. (Apr. 30, 2014, 7:12 PM), <http://online.wsj.com/news/articles/SB10001424052702304163604579532251627028512>.

11. CONSOB Regolamento n. 18592/2013, art. 24 (June 26, 2013) (It.).

12. This paper does not argue that all crowdfunding projects must succeed; instead, some projects are *recklessly funded*. “Recklessly funded” occurs when a rational individual who perform a reasonable due diligence would not have invested his own funds into the projects because it reasonably believes or expects that the project is more likely to fail than succeed.

This paper first deconstructs the all-or-nothing model from all three sides: the platform's incentives to investigate, the campaign creator's incentives to provide information, and the crowd's incentives to invest optimally. Second, this paper discusses how overfunding encourages herding which leads to two problems: The investing crowd has little incentive to check a project; and too few projects get funded. The former problem is, however, the main concern of this paper. Allowing campaign creators to overfund hides information from the crowd, and even if the crowd were fully rational, they would not be able to make an educated investment. In other words, overfunding combined with the all-or-nothing model distorts incentives further. Finally, this paper discusses how liability and regulations have attempted to redress some distorted incentives. Reward based platforms do not carry much liability; hence, they have little incentive to filter projects. Increasing liability of campaign creators can have an impact on their behavior but they may respond more to disclosure requirements that require them to signal their past performance in order to approximate their future intent. Finally, to realign the incentives of the crowd may require platforms and policymakers to work together and become innovative: Paternalistic regulation such as capping the investment level may not be sufficient; behavioral economics suggest some ways to encourage more due diligence.

II. THE ALL-OR-NOTHING MODEL DISTORTS INCENTIVES TO INVESTIGATE

Crowdfunding involves three participants: the crowdfunding platform, the campaign creator, and the crowd. This section looks at each participant and how the all-or-nothing model affects their behavior and may incentivize these participants to make crowdfunding less socially optimal than it can be.

A. THE PLATFORM'S INCENTIVE TO INVESTIGATE

Platforms have a private incentive to ensure that they do not attract bad, failing, and fraudulent products (e.g., pyramid schemes). If they do not filter for these projects, their reputation and their goodwill would be harmed. More importantly, their service would become unwanted and the platform would, itself, fail. Approaches differ greatly from platform to platform to ensure that they properly filter projects. These approaches can be divided in two: preemptive due diligence and retroactive actions.

On the one hand, pre-emptive due diligence requires more participation from the platform because it requires that the platform check

all projects. Therefore, platforms will use this technique if their service attracts a large number of problematic projects. The larger cost associated with performing a due diligence for all projects must also be passed onto both type of portal users (fundraisers and investors).

Some platforms perform a due diligence and filter campaigns before posting them on their portal. For instance, WiSeed, a French based equity crowdfunding platform, performs an initial review, proposes the selected projects to the crowd to vote along eleven criteria, and finally the platform performs a due diligence before allowing the crowd to invest.¹³

This triple-layered filter may not be enough to protect the crowd from unsuccessful projects. WiSeed states risk capital such as equity crowdfunding involves risks by definition and states that out of every ten companies, investors should expect that three will be written off, two will break even, and the remaining five may bring back enough capital to lead to profits.¹⁴ Since its creation in 2008, WiSeed has helped finance seventy-six companies for almost thirty million euros.¹⁵ They recorded, as of mid-2015, five negative exits to one positive exit; the rest of the investment remained un-exited. Even with a three-layer filter,¹⁶ the current successful exit rate is low, much lower than what WiSeed predicts.

Besides protecting their goodwill, certain platforms have aligned their own private incentives with performing exhaustive due diligences. For instance, some equity based crowdfunding platforms perform extensive due diligence because they earn more when projects succeed and the crowd earns more. Seedrs, a U.K. based equity crowdfunding platform, profits only if the crowd profits because their fee is linked to the profits that investors make upon reselling their shares.¹⁷ As such, the platform has a

13. GUIDE ENTREPRENEUR, WISEED, https://s3-eu-west-1.amazonaws.com/wiseed-public-fr/mediateque/guide_entrepreneurs.pdf.

14. Christine Lejoux, *Wiseed, ou Quand les Particuliers Investissent le Capital-Risque*, LA TRIBUNE (Aug. 1, 2015, 10:00 AM), <http://www.latribune.fr/entreprises-finance/wiseed-ou-quand-les-particuliers-investissent-le-capital-risque-495249.html>.

15. *Startups Funded per Year*, WISEED, <https://www.wiseed.com/en/startups/equity-crowdfunding> (last visited Mar. 13, 2016).

16. In 2014, around one thousand companies submitted to WiSEED to start a campaign and from these thousand, thirteen were financed and with a ninety-four percent success rate. Christelle Lefebvre, *Wiseed: "Un Assouplissement Fiscal Positif Pour les Start-Ups"*, NICE MATIN (Jan. 22, 2015, 10:59 AM), <http://www.nicematin.com/le-club-eco/wiseed-un-assouplissement-fiscal-positif-pour-les-startups-2075105.html> ("Wiseed voit arriver 1000 projets par an, elle en a financé 13 en 2014 avec un taux de réussite des souscriptions de 94%"). In 2014, among these one thousand projects, two hundred projects were submitted to e-vote and fifty went to due diligence. *Wiseed*, EDUBANQUE.COM, <http://www.edubanque.com/entreprendre/crowdfunding/annuaire-du-crowdfunding/wiseed.html> (last updated Jan. 6, 2015) ("200 projets passés en e-vote, 50 projets passés en due-diligence").

17. For instance, Seedrs "only charge[s] a single, straightforward fee of 7.5% on any profit that you make on an investment held by us as nominee." *Frequently Asked Questions*, SEEDRS, <https://learn.seedrs.com/faqs/> (last visited Mar. 13, 2016). Seedrs creates a holding to hold the shares brought by the crowd and collects the 7.5% when a contributor sells its shares.

strong incentive to perform preemptive due diligence.

Arguably, some platforms perform so much due diligence that they provide few incentives for other crowdfunding participant to perform their own.¹⁸ For WiSeed, the filtering may have disincentivized other forms of due diligence since almost all projects that make it through these filters are financed;¹⁹ hence, the weeding out promised by the all-or-nothing model may not work after all or even become almost redundant.

Preemptive due diligence is not adequate for all platform types. Equity crowdfunding platforms can perform this kind of due diligence because they receive relatively fewer projects.²⁰ Reward based crowdfunding, however, has opted for a more reactive approach because of the large volume of projects they receive: checking each project would require larger costs that would be then passed on to platform users; thus, to keep cost low, such platforms may prefer not to perform preemptive due diligence and, instead, may prefer to act after the fact.

Proactive due diligence occurs after the projects have been publically posted and even received some investments. As such, proactive due diligence relies on the crowd to flag problematic projects. In other words, it exploits the all-or-nothing model attributes more than preemptive due diligence.

For instance, Kickstarter receives thousands of projects and it has helped to successfully finance over 22,000 projects with success rates varying between thirty-four percent and seventy percent depending on the category or industry.²¹ Kickstarter acts after the crowd flags a project as problematic.²² In other words, Kickstarter relies on the crowd to perform its due diligence. Once, a project is flagged, the platform investigates this problematic project; if the platform's due diligence discovers problems with

18. "The crowd's decision on whether or not to support a crowdfunding campaign is very much based on emotion and as such, the time spent by a potential backer in reading the details of a crowdfunding campaign and subsequently deciding whether or not to contribute is only a matter of a few minutes. Surprisingly, this also holds true for crowdinvesting." SPACETEC CAPITAL PARTNERS GMBH, CROWDFUNDING INNOVATIVE VENTURES IN EUROPE: THE FINANCIAL ECOSYSTEM AND REGULATORY LANDSCAPE (2014). Behavioral economists have also observed this "intuitive" decision-making and investment in other contexts. See, e.g., Daniel Kahneman, *Maps of Bounded Rationality: Psychology for Behavioral Economics*, 93 AM. ECON. REV. 1449 (2003) (discussing the literature on decision making).

19. See *Startups Funded per Year*, *supra* note 15.

20. Also as licensed financial analyst, they have a duty to perform some due diligence, particularly if they are considered the agent of investors. See, e.g., *Equity Crowdfunding*, *supra* note 2, at 388.

21. Stephen Heyman, *Keeping up with Kickstarter*, N.Y. TIMES (Jan. 15, 2015), <http://www.nytimes.com/2015/01/15/arts/international/keeping-up-with-kickstarter.html>.

22. For instance, Kickstarter cancelled a crowdfunding campaign that showed potential signs of fraud during the campaign, after eighty percent of the threshold was already reached. *Kickstarter Pulls Plug on the Rock Smartwatch After Backer Concerns*, CROWDSOURCING.ORG (Dec. 11, 2013), <http://www.crowdsourcing.org/editorial/kickstarter-pulls-plug-on-the-rock-smartwatch-after-backerconcerns/29644>.

the projects, the platform removes the project and refunds the invested funds.

Preemptive actions take the onus away from the crowd to perform due diligence, whereas pro-active measures rely on the crowd to play a central role in filtering out unviable and/or fraudulent schemes. Exploiting the all-or-nothing model disincentivizes platforms to perform its own due diligence on every project, and instead, platforms perform due diligence only on flagged projects.

