## Equity crowdfunding: New evidence from US and UK markets

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## Equity crowdfunding: New evidence from US and UK markets

## Abstract

This paper offers insights into 3,576 initial equity crowdfunding offerings in the UK and US markets from 2012 to 2019. We investigate the factors influencing three outcomes: the success of the offering, the fundraising target, and matching between entrepreneurial ventures and crowdfunding platforms. In all markets, higher equity retention by original entrepreneurs positively affects the chances of success of the offerings and amount of capital raised. However, there are differences across platforms. Patents do not have a significant impact in entrepreneur-led platforms, while they matter in the UK investor-led platform SyndicateRoom. By separately observing the capital demand set by entrepreneurs and the capital supply by investors, we find that entrepreneurs in financial centers set higher targets in UK markets. There is no difference in the amount of capital raised by female and male entrepreneurs, conditional on female founders setting lower targets in UK markets.

**Keywords**: equity crowdfunding, entrepreneurial finance, US, new ventures, startup financing. **JEL codes**: G23, G24, L26, M13

### 1. Introduction

Equity crowdfunding is changing the entrepreneurial finance ecosystem, with the number and the amount of capital raised continuously increasing. Equity crowdfunding markets allow firms to raise capital from a crowd of small investors, who may "get the same kind of deals that up to this point only select investors have gotten that have been customers of some of the best-known investment banking firms."<sup>1</sup> Unlike venture capital, where entrepreneurs attract money from a small number of professional investors through a negotiated process, equity crowdfunding offerings are open to the broad public (Block et al. 2020). Once an offering is listed on a crowdfunding platform, the price is fixed and the ownership structure is solely defined by investors' interest in the firm's securities (Cumming, Meoli, and Vismara 2019b). Unlike initial public offerings (IPOs), where institutional investors are allocated the largest fraction of shares (Aggarwal, Prabhala, and Puri 2002), equity crowdfunding is mostly associated with small investors investing limited amounts of capital. Hence, equity crowdfunding creates a new investment environment, providing an opportunity to explore the challenges that entrepreneurial ventures face in raising capital from new points of view.

Our insights on equity crowdfunding are mainly based on evidence from the United Kingdom (UK) (e.g., Cumming, Meoli, and Vismara 2019a; Ralcheva and Roosenboom 2020; Signori and Vismara 2018; Vismara 2016; Walthoff-Borm, Schwienbacher, and Vanacker 2018; Walthoff-Borm, Vanacker, and Collewaert 2018). Few works have been published on equity crowdfunding markets in the United States (US), with two notable exceptions. Johan and Zhang (2020) investigate investors' preferences in perceiving qualitative business information. By formulating a contextual analysis on equity crowdfunding offerings, they find that a more detailed qualitative business description is associated with a higher chance of offering success and a larger amount of capital raised. Moreover, they show that entrepreneurs' excessive use of promotional language is rewarded by ordinary investors, while sophisticated investors are more resistant to promotional language. Stevenson et al. (2020) perform an inductive study to explain the reasons some entrepreneurs prefer equity crowdfunding even when traditional corporate finance markets are accessible. Their model motivates the preference for equity crowdfunding in terms of perceived funding fit, defined as entrepreneurial perceptions about the suitability of funding types for his or her entrepreneurial venture at its current stage of development.

The limited attention devoted to the US equity crowdfunding market is partly explained by the different approaches taken by regulators. While equity crowdfunding was treated early on as a

<sup>&</sup>lt;sup>1</sup> This quotation is a statement of Sen. Mark Warner from 158 CONG. REC. S1689 (Mar. 15, 2012)

regulated activity in the UK under the Financial Services and Markets Act 2000, the US Congress passed the Jumpstart Our Business Startups (JOBS) Act only in 2012 to direct the Securities and Exchange Commission (SEC) to make new regulations (Cummings et al. 2020). Equity crowdfunding regulation was only fully adopted in May 2016, when Regulation CF (Title III of the JOBS Act) came into force, allowing ventures to raise capital through securities that are equally available to all types of investors. Our study brings equity crowdfunding to the attention of corporate finance scholars by examining the universe of equity crowdfunding offerings in the UK and the US.

First, the equity crowdfunding market allows us to investigate whether signals—such as equity offered (e.g., Leland and Pyle 1977) and patents (e.g., Farre-Mensa, Hegde and Ljungqvist 2020)—by entrepreneurs in traditional corporate finance markets work when raising money from small investors. When evaluating a new venture, investors face significant information asymmetry with respect to the entrepreneurs involved and its prospects. In public offerings, the amount of equity capital retained by existing shareholders is typically considered a signal that can reassure prospective investors. Leland and Pyle (1977) argue that entrepreneurs' willingness to invest in their own projects signals project quality. As entrepreneurs know more than external investors about the quality of the project, investors observe owners' financial commitment to obtain information about an unknown firm's value. Entrepreneurs who are confident that the project will generate future cash flows are expected to retain as much equity as possible. Hence, the amount of equity offered is considered a signal to external investors, and a smaller percentage of equity offered is believed to indicate higher quality. In the equity crowdfunding context, potential investors can easily observe the percentage of equity offered as this information is available online for all offerings listed on crowdfunding portals.

Relatedly, patenting activity may reflect the quality and extent of a firm's innovation. As such, it can reduce information asymmetries between external investors and entrepreneurial ventures. Several studies used patenting activity to measure corporate innovation (e.g., Bernstein 2015; Chemmanur, Loutskina and Tian 2014; Hellmann and Puri 2000). By analyzing patenting behavior in the context of venture capital, Hellmann and Puri (2000) find that innovator firms are more likely to obtain venture capital financing than imitator firms. More recently, Farre-Mensa, Hegde, and Ljungqvist (2020) illustrate that a startup's first patent increases the chances of securing venture capital funding over the next three years by 47% and the chances of raising funding from public investors through an IPO by 128%. The equity crowdfunding context offers a suitable environment to examine the role of patenting activity at a very early stage of the venture cycle.

