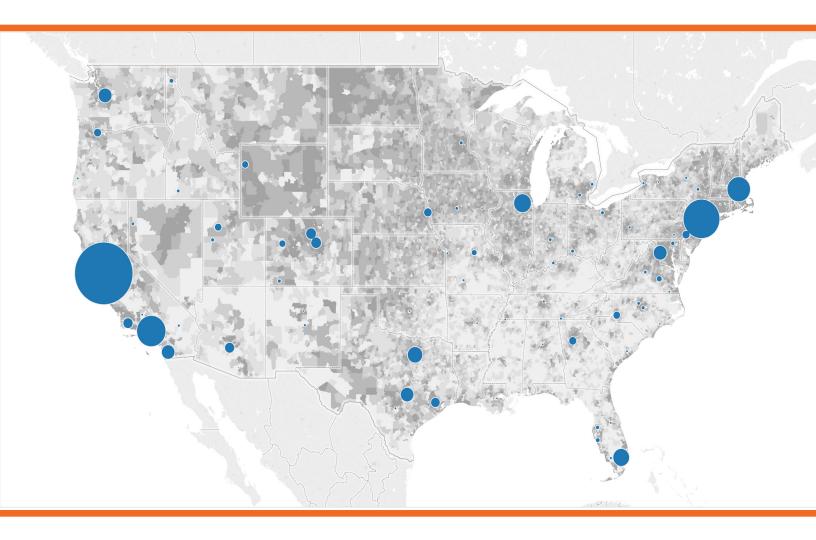


LAB FOR INNOVATION SCIENCE AND POLICY



CAN EQUITY CROWDFUNDING DEMOCRATIZE ACCESS TO CAPITAL AND INVESTMENT OPPORTUNITIES?

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Cover: The map plots equity crowdfunding investment activity across the United States on the leading U.S. Title II platform. The grayscale represents income per capita (a proxy for wealth), and the blue circles reflect the size of online investment by accredited investors in the focal region. (Catalini and Luo, 2016).

Introduction

"Oculus Rift virtual reality headset raised \$2.4 million on Kickstarter [in 2012], no strings attached. Those donors weren't looking for a payout; they wanted to support something they believed in, and maybe get a pair of virtual reality goggles to play with. But when Facebook bought Oculus a year and a half later for \$2 billion in cash and stock, backers wondered: what if I'd asked for equity instead of a poster?"

At that time, however, equity was not an option. Although securities laws had been changed (through Title III of the 2012 Jumpstart our Business Startups (JOBS) Act) to permit equity crowdfunding of startups from all investors (regardless of income or net worth), concerns remained over protecting unsophisticated investors from fraud and subjecting nascent startups and online platforms to disclosure and review requirements.

The U.S. SEC (Securities and Exchange Commission) struggled to craft implementing regulations "stringent enough to protect investors but flexible enough to allow for meaningful fund-raising," Title III stalled and did not take effect. Startups, like Oculus Rift, could only crowdfund equity shares in their companies from accredited investors (i.e. those with more than \$1,000,000 in net worth). On platforms open to the general public, e.g. Kickstarter, "donations" could be offered in exchange for "rewards" but not for the chance to own a stake in the startup and share in its returns. The opportunity to buy a stock in the creation of new and exciting ideas like Oculus Rift remained beyond the reach of ordinary individuals (so-called "non-accredited investors").

<u>That is about to change</u>. On May 16, 2016, Title III will finally go into effect (thanks to new implementing rules adopted last fall by the SEC). Touted as a "potential game-changer" for everyday investors and entrepreneurs alike, Title III could allow —for the first time— everyday investors the opportunity to share in the returns of "the next big idea."

But can equity crowdfunding, under Title III, democratize access to capital and investment opportunities? It is unclear whether the new Title III rules lay the foundation for this to actually materialize, and whether Title III platforms are likely to attract high quality, high growth startups like Oculus Rift. So far, predictions have varied: some hail the Title III rules as ushering in the dawn of a new future ("For the first time in 83 years, all investors—regardless of income or net worth—will now be able to invest in high-potential startup companies") while others dismiss equity crowdfunding for everyday investors as dead on arrival.³

The purpose of this brief is to consider this question through the lens of the emerging field of innovation science. As background, we first provide brief context about equity crowdfunding and the provisions of the JOBS Act that legalize it. Next, we apply a simple economic analysis to evaluate whether equity crowdfunding markets for high-growth startups and non-accredited investors are likely to materialize, and how the U.S. equity crowdfunding market may evolve over time under the Title III rules. We offer this analysis as a tool for U.S. stakeholders and policymakers to evaluate this new market for capital, and also to provide policy guidance for those

in other countries considering whether similar regulatory frameworks might help or hinder innovation in their regions.

Our main conclusions are clear:

- Title III is not likely to provide either everyday investors or high-growth startup founders with significant new markets for funding the "next great idea".
- Title III could lead to novel opportunities for investment and experimentation, opening new avenues of funding for small businesses, means of building a committed user base, and vehicles for marketing and branding.
- Through experimentation with new market design rules, data streams (e.g. integration with verifiable growth metrics) and milestone-based funding, equity crowdfunding platforms could improve the quality and type of startups they are able to attract.
- Regulators should not lose sight of Title II the provision of the JOBS Act permitting *accredited* investors to use equity crowdfunding as an alternative pathway for achieving some of Title III's initial goals. By experimenting with the scope and terms of accreditation, regulators may be able to extend the success of equity crowdfunding enabled by Title II (e.g. on platforms like AngelList and FundersClub particularly when combined with online syndication) to a broader set (but not the complete universe) of investors.