Note that even the platforms that perform their own diligence, like WiSeed, still rely on the crowd. While this reliance may help filter projects on which the crowd has better information, it may well be more reflective of filtering projects that some crowd members will not like and support. In other words, the platform relies on the crowd to filter projects in which performing due diligence would constitute a waste of resources for commercial reasons, instead of reasons linked to project inherent defects.

The next section investigates how the all-or-nothing model incentivizes campaign creators to disclose valuable information.

B. THE CAMPAIGN CREATOR'S INCENTIVES TO DISCLOSE INFORMATION

Campaign creators have an incentive to reveal information because they want to secure investment. Campaign creators compete with other campaigners for the crowd's (limited) funds. In order to distinguish their project from others, they have an incentive to disclose positive information: they have incentive to signal that they project will succeed.

The all-or-nothing model seems to encourage them to provide even more details and present the information at a lower reading level²³ as compared to the keep-it-all model.²⁴ Since they need to convince the crowd to invest beyond a certain threshold, campaign creators are incentivized to provide more information than under the keep-it-all model. With more information, the crowd should be able to make better decisions and be able to detect issues.

More information may not always help investors; instead, higher quality information should be the focus.²⁵ Campaign creators perform a

23. Douglas J. Cumming et al., *Crowdfunding Models: Keep-it-All vs. All-or-Nothing* (Working Paper, May 31, 2015, version) (using data from Indiegogo, which lets the campaign create elects between a keep-it-all and all-or-nothing model, and finding a correlation between the all-or-nothing model and more information such as a longer and easier to read project description with more pictures and video pitches).

24. The keep-it-all model is one where the fundraiser keeps any funds that he or she raises through the crowdfunding campaign period.

25. Jan Barton & Gregory Waymire, *Investor Protection Under Unregulated Financial Reporting*,

cost benefit analysis in order to decide what information to disclose. As such, a campaign creator will only disclose information that he or she believes increases the probability of securing financing; and he or she will hide information that would hurt its chance of success.

Some information, such as an audited financial statements, is expensive to produce and producing this information does not guarantee that the campaign will succeed. Nonetheless, it helps campaign creators send a strong signal about the belief he has in his project.

With crowdfunding, the costs usually outweigh the benefits because investors are numerous enough that they need not convince every investor, but only a small portion. Traditional investment mechanisms, such as loans from banks, or investments from business angel or venture capital investors, usually involves only a few players; hence, fund-seekers need to send a strong signal to convince even one of these few players. With crowdfunding, fund-seekers need only to convince a small fraction of a large group.

Therefore, campaign creators do not usually disclose costly information unless prompted.²⁶ While none of the equity crowdfunding regulations in Europe requires that the campaign creators disclose such information, the U.S. regulations have a disclosure requirement, which varies depending on the threshold sought.²⁷ U.S. policymakers have recognized that the incentives created by the all-or-nothing model were not sufficient to encourage fundraisers to disclose valuable information.

C. THE CROWD BEARS THE BRUNT OF THE DUE DILIGENCE

Some platforms rely on the crowd to perform its due diligence. Some have questioned the wisdom of the crowd, stating that it rests upon faulty assumptions.²⁸ The crowd has generally three options when participating in crowdfunding: an individual can research a project, generate information,

38 J. ACCT. & ECON. 65, 39 (2004) (empirically finding that companies which reported higher quality information experience lower smaller losses during the 1929 crash).

26. Barton & Waymire, *supra* note 25, at 4 (empirically finding “that managers select financial reporting quality by factoring in investor demand for information”).

27. *Equity Crowdfunding*, *supra* note 2, at 389.

28. Zachary J. Griffin, *Crowdfunding: Fleecing the American Masses*, 4 CASE W. RES. J. L. TECH. & INTERNET 375, 402 (2013) (arguing that the wisdom of the crowd relies on three assumptions: “1) that someone will uncover fraudulent information in business plans; 2) that those same individuals will post the ‘truth’ on the Internet; and 3) that crowdfunding investors will see and read the posts about fraudulent business plans. If any one of these assumptions fails, the whole ‘wisdom of the crowds’ theory collapses.”); Joan MacLeod Heminway, *Investor and Market Protection in the Crowdfunding Era: Disclosing To and For the “Crowd”*, 38 VT. L. REV. 827, 847–48 (2014) (discussing the wisdom and the madness of the crowd and argue that governmental mandated disclosure may be useless depending on the predominant behaviors of the crowd (decentralized, independent, and diverse)).

and add to the crowdfunding project experience; or an individual can consume the information created by others and follow their recommendations; or an individual can do neither, but still choose between participating or not.²⁹

The first type of individual is difficult to believe. If an individual generates information, he must expend time and potentially resources to do so. After generating that information, he can either keep it to himself or share it with other members of the crowd. If a crowd participant invests in a project, he has incentives to promote the project whereas if a crowd participant believes a project is a fraud (or simply bad), he has little private incentive to spend more time and resources to flag it as such. In other words, positive disclosures may be difficult to interpret; negative disclosures are not as frequent as they should be and when they occur, they might be motivated by other reasons. In the end, each member of the crowd may have to rely on their own due diligence, which almost defeats the idea behind the crowd and the all-or-nothing model.

For the crowd to function as a project filter, the same individual needs to promote good projects and detract bad projects in order for their signal to become trustworthy; otherwise, the information produced may be difficult to trust and to distinguish from noise. Arguably, other mechanisms incentivize information sharing in this setting. For instance, an individual can be rewarded for sharing his knowledge about a bad project through enhanced reputation.

One study finds that if individuals have private incentives to promote a campaign, they may encourage riskier projects.³⁰ They found that some crowd members may strategically invest in order to induce others to invest because investing seems to be the clearest endorsement message. In other words, it should not be surprising that if a campaign is a fraud, crowd members participating in the scheme might induce others to invest.

The second type of individual may misinterpret the important information. If an individual consumes information, he expends fewer resources. Even if all the information is valuable, the marginal benefit of consuming additional information decreases; hence, the consumers may focus on the most obvious information without digging deep.³¹

29. See, e.g., Ilan Kremer et al., *Implementing the "Wisdom of the Crowd,"* 122 J. POL. ECON. 988 (2014) (providing a modelization of the interaction of three participation options).

30. Thomas Hildebrand et al., *Adverse Incentives in Crowdfunding* (Working Paper, Feb. 20, 2016), <http://dx.doi.org/10.2139/ssrn.1615483> (finding that in loan-based crowdfunding, rewards have created adverse incentives for group leaders to promote risky loans with higher default rates while other crowd members are not aware of this incentive and follow the leader in their investment).

31. See, e.g., Scott Counts & Kristie Fisher, *Taking it All in? Visual Attention in Microblog Consumption*, 11 INT'L AAAI CONF. ON WEBLOGS & SOC. MEDIA 97 (2011) (discussing the limited attention of consumers and the information characteristics that trigger consumers' actions).

Furthermore, the consumers may struggle to separate valuable information from noise; hence, they may struggle to decide in which project to invest to maximize their welfare.

One study found that initial investors are usually the ones in geographical proximity of a project, i.e., they are able to physically verify the project.³² Considering that location does not affect the information consumption costs, the underlying conclusion is that information consumers (i.e., follow-up investors) base their investment decisions on the judgment of investors who are closely located to the project creator.³³ Since investing is the strongest message, and location permits better fraud detection, information consumers wait for people who can observe the campaign creator to invest before investing themselves.

However, trusting people based on their physical closeness to the individual fundraising can be problematic because those same people maybe the ones promoting a bad or fraudulent scheme. Family and friends, who might provide the seed money for a crowdfunding campaign, may strategically bid and endorse a project or endorse a project for other reasons other than their own benefits.³⁴

The third type of individual may misguide other investors. If an individual does not produce or consume information, he expends no resources. Instead, he or she invests based on “hunches” and the information provided to him by the campaign creator or platform.³⁵ Relying on hunches is an option with crowdfunding because he or she may invest small amounts and diversify his or her risks such that it may not be either privately optimal to generate or consume information. Investors may not even learn from their mistake since most do not repeatedly invest over a year.³⁶

32. Ajay Agrawal et al., *Offline Relationships, Distance, and the Internet: The Geography of Crowdfunding* (Working Paper, Mar. 10, 2011), <http://pages.stern.nyu.edu/~atakos/ResearchCamp/agoldfarbpaper.pdf>.

33. *See id.*

34. Family and friends may consider the wellbeing of the fundraiser when they assess their own benefits. For instance, a parent may invest into the project of a child not because they believe that their invest will turn into profits but because their child receives a head start that can help them accomplish their ultimate goal and happiness: parent’s wellbeing is dependent on their child’s wellbeing.

35. *See supra* note 17 and accompanying text.