Second, equity crowdfunding markets are also of great interest in corporate finance due to the possibility of separating demand from the supply side of equity finance, which is difficult to achieve

in traditional corporate finance markets. Unlike traditional entrepreneurial finance markets such as venture capital investments, where scholars can observe the matching between investors and entrepreneurs only when they occur, in equity crowdfunding, we can distinguish between the demand side, represented by entrepreneurs setting how much capital to raise, and the supply side, determined by investors making decisions on which venture to finance and by how much. Entrepreneurs set an offering target at the beginning of the equity crowdfunding offering, thereby fixing the amount of capital to be raised. This decision takes into consideration the tradeoff between the need for capital formation (i.e., higher targets allow more money to be raised) and the risk of not attracting enough capital to reach the target (which signifies an unsuccessful offering with no money raised). The context of equity crowdfunding therefore disentangles the determinants of the offering target, a choice made by entrepreneurs, from the determinants of the offering success, a choice collectively made by investors.

Third, equity crowdfunding markets are also of interest to corporate finance scholars because of platform heterogeneity (Cumming, Vanacker, and Zahra 2019; Cumming, Johan, and Zhang 2019). This platform heterogeneity might not only affect the determinants of offering success and target fundraising, but also provide new insights into the observed matching between entrepreneurial ventures and crowdfunding platforms. The UK market, for example, has a long history of both entrepreneur-led platforms, such as Crowdcube and Seedrs, and investor-led platforms, such as SyndicateRoom. As previous scholars generally focus on one equity crowdfunding platform in isolation, our understanding of platform heterogeneity and, specifically, of the matching between entrepreneurial ventures and distinct platforms remains underdeveloped.

In this study, we investigate the factors that influence three outcomes of the equity crowdfunding process: (1) the success of the offering and the amount of capital raised, (2) the fundraising target, and (3) the observed matching with crowdfunding platforms.

First, related to the determinants of *offering success* and the *amount raised*, we focus on the impact of the equity offered. Studies show the significance of the decision on the level of equity offered in equity crowdfunding (Ahlers et al. 2015; Cumming, Meoli, and Vismara 2019a; 2019b; Hornuf, Schmitt, and Stenzhorn 2018; Mohammadi and Shafi 2018; Shafi 2019; Vismara 2016; 2019). These studies typically examine the equity offered in one country (often the UK) using data from one equity crowdfunding platform (often Crowdcube or Seedrs). Interestingly, when comparing the emerging US equity crowdfunding market with the UK equity crowdfunding market, we find that a larger fraction of equity is retained in the US, although firms across both markets are similar in age and size. We find that equity offered negatively influences offering success and funding amounts in

the US and UK markets and that equity retention serves as a quality signal. By investigating the unexplored setting of US equity crowdfunding offerings, we show that previous results on equity offered are not idiosyncratic to the context of the UK equity crowdfunding markets. We also extend the evidence on the effectiveness of equity retention as a quality signal within the universe of UK offerings. We find that equity offered negatively impacts offering success and the amount of funding raised on entrepreneur-led platforms such as Crowdcube and Seedrs, but not on SyndicateRoom, an investor-led UK platform that has not been studied before. This result can be explained by the fact that SyndicateRoom requires the involvement of at least one venture capitalist (VC) or business angel (BA) to admit firms to raise capital.

Studies suggest that patents have no significant impact on the chances of offering success and the amount of capital raised in the UK equity crowdfunding market (Ralcheva and Roosenboom 2020; Vismara 2018). These studies again focus on entrepreneur-led platforms. We find consistent evidence for US offerings; however, for UK offerings, we surprisingly find a positive impact of patents on offering success and funding amount, but this effect is driven by the investor-led platform, SyndicateRoom. Consistent with prior UK evidence, we also find that patents have no effect on offering success and funding amount on entrepreneur-led platforms (i.e., Crowdcube and Seedrs). These different findings between entrepreneur-led and investor-led platforms are consistent with Rajan's (2012) model of standardization following differentiation. Specifically, patents are at the core of the standardization process, which entrepreneurs need to undertake as the enterprise progresses in its fundraising life cycle. While entrepreneurial ventures at the very early stage focus on differentiation, standardization becomes important for raising equity capital at later stages. Accordingly, patents are a predictor of offering success in SyndicateRoom, where entrepreneurial ventures are larger and more mature than those on Crowdcube and Seedrs.

Second, concerning the factors influencing the choice of the *fundraising target*, we find that entrepreneurs located in financial centers are more likely to set higher targets for the equity crowdfunding offerings of their firms, although this evidence is limited to the UK market (and specifically, to UK entrepreneur-led platforms). This suggests that being located in a financial center raises expectations of how much UK entrepreneurs think they can raise. These entrepreneurs' expectations are eventually met in terms of offering success. Entrepreneur gender also determines how the offering is structured. The amount of capital raised by offerings from female entrepreneurs does not differ from that raised by male entrepreneurs; however, this evidence is conditional on successful female founders setting lower targets, although this result is only significant in the UK. Precisely, we find this effect to be driven by SyndicateRoom. A possible explanation might be that

female entrepreneurs are less effective than male entrepreneurs in negotiating business valuation with lead investors in investor-led platforms, resulting in a lower target amount.

Finally, we provide insights into the *matching* between entrepreneurial ventures and crowdfunding platforms. While a small set of studies investigate differences among platforms (e.g., Cumming, Johan, and Zhang 2019; Meoli, Rossi, and Vismara 2020; Rossi, Vismara, and Meoli 2019), we contribute to this stream of literature by studying how firm characteristics are correlated to the likelihood of listing on one platform over another. Focusing on the UK equity crowdfunding market, we find that firms that are larger, more mature, and hold patents are more likely to list on the investor-led platform SyndicateRoom. This suggests that entrepreneurial ventures at their early stage prefer Crowdcube or Seedrs, arguably because they find it more difficult to attract accredited investors to commit to their venture before the offering is launched, as required to list on SyndicateRoom. In terms of inclusivity, Crowdcube seems less attractive for female entrepreneurs relative to Seedrs and SyndicateRoom.