1. Background

Before turning to our analysis of the economics of equity crowdfunding for non-accredited investors, we first briefly review what equity crowdfunding is and what stakeholders hoped to achieve in legalizing it. Next, we provide a high-level overview of the federal JOBS Act, how its two equity crowdfunding provisions changed U.S. Securities laws, and why implementing equity crowdfunding for non-accredited investors proved more complex and controversial than for accredited investors.

a. Equity Crowdfunding and the JOBS Act

"Equity crowdfunding is a mechanism that enables broad groups of investors to fund startup companies and small businesses in return for [an ownership stake in the business,]" typically through an online platform.⁴ It grew out of rewards and donation-based crowdfunding platforms, like Kickstarter and Indiegogo, that had so successfully leveraged the internet to match funders (beyond family and friends) with artistic and technology projects. "Given the success of donation- and rewards-based crowdfunding in the decade up to 2010, it was inevitable that intermediaries in the capital raising profession would try to accomplish similar objectives—matching angel investors using the power of the Internet, disclosing information and deal terms, and facilitating the investment transaction—all online." The hope, and expectation, was that equity crowdfunding would "expand the pool of capital available to companies" and "broaden the diversity of projects that get early stage capital," financing "unknown startup[s] with good idea[s] that traditional funders miss."

Equity crowdfunding in the United States was made possible by the federal JOBS Act, bipartisan legislation intended to encourage the funding of small businesses that was signed into

law by President Obama on April 5, 2012. Much broader in scope than crowdfunding alone, the JOBS Act pulled together multiple bills aimed at economic revitalization, and amended a number of securities laws and regulations with the objective of making it easier for small companies to raise money, stay private and/or go public. Title II of the JOBS Act ("Access to Capital for Job Creators") legalized equity crowdfunding for accredited investors, whereas Title III ("Crowdfunding") legalized equity crowdfunding for non-accredited ones.

b. Title II of the JOBS Act - Equity Crowdfunding for Accredited Investors

Opening equity crowdfunding to accredited investors was not controversial. By definition, accredited investors are required to have at least \$1,000,000 in net worth. They are assumed to be both sophisticated and able to withstand the risk of loss. Moreover, even before the JOBS Act, startups were allowed to issue securities to accredited investors through private placements and without "going public" (under Rule 506 and "Regulation D" of the Securities Act of 1933). What startups weren't allowed to do was advertise the sale of their stock. "Publicly advertising the fact that you were raising investment (general solicitation) was against the law for early stage private companies. Fundraising from the general public was the exclusive domain of larger companies who [could] afford to spend the millions it takes to become listed on stock exchanges like the NASDAQ." This ban on general solicitation prevented startups from promoting their companies and seeking investors via online platforms.

As of September 23, 2013 (when SEC implementing rules went into effect), Title II of the JOBS Act effectively removed the general solicitation ban from Rule 506 private placements and clarified that such placements were *not* public offerings.¹¹ It also exempted online platforms facilitating these offerings from having to register with the SEC as broker/dealers, limiting the regulatory burdens they faced.¹² "Private startups and small businesses [could] raise investment funding publicly- using sites like Facebook or Twitter to help spread the word, and taking in investment online via equity crowdfunding sites..." Many equity crowdfunding platforms for accredited investors now successfully facilitate private placements, including AngelList, FundersClub, WeFunder, Crowdcube, CircleUp, and Crowdfunder.

c. Title III - Equity Crowdfunding for Non-Accredited Investors

History. Opening equity crowdfunding to non-accredited investors proved to be more complex and controversial. There was – and still is – debate over whether everyday investors contribute enough to share in the returns of high-growth startups like Oculus Rift. Some argue that through rewards-based platforms donors often spot the next great idea or consumer product, demonstrating the demand that startups need to secure venture backing. Therefore, as a matter of fundamental fairness, they should be allowed to share in the returns. ¹⁴ Others feel strongly that professional investors bring more to the table (in terms of experience, networks, mentoring, and money), take on more risk, and suffer greater losses. Still others raise concerns that allowing unaccredited investors to participate through rafts of small, individual investments may also impose additional frictions on subsequent rounds of capital (e.g. because of a complex equity structure).

Moreover, at the time the JOBS Act was passed, equity crowdfunding from non-accredited investors required the development of a new regulatory structure. Startups had not been allowed to offer securities to non-accredited investors via private placements in the past, and expanding access to them required additional protections, as non-accredited investors have fewer resources and are assumed to be on average less sophisticated than accredited ones. At the same time, however, care needed to be taken to avoid placing too many disclosure requirements on startups, or they would simply ignore equity crowdfunding as a channel of capital formation altogether. It is no wonder, given these challenges, that drafting implementing rules for Title III took close to three years. ¹⁵

Summary of Rules Adopted. Implementing rules for Title III were adopted on October 30, 2015 and go into effect on May 16, 2016. The rules balance investor protection and investment flexibility by: (1) "permit[ting] individuals to invest in securities-based crowdfunding transactions subject to certain investment limits;" (2) "limit[ing] the amount of money an issuer can raise using the crowdfunding exemption; (3) "impos[ing] disclosure requirements on issuers; and (4) "creat[ing] a regulatory framework for ... the funding portals that facilitate the crowdfunding transactions." Key provisions of these rules are summarized in Table 1.