36. *See The Best of 2012*, KICKSTARTER, <https://www.kickstarter.com/year/2012> (last visited Mar. 13, 2016) (claiming that of its 2.2 million people who backed projects in 2012, only 570,672 backed two or more); *13: The Year in Kickstarter*, KICKSTARTER, <http://www.kickstarter.com/year/2013> (last visited Mar. 13, 2016) (claiming that in 2013 Kickstarter had three million people pledge, of which “807,733 backed more than one project.”); *The Year in Kickstarter 2014*, KICKSTARTER BLOG, <https://www.kickstarter.com/year/2014> (last visited Mar. 13, 2016) (claiming that in 2014, 3.3 million people backed a Kickstarter project, of which “773,824 people backed more than one project”). Hence about 74% of backers back only one project in 2012, seventy-one percent in 2013, and seventy-seven percent in 2014. These numbers do not account for individuals who come back from year to year and who may be learning by doing; but it also highlights that the majority of individuals are attracted to

This investor type is problematic because by investing, they are generating information for subsequent investors.³⁷ Since information consumers may not wish to rely on this cheap talk provided by information generators, they may focus their attention on the number of committed investors and the commitment level. Since the last kind of investors invest without due diligence,³⁸ they can induce others to invest without filtering projects through other means.

The crowd will be composed of all three types of individuals. If noninformation generators and consumer investors dominate the crowd, free riding becomes problematic.³⁹ These investor types rely on other investors' private incentives to perform due diligence and check the project in depth.

The all-or-nothing model can disturb the order between information gatherers and consumers. In this model, even if non-information generator and consumer investors are the first to invest, they can free ride on future actions. These investor types know that in order to be funded, a project needs to gather a critical mass in order for the funds to be disbursed; hence, they may invest under the assumption that later investors will perform their due diligence and sufficient investors will perform such analysis within the

specific projects.

37. Empirical studies have found that the amount invested provides incentive for others to invest whereas the number of investors may provide a disincentive to invest. Professors Juanjuan Zhang and Peng Liu also found that crowd-lender in an all-or-nothing model take in consideration the investment behavior of previous investors before investing: investors are more likely to bid if they observe that the amount invested is larger and the percent left to reach the threshold is smaller; however, the higher the number of investors observed the less likelihood individuals are to invest because "as decision-makers imitate their predecessors, their own choices become less diagnostic of quality." Juanjuan Zhang & Peng Liu, *Rational Herding in Microloan Markets*, 58 MGMT. SCI. 892 (2012). In *Crowdfunding Creative Ideas: The Dynamics of Project Backers in Kickstarter*, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2234765 (2014), Venkat Kuppaswamy & Barry L. Bayus performed a similar analysis. They focused on the number of investors. They found that the ratio of the cumulative number of backers supporting a project to the total number of backers required to reach project's goal impacts the likelihood of receiving new investments. In reward based crowdfunding, the daily additional average number of investors does not linearly increase over time; instead, it follows a "U" shape: it decreases at first to increase in the later stages of the campaign; once fully funded, this number slowly decreases again.

38. See Wenjing Duan et al., *Informational Cascades and Software Adoption on the Internet: An Empirical Investigation*, 33 MISS. Q. 23 (2009) (finding that online communities can exhibit this behavior where the crowd follows the behavior the adoption decision of predecessor without actively consuming and processing information to make that decision and that crowds when adopting software follow the cascade theory: User reviews have no impact on the adoption of popular product whereas they have an impact on less popular product).

39. Hendrik Hakenes & Friederike Schlegel, *Exploiting the Financial Wisdom of the Crowd — Crowdfunding as a Tool to Aggregate Vague Information* (Working Paper, Aug. 1, 2014 version), <http://dx.doi.org/10.2139/ssrn.2475025> (modeling the crowdfunding investment mechanism in a loan-based crowdfunding setting and shows that some investors have no incentive to gather information in an all-or-nothing model and instead "may still want to make a pledge, trying to free-ride on the information provided by the informed households").

required critical mass.⁴⁰ In the process, they generate information for subsequent investors as well.

In general, the all-or-nothing model leads to only a few individuals carrying out some form of due diligence and too much free riding. Without a critical mass performing due diligence, the all-or-nothing crowdfunding model fails to ensure that the crowd will not lose their investment through fraud or bad projects.

The lack of due diligence is exacerbated in the equity all-or-nothing model because investors will rely on the platforms to perform their own due diligence — particularly if the platform's fee is attached to investment performance. In other words, the all-or-nothing model may encourage the crowd not to be wise, but instead to follow each other.

To counter some of these issues, the Italian regulations have required that at least five percent of the invested funds come from sophisticated investors. The logic being that at least five percent of the investment will come from individuals who will perform a due diligence: Sophisticated investors have the expertise to understand business planning. They make a living out of investing; hence, they have a strong private incentive to perform due diligence.

This logic, however, may not function and these sophisticated investors may not provide this safety net. Nonprofessionals may invest based upon the knowledge that professional investors will perform their due diligence:⁴¹ they rely, once more, on the necessary critical mass of the all-or-nothing model. In other words, this rule may induce even more investment than without it.

Sophisticated investors may also take more risk than they would otherwise because of the small relative amount invested and their capacity to diversify. For instance, in 2014, Stars Up, an Italian based crowdfunding platform, helped raise funds for its first project, Cantiere Savona, a start-up that produces solar-motor boats.⁴² It raised €380,000 from forty-four investors or about €8,600 per investor; however, it took eight business days between reaching the fund threshold and achieving the requisite five-percent-from-professional-investor threshold.⁴³ In this

40. “[T]he sequential nature of investment has the potential of triggering an information cascade. This path dependence suggests that funding success will only reflect underlying project quality if early funders do a careful job screening projects.” Ajay Agrawal et al., *Some Simple Economics of Crowdfunding*, in *INNOVATION POL’Y & THE ECON.* 63 (Josh Lerner & Scott Stern eds., 14th ed. 2014).

41. Crowdfunding opened investing to potential investors without the same kind of expertise. *Equity Crowdfunding*, *supra* note 2, at 386–99 (discussing in more details the different definition of a sophisticated investors and the different relaxation of this rule in the U.K., the U.S., France, and Italy).

42. See *Cantiere Savona SRL*, STARSUP, <http://www.starsup.it/project/cantiere-savona-srl/> (last visited Mar. 13, 2016).

43. Observation made from checking the website regularly.

example, the sophisticated investors were the last to invest; hence, they did not generate information for others and instead just approved a project ready to launch.

Finally, the previous discussion assumes that investors are generally fully rational; however, behavioral economic studies have shown that investors do not always behave entirely rationally.⁴⁴ They may suffer from overconfidence when they put too much stock in the information they derived.⁴⁵ One such issue can arise when crowd members see other investors with private information about the project invest and fail to realize that other reasons besides profit making (e.g., love) can lead to investing. Crowd investors could believe that other individuals have better information than they do and crowd investors could over rely on the crowd's investment behavior more than they really should.

Overfunding can also induce even more overconfidence: crowd investor can interpret overfunding to mean that a project is more successful than the fundraiser believed it would be. Overfunding can aggravate some of the all-or-nothing model flaws. The next section investigates in more details overfunding within the context of the all-or-nothing model.

III. OVERFUNDING ENCOURAGES HERDING AND FURTHER DISTORTS INCENTIVES

Overfunding occurs when a campaign creator allows the crowd to invest beyond the preset threshold and the crowd keeps investing. Overfunding frequently occurs.

In the reward-based setting, one study found that in over 40,000 Kickstarter projects created between 2009 and July 2012, the projects that were successfully funded were also on average funded at 152% of their

44. Behavioral economics has showed that investment behavior may suffer from a number of belief distortions. Nicholas Barberis & Richard Thaler, *A Survey of Behavioral Finance*, in *Handbook of the Economics of Fin.* (G.M. Constantinides et al., eds. 2003) http://faculty.som.yale.edu/nicholasbarberis/ch18_6.pdf (suggesting overconfidence, optimism and wishful thinking, representativeness, conservatism, belief perseverance, anchoring, and availability biases as potential belief disruptors that can affect investor decisions); at 1064 (stating that optimism and wishful thinking occurs when investors overestimate their investment abilities); (representativeness occurs when investors misidentify characteristics and associations and investors make generalization); at 1065 (conservatism occurs when investors underestimate the occurrence of a hypothesis based on an observed event); at 1066 (belief perseverance occurs when investors cling on too long to a belief); (anchoring occurs when an investor's initial belief affects future belief); (availability biases occur when investor's more recent experiences overly affect his belief).

45. Overconfidence occurs when investors "believe that they have information strong enough to justify a trade, whereas in fact the information is too weak to warrant any action." 2 *ADVANCES IN BEHAVIORAL FIN.* 53 (Richard H. Thaler ed., 2005).

threshold goals, overfunded by 51.9%.⁴⁶

In the equity based setting, from data collected on CrowdCube, successful equity crowdfunding campaigns in 2014, were funded at 140% of the target threshold.⁴⁷

Allowing overfunding creates a two-fold problem when deployed with the all-or-nothing model. This section investigates the issues that overfunding creates for the crowd and how campaign creators can take advantage of overfunding.

A. THE CROWD HAS A LOWER INCENTIVE TO INVESTIGATE

Investors incorporate in their decision making process the number of previous investors, the level of investments made, and remaining investments needed to reach the threshold. Empirical studies have found that the ratio of investments made to the goal, strongly influences the decision process of investors.⁴⁸ Furthermore, observing overfunding tends to trigger even more funding than underfunding.⁴⁹

Subsequent investors take into consideration the funding level for two reasons. First, they trust that the critical mass that came before them has performed their due diligence before investing. Overfunding discourages information gathering. Crowd members who are uninformed and unwilling to inform themselves herd around projects that have already garnered enough support.⁵⁰ Second, they are assured that the project will become funded; hence, investing in overfunded projects removes any lingering doubt about the project's outcome and spares the investors the search cost of looking for an alternative investment.