The remainder of this paper is organized as follows. Section 2 compares equity crowdfunding markets with traditional finance markets and discusses the main regulatory aspects of equity crowdfunding in the UK and US. Section 3 describes the methodology, sample, and data sources used in our study. Section 4 provides descriptive statistics and the results of the empirical analysis. Section 5 presents the main conclusions of this study.

#### 2. Institutional background

#### 2.1 Equity crowdfunding

Equity crowdfunding platforms enable firms to raise funds via relatively small contributions from a comparatively large number of investors who invest in a venture in exchange for shares. Equity crowdfunding differs from donation crowdfunding, where individuals or non-governmental organizations raise capital from donors, who receive nothing in exchange except the satisfaction of participating in a crowdfunded initiative. In other words, the motivation to finance a project is driven by charitable giving and social image rather than realizing a financial return; moreover, in donation crowdfunding, project proponents aim to raise as much capital as possible. Donation crowdfunding offerings are based on the all-or-nothing model (Cumming, Leboeuf, and Schwienbacher 2020). Consequently, funding success in equity crowdfunding is achieved if a defined amount of capital is raised, whereas in donation crowdfunding, the capital is kept regardless of whether the target is met.

Equity crowdfunding also differs from reward-based crowdfunding, where backers are offered a product or a service rather than shares in the company. Backers typically receive a symbolic reward displaying their support for the project. Different from equity crowdfunding, where investors are mainly driven by financial goals, backers are instead interested in product-oriented and community-building goals (Block et al. 2018; Vismara 2016). Furthermore, the amount of capital raised is typically more limited in reward-based crowdfunding compared to equity-based crowdfunding. On Kickstarter, a well-established US reward-based crowdfunding platform, two out of three successful projects raise less than \$10,000, with only 4% raising more than \$100,000.<sup>2</sup> In contrast, successful projects on Crowdcube, one of the largest equity crowdfunding platforms in the UK, raise \$580,000 on average.<sup>3</sup>

Debt crowdfunding is a third type of crowdfunding that takes on various forms, including peer-to-peer lending, invoice trading, and debt-based securities. In peer-to-peer lending, individuals provide a loan to a consumer or business borrower and receive fixed interest rates for their loans. In invoice trading, individuals purchase invoices or receivables from a business at a discount, while in debt-based securities crowdfunding, individuals purchase debt financial securities, typically a bond or debenture, at a fixed interest rate. As in equity crowdfunding, the motivation to invest is mainly financial. However, unlike equity crowdfunding, debt crowdfunding is exclusively specialized in debt financial instruments. Equity crowdfunding is thus a unique segment within the crowdfunding market.

Equity crowdfunding is also fundamentally different from traditional sources of finance in multiple dimensions, including supply side (investors), demand side (issuers), and intermediaries (platforms), as detailed in Table 1 and discussed below.

Equity-crowdfunded firms raise financing from a large pool of individuals investing relatively small amounts of money (Ahlers et al. 2015). This is different from traditional private deals, where the supply side is limited to a relatively small group of VCs and/or BAs investing large amounts of capital. As with IPOs, equity crowdfunding enables issuers to offer their securities to the public. However, crowdfunding investors differ from IPO investors in several aspects. First, while IPO investors must be either accredited or be a personal acquaintance to invest in anything but large public offerings, both accredited and non-accredited investors can access equity crowdfunding opportunities. Second, in traditional public equity markets, investor protection is achieved through

<sup>&</sup>lt;sup>2</sup> Kickstarter statistics are automatically updated on a daily basis at https://www.kickstarter.com/help/stats.

<sup>&</sup>lt;sup>3</sup> Crowdcube statistics are calculated on the first 1,000 successful deals from platform inception to November 2019, available at https://www.crowdcube.com/explore/blog/crowdcube/funding-the-wonderful-in-numbers.

due diligence, high levels of disclosure, legal accountability, and the offering of a prospectus. In contrast to IPOs, equity crowdfunding is characterized by loose regulation and investor protection. As long as they comply with investment limits based on personal income or net worth, crowdfunding investors have access to any equity crowdfunding offering selected by the platform. Last, different to IPOs, where investors can trade their securities on stock exchanges, crowdfunding investors are normally locked into their investment until the firm is either acquired or goes public. There are only a few equity crowdfunding platforms that allow online trading of securities. For instance, the UK platform Seedrs created a secondary market in 2017 (Seedrs Secondary Market) where anyone can purchase shares in equity-crowdfunded firms.

Different from venture capital or other types of private equity, where investors' capital is managed by fund managers, crowdfunding investors directly choose which entrepreneurial venture to finance. Relative to traditional public equity markets, overcoming information asymmetries is problematic in equity crowdfunding because of the absence of specialized middlemen (Cumming, Johan, and Zhang 2019). Financial analysts do not help with information production, and there are no documents vetted by national agencies (i.e., SEC). In contrast to VCs and BAs, crowdfunding investors do not meet entrepreneurial teams in person but make investment decisions based exclusively on the information available online, which is typically provided in the form of a simplified business plan and video pitch. Moreover, their incentive to perform due diligence is low. While the cost of due diligence is fixed, the incentive to perform due diligence is variable and increases with the size of the investment. Since crowdfunding investors bid small amounts of capital, the potential benefit from investing is not sufficient to compensate for the cost of performing individual due diligence. Moreover, crowdfunding investors typically lack the experience and capability to evaluate investment opportunities (Ahlers et al. 2015).