Table I. Overview: Key Provisions of Title III Rules

Rule	Key Terms
Funding caps on the amounts funders can invest and companies can raise	 \$1 million cap on the amount companies can raise over a 12-month period. \$2,000 limit on the amount that funders can invest if their annual income or net worth is less than \$100,000
Limits on the size of companies and types of vehicles	 Companies with over 500 non-accredited investors and \$25 million in assets are required to go public (and submit to much more stringent reporting and disclosure obligations). Special purpose vehicles, including syndicates, that would aggregate everyday investors into a single fund treated as one shareholder and run by a lead investor are prohibited.
Disclosure obligations for both companies and Title III platforms, which are less burdensome than those required for public offerings	 Companies must disclose how they set the price for their shares, what their financial condition is, who their officers, directors and major shareholders are, and how they plan to use the money they raise. Platforms must inform investors of the type of securities being offered, resale restrictions and investor limits, provide communication channels to permit discussions of offerings, and take certain measures to reduce the risk of fraud
Exemptions for companies and Title III platforms from securities law obligations	 Companies (issuers) seeking to raise between \$500,000 and \$1,000,000 may disclose "reviewed" instead of audited financial statements (which are less costly to prepare). Platforms may facilitate the offer and sale of securities without registering with the SEC as broker-dealers.

Rule	Key Terms
	• Platforms are allowed to take a financial interest in their
	listed offerings to the extent the financial interest is provided
	as compensation for services rendered

Balance Struck. The balance struck by the Title III rules is thoughtful as well as substantive. On the one hand, the maximum downside risk that any individual investor can suffer is limited to a small fraction of his/her income or net worth. In addition, because startups can only raise \$1,000,000 from everyday investors each year, investors are given a chance to see how startups perform before deciding whether to invest again. On the other hand, early-stage ventures and online platforms with limited resources are freed from many of the onerous requirements imposed in traditional securities markets that might otherwise prevent them from offering securities online to everyday investors. Still, early-stage ventures do not get a lifetime pass from rules applying to other issuers. Those that successfully scale must assume more stringent disclosure and investor protection obligations after growing beyond the \$25 million assets threshold. Last but not least, with the option to curate deals and take equity positions in offerings, Title III platforms are given incentives to maximize the number of successful deals listed and align their interests with everyday investors to select high quality ventures.

Even under these rules, however, the question remains whether Title III platforms are likely to attract the next generation of "unicorns" (\$1 billion startups) and offer real opportunities for everyday investors to share in their returns. Moreover, given the relatively small investment limits, will the rules encourage investors to be properly diversified?

2. Economic Analysis

The short answer to both questions is no. While the Title III rules try to carefully balance investor protection and issuer flexibility, economic theory tells us that a number of additional dynamics remain that are likely to fuel adverse selection and steer early-stage ventures with high-growth potential towards other funding channels (including Title II, accredited-investor oriented platforms). This section first briefly reviews the information imbalance that exists between the two sides of this market, and why, even under the new Title III rules, that imbalance will likely prevent equity crowdfunding markets from working efficiently. Next, the section outlines rules, technical features and cultural norms that have been used in rewards-based crowdfunding as well as on equity crowdfunding platforms for accredited investors ("Title II platforms") to address these issues, and considers whether those non-regulatory measures could be used to blunt some of the drivers of potential market failure. Finally, the section considers likely market outcomes.

a. The Information Imbalance and Incentive Deficit

Title III equity crowdfunding platforms will make it possible for funders to invest small amounts of money from potentially geographically remote locations in early-stage ventures in return for equity. In this context, startups will have significantly more information about their products, services and prospects than the crowd. Moreover, funders will lack the incentive (or ability) to independently assess and monitor the ventures in which they invest (particularly along dimensions that are best evaluated via face-to-face meetings). Thus, these everyday investors

will be at risk of losing their investment not only because startups are inherently risky, but also because of the lack of information on their potential. Funders may not be able to spot and will have no means to stop over-exuberance and incompetence, outright fraud, and other sources of potential failure by the startups they invest in.

These dynamics – the drastic asymmetry between the information available to and incentives of funders and startup entrepreneurs – create conditions ripe for what economists call adverse selection and moral hazard problems that can lead to market failure.

Adverse selection is "the process by which the price and quantity of goods or services in a given market is altered due to one party having information that the other party cannot have at a reasonable cost." In equity crowdfunding, neither everyday investors nor startup founders can correct the information imbalance that exists at a reasonable cost.²⁰ Everyday investors typically lack the time, money and expertise to inject themselves into the day-to-day management and oversight of the startups they fund. Nor is it worthwhile for them to develop this expertise given the relatively small amount they are investing. While startup founders have a more precise understanding of what they are doing and their prospects, they have very limited resources to communicate this to investors, prepare extensive disclosures, and generate detailed financial reporting. In the future, one could imagine startups opening up data streams²¹ (e.g. using blockchain technology) to a trusted third party (or even the public), in an effort to reduce information asymmetry and make subsequent investments conditional on reaching key measurable milestones. However, online platforms have not experimented with this type of integration thus far. In the absence of solutions that allow online platforms to transparently track startup performance over time and share that information back with the crowd of investors, it will be difficult for a milestone-based approach (similar to the one adopted by angel investors and venture capitalists to make subsequent investment contingent on reaching key objectives) to take off.