Herding is privately efficient, but it creates problems. First, herding around a few projects leaves fewer resources for other projects, which may remain unfunded. Therefore, overfunding furthers inequality between projects and project creators.⁵¹

46. Ethan Mollick, *The Dynamics of Crowdfunding: An Exploratory Study*, 29 J. BUS. VENTURING 1, tbl. 1 (2014).

47. *Equity Crowdfunding*, *supra* note 2, at 407 Table 5.

48. See Zhang & Liu, *supra* note 37.

49. Lars Hornuf & Armin Schwienbacher, *Funding Dynamics in Crowdfunding* (Working Paper, 2015), <http://ssrn.com/abstract=2612998> (testing the effect of overfunding on the investment incentive in crowd-investment in Germany and finding that “[c]ompared to pre-funding, the number of investments is 2.23 percent larger in the postfunding period”).

50. Agrawal et al., *supra* note 32 (stating that “[f]unding propensity increases with accumulated capital and may lead to herding.”). In *Herding and Contrarian Behavior in Financial Markets*, 79 ECONOMETRICA 973 (2011), Andreas Park & Hamid Sabourian model sequential investment model and describe the circumstances under which investors herding.

51. Initial investments usually come from friends and family. Since the projects that reach their

Second, overfunding takes the project control away from the campaign creator. For reward based crowdfunding, one study found that overfunded projects are more likely to experience delayed deliveries.⁵² Delays with overfunding can be explained in two ways. First, the project funder allowed for overfunding and did not accurately anticipate the demand; hence, since the realized demand exceeds the expected supply, the delivery takes longer than expected. Second, overfunding encourages campaign creators to ex-ante ask for less than they need. If they cannot reach sufficient economies of scale to fulfill the demand, then they may need to find complementary funds whose search delays the project and increases the cost.⁵³

B. CAMPAIGN CREATORS MISINFORMATION STRATEGY

Campaign creators can game the system to induce more investment. Instead of selecting the level of investment they want, they can set their threshold lower. Specifically, campaign creators have a private incentive to select an amount they believe can be collected easily, which then will further induce uneducated investors to follow others.

In other words, the campaign creator may distort the information provided by the would-be investment level: investors cannot trust how much a company requests under overfunding. This creates two problems.

First, empirical studies show that investors are not only affected by the percentage of the goal reached but also by the actual amount required.⁵⁴ Since the campaign creator under-asks for funds to assure that he reaches the threshold and encourages further funding through overfunding, he may end up with less than he needs to succeed. Collecting less than he needs increases his chances of failure. Alternatively, he may elect to complement the initial crowdfunding campaign.

He can complement his campaign by a loan or a subsequent campaign.⁵⁵ For reward-based campaigns, seeking a loan or a subsequent

goal garner more interest, the seed funds from friends and family will perpetuate the initial inequality of project creators: project creators who come from poor background will have poorer friends and family who may not be able to put the seed money sufficient to garner other individual attention; instead, few projects herd these funds that are not linked to a project.

52. Mollick, *supra* note 46, at 12–13.

53. In traditional market, a high demand implies that the company can charge higher prices for the product to the point that supply meets demand; instead, in crowdfunding with overfunding, the whole demand is affected and, since the prices are set, the cost is carried by the campaign creator, who ends up losing money.

54. See Zhang & Liu, *supra* note 37.

55. Ethan R. Mollick & Venkat Kuppaswamy, *After the Campaign: Outcomes of Crowdfunding*

campaign can retard the delivery of goods for the initial reward based campaign.

In the equity context, overfunding does not allow investors to form an accurate belief. Loans decrease the future earning potential of the initial investment because the fundraiser will have to repay the interest whereas the initial funds raised were provided interest free. A subsequent campaign can further put investors at risk⁵⁶ because it can dilute the investors' shares.⁵⁷ Under certain regulations, like in the U.S., crowd investors are locked into their investment for 12 months and may not be able to avoid dilution by reselling their investment or by negotiating antidilution clauses.⁵⁸

Finally, in equity crowdfunding, the crowd cannot accurately anticipate the level of the agency problem⁵⁹ because overfunding creates uncertainties and, hence, unclear rules. While the agency problem cannot be avoided,⁶⁰ potential investors cannot estimate the campaign creator's remaining level of incentive.⁶¹

Overfunding compounds the information asymmetries of investing into new companies or new projects. When an investor considers making a contribution, he or she forms beliefs about the projects. Since investors

(UNC Kenan-Flagler Research, Paper No. 2376997, 2014), http://papers.ssrn.com/sol3/Papers.cfm?abstract_id=2376997 (finding that the majority of campaign creator in Kickstarter sample ended up complementing their campaign by raising further funds from other sources including from following up campaign).

56. Edmund W. Kitch compares investing in securities regulation to gambling and calls for the government to become consistent about its regulations: "If governments are . . . fine . . . [with] citizen . . . gambling, does it make sense to try to prevent them from investing . . . and assuming the risk that their investment is an unprofitable one? Application of the securities acts needs to adapt to modern technologies and contemporary views." Edmund W. Kitch, *Crowdfunding and an Innovator's Access to Capital*, 21 GEO. MASON L. REV. 887, 889 (2014).

57. See, e.g., John S. Wroldsen, *The Social Network and the Crowdfund Act: Zuckerberg, Saverin, and Venture Capitalists' Dilution of the Crowd*, 15 VAND. J. ENT. & TECH. L. 583, 618 (2013) (discussion the issues of dilution as it relates to crowdfunding and arguing that "crowdfunders, like venture capitalists, need down-round antidilution protection against the horizontal risks that subsequent investors represent" and "need standard contractual protection against shares-based dilution").

58. If crowdfunding works, as intended, at providing seed fund to start-ups, then investors should expect some dilution; but, contrary to traditional investors, like business angels or venture capital funds, crowd investors may not be able to negotiate for antidilution clauses. *Id.*

59. The agency problem occurs because the manager/founder of the company does not receive the whole benefits of his work. Eugene F. Fama and Michael C. Jensen, *Separation of Ownership and Control*, 26 J. L. & ECON. 301 (1983) (discussing the issues associated with separating control, which makes the decision, from ownership, which bears the consequences of decisions because transaction costs lead to incomplete contracts).

60. It can, however, be addressed by realigning the incentive of the founders with the investors. For instance, the founder may receive performance incentives (i.e., his salary may be attached to the companies' returns).

61. For instance, the campaign creator can offer twenty percent of the company to the crowd for \$500,000 — the original threshold, but also set an overfunding threshold of forty percent of the company for \$1,000,000 (assuming no dilution). If the founder holds eighty percent or sixty percent of the company, he has a different incentive to work at the margin.

may not have access to facts such as whether overfunding is possible and its level, their beliefs will become inaccurate. Overfunding is not an option in traditional Initial Public Offerings (“IPOs”).

In general, overfunding places the risk of underfunding on the committed investors, whereas, without overfunding the risk is on the campaign creator. Without overfunding, campaign creators may end up being more forthcoming about what they need. They still have an incentive to set the threshold to what they think they can reach, but since they know that over-funding is not possible, these thresholds ought to be more reflective of what they need.

This is not to say that overfunding should not be allowed, because it serves a purpose. For instance, in Italy, the regulations allows investors to change their mind until the threshold is reached within limits;⁶² some level of overfunding may be necessary to protect ventures and entrepreneurs from investor indecisiveness.

Overfunding should, however, be capped, and more importantly be fully disclosed. The amounts (capitalization, amount, etc.) they disclose are important information. Without disclosure, investors will be misled.

Alternatively, a way to shift the risk back on the campaign creator is to allow a cool-off period for investors: a period after the closing of the fundraising but before they are bound by their commitment.⁶³ Unlike an IPO, equity crowdfunding allows for overfunding. Investors should be able to change their mind if they think that the entrepreneurs will keep ninety percent of the equity but because of overfunding, it gets reduced to eighty percent.⁶⁴

IV. REALIGNING INCENTIVES

The all-or-nothing model has drawbacks. The level of due diligence is arguably less than optimal. Participants have diverging incentives to seek or hide information. This section examines how these crowdfunding

participants can be encouraged to realign their private incentives with the optimal level of due diligence.

62. *Equity Crowdfunding*, *supra* note 2, at 391.

63. For instance the Italian regulation allows investors to withdraw their order within seven days of ordering or within seven days of having knowledge of a material mistake that would “influence the decision on the investment.” CONSOB Regolamento n. 18592/2013, art. 13 § 5 & 25 § 2 (June 26, 2013) (It.). Overfunding could constitute such material mistake.

64. The same argument could be made for reward crowdfunding: letting overfunding occur can change the delivery delay (because of miss-calibration) and hence the crowds desire to participate.

A. ONLY SOME PLATFORMS ARE HELD LEGALLY LIABLE

Crowdfunding portals have private incentives to filter bad and fraudulent projects. Crowdfunding platforms can also be further incentivized to filter projects by holding them vicariously liable for the misconduct their platforms enable. Little jurisprudence exists specific to crowdfunding. As such, this section looks at platform liability in other context and draws comparisons.