On the demand side, equity crowdfunding provides an opportunity to raise external equity capital for entrepreneurial ventures that find it difficult to access traditional finance. Equity crowdfunding provides entrepreneurs with a relatively cheap way to raise capital. Entrepreneurial ventures aiming to raise capital through equity crowdfunding need to pay a fee to use the platform. This fee is typically calculated as a percentage of the total amount of capital raised, but only in the case of a successful outcome. Relative to IPOs, compliance costs and entry barriers are low in equity crowdfunding offerings. Capital formation through an IPO is costly because of fixed direct compliance costs and indirect disclosure costs. Although these costs are lower in secondary markets dedicated to entrepreneurial and high-tech firms, IPOs are still too expensive for most entrepreneurs. Venture capital and other types of private equity reduce disclosure costs for entrepreneurial ventures.

However, not all businesses and industries satisfy the growth and exit preferences of VCs and private equity firms. Since crowdfunding investors are likely to have lower incentives and capabilities to evaluate investment opportunities, entrepreneurial ventures that raise capital on equity crowdfunding platforms are firms in traditional sectors with business models that should not be overly complex.

By matching the supply with the demand side, equity crowdfunding platforms engage in due diligence and screening of entrepreneurial ventures. Crowdfunding platforms' due diligence comprises background checks, site visits, credit checks, cross-checks, account monitoring, and thirdparty proof on funding projects (Cumming, Johan, and Zhang 2019). By performing due diligence on behalf of individual investors, equity crowdfunding platforms fulfil a role similar to that of stock exchanges or fund managers. This is in contrast with BAs, who individually select investment opportunities (although BA networks sometimes perform a screening role). Besides performing due diligence, crowdfunding platforms also play a role in post-investment monitoring. Platforms that work under a nominee structure<sup>4</sup> hold the voting power of crowdfunding investors and exercise a monitoring role on their behalf. However, in the absence of a nominee structure, individual crowdfunding investors are unlikely to perform individual monitoring. This is different from IPOs, where firms are subject to ongoing listing requirements and vigilance from national agencies. Furthermore, contrary to VCs and BAs, where investors often serve on boards of directors and hold meetings with management, crowdfunding investors are unlikely to become involved in firm management. VCs often spend significant effort and time in their coaching function, providing firms with added value. Similar approaches are unlikely to be observed among crowdfunding investors due to their limited financial knowledge and monitoring incentives.

## [Insert Table 1 here]

# 2.2 Equity crowdfunding platforms

Equity crowdfunding involves three main actors: investors, entrepreneurs, and crowdfunding platforms. Crowdfunding platforms act as intermediaries between the supply (investors) and the demand side (entrepreneurs). By acting as an intermediary, the platform is responsible for the amount and type of information exchanged between both sides. Equity crowdfunding platforms can either be entrepreneur led or investor led.

<sup>&</sup>lt;sup>4</sup> An equity crowdfunding platform operates a nominee structure, whereby the platform itself acts as a trustee or appoints a nominee entity such as a lead investor to manage voting rights on behalf of individual investors (Rossi, Vismara, and Meoli 2019; Walthoff-Borm, Vanacker, and Collewaert 2018)

Entrepreneur-led platforms are marketplaces for entrepreneurial ventures to raise finance on their investment terms. As entrepreneur-led platforms do not require the involvement of any lead investor, decisions about the business valuation and typologies of shares are essentially taken by entrepreneurs. Entrepreneur-led platforms ask for symbolic minimum investment thresholds (typically \$10). As the size of the investments is often small, investors' incentive to perform due diligence is weak. Thus, entrepreneur-led platforms benefit entrepreneurial ventures by providing capital with relatively less stringent scrutiny. However, these platforms arguably offer fewer opportunities to benefit from the experience and contact with lead investors.

Investor-led platforms list entrepreneurial ventures that have at least one VC or BA involved in the funding round. Once lead investors have negotiated the investment terms of the entrepreneurial venture, the offering is listed on the platform, allowing online investors to consider investing with the same valuation and rights negotiated with the lead investors. The goal is to allow small investors to benefit from the expertise and negotiations of lead investors, resulting in better investment terms. While entrepreneur-led platforms ask for symbolic minimum investment thresholds, investor-led platforms require investors to make relatively larger investments (the typical threshold is around \$1,000). As investments are larger, individuals' incentive to perform due diligence and monitoring are higher. However, setting a relatively large minimum amount of investment capital may discourage potential investors from accessing the investment opportunity. From the entrepreneur's perspective, the presence of a lead investor results in more stringent due diligence and monitoring. However, early-stage entrepreneurial ventures might find it difficult to attract a lead investor before the offering is launched. As such, investor-led crowdfunding platforms attract fewer entrepreneurial ventures than entrepreneur-led platforms. The average size of entrepreneurial ventures and the success rate of the offerings on investor-led platforms are higher than those on entrepreneur-led platforms.

Crowdcube, Seedrs, and SyndicateRoom are three well-established equity crowdfunding platforms in the UK. Crowdcube and Seedrs are entrepreneur-led equity crowdfunding platforms. Crowdcube pioneered the UK equity crowdfunding market in 2011 and was one of the world's first equity crowdfunding platforms (Rossi and Vismara 2018). It allows entrepreneurs to launch three types of offerings: equity, convertible, and debt (in the form of bonds). Seedrs, launched in 2012, allows entrepreneurs to raise capital through three types of offerings: equity, fund, and convertible. When investing in a fund on Seedrs, investors become shareholders in each enterprise that the fund manager chooses. However, most deals offered by Crowdcube and Seedrs are equity offerings. Both platforms operate an all-or-nothing model, where the entrepreneur keeps nothing unless the goal is achieved (e.g., Cumming, Leboeuf, and Schwienbacher 2020). Seedrs was the most active investor

in 2019 with 215 funded deals (including follow-on rounds) and £99.3 million raised (Beauhurst 2020). Crowdcube was second in the overall ranking with 191 deals, despite registering £125.3 million, the largest amount of capital raised among UK equity crowdfunding platforms. A Beauhurst (2020) report also showed that 2019 "was the busiest year on record for those platforms," both in terms of the number of deals and the amount of capital raised. Since 2011, Crowdcube and Seedrs have together raised £2 billion. On October 5, 2020, Crowdcube and Seedrs announced plans to merge to create "one of the world's largest private equity marketplaces."<sup>5</sup>