The asymmetry that will exist between startup founders and funders on Title III platforms is something that both groups either already understand or will soon come to realize. As a result, the behavior of each group is likely to change over time in ways that downgrade the types of deals available on Title III platforms. "Funders may discount the value of ventures on the platform" and their willingness to pay because "it is particularly difficult for [them] to assess the true ability of the creator or the underlying quality of the project or venture." In response, "high-quality ventures will avoid raising capital on [Title III platforms] because they cannot achieve a 'fair' price for their equity in that forum." Title III platforms, in turn, will be increasingly used by low-quality ventures to secure funding, and the Title III equity crowdfunding market will tend towards a "sub-optimal equilibrium," leaving (via adverse selection) everyday investors with lower-quality options. ²⁴

There is little question in our view that acute information asymmetry will exist and persist under the Title III rules. The rules' funding caps (which limit the amount that funders can invest and that startups can raise each year) will not give individual investors sufficient incentives to conduct the due diligence and monitoring needed to effectively evaluate ventures.

Nor will startups be able to correct information imbalances at a reasonable cost given the total funds they are permitted to raise through Title III. Moreover, startups with high-growth potential

face an additional, significant disincentive when raising capital on Title III platforms: the requirement to go public when \$25 million in assets is reached. Public listing carries with it a number of significant additional disclosure and reporting requirements. These include: completing a Sarbanes-Oxley filing, paying for and dedicating the man-hours necessary to prepare audited financial statements (both yearly and quarterly returns), disclosing data, preparing and filing annual and quarterly reports. It also opens the companies to pressures for meeting stated earnings and profits targets (ones that a new venture may not be ready for). Furthermore, the highest growth prospects have access to other sources of capital that do not impose these requirements. Why would startups assume these extra obligations and pressures unless they do not have an alternative?

Moral hazard describes "a situation where there is a tendency to take undue risks because the costs are not borne by the party taking the risk." On Title III platforms, once fundraising is closed, funders may lack effective ways to compel startups to perform as promised. By that point, startups will have committed capital, bargaining leverage between startups and investors will shift, and everyday investors will bear the risk of a loss. "[Startups] may behave in a short-term opportunistic manner and not exert the level of effort that was implied at the outset." Startups may also lack discipline in how they spend their funds. Anticipating the potential for this behavior, funders may be deterred from investing through equity crowdfunding in the first place, and the market for Title III platforms may be significantly stunted. ²⁹

Unlike adverse selection, where Title III rules may contribute to the economic drivers of persistent and severe information asymmetry, Title III rules may be more of a wash with respect to moral hazard. On the one hand, yearly caps on how much start-ups can raise may provide an incentive for startups to generate good results (or to meet self-identified milestones) and a disincentive for moral hazard. Startups with better results will be better positioned to raise additional amounts (up to the \$1,000,000 cap) in successive years. On the other hand, Title III rules impose lighter disclosure requirements on early-stage ventures, which might make it easier for startups to perform at sub-optimal levels without scrutiny or detection by everyday investors. Either way, however, because of the relatively low investment limits, investors may not to be able to properly diversify their investments across multiple startups. Given the extremely skewed nature of returns to early-stage entrepreneurial investment (the vast majority of founded startups fail), in the absence of diversification, the most likely outcome for unaccredited investors will be to lose their capital.

b. The Importance of Market Design and Trusted Intermediaries

Equity crowdfunding platforms can also play a key role in shaping the future of Title III markets beyond the SEC rules. Platform rules, self-regulation, technical features and cultural norms will also shape how attractive online platforms ultimately become to high-growth startups and everyday investors. By experimenting with new market design rules, data streams (e.g. integration with verifiable growth metrics) and milestone-based funding, Title III platforms could substantially improve the quality and type of startups they are able to attract.

There are a number of tools (including crowd due diligence, funding thresholds and milestones, additional reporting requirements, and syndicates) used in rewards and accredited crowdfunding

that have proven effective in ameliorating at least some information asymmetry, fraud and moral hazard.³⁰ We anticipate that these methods will be implemented on Title III platforms and that some will be effective in minimizing problems that might otherwise arise. However, we do not expect these measures to be sufficient to counter adverse selection under the existing regulatory framework, especially in light of the fact that the Title III rules prohibit the most promising among them – the use of syndicates.

Reducing Fraud. Information sharing on online platforms (crowd due diligence) may help to curb some instances of outright fraud. While everyday investors have less of a stake, and therefore less incentive to conduct due diligence, there are many more of them. More people bring a wider variety of perspectives and perhaps a greater ability to notice something amiss.³¹ The crowd may be able to spot a project as technically unfeasible,³² stolen or fraudulent. Third-party certification may also emerge as a viable business model, allowing the crowd to rely on an intermediary for certain aspects of the due diligence process.

Minimizing Information Asymmetry.