Crowdfunding is a nascent phenomenon and courts have not ruled on their liability, but they offer similar services as eBay with auctioned goods, Napster with music files, Airbnb with vacation rentals, and even Uber with transportation. These other platforms offer a glimpse into platform liabilities that can help guide crowdfunding platforms. First, this section looks at reward-based crowdfunding and second it looks at equity-based crowdfunding.

1. Reward Based Crowdfunding

In most cases, reward based crowdfunding platforms should not be held liable because crowdfunding platforms only offer a forum where campaign creators meet the crowd. They do not endorse any actions or messages they enable through their forum. They do not make product guarantees nor do they advise the crowd on which project to fund. They allow the two sides to transact.

eBay is a platform where individuals can “display” and sell their unwanted goods to other platform users. eBay was one of the first to litigate this issue of platform liability in the internet context.⁶⁵ In *Gentry v. eBay*,⁶⁶ the plaintiff purchased memorabilia through eBay. The memorabilia turned out to be fake and the plaintiff sued eBay alleging that eBay was in breach of the California’s Autographed Sports Memorabilia Statute⁶⁷ and engaged in unfair business practices under the Unfair Competition Law.⁶⁸ The court ruled that eBay is not a sports memorabilia dealer because it does not control how goods are classified and described and hence the California's Autographed Sports Memorabilia Statute does not apply.⁶⁹ Furthermore, the appellate court also held that Section 230 of

65. For instance, *Tiffany (NJ) Inc. v. eBay Inc.*, 600 F.3d 93, 105 (2nd Cir. 2010) discusses that this Court was the first to apply contributory trademark infringement to an online marketplace and discusses cases overseas.

66. *Gentry v. eBay, Inc.*, 99 Cal. App. 4th 816 (2002).

67. Cal. Civ. Code § 1739.7 (West 2000).

68. Cal. Bus. & Prof. Code §§ 17200-17210.

69. *Gentry*, 99 Cal. App. 4th at 826–28.

Title 47 of the United States Code immunizes eBay because the content of the description was provided by the seller — a third party to eBay — and thus eBay did not directly publish the information and hence did not cause the harm⁷⁰ — which barred the Unfair Competition Law claim as well.⁷¹

As eBay's success continued to grow, it continued to tract the sale of counterfeits. In *Tiffany (NJ) Inc. v. eBay Inc.*,⁷² the court describes the proactive and retroactive measures that eBay has put in place to filter out counterfeits. Tiffany jewelers alleged that eBay infringed its trademark,⁷³ that eBay contributed its trademark infringement,⁷⁴ and that eBay was willfully blind and was not incentivized to filter out counterfeits,⁷⁵ among others allegations. The Second Circuit Court dismissed all three claims against eBay citing eBay's effort to filter counterfeits *ex-ante* and *ex-post* auction. The Court's discussion focuses on the difference between eBay's general knowledge of fraudulent activity and specific knowledge⁷⁶: General knowledge is not sufficient to hold the platform liable; instead, they must have specific knowledge and have failed to act.

Beyond the exchange of tangible goods, other forums have facilitated the exchange of intangible goods. Napster did for copyrighted materials what eBay did for counterfeit products: They allowed peer-to-peer exchange of products. The U.S. Supreme Court ruled on a Napster like application in 2005 in the case of *Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd.*⁷⁷ In this case, the Court ruled that a peer-to-peer software designer was liable for enabling and encouraging the transfer of copyrighted material.⁷⁸ The Court distinguished this case from the previous landmark ruling in *Sony Corp. of America v. Universal City Studios, Inc.*⁷⁹ because even though both technologies allowed for the infringement of copyrighted material, *Grokster* made infringement the objective of the technology, which could be demonstrated through statements.⁸⁰ Since this decision, legal applications of these principles have seen platforms like YouTube⁸¹ evade liability because they performed *ex-post* enforcement when copyrighted media was flagged as infringing.

These two examples show that some crowdfunding portals will be

70. *Id.* at 828–30.

71. *Id.* at 835–36.

72. *Tiffany (NJ) Inc.*, 600 F.3d at 93.

73. *Id.* at 101–03.

74. *Id.* at 103–09.

75. *Id.* at 109–10.

76. *Id.* at 107.

77. *Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd.*, 545 U.S. 913 (2005).

78. *Id.* at 940.

79. *Sony Corp. of America v. Universal City Studios, Inc.*, 464 U.S. 417 (1984).

80. *Metro-Goldwyn-Mayer Studios Inc.*, 545 U.S. at 941.

81. *Viacom Intern. Inc. v. YouTube, Inc.*, 940 F. Supp. 2d 110 (S.D.N.Y. 2013).

able to avoid liability. First, most reward based platforms amount to a presale: the project creators sell products that do not exist yet and promise to send them in the future. Therefore, such platforms can avoid liability for the information posted by campaign creators. Second, if the platforms *ex-post* ban fraudulent projects after the crowd polices and flags a project, then they can avoid liability under certain circumstances. Reward based platforms like Kickstarter that perform *ex-post* enforcement and rely on the crowd to monitor projects may well be doing just enough to avoid liability.⁸²

In the discussed cases, the courts were not swayed by the level of fraud, but simply by the platforms' actions.⁸³ In the past, Kickstarter has witnessed even lower levels of fraud.⁸⁴ While not a factor for courts, Kickstarter will unlikely face liability because it has put in place sufficient filters to either deter or fight frauds.

2. Equity Crowdfunding

Platforms can face different problems if they facilitate the exchange of regulated products or services. Some platforms have come under heavy criticism because they facilitate peer-to-peer transactions in heavily regulated industries and step on the toes of brick and mortar regulated businesses. Equity crowdfunding platforms also facilitate the trading of regulated products and looking at court decisions in other contexts may help draw a comparison.

First, Airbnb⁸⁵ acts as a forum that enables peer-to-peer property rentals for short or long-term stays. In the case of Airbnb, housing rentals must comply with various zoning laws, tax regulations, and other local

82. Kickstarter denies liability for fraud or bad performing schemes. *Trust and Safety*, KICKSTARTER, <https://www.kickstarter.com/trust> (explaining Kickstarter's policy and level of availability, and what actions it takes in case of complaints). *Kickstarter Transparency Report 2014*, KICKSTARTER, <https://www.kickstarter.com/blog/kickstarter-transparency-report-2014> (explaining the actions taken in consequence to complaint about intellectual property right infringements).

83. Andrés Guadamuz González claims "four out of every ten buyers reporting that they have had some sort of problem with their transactions." Andrés Guadamuz González, *eBay Law: The Legal Implications of the C2C Electronic Commerce Model*, 19 *COMPUTER L. & SECURITY REV.* 468, 469 (2003). In *Tiffany (NJ) Inc.* the defendant claims that over seventy-three percent of alleged Tiffany products are counterfeit. 600 F.3d at 99. In *Grokster*, Justice Breyer cites that ninety percent of the Grokster traffic may involve copyright infringement issues and the same could be said in *Sony Corp. of America v. Universal City Studios, Inc.*, 464 U.S. 417 (1984); yet, the defendant in the former was held liable while in the latter, it was not. *Grokster*, 545 U.S. at 951. These examples show that the level of fraudulent activities is not the issue; the issue revolves around the actions undertaken to stop the frauds.

84. In a sample of 381 Kickstarter products, three issued refunds and eleven stopped responding to backers: 3.6% of the projects were incomplete. Mollick Ethan Mollick, *The Dynamics of Crowdfunding: An Exploratory Study*, 29 *J. BUS. VENTURING* 1, 11 (2014).

85. AIRBNB, <https://www.airbnb.com/> (last visited Apr. 13, 2016).

ordinances. Their enforcement has been directed toward platform users and not the platform itself. For instance, in San Francisco, the local authorities have legislated the duration during which a property can be rented;⁸⁶ while it indirectly affects Airbnb, the local ordinance does not regulate the platform itself. In New York, the authorities have been trying to clamp down on the hotel tax evasion that Airbnb enables.⁸⁷ Airbnb itself has not been held liable either and instead the platform makes sure to inform users that it does not hold liability.⁸⁸

Second, Uber⁸⁹ is a platform enabling the peer-to-peer transport of individuals. Uber has not been as successful as Airbnb⁹⁰ at deflecting liability. Uber is being challenged by the drivers using the platform to prove that they are not independent contractors, but instead they were employees of Uber.⁹¹ As such, Uber would be vicariously liable for the actions of the platform users.⁹²

These two examples of peer-to-peer interactions involving regulated services demonstrate that liability depends on old regulations applied to new market places. In the equity context, the sale of equity shares is heavily regulated. Contrary to other previously discussed platforms, U.S. regulators have carved specific rules for equity crowdfunding platforms and hold platforms liable for checking into the campaign creator's background, etc.⁹³

These rules will likely function in the digital world as they do in the

86. Katy Steinmetz, *San Francisco Revamps Airbnb Regulations*, TIME (July 15, 2015), <http://time.com/3958153/san-francisco-airbnb-legislation/>.

87. *Airbnb, Inc. v. Schneiderman*, 44 Misc. 3d 351 (N.Y. Sup. Ct. 2014) (denying a motion to squash a state general attorney subpoena order against Airbnb where the attorney general attempts to obtain information about Airbnb users in an attempt to enforce the Multiple Dwelling Laws).