SyndicateRoom is a UK-based investor-led equity crowdfunding platform. Launched in 2013, it positioned itself as a platform that allows investors to co-invest alongside professional investors. In the period 2013–2019, SyndicateRoom raised £250 million through equity crowdfunding deals (Beauhurst 2020). Like Crowdcube and Seedrs, the platform operates an all-or-nothing model. However, unlike Crowdcube and Seedrs, which ask for symbolic minimum investment thresholds, SyndicateRoom asks for a minimum invested capital of £1,000 to access the investment opportunity, in addition to the involvement of at least one VC or BA to list the offering on the portal. In October 2019, the platform moved towards a new investment model and became a venture capital fund that no longer offers individual crowdfunding investment opportunities (Beauhurst 2020).

In the US, equity crowdfunding platforms have started to allow entrepreneurs to launch equity Regulation CF offerings since 2016, when Regulation CF came into effect (more details below). As of July 2020, 53 funding portals were operating under Regulation CF. Among them, SeedInvest, Wefunder, and StartEngine account for 80% of all capital raised for equity Regulation CF offerings across all platforms. These three platforms are entrepreneur-led, operate an all-or-nothing model, and offer securities in different forms, including equity, debt, and Simple Agreement for Future Equity. They also operate under different equity crowdfunding rules, like Regulation D and Regulation A+. In September 2020, StartEngine raised \$200 million for 375 enterprises, SeedInvest raised \$200 million for 200 enterprises, while Wefunder raised \$171.5 million for 471 enterprises.<sup>6</sup>

## 2.3 Regulation in the UK and US markets

**Regulatory evolution and basic frameworks.** In the UK, equity crowdfunding was originally regulated by the Financial Services and Markets Act 2000, and firms seeking to operate crowdfunding platforms had to apply for authorization from the Financial Conduct Authority (FCA),

<sup>&</sup>lt;sup>5</sup> Available at https://www.crowdcube.com/explore/blog/crowdcube/crowdcube-news

<sup>&</sup>lt;sup>6</sup> The data are from each platform's official website, available at startengine.com, seedinvest.com, and wefunder.com, accessed in September 2020.

just as any other firm providing regulated financial services in the UK<sup>7</sup>. In March 2014, the FCA introduced a new rule to regulate equity crowdfunding through Policy Statement PSI14/4<sup>8</sup>, whereby entrepreneurial ventures are permitted to raise capital only from certain types of investors, namely professional investors, advised investors, self-certified sophisticated or high net worth investors, and investors who confirm that they are not investing more than 10% of their net investible assets in equity crowdfunding. This means that while only specific investor types are permitted to invest an unlimited amount of capital, everyone can invest up to the threshold according to their net investible assets.

On April 5, 2012, former US President Barack Obama signed into law the JOBS Act that changed the landscape for many entrepreneurial ventures aiming to raise capital in the US. In 2013, Title II of the JOBS Act (Regulation D, Rule 506(b) and Rule 506(c)) was adopted by the SEC, allowing entrepreneurial ventures to raise capital by issuing restricted securities—securities subject to transferability and resale limitations. Regulation D Rule 501 defines accredited investors as one of the following investor types: (a) banks, insurance companies, and registered investment companies, (b) employee benefit plans with total assets of over \$5 million, (c) charitable organizations with total assets of over \$5 million, (d) an individual director, executive officer, or general partner of a company selling securities, (e) a business where all equity owners are accredited investors, (f) a natural person with an individual net worth of over \$1 million, (g) a natural person whose annual income exceeded \$200,000 over each of the last three years, and (h) a trust with assets of over \$5 million.

While the UK equity crowdfunding has been open to both accredited and non-accredited investors since the launch of the first equity crowdfunding platform in 2011 (Crowdcube), only accredited investors could invest in equity crowdfunding in the US until 2015, when Title IV (Regulation A+) of the JOBS Act came into effect. Regulation A+ is divided into two tiers (Tier 1 and Tier 2) and sets the investment limit for non-accredited investors at 10% of the greater of annual income or net worth of natural persons and at 10% of the greater of annual revenue or net assets at fiscal year-end for non-natural persons. With Regulation A+, fundraising is no longer limited to wealthy individuals, but is also open to users and community members (i.e., "the crowd"). From the investor's perspective, it was the first time in the US that investors could participate in equity crowdfunding deals as accredited or non-accredited individuals. However, as in the UK, not all individuals have equal access to equity crowdfunding transactions, as only specific types of investors

<sup>&</sup>lt;sup>7</sup> Article 25(1) of the Financial Services and Markets Act 2000 (Regulated Activities) Order 2001.

<sup>&</sup>lt;sup>8</sup> Policy statement 14/4, The FCA's regulatory approach to crowdfunding over the internet, and the promotion of nonreadily realizable securities by other media, March 2014: http://www.fca.org.uk/static/documents/policystatements/ps14-04.pdf

are permitted to invest an unlimited amount of capital, while non-accredited investors are subject to investment limits. The first Regulation A+ offering hosted on an equity crowdfunding portal was in August 2015, with Elio Motors raising \$17 million on the platform StartEngine. As of December 2019, the total amount sought was approximately \$11.2 billion across all offerings, including \$9.1 billion across qualified offerings (SEC 2020).