Additional Reporting Requirements. Rewards-based platforms now require startups to include estimated product delivery deadlines, have a working prototype and make additional disclosures. While these steps are not a substitute for the tacit information about founders' determination, potential and team dynamics that can often only be gathered through personal meetings, they do encourage startups to better manage expectations and de-risk their ideas before asking for funding. Recent empirical evidence from a policy change on the reward-based crowdfunding platform Kickstarter³³ showed that after the technical requirements for posting projects with a technological component increased, the average quality of campaigns improved.

Syndicates. On Title II platforms, accredited investors are increasingly investing in early-stage ventures through syndicates where lead investors bring deals to a crowd of backers. Syndicates enable a better division of labor between different types of investors, provide better incentives for due diligence and for reducing information asymmetry, facilitate diversification.³⁴ Typically, lead investors provide information to potential backers on how many deals they expect to syndicate and typical investment size, committing to share a written investment thesis and disclose potential conflicts of interest for each investment. Backers apply to join a syndicate, agreeing to invest on the same terms as the lead and, importantly, to pay a "carry" (a 5-20% fraction of the profits earned on capital when a startup is acquired or has an IPO). The carry compensates the lead for doing extensive face-to-face due diligence, mentoring and monitoring, and ultimately ensures that the startup makes progress through milestones (aligning the incentives of the syndicate and the startup and reducing moral hazard). By consolidating the backing of multiple, accredited investors into a single "Special Purpose Fund," syndicates also simplify cap tables and streamline investor management for startups relative to direct online investments.³⁵

Unfortunately, however, Title III rules forbid special purpose vehicles like syndicates that might serve as trusted intermediaries between early-stage ventures and everyday investors, and that could counter some of the dynamics fueling adverse selection. Without syndication, everyday investors lack ways to incentivize professional investors to work with or for them, and professional investors are unlikely to welcome others to free-ride on their expertise, resources or deal flow.

Under the Title III rules, it is not apparent how trusted intermediaries will be formed or whether they are allowed at all.³⁶

c. The Bottom Line: Adverse Selection Will Persist

The prohibition against syndicates, in combination with other Title III rules, offer weak counter measures to potential sources of market failure. Moreover, while possibly attractive to some types of small businesses, the rules are currently not designed to encourage high potential, growth-startups to participate in these markets.

Table 2: Potential of Rules/Methods to Minimize Sources of Market Failure

Title III Rules	Adverse Selection	Moral Hazard		
Investment Caps	0	•		
Fundraising Caps	0	•		
Limited Disclosure Obligations	•	0		
Platform Investment	•	•		
Prohibition of Syndicates	0	0		
Platform Terms/Norms				
Crowd Due Diligence	O	•		
Additional Disclosures and Transparency on Performance	•	•		
Milestone-based Funding	•	•		
Key: (poor) ⊙(weak) ⊕(average) ● (strong)				

Taken together, Title III's funding and investment caps (which leave investors with insufficient incentives to conduct due diligence and monitoring and early-stage ventures unable to correct information imbalances at a reasonable cost), requirement for issuers to go public at \$25 million in assets (which could subject early stage ventures to the requirements, costs and pressures of public listing well before they would have to incur them on Title II platforms), and prohibition of investment through syndicates (which deprives everyday investors of the ability to develop and work through trusted intermediaries), leave few incentives for the highest-quality innovation-driven startups to raise capital on Title III platforms. As a result, over time, offerings listed on Title III platforms are increasingly likely to be those without high growth ambitions – small-to-medium-sized enterprises like art galleries, coffee shops and restaurants, not high-tech startups like Oculus or Pebble. Startups with the potential to grow into unicorns will seek out professional investors and avoid Title III platforms altogether, or use reward-based crowdfunding where appropriate to raise non-dilutive capital. As the founder of WeFunder put it, listings on Title III platforms will be: "Adverse selection at its finest."

3. Opportunities Remain for Experimentation with New Forms of Entrepreneurship

The fact that adverse selection will persist does not mean that the Title III rules are ill advised or counter-productive. Instead, these rules may open new avenues for small to medium sized businesses to raise funding at a lower cost of capital, engage community and engender brand loyalty. Title III may also facilitate the funding of civic initiatives that would otherwise not materialize.

Exactly how equity will broaden opportunities for engaging the crowd is difficult to predict, but this new avenue for investment provides a fertile ground for experimentation. For example, it may present opportunities to bundle rewards and ownership. Adverse selection will not dampen the desire of everyday investors to share in the passion behind or build community around creative ideas or causes. The success of Kickstarter and other rewards-based crowdfunding platforms show the value that backers get from early access to products, recognition for discovering innovations, and participating in a new venture's community of supporters. Title III platforms will offer startups a new way to develop a committed user-base, generate a strong signal of demand, and sell shares that are otherwise difficult to trade in traditional markets for early-stage capital.³⁹

Title III platforms may also create a new source of financing for small and medium sized entities. Their competition with traditional lending channels such as retail banks and credit cards could lower the cost of capital for this important segment of the economy, especially when combined with new technical solutions that improve the information flow between investors and businesses (e.g., performance data). It might also catalyze the launch of new forms of entrepreneurship and businesses tightly tailored to local community needs.