88. See, e.g., Brittany McNamara, *Airbnb: A Not-So-Safe Resting Place*, 13 J. TELECOMM. & HIGH TECH. L. 149 (2015) (discussing the various disclaimers and the lack of liability for Airbnb and stating that Airbnb avoids liability under § 230).

89. UBER, <https://www.uber.com/> (last visited Apr. 13, 2016).

90. Talia G. Loucks, *Travelers Beware: Tort Liability in the Sharing Economy*, 10 WASH. J.L. TECH. & ARTS 329, 335 (2014) (arguing that Airbnb avoid liability by behaving like a travel agent).

91. In *O'Connor v. Uber Technologies, Inc.*, platform users have brought a class action against Uber because Uber failed to pass on the gratuity that they were allegedly supposed to receive. No. C-13-3826 EMC (N.D. Cal. 2015). Uber argues the drivers are not its employees but instead are independent contractors and therefore not entitled to guarantees that employees receive in California. The District Court ruled that Uber's drivers are its presumptive employees but questions of facts remain to be determined as to whether they are employees. Uber faces similar claims and class action for platform users from Massachusetts and Illinois respectively in *Yucesoy v. Uber Technologies, Inc.*, No. 4:15-cv-00262-EMC (N.D. Cal. 2015) and *Ehret v. Uber, Technologies, Inc.*, No. 14-cv-0113-EMC (N.D. Cal. 2015). Some have expressed doubt about the validity of this argument. See e.g., Brishen Rogers, *The Social Costs of Uber*, 82 U. CHI. L. REV. DIALOGUE 82, 98–99 (2015) (stating that the author is “skeptical, though, that many courts will find Uber drivers to be employees” because most federal and state statutes require the employer to have “the right to control” and Uber fails to control the drivers' working hours).

92. *Search v. Uber Technologies, Inc.*, Civil No. 15-257 (JEB) (DDC 2015).

93. *Equity Crowdfunding*, *supra* note 2, at 389.

analog world. Equity crowdfunding platforms act as IPO underwriters because they publish the information necessary to sell shares publicly. Underwriting a public offering exposes the underwriter to strict liability, but allegedly liable underwriters can invoke a due diligence defense if sued.⁹⁴ Therefore, equity platforms are likely to follow the same rules⁹⁵ — regardless of their online existence — and Section 230 will not immunize equity crowdfunding platforms if the campaign creator posts misleading statements.

3. *Realigning Incentives*

Not all forms of crowdfunding are equal and as such, realigning incentives depends upon the nature of the platforms. The platforms' incentives are the least misaligned of the three crowdfunding participants.

For reward based crowdfunding, it remains too early to say whether reward crowdfunding projects will involve the same level of fraud as eBay⁹⁶ and therefore even require realigning platform incentives to optimally filter projects. Even if reward crowdfunding platforms do not filter projects *ex-ante*, not filtering them *ex-post* exposes them to enough liability to incentivize them to perform some due diligence according to the existing negligence standards discussed above in other platform contexts.

For equity based crowdfunding, platforms have sufficient private and legal incentives to assure that they filter projects; they sometimes have too much incentive to filter projects.⁹⁷ Fraud may not be the biggest threat to crowdfunding; it may be project creators' incompetence. Platforms face no liability if the information disclosed is not misleading, but the projects they post on their website fail due to project creator's incompetence. With new companies, seventy percent of startups fail within five years of their creation.⁹⁸ The example of WiSeed in France tends to show that crowdfunded equity projects fail at a similar or higher rate.⁹⁹ Professional investors would know this but the crowd may not and hence they could be

94. The 1933 Act states that “no person, other than the issuer, shall be liable” unless the issuer can prove that “he had, after reasonable investigation, reasonable ground to believe” at the time of the statements that they were true without material fact omissions or misleading statements. 15 U.S.C. § 77k(b)(3)(A); Joseph Kieran Leahy, *The Irrepressible Myths of BarChris*, 37 DJCL 411, 421–25 (2012) (describing the underwriter's liability and what underwriters have done in order to avoid such liability and satisfy due diligence).

95. To further protect investors, France regulators have required that these platforms have a civil insurance in order to be able to pay if they are held liable. *Equity Crowdfunding*, *supra* note 2, at 396.

96. *See supra* notes 69–70.

97. *See infra* Section IV.C.

98. Garry A. Gabison, *Birth, Survival, Growth, and Death of ICT Companies*, JRC SCIENTIFIC & POL'Y REPORT, EUR Rep 27127 (2015).

99. Lejoux, *supra* note 14.

exposed to risks they do not appreciate.

Platforms as underwriter¹⁰⁰ play an important role but they may be doing too little to assure that equity crowdfunding will not fail. Crowdfunding platforms could be incentivized to filter projects for incompetence through liability (using a gross negligence standard for instance)¹⁰¹ which would lead to a minimum amount of filtering. Such liability could, however, carry a heavy price: Platforms will end up filtering projects the same way as other professional investors do and lose some of the unseen benefits of having the crowd involved who can select and support projects that traditional investors do not find viable.

B. EQUITY FUNDRAISERS SHOULD DISCLOSE PAST PERFORMANCE — WITHIN LIMITS

In the online world, peer-to-peer trust relies on reputation based on feedback from repeated interactions.¹⁰² Following each interaction, peers rate others peer contributions and with each interaction, peers gain status.¹⁰³ Reputation on a given website may take the form of ratings. In the crowdfunding context, campaign creators rarely repeatedly interact with investors like an eBay seller would with purchasers.¹⁰⁴ As such, these ratings have not yet surfaced in the crowdfunding context.¹⁰⁵ Relying on informal means of enforcement may not work in the crowdfunding context.

Campaign creators are legally liable for the information they disclose on a website. If they intend to defraud platform users, realigning their incentive requires increasing the enforcement level. The enforcement level

100. Blakley C. Davis and Justin W. Webb argue that the “relationships with underwriters and/or strategic alliances with established firms can also reduce the liabilities stemming from newness by enabling the venture to essentially borrow legitimacy from the external party.” Blakley C. Davis & Justin W. Webb, *Crowd-Funding of Entrepreneurial Ventures: Getting the Right Combination of Signals*, 32 FRONTIERS ENTREPRENEURSHIP RES. 1, 5 (2012). Javier Ramos, *Crowdfunding and the Role of Managers in Ensuring the Sustainability of Crowdfunding Platforms*, JRC SCIENTIFIC & POL’Y REPORT 46 (2014) (discussing the role that platform managers can play to prevent fraud).

101. Unlike Uber, who may face liability for negligent hiring, platforms do not face liability for negligent posting and do not filter projects for incompetence. A similar standard could be applied to equity crowdfunding.

102. Dara Chevin, *Schemes and Scams: Auction Fraud and the Culpability of Host Auction Web Sites*, 18 LOY. CONSUMER L. REV. 223, 230 (2005) (discussing the importance of feedback about online participant but warns that this feedback is not always reliable).

103. *Gentry*, 99 Cal. App. 4th at 835 (discussing the rating of platform users and finding that platforms are not liable for the rating because they are highly subjective).

104. For instance, Kickstarter states that twelve percent of campaign creators have launched more than one project; leaving eighty-eight percent without repeat interactions. KICKSTARTER, <https://www.kickstarter.com/blog/by-the-numbers-when-creators-return-to-kickstarter> (last visited Oct. 27, 2015).

105. Note that if platforms create a rating for campaign creators, they are opening themselves up to liabilities under *Hanberry v. Hearst Corp.*, 81 Cal. Rptr. 519 (1969) because it could amount to an endorsement (to be distinguished from *Yanase v. Automobile Club of So. Cal.*, 212 Cal. App. 3d 468 (1989), where such endorsement was not offered).

depends on the monitoring, prosecution, and damage levels. Damages include punitive damages and civil and criminal penalties. If defrauding campaign creators are held to a higher degree, their actions will be better deterred, however, campaign creators who intend to defraud the crowd may well be judgment proof and not respond to higher punishments. Holding them accountable more often may be the only recourse.

One way to assure that crowdfunding does not attract fraudulent schemes is by requiring fundraisers to exhibit costly signals that only non-fraudulent schemes can exhibit.¹⁰⁶ In the equity context, these signals usually take the form of filings or disclosure requirements. The U.S. regulation requires¹⁰⁷ such a signal, but has been criticized for the cost it imposes on the system.¹⁰⁸

These past performances or the company's health are assumed to be predictive of future performances, yet, past performances can be a poor predictor of future results. Even if the campaign creator puts good faith effort into the startup, they might fail. Nonetheless, some measures can be put in place to assure that campaign creators carry some liability to ensure they do put good faith effort into the company.

To ensure such efforts, their incentives must not be completely misaligned. First, the campaign creator should always remain the majority equity holder¹⁰⁹ to diminish the potential impact of the agency problem. Aware of this issue, some platforms cap how much equity a campaign can offer.¹¹⁰

Second, platforms can further incentivize fundraisers by divesting the funds in installments after certain milestones (e.g., prototype, mass production, etc.). This tool has been heavily used in the venture capital

106. Ginger Zhe Jin & Andrew Kato, *Dividing online and offline: A case study*, 74 REV. ECON. STUDIES 981 (2007) (modelling and testing the sale of trading cards over the internet and discussing and testing the usefulness of grading service — auditing like services for trading cards — to separate good from bad products).