Title III of the JOBS Act (Regulation CF) came into effect in 2016. Although Regulation A+ and Regulation CF are similar in that they both enable entrepreneurial ventures to raise equity crowdfunding capital from a pool of non-accredited investors, they differ on how investment limits are applied to different types of investors. As stated in the Final Rule document of Regulation CF, crowdfunding transactions are intended to be available equally to all types of investors<sup>9</sup>. Indeed, unlike under Regulation A+, both accredited and non-accredited investors are subject to the same investment limits under Regulation CF. Each potential investor is limited to investing according to their annual income or net worth: (a) the greater of \$2,000 or 5% of the lesser of the investor's annual income or net worth if either <sup>10</sup>annual income or net worth is less than \$100,000; or (b) 10% of the lesser of the investor's annual income or net worth, not exceeding an amount sold of \$100,000 if both annual income and net worth are \$100,000 or more. The implementation of Regulation CF provides more private enterprise investment opportunities to non-accredited investors, enlarging the supply of capital for entrepreneurial ventures seeking to raise money through equity crowdfunding. The investment limit for accredited investors might be perceived as a drawback of Regulation CF, as it could deter accredited investors from participating in an offering. However, by investing a larger amount of capital, accredited investors are more likely to influence or challenge entrepreneurs compared to non-accredited investors. Therefore, from an entrepreneur's perspective, the absence of powerful investors could also be an advantage. On March 4, 2020, the SEC announced a proposal to amend the investment limits for investors in Regulation CF by not applying any limits to accredited investors and revising the calculation method for limits for non-accredited investors<sup>11</sup>. The amendment had not yet been incorporated as of September 2020; however, entrepreneurial ventures might rely on concurrent offerings under Regulation A+ or Regulation D if they seek to sell a larger amount of securities to accredited investors. As of November 2019, the estimated total capital invested under Regulation CF was \$107.9 million.

<sup>&</sup>lt;sup>9</sup> Final Rule: Crowdfunding 17 CFR Parts 200, 227, 232, 239, 240, 249, 269, and 274 available at https://www.sec.gov/rules/final/2015/33-9974.pdf

<sup>&</sup>lt;sup>11</sup> Facilitating Capital Formation and Expanding Investment Opportunities by Improving Access to Capital in Private Markets: 17 CFR Parts 227, 229, 230, 239, 249, 270, and 274 available at https://www.sec.gov/rules/proposed/2020/33-10763.pdf

(Un)Registered platforms. According to the Policy Statement, UK firms that operate investment-based crowdfunding are defined as "platforms on which consumers can buy investments, such as equity or debt securities that are not listed or traded on a recognized exchange, or units in an unregulated collective investment scheme". However, there is no national registry of equity crowdfunding platforms in the UK. Likewise, offerings under Regulation D and Regulation A+ are not required to be conducted via registered intermediaries in the US. Entrepreneurial ventures might, therefore, offer and sell securities through crowdfunding transactions without relying on registered entities. However, from the investor's perspective, the use of unregistered intermediaries poses potential investor protection concerns because of the absence of a regulatory framework for such intermediaries' practices and involvement in offerings, resulting in an increased potential for fraudulent activity. The role of crowdfunding intermediaries becomes essential under Regulation CF. Crowdfunding intermediaries are required to register with the SEC as a broker-dealer or a funding portal regulated by the Financial Industry Regulatory Authority. As such, crowdfunding intermediaries are required to offer educational material, provide communication channels to investors, take measures to reduce the risk of fraud, and make available information about the offering. Therefore, Regulation CF provides more protection than in the UK and other regulations in the US.

**Funding thresholds.** In the UK, entrepreneurial ventures offering investment on equity crowdfunding platforms may collect up to £8 million in 12 months. When an equity crowdfunding raise goes beyond £8 million, the entrepreneurial venture needs to produce a prospectus that must be approved by the FCA. In the US, entrepreneurial ventures can raise unlimited amounts of equity crowdfunding capital under Regulation D. However, both Regulation A+ and Regulation CF set an investment offering limit. Regulation CF sets the offering limit at \$1.07 million in 12 months. While Regulation CF allows entrepreneurial ventures to raise a much smaller amount compared to the UK, while Regulation A+ allows entrepreneurial ventures to raise a larger amount of capital (\$20 million in 12 months under Regulation A+ Tier 1 and \$50 million in 12 months under Regulation A+ Tier 2). However, from an entrepreneur's perspective, the cost of running an equity crowdfunding offering under Regulation A+ is higher than under Regulation CF. Indeed, the cost of launching a Regulation A+ offering is estimated to be between \$50,000 and \$100,000<sup>12</sup>, comprising accounting and legal costs, qualification with the SEC, as well as ongoing disclosure requirements. Instead, under Regulation CF, entrepreneurial ventures can expect to pay between \$4,000 and \$10,000<sup>13</sup> for a financial review and legal documentation. It is also possible to self-certify the company's finances

<sup>&</sup>lt;sup>12</sup> Available at https://www.startengine.com/blog/regulation-a-what-entrepreneurs-need-to-know/

<sup>&</sup>lt;sup>13</sup> Available at https://startengine.com/blog/regulation-crowdfunding-101-for-entrepreneurs/

and launch an equity crowdfunding offering at no cost if the entrepreneurial venture is a corporation and the maximum raise limit is set at \$107,000. Amendments not yet implemented as of December 2020 by the SEC will allow entrepreneurial ventures to raise more capital through equity crowdfunding as the offering limit could be increased to \$10 million under Regulation D, to \$75 million under Regulation A, and \$5 million under Regulation CF.

**Documentation.** There is no specific documentation required for entrepreneurial ventures to raise capital through equity crowdfunding in the UK. This is different from the US, where entrepreneurial ventures must file specific documents based on the regulation under which they plan to raise equity crowdfunding capital. Under Regulation D, they are required to file a Form D with the SEC within 15 days after the first sale of securities in the offering. Under Regulation A+, they are required to file a Form 1-A with the SEC, including an offering statement, two years of financial statements, and an exit report. Once the offering statement has been reviewed by the SEC, the entrepreneurial venture is declared qualified by a notice of qualification and may begin to sell securities. Under Regulation CF, entrepreneurial ventures are required to file a Form C with the SEC, including an offering statement, two years of financial statements, and an annual report. From an entrepreneur's perspective, the qualification process and ongoing reporting costs are more intensive and costly in the US relative to the UK. However, from the investor's perspective, entrepreneur disclosure requirements enhance investor protection in the US.