We may also see entirely new forms of crowdfunding arise as communities explore ways to fund civic initiatives and public goods. Title III platforms might be able to present offerings outside the orbit of traditional funding channels with the potential for higher social impact (albeit lower potential for financial return). +POOL is an illustrative example. An initiative, launched by two successful Kickstarter campaigns, +POOL aims to build the world's first water-filtering, floating pool in New York's rivers. 40 Through crowdfunding +POOL obtained the support of over 4,590 backers. While some have fretted that the pool may face significant regulatory obstacles to secure the permits needed for construction and operation, its large crowd of backers sends a strong signal to regulators that the project represents something the local community cares about. Once more, the ability of crowdfunding to surface market demand at a low cost is likely to change the dynamics of how public goods are provided.⁴¹ Title III platforms will enable projects like +POOL to offer equity. Perhaps doing so would give backers an opportunity to more closely align with a project's long-term success and raise funds for projects that require substantially more capital ex-ante. More generally, the chance to share in the ownership may help support projects that do not lend themselves as well to rewards-based platforms. Title III may open significant, and as yet largely untapped, capital markets for social impact, ultimately funding ideas and projects that traditional investors eschew.

4. The Possibility of Extending Title II

Still, the question of fundamental fairness that shadows rewards-based crowdfunding remains. Backers of wildly successful Kickstarter campaigns (like Oculus and Pebble) not only provide startups the money they need to build prototypes and scale, but also generate the demand signal that professional investors later rely on when choosing which ventures to fund. Title III was billed as a way for everyday investors to share in the returns of the potential unicorns they help to identify. Our analysis of the Title III rules make plain such opportunities are unlikely to materialize on Title III platforms due to information asymmetry and adverse selection.

Perhaps, instead, regulators might consider experimenting with the scope of the investor accreditation definition used by Title II platforms in an effort to allow a wider range of investors to benefit from their listings. In the UK, where equity crowdfunding has been available for multiple years, the Financial Conduct Authority (FCA) has maintained a substantially more flexible approach to its regulation, and has allowed platforms to accept investments from broader segments of the population. According to the regulator's most recent evaluation of the regime, ⁴² the UK rules have been successful so far not only in letting the market grow and experiment, but also in protecting and educating retail investors.

By all accounts, enabling online platforms to offer equity to accredited investors under Title II of the JOBS Act has been a success in the U.S. Less in need of protection against losses because of their high annual income or net worth, accredited investors are neither limited in terms of the amount they can fund nor prohibited from joining syndicates. They, along with Title II platforms, have developed mechanisms for reducing fraud, overcoming information asymmetry, and leveraging the expertise and networks of lead investors. Title II has thus provided accredited investors with a wider range of investment opportunities, and facilitated better matches between angel investors and early-stage ventures than would otherwise have occurred. Further, through online syndication, Title II has the potential to change not just equity crowdfunding, but the broader venture capital industry as well, increasing access to capital and competition for high quality startups. We see this already beginning to happen in some cases, where venture capital firms have either directly co-invested with equity crowdfunding syndicates, or followed with larger, follow-on rounds.

Currently, to be considered accredited, an investor must have a net-worth of more than \$1 million (excluding their primary residence) or have an income of at least \$200,000 each year for the last two years (if single) or \$300,000 combined (if married) with the expectation of the same or greater income in the current year. He ligibility to invest via Title II platforms could be extended to investors just below current accreditation thresholds. More importantly, the SEC might experiment with new classes of accreditation (e.g. based on investment education or training), and allow for syndication to emerge on Title III platforms.

Conclusion

Whereas Title III of the JOBS Act may not democratize the funding of and returns to high-growth startups, it could still have a positive impact on the economy. Small sized businesses and civic initiatives may use Title III platforms to build a community around their products and projects and develop new forms of marketing and branding that extend beyond what is currently possible through reward-based crowdfunding. Backers will have more options to support businesses and social impact initiatives that they care about, while at the same time sharing in their long term financial returns. Nor should everyday investors, platforms or the SEC give up on the goal of allowing more people to share in the returns of high-growth startups. Instead, the SEC should actively investigate how the market design mechanisms that have improved the online platforms used by accredited investors can be ported to non-accredited backers. At stake, is the ability of crowdfunding to not only fund more of the same entrepreneurs and ideas typically funded through traditional channels, but to also fundamentally change how society allocates capital to ideas. Better regulation and market design could remove frictions in the flow of early-stage capital, and expand the number of entrepreneurial experiments the economy is able to sustain at any point in time.

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¹ Adrianne Jeffries, "If you back a Kickstarter project that sells for \$2 billion, do you deserve to get rich?", The Verge, 3/28/2014, http://www.theverge.com/2014/3/28/5557120/what-if-oculus-rift-kickstarter-backers-had-gotten-equity.

² Historia Chapters to U.S. Scaurities Laws Open New Market for Patril Laws Const. 11/2/15

² Historic Changes to U.S. Securities Laws Open New Market for Retail Investors, Crowdability, 11/2/15, http://www.crowdability.com/article/title-iii-has-passed#.VkoPcvmrShc.

³ See, e.g., Stacey Cowley, SEC Gives Small Investors Access to Equity Crowdfunding, 10/30.2015, NYT DealBook, http://www.nytimes.com/2015/10/31/business/dealbook/sec-gives-small-investors-access-to-equity-crowdfunding.html; Historic Changes to U.S. Securities Laws Open New Market for Retail Investors, Crowdability, 11/2/15, http://www.crowdability.com/article/title-iii-has-passed#.VkoPcvmrShc (For the first time in 83 years, all investors—regardless of income or net worth—will now be able to invest in high-potential startup companies."); http://www.crowdfundinsider.com/2015/11/76979-wefunder-to-sec-title-iii-critical-flaw-harms-investors/

⁴ https://en.wikipedia.org/wiki/Equity_crowdfunding

⁵ http://www.freedman-chicago.com/ec4i/History-of-Crowdfunding.pdf at 5.