107. *Equity Crowdfunding*, *supra* note 2, at 389.

108. “The proposed S.E.C. rules, particularly those requiring audited financials and annual reporting, have been criticized as detrimental to crowdfunding because compliance costs have been estimated to consume more than 15 percent of the offering. The result is that few expect the S.E.C. to adopt regulations that allow companies to use crowdfunding effectively.” Steven Davidoff Solomon, *S.E.C.’s Delay on Crowdfunding May Just Save It*, N.Y. TIMES (Nov. 18, 2014, 2:56 PM), http://dealbook.nytimes.com/2014/11/18/s-e-c-s-delay-on-crowdfunding-may-just-save-it-2/?_r=0.

109. As previously discussed in note 46, the agency problem occurs when separating ownership from management. By requiring that the campaign creators have a minimum amount of equity or interest in the company, it supports that they will self-serve and try to advance their interest by putting a good faith effort.

110. For instance, WiSeed limits the capital sale up to twenty percent. WiSEED (Mar. 24, 2016), <https://www.wiseed.com/en/startups/lever-des-fonds>.

context.¹¹¹ To some extent, all regulations have addressed this question because they limit the amount entrepreneurs can raise.¹¹²

Third, the campaign creator could also sign a noncompete agreement to assure that he will not jump ship at the first sign of failure. If the entrepreneur knows that his future is tied to the company for the foreseeable future, he will be more incentivized to give its all for the company.

C. ENCOURAGING A WISER CROWD IN EQUITY CROWDFUNDING

Crowdfunding presents the crowd with unique investment opportunities; but crowdfunding is not without issues. This section discusses how some of these issues can be addressed.

1. Moral Hazard Problems

The crowd likely under-invests in due diligence for five reasons. First, the crowd may not carry out any due diligence because they lack the expertise to understand financial reports¹¹³ and must rely on outside due diligence (i.e., platforms); thus, the crowd will not invest into information it cannot understand. Second, even if they have the expertise, they can free ride upon the due diligence of others¹¹⁴ — including platforms, whose livelihood depends on properly filtering these projects.¹¹⁵ Third, if they have the expertise, the small size of a crowdfunding investments may not justify the cost of performing this due diligence.¹¹⁶ Fourth, the crowd

111. Staged financing has been heavily used in the venture capital context and could help keep the campaign creator's incentives aligned with the investing crowd's incentives. Paul Alan Gompers & Joshua Lerner, *THE VENTURE CAPITAL CYCLE*, Ch. 8 (2004) (discussing stage financing in the context of venture capital). Furthermore, stage financing can limit the impact of bad projects since campaign creators would not receive the funds if they cannot reach the next stage and hence limiting the amount that can be defrauded or lost to incompetent entrepreneurs.

112. Some policymakers have even complained that these limits were too small and talked of increasing them already. Chance Barnett, *SEC To Vote On Title III Equity Crowdfunding Rulings October 30th*, FORBES (Oct. 27, 2015, 8:11 PM), <http://www.forbes.com/sites/chancebarnett/2015/10/27/sec-to-vote-on-title-iii-equity-crowdfunding-rulings-october-30th/>.

113. Nonrational investors may even overestimate their investment abilities. See Barberis & Thaler, *supra* note 44, at 1064.

114. "To the extent that the cost of performing due diligence is high and the individual benefit low, the crowdfunding community may systematically underinvest in due diligence; instead, funders may free-ride on the investment decisions of others, which is feasible to do since funding information is public and funders usually cannot be excluded." Agrawal et al., *supra* note 40.

115. See, e.g., Richard Carter & Steven Manaster, *Initial Public Offerings and Underwriter Reputation*, 45 J. FIN. 1045 (1990) (modeling the impact of underwriter reputations on stock prices following an IPO; finding that the stock of companies whose IPO was underwritten by financial companies with a higher reputation did not experience price run-ups; and concluding that prestigious underwriters associated with lower risks and provide investors less incentive to acquire information).

116. *Id.*

investors can diversify and protect against risks. Finally, investors may be too protected to incentivize their due diligence. When other crowdfunding participants carry the liability, investors may fall into a moral hazard trap¹¹⁷ — they could invest without performing their due diligence because the liabilities of other participants assure that they can recover.

When the platform has a (legal) duty to filter projects, the crowd seems to be less skeptical of the projects. In Europe, crowdfunding platform comparisons provide some evidence that different liability schemes lead to differing crowd behavior. In France, Ulule, a Paris-based reward crowdfunding platform, quotes a success rate of sixty-five percent.¹¹⁸ As a reward based crowdfunding platform, Ulule denies all liability with respect to failed projects;¹¹⁹ yet, “Ulule performs an initial validation when a project is proposed to filter out questionable projects.”¹²⁰ Also in France, WiSeed, a Toulouse-based equity crowdfunding platform, which has a three-layer filtering process, quotes a ninety-four percent success rate after the projects go through the filtering.¹²¹ WiSeed, as a *Conseiller en Investissements Participatifs*, or licensed crowdfunding agent, carries a duty to perform a due diligence and to audit the projects. In the U.K. in 2013, Crowdfunder, a U.K. based reward crowdfunding platform, reported a twenty-three percent success rate,¹²² whereas, in 2014, Crowdcube, its sister equity crowdfunding platform, quoted a fifty-two percent success rate.¹²³ Similarly, Crowdfunder denies any liability¹²⁴ whereas Crowdcube is a licensed professional.

Platform comparisons in France and in the UK show that reward based crowdfunding traditionally has a lower success rate than equity based crowdfunding. A number of factors may explain this difference including the size and nature of the investment. However, liability divergences also

117. Kenneth J. Arrow, *Uncertainty and the Welfare Economics of Medical Care*, 53 AM. ECON. REV. 941 (1963) (explaining that individuals take more risks when they carry insurance because others will pay the costs of their risky activity).

118. Ulule Statistics, ULULE, <https://www.ulule.com/stats/> (retrieved Oct. 26, 2015), <https://web.archive.org/web/20160214231539/http://www.ulule.com/stats/>.

119. “Consequently, Ululers may not seek the Company's liability if Project Owners fail to meet their obligations.” *General Conditions of Use for the Site*, ULULE, <https://www.ulule.com/about/terms/> (last visited Oct. 26, 2015).

120. *FAQ*, ULULE, <http://www.ulule.com/about/faq/> (last visited Oct. 26, 2015).

121. *See Startups Funded per Year*, *supra* note 15.

122. *Grants, loans and crowdfunding — the new funding mix*, CROWDFUNDER, http://www.crowdfunder.co.uk/uploads/biz_dev/special_report_grants_loans_crowdfunding.pdf (last visited Oct. 26, 2015).

123. *Crowdcube Infographic*, CROWDCUBE, <https://www.crowdcube.com/infographic> (last visited Oct. 26, 2015).

124. *Crowdcube Terms of Use*, CROWDCUBE, <http://www.crowdfunder.co.uk/terms-conditions> (last visited Oct. 26, 2015).

need to be considered.¹²⁵ In equity crowdfunding, the crowd relies on filters provided by other crowdfunding participants and do not act according to the expected principles of the *Wisdom of the Crowd*; in reward crowdfunding, the crowd carries the liability.¹²⁶

Two caveats should be made. First, individual investors may not have sufficient incentive to enforce their rights through complicated litigation because they invest only small amounts and coordination costs are high.¹²⁷ Instead, they must rely on the regulator to enforce their rights against platforms and campaign creators.

Second, having platforms bear liability and heavily filter projects could lead to better outcomes (e.g., lower failure rate) than letting the crowd filter projects because platforms employ experienced financial professionals. The counterfactual (whether more platform liability leads to worse outcome) cannot be properly tested.¹²⁸ However, having too many platform based filters arguably deprives society of a number of socially valuable ideas: professional platforms filter projects in a different way than the crowd and these professionals may not find a project viable that the crowd may have supported.

2. A Role for Policymakers and Platforms

Policymakers (and platforms) have attempted to realign the crowd's incentives. Policymakers, like Italian policymakers,¹²⁹ have required that all investors should be offered a cool-off period before the investment becomes final. Having a period where the investors can only further investigate and remove his investment (instead of investing) will allow investors to focus on the information instead of investing out of fear of missing out.¹³⁰

Besides providing time to reflect, some platforms provided potential

125. Comparing country to country may be difficult because of the size of the sites. Ulule performs an initial validation that Crowdfunder does not. Similarly, WiSeed has a three-layer filtering process that Crowdcube does not deploy and hence filters out more projects; Crowdcube helped fund one hundred and five projects in 2014 compared to thirteen for WiSeed. *2014 Review*, CROWDCUBE, <http://www.crowdcube.com/2014/> (last visited Oct. 26, 2015).

126. If platforms (and campaigners) are not held liable, investors carry the risks directly.

127. The small amounts invested through crowdfunding do not provide individual investors with enough private incentive to sue to enforce their rights when they must pay large litigation costs to enforce these rights.

128. This phenomenon is sometimes referred to as the Peltzman effect, which is the effect of having more safety regulations which lead to more risk taking and worse outcomes. *See generally* Sam Peltzman, *The Effects of Automobile Safety Regulation*, 83 J. POL. ECON. 677 (1975).

129. *See* CONSOB Reg. n. 18592/2013, *supra* note 63.