**Cross-border activities.** Under Regulation D, entrepreneurial ventures based in the UK are allowed to launch an equity crowdfunding offering in the US, while both Regulation A+ and Regulation CF restrict this opportunity to US-based enterprises (and Canadian enterprises under Regulation A+). Thus, non-US entrepreneurial ventures are allowed to engage in equity crowdfunding in the US, but they can raise capital from accredited investors only. In the UK, entrepreneurial ventures based in the US are not allowed to raise equity crowdfunding capital. To overcome restrictions on cross-border equity crowdfunding between the two countries, some UK-based platforms have expanded into the US market with partnerships, allowing US-based enterprises to raise capital through equity crowdfunding in the UK. The UK platform Crowdcube, for instance, partnered with the US-based platform SeedInvest in 2017 to make US offerings available on the

platform.<sup>14</sup> One year later, the UK platform Seedrs partnered with the US platform Republic, allowing entrepreneurial ventures based in the UK to run joint crowdfunding campaigns on the two platforms.<sup>15</sup>

# 3. Sample and methods

### 3.1 Sample identification and data sources

In this study, the UK population of crowdfunding offerings is made up of 3,852 offerings posted on the crowdfunding platforms Crowdcube, Seedrs, and SyndicateRoom from 2012 to the end of 2019. We exclude 81 offerings that are mini-bonds, convertibles, or fund campaigns and 812 equity offerings conducted by entrepreneurial ventures that had already launched an equity crowdfunding offering on Crowdcube, Seedrs or SyndicateRoom platforms. The final sample comprises 2,959 initial equity crowdfunding offerings.

The sample of UK initial equity crowdfunding offering is matched with Orbis Europe to include accounting information, firm location, and founder characteristics. The matching with Orbis Europe is done using national identification numbers and company names available on the crowdfunding platforms' official websites. Equity offerings, targets, and funding amounts are taken from equity the platforms' official websites that were monitored in the period 2012–2019. The sample is matched with Crunchbase, a database on entrepreneurial ventures operated by TechCrunch, to include information on patents. Data on Crunchbase are provided by a community of investment firms, executives, entrepreneurs, and investors, and it uses artificial intelligence, machine learning algorithms, as well as manual curation to validate data accuracy (Crunchbase 2020). The matching with Crunchbase is performed using company names and company domains available on the crowdfunding platforms' official websites.

The US population of crowdfunding offerings is based on the information made available by the SEC and refers to Regulation CF offerings. Regulation CF requires that each company files a set of documents when launching a crowdfunding offering. All the filings are submitted to the SEC via the Electronic Data Gathering Analysis and Retrieval System (EDGAR). The Crowdfunding Offerings Data Set<sup>16</sup> provides information about the submissions, characteristics of the company, features of the offering, disclosure requirements, and intermediary crowdfunding platform.

<sup>&</sup>lt;sup>14</sup> "Crowdcube partnership with America's top equity crowd funder Seedinvest," available at

https://www.crowdcube.com/explore/blog/crowdcube/crowdcube-partners-with-americas-top-equity-crowdfunder <sup>15</sup> "Seedrs partners with Republic to enable European businesses to co-raise from U.S. investors," available at

https://www.seedrs.com/learn/blog/seedrs-partners-with-republic-to-enable-european-businesses-to-co-raise-from-u-s-investors

<sup>&</sup>lt;sup>16</sup> The Crowdfunding Offerings Data Set is available at https://www.sec.gov/dera/data/crowdfunding-offerings-data-sets.

Information is collected without amendments to the "as-filed" submissions. The data set has been updated quarterly since April 2016.

The Crowdfunding Offerings Data Set includes different filing entities, such as offering statements, progress updates, annual reports, terminations, and any amendments or withdrawals to these submissions. Companies must file an offering statement (Form C) in which the offering amount and the maximum offering amount are stated before the launch of the offering of securities. Companies must disclose any changes (including changes in the offering amount and the maximum offering amount) to the offering statement filed under Form C for the offering that has not yet been completed by filing an amendment (Form C/A). Within five business days from the end of the offering, they must report the amount raised on a progression update filing, known as a progress update (Form C-U), regardless of whether the offering amount was met. Alternatively, a company can withdraw its offering by filing a withdrawal statement (Form C-W). Offerings are identified based on the Central Index Key (CIK) of the company and submission number. Offerings identified as duplicates are consolidated, and amendments are consolidated with the original offering statement. We rely on the information reported in the most recent amendment during the offering period.

In this study, the US population of crowdfunding offerings comprises 2,194 offerings launched from April 2016 to December 2019. We exclude 478 offerings of securities offered equal to "Debt" and 1,015 offerings equal to "Others". By doing so, we exclude debt, convertible notes, token offerings, and simple agreements for future equity. We exclude 68 offerings where companies had already launched an equity crowdfunding offering under Regulation CF. Offerings launched by the same company are identified by the same CIK. Basing on the offering deadline of the most recent amendment, we add information on the offerings that had not yet expired as of January 2020 and exclude 16 offerings is made up of 617 initial equity crowdfunding offerings launched on 28 equity crowdfunding platforms (i.e., Bumper Collective, Buy the Block, CrowdsourceFunded, Crowd Ignition, Equitydoor, Equityfund Crowd Funding Portal, FlashFunders, Funding Portal, Fundme.com, Fundopolis Portal, Gridshare, GrowthFountain Capital, Indie Crowd Funder, Jumpstart Micro, Letslaunch, Mr. Crowd, Merging Traffic Portal, MinnowCFunding, Netcapital, Nvsted, Razitall, SeedInvest, Small Change, StartEngine, Title3funds, TruCrowd, VidAngel Studio, and Wefunder).