⁶ http://mitsloan.mit.edu/newsroom/articles/the-risks-and-rewards-of-equity-crowdfunding/

⁷ https://en.wikipedia.org/wiki/Jumpstart_Our_Business_Startups_Act

^{8 17} CFR §230.501, http://www.ecfr.gov/cgi-

bin/retrieveECFR?gp=&SID=8edfd12967d69c024485029d968ee737&r=SECTION&n=17y3.0.1.1.12.0.46.176

⁹ https://www.sec.gov/spotlight/investor-advisory-committee-2012/investment-advisor-accredited-definition.pdf (revisiting assumption that accredited investors do not need the 1933 Act protections in order to be able to make an informed investment decision and protect their own interests.)

 $^{^{10}\} http://www.forbes.com/sites/chancebarnett/2013/09/23/the-crowdfunders-guide-to-general-solicitation-title-ii-of-the-jobs-act/$

https://wefunder.com/post/36-the-sec-just-voted-to-lift-the-ban-on-general-solicitation

¹² See http://www.mofo.com/~/media/Files/PDFs/jumpstart/120326-The-JOBS-Act.pdf)(http://www.mofo.com/~/media/Files/PDFs/jumpstart/120416-PLI-Quick-Guide-JOBS-Act.pdf. However, where general solicitation is used, issuers and platforms are required to take steps to verify each investor's accredited

status. Id. *See also* http://www.mofo.com/~/media/Files/PDFs/jumpstart/120416-PLI-Quick-Guide-JOBS-Act.pdf)

13 http://www.forbes.com/sites/chancebarnett/2013/09/23/the-crowdfunders-guide-to-general-solicitation-title-ii-of-

- ¹³ http://www.forbes.com/sites/chancebarnett/2013/09/23/the-crowdfunders-guide-to-general-solicitation-title-ii-of-the-jobs-act/
- Just to put this in perspective, if Kickstarter backers of Oculus Rift had been allowed to buy shares in the company, for example, "a \$300 investment would have netted \$43,500, a 145x return. Adrianne Jeffries, "If you back a Kickstarter project that sells for \$2 billion, do you deserve to get rich?", The Verge, 3/28/2014, http://www.theverge.com/2014/3/28/5557120/what-if-oculus-rift-kickstarter-backers-had-gotten-equity.
- ¹⁵ Historic Changes to U.S. Securities Laws Open New Market for Retail Investors, Crowdability, 11/2/15, http://www.crowdability.com/article/title-iii-has-passed#.VkoPcvmrShc.
- 16 http://www.sec.gov/news/pressrelease/2015-249.html
- ¹⁷ More generally, economic theory tells us that, without any rules or regulations, equity crowdfunding markets for non-accredited investors are likely to fail. Not only is information asymmetry between founders and funders acute, but adverse selection, moral hazard and free-riding are likely to abound as well. Scared of incompetence or fraud by startups, potential funders may either not invest, or take a wait and see approach. As a result, value-enhancing transactions between high-quality startups and everyday investors may never occur.
- ¹⁸ See Agrawal, A., C. Catalini and A. Goldfarb, 2014, "Some Simple Economics of Crowdfunding," in J. Lerner, and S. Stern, eds., *Innovation Policy and the Economy*, Vol. 14, p. 63-97, Chicago, IL, USA: University of Chicago Press.
- https://www.boundless.com/economics/textbooks/boundless-economics-textbook/challenges-to-efficient-outcomes-15/sources-of-inefficiency-83/asymmetric-information-adverse-selection-and-moral-hazard-318-12415/
 Agrawal, A. C. Catalini, and A. Goldfarb, "Are Syndicates the Killer App of Equity Crowdfunding?" *California Management Review* Vol. 58, No. 2 (Winter 2016).
 Startups could reveal aggregated statistics from their daily accounting, user growth and engagement metrics,
- ²¹ Startups could reveal aggregated statistics from their daily accounting, user growth and engagement metrics, orders etc. Similarly, they could have experts evaluate and certify different parts of their business model or technology. Whereas certification of crowdfunding projects is in its infancy, new approaches are emerging (e.g., https://www.dragoninnovation.com/services/certification).
- ²² Agrawal, Catalini, Goldfarb (2014).
- ²³ *Id*.
- ²⁴ *Id*.
- ²⁵ See, e.g., <u>http://www.cnbc.com/id/47979116</u>
- ²⁶ See, e.g., http://fortune.com/2011/03/17/why-startups-dont-go-public-anymore
- https://www.boundless.com/economics/textbooks/boundless-economics-textbook/challenges-to-efficient-outcomes-15/sources-of-inefficiency-83/asymmetric-information-adverse-selection-and-moral-hazard-318-12415/
 Rgrawal, Catalini, Goldfarb (2014).
- ²⁹ See Agrawal, Catalini, Goldfarb (2014).
- ³⁰ Avoiding Collection Action Problems: Both reward-based and Title II crowdfunding platforms rely on the provision point mechanism to solve collective action problems: Projects and ventures only receive money if a funding threshold is reached or surpassed within a certain period of time. Not only does this design discourage potential investors from taking a wait and see approach, but it also protects early investors from having to fund ventures that are unable to raise enough money to be viable. We expect that emerging Title III platforms will likewise develop and rely on similar provisions.