130. Hornuf & Schwienbacher, *supra* note 49 (observing “a small rise in investments during the last three days of the funding period,” an effect that might be due to some investors closely watching the funding dynamics and ultimately fearing that they will no longer be able to invest).

investors with warnings. For instance, Crowdcube provides the following warning:

Investing in start-ups and early stage businesses involves risks, including illiquidity, lack of dividends, loss of investment and dilution, and it should be done only as part of a diversified portfolio. Crowdcube is targeted exclusively at investors who are sufficiently sophisticated to understand these risks and make their own investment decisions. You will only be able to invest via Crowdcube once you are registered as sufficiently sophisticated.¹³¹

Platforms put these warning to protect themselves against liability and therefore, investors assume the risks of investing. The positive externality is that these warnings help inform the crowd about the risks of investing; however, these warnings remain vague and are relegated to the bottom of the page. Further warnings can be read on the site but they require that the visitors actively look for them.

Whether investors read¹³² or understand these warnings is difficult to tell. Considering that crowdfunding targets nonsophisticated investors, these bottom-of-the-page warnings are arguably insufficient considering the risks involved.

Policymakers should encourage these platforms to use these warnings in a more sophisticated way. First, policymakers can draw from the European ePrivacy Directive experience.¹³³ This directive requires that all cookies stored on a computer be approved by the user — similar to an opt-in policy instead of a previously opt-out strategy.¹³⁴ While the application of this directive took different forms in different European Member States,¹³⁵ generally, websites have a tab pop out at the top or bottom of the

131. *Invest in Innovative British Businesses*, CROWDCUBE, <https://www.crowdcube.com/#riskWarningModal> (last visited Oct. 26, 2015).

132. See e.g., Soussan Djasabi et al., *Visual Hierarchy and Viewing Behavior: An Eye Tracking Study*, HUMAN-COMPUTER INTERACTION: DESIGN AND DEVELOPMENT APPROACHES 331 (2011) (discussing the placement of information and reading pattern of website visitors and finding that visitors focus on the top, left, and middle of pages and fixate on face images).

133. Directive 2002/58/EC of the European Parliament and of the Council of July 12, 2002 concerning the processing of personal data and the protection of privacy in the electronic communications sector (directive on privacy and electronic communications) amended by 2009/136/EC.

134. *Id.*; Council Directive 2009/136 art. 2(5), 2009 O.J. (L337) 11, 30 (EC). See also Jonathan R. Mayer & John C. Mitchell, *Third-party Web Tracking: Policy and Technology*, 2012 IEEE SYMPOSIUM ON SECURITY AND PRIVACY 412, 418 (2012).

135. Matthew S. Kirsch, *Do-Not-Track: Revising the EU's Data Protection Framework to Require Meaningful Consent for Behavioral Advertising*, 18 RICH. JL & TECH. 1, 8 (2011) (providing examples of France and the Netherlands to demonstrate different applications of the same EU directive).

screen, which offers visitors two or three options: consent, continue navigating the website as form of consent, and a direct link to the cookie policy. The warning should be displayed in the same way instead of putting them at the bottom of the page.

Second, platforms can help educate the nonprofessional crowd. They can refuse investment until the potential investors fulfill certain actions. They should ensure that the crowd understands the risks involved and the platform could benefit from explaining investment risks to non-professional investors.

Educating investors can take many forms: It can be passive or active. Passive education relies on the investors receiving information. To ensure that these tactics function, platforms can deploy behavioral economic tools to help educate nonprofessional investors. For instance, platform can use social norming.¹³⁶ Through social norming, behavioral economists induce individuals to change their behavior by informing them what other members of the population are doing i.e., the norm. Platforms could present information about investors within a prompt before they can invest. Such a prompt could read: “*The average professional investor spends 2hrs estimating whereas the average non-professional investor spends less than 10 minutes.*”¹³⁷ Messages like those could induce the average investors to do further due diligence.

Active education requires investors’ participation. Before a member of the crowd can invest or even before every investment, he could be prompted to take a test targeted at providing information. The prompt could test the investor's knowledge about a number of risks associated with financial investments. For instance, a prompt for the failure rate of startups could look like: “*Within 5 year of its creation, what percentage of startup fail?: (a) 30%; (b) 50%; (c) 70%.*”¹³⁸ Avenues of education can include due diligence, risk diversity, share dilution, and other concepts that may not be obvious to a nonprofessional investor.

Platforms may not, however, implement this investor filtering of their own volition and may require a push.¹³⁹ Policymakers may provide this

136. See, e.g., Rene Van Bavel, Gabriele Esposito & Tom Baranowski, *Is Anybody Doing It? An Experimental Study of the Effect of Normative Messages on Intention to Do Physical Activity*, 14 BMC PUB. HEALTH 778 (2014) (testing the impact of social norms on the intent of exercise).

137. Note that these times in no way reflect estimations.

138. If done for every investment, the answers’ order and the wrong answers could be changed at every prompt to ensure that the investors do not just always select the same choice but instead read the prompts and learn from them.

139. In crowdfunding, investments are generally small; hence, platforms need a high volume of business — whether through repeat business or economies of scale. Platforms have a private incentive to provide a positive experience: if investors feel that a platform has taken advantage of their lack of experience, then visitors will not repeat their interaction and give the platform bad reviews. Educating investors can enhance the experience. Relying on these incentives and non-regulatory mechanisms has

extra push. Policymakers can protect investors by requiring that they become more educated before they invest.¹⁴⁰ Policymakers, much like the E.U. ePrivacy Directive did, could regulate how much information is disclosed and how it is disclosed — including whether overfunding can occur as discussed above.

Policymakers are already regulating a number of crowdfunding aspects. For instance, policymakers in the U.S. and U.K. have limited the amount of funds each member of the nonprofessional investing crowd can invest.¹⁴¹ These forms of regulations have been described as paternalistic regulations.¹⁴² Policymakers do not trust the crowd to do what is in their best interest and therefore limits their (investment) choices. Restriction *ex-ante* limits the risk to which investors are subjected whereas education encourages investors to take educated risk.

V. CONCLUSION

Crowdfunding offers an avenue for nontraditional projects and non-traditional investors. Harvesting its potential should not come at the expense of exposing nonprofessional investors to dangerous behavior.

Some platforms have already complained that too much regulation could harm the process.¹⁴³ Platforms have some private incentives to ensure that investors do not fall to abusive behavior; however, this incentive remains limited and regulations have a role to play.

Campaign creators have little to no private incentive to ensure that investors benefits. While some entrepreneurs become serial entrepreneurs, crowdfunding is not old enough to test whether reputational safeguard can play a role in this world. Fraud and incompetence are not crowdfunding specific issues: they occurred before crowdfunding existed.¹⁴⁴

not helped in other settings such as the penny stock. *See, e.g.*, Kevin C. Bartels, *Click Here to Buy the Next Microsoft: The Penny Stock Rules, Online Microcap Fraud, and the Unwary Investor*, 75 IND. L.J. 353 (2000) (discussing stock fraud throughout the years, the impact of the internet on penny stock fraud, and potential solutions).

140. Stephen J. Choi & Adam C. Pritchard, *Behavioral Economics and the SEC*, 56 STAN. L. REV. 1 (2003) (discussing various investor biases and arguing that the SEC should educate investors on these biases instead of limiting their investments and requiring disclosure).

141. *Equity Crowdfunding*, *supra* note 2, at Table 2.

142. *See, e.g.*, Colin Camerer et al., *Regulation for Conservatives: Behavioral Economics and the Case for "Asymmetric Paternalism"*, 151 U. PENN. L. REV. 1211 (2003) (discussing the cost and benefits of regulating the whole population because some individuals do not behave entirely rationally and describing such paternalistic methods as requiring and standardizing information disclosure).

143. *See, e.g.*, Ramos, *supra*, note 100.

144. William Galvin, Secretary of the Commonwealth of Massachusetts, *Comment on the Securities and Exchange Commission's Regulatory Initiatives Under the JOBS Act: Title III, Crowdfunding* (Aug. 8, 2012), <http://www.sec.gov/comments/jobs-title-iii/jobstitleiii-121.pdf> (comparing crowdfunding to penny stock and the fraud associated with these kinds of IPOs).

Crowdfunding can, however, facilitate their popularization.

Investors have private incentives to assure the system works; nonetheless, these incentives have limitations. Even if the investors are assumed to be fully rational, they may not perform enough due diligence and when they are not fully rational, they may put too much on certain pieces of information. Investors, and particularly non-professional investors, suffer from a number of biases¹⁴⁵ such as overconfidence about the information they gather or about their own ability. Platforms and policymakers have a place to play in curbing these biases.

Some argue that too many regulations could harm the process more than help them.¹⁴⁶ However, regulations have spurred investment in some occasions because it legitimized the process.¹⁴⁷ At what point regulation becomes too much is difficult to tell, and will likely require a trial and error process.

145. See Hakenes & Schlegel, *supra* note 39.

146. See, e.g., Ethan Mollick, *The Danger of Crowding Out the Crowd With Equity Crowdfunding*, PUB. POL'Y INITIATIVE ISSUE BRIEF 1 (Aug. 2014) (discussing the need to not restrain the investing crowd in order to garner its full potential).

147. *Equity Crowdfunding*, *supra* note 2.