 ³¹ *Id.*
- ³² For example, Healbe's campaign on Indiegogo received a great deal of scrutiny after people started questioning the ability of the device to directly measure glucose levels in the bloodstream: https://pando.com/2014/03/20/on-indiegogo-a-miracle-health-device-raises-730k-and-a-whole-load-of-red-flags/ and
- http://www.crowdfundinsider.com/2013/06/17421-watch-kickstarter-fraud-foiled-by-kickstarted-documentary-team/
 ³³ Agrawal, A., C. Catalini, A. Goldfarb, and H. Luo, "Slack Time and Innovation." *National Bureau of Economic Research Working Paper No. 21134* (2016).
- ³⁴ Agrawal, A., C. Catalini, and A. Goldfarb, "Are Syndicates the Killer App of Equity Crowdfunding?" *California Management Review* Vol. 58, No. 2 (Winter 2016).
- ³⁵ Agrawal, Catalini and Goldfarb (2016).
- ³⁶ Some may counter that the ability for platforms to curate, and take equity stakes in, the offerings they facilitate will enable platforms to evolve into trusted intermediaries and mitigate the need for syndicates or other types of

special purpose funds. So long as Title III rules permit platforms to substantially scale the way they curate, select and certify of startups (e.g., through machine learning, new sources of data or a qualified crowd of experts), then platforms will have the incentive to experiment with methods, such as these, to reduce uncertainty over startup quality (and information asymmetry), and differentiate themselves based on offering performance. While potentially helpful, we do not anticipate that such steps would be sufficient to avoid adverse selection altogether because the problem of coordinating rafts of unsophisticated investors and crowded cap tables would persist.

37 Indeed, AngelList's announcement that it "is launching a new off-shoot company labeled Republic to allow non-

³⁷ Indeed, AngelList's announcement that it "is launching a new off-shoot company labeled Republic to allow non-accredited investors the opportunity to support SMEs," signals that it expects Title III platforms to primarily serve small-to-medium-sized businesses (as opposed to high-potential-growth startups).

http://www.crowdfundinsider.com/2016/05/85477-huge-angellist-moves-into-title-iii-crowdfunding-with-republic/

38 http://www.crowdfundinsider.com/2015/11/76979-wefunder-to-sec-title-iii-critical-flaw-harms-investors/

- 8tracks may be a good example. A subscriber-based, streaming radio service, 8tracks has differentiated itself from Pandora, Spotify, Apple Music and others "by having real, living, breathing people compile the music playlists." http://www.crowdfundinsider.com/2016/02/81502-8tracks-internet-radio-startup-grabs-25-million-in-investor-interest/. In January of this year, 8tracks reached out to its user base to ask for indications of interest in investing once equity crowdfunding opens on Title III platforms. It appears that 8tracks wanted to both deepen the commitment of its user base and generate a strong signal of demand. As 8tracks CEO & founder, David Porter, explained to subscribers, "8tracks was founded to showcase the passion and talent of people who care about great music and wish to share it, delivering the perfect playlist for a listener's taste, time and place. As our DJ's and listeners have both created and promoted this infinite soundtrack, so too should they have the opportunity to finance it by taking a stake in the company while we are still relatively small. ... This isn't an offer to invest, and as of now you still can't buy shares. I'd simply like to understand if you would be interested in participating." Email from David Porter, CEO & founder, 8 tracks, to users, 1/27/2016 (emphasis in original). To date, over 30,000 people have indicated interest in investing \$1,000 a piece in 8tracks for a total of approximately \$30 million. http://techcrunch.com/2016/03/22/8tracks-is-raising-a-30-million-crowdfunding-round/. Notably, however, the new Title III rules don't permit that to happen. These rules can be purposed to a the price part has price and end investors of the purpose an
- Title III rules don't permit that to happen. These rules cap investment in 8tracks by unaccredited investors to \$1 million/year. Depending on the price per share, and any limits on the number of shares sold to each investor, either a lot of willing investors will not be able to participate, or their fraction of ownership (and ability to share in returns) will be very small. 8tracks has raised money through venture capital channels in the past. They will likely enhance their ability to do so again via this demonstration of demand.

⁴⁰ "Like a giant strainer dropped into the river, POOL+ is designed to clean up to a half a million gallons of water every single day," give New Yorkers a safe place to swim, and connect citizens with their natural environment. www.pluspool.org/about/.

www.pluspool.org/about/.
41 Through engraved tiles, +POOL now offers backers the opportunity to "own a piece of the pool" (http://www.pluspool.org/tilebytile/), creatively translating a Kickstarter reward into a proxy for community ownership.

⁴² https://www.fca.org.uk/static/documents/crowdfunding-review.pdf and http://www.fca.org.uk/your-fca/documents/policy-statements/ps14-04 and

⁴³ http://www.wsj.com/articles/coming-soon-from-china-a-400-million-bonanza-for-u-s-startups-1444622462

⁴⁴ https://en.wikipedia.org/wiki/Accredited investor#United States.