Accounting information, incorporation date, firm location, and founder characteristics are collected from offering statements. We derive the issuer's gender from their first name using the

genderize.io API.<sup>17</sup> This tool collects information from all over the web, including 114,541,298 gender-name entities from 79 countries and 89 languages. The offering target is defined as the average of the offering amount and the maximum offering amount from the offering statement. The funding amount is extracted from the information available on the progress update file. In the case of missing information, the platforms' official websites are consulted to locate the information. Information on equity offered is hand collected from the offering memorandum available through EDGAR. The sample is matched with Crunchbase to include information on patents through company name and company domain available on offering statements.

## 3.2 Empirical strategy

Crowdfunding offerings may be offered under two fundraising models—the keep-it-all model, where the entrepreneurial venture keeps the entire amount of capital raised regardless of achieving the target, and the all-or-nothing model, where the entrepreneurial venture keeps nothing unless the target is achieved (Cumming, Leboeuf, and Schwienbacher 2020). The equity crowdfunding offerings considered in our analysis are offered under the keep-it-all model. Accordingly, we consider as successful all those offerings where the amount raised is equal or larger than the offering target.

We estimate the determinants of success of equity crowdfunding offerings by controlling for potential endogeneity of the target amount. The amount of capital to be raised in the offering, namely the target, should be primarily determined by real needs. However, as the target amount is set at the same time as the decision to launch the offering, entrepreneurial ventures are likely to adjust for strategic purposes (Cumming, Meoli, and Vismara 2019b; Cumming, Leboeuf, and Schwienbacher 2020). Entrepreneurs might decide to adjust the target amount based on their desire to signal commitment, as well as on entrepreneurial expectations about their individual capability to attract crowdfunding investments. Therefore, following Cumming, Meoli, and Vismara (2019b) and Cumming, Leboeuf, and Schwienbacher (2020), we control for the endogeneity of the target amount, which is instrumented with *Average Ln(Target)*, measured for each firm as the average of all target amounts in the same industry and platform in the previous 12 months. For estimation, we use an instrumental variable (IV) probit regression model. We opt for a probit model due to the presence of dummy variables among our dependent variables (*Success*). Our system of equations is given by the following:

<sup>&</sup>lt;sup>17</sup>The API is available at https://genderize.io/

$$Ln(Target) = \alpha_1 + \beta_1 Average Ln(Target) + \bar{\delta}_1 \bar{X} + \varepsilon_1$$
(1)

$$Success = \alpha_2 + \gamma_2 Ln(Target) + \bar{\delta}_2 \bar{X} + \varepsilon_2$$
<sup>(2)</sup>

Additionally, our analysis aims to estimate the determinants of the funding amount for the sample of successful equity crowdfunding offerings. Our reference model is the system of equations described above (Equations 1 and 2), where we replace the outcome variable *Success* with *Ln* (*Funding amount*). We use an IV two-stage least squares (2SLS) regression model as the dependent variable is continuous. *Average Ln* (*Target*) is measured for each firm as the average of target amounts of successful offerings in the same industry and platform in the previous 12 months since we consider a restricted sample of successful offerings.

In the UK, companies aiming to raise capital through equity crowdfunding may choose Crowdcube, Seedrs, or SyndicateRoom. We aim to test whether the determinants of success of equity crowdfunding offerings differ across the platforms. While our model considers endogenous determination of the target, it is also interesting to assess whether the choice of the platform plays a role in estimating the determinants of success of equity crowdfunding offerings. To consider this potential source of sample selection bias, we analyze the selection process of offerings listed on a platform with respect to those listed on the others. The selection mechanism depends on unobservable offering characteristics that are potentially related to the choice of the platform. The first stage of the Heckman model consists of a bivariate probit regression on the likelihood of posting an offering on a platform with respect to another. The first-stage equation includes an identification variable (*Platform preference*), measured as the number of offerings listed on a platform, divided by the number of offerings posted on the three platforms in the same industry in the 12 months prior to each observation. The selection equation is used to construct estimates of inverse Mills ratios (*IMR Platform*), to be included in all regressions of the second stage (Equations 1 and 2 described above). In the case of Crowdcube, our system of equations is given by the following:

$$Crowdcube_{dummy} = \alpha_3 + \beta_{3,1} Platform Preference + \overline{\delta}_3 \overline{X} + \varepsilon_3$$
(3)

$$Ln(Target) = \alpha_4 + \beta_4 AverageLn(Target) + \rho_4 IMR_{platform} + \bar{\delta}_4 \bar{X} + \varepsilon_4$$
(4)

$$Success = \alpha_5 + \gamma_5 Ln(Target) + \rho_5 IMR_{platform} + \bar{\delta}_5 \bar{X} + \varepsilon_5$$
(5)

where *Crowdcube* is a dummy variable equal to 1 if the platform is listed on Crowdcube, and *Platform preference* is measured as the number of offerings listed on Crowdcube, divided by the number of offerings listed on Crowdcube, Seedrs, and SyndicateRoom in the same industry in the 12 months before each observation. We follow the same procedure to analyze the selection process of offerings posted on Seedrs and SyndicateRoom<sup>18</sup>.

### 4. Results

#### 4.1 Descriptive statistics

Table 2 summarizes the descriptive statistics for the population of initial equity crowdfunding offerings, distinguishing between the UK (2,959 observations) and US offerings (617 observations). Looking at the outcome variables in our analysis, successful cases are more frequent among US offerings (51.1%) rather than UK offerings (41.8%). The average successful crowdfunding offering in the UK raises \$0.732 million, which is around three times larger than the amount raised by the average US crowdfunding offering (\$0.222 million). The average firm in the UK is around 3.03 years old at the time of the equity crowdfunding offering. Age is similar to firms in the US (2.76). Firms in the US are characterized by larger total assets (\$0.350 million vs. \$0.262 million), though the difference is not statistically significant. The percentage of equity offered is, on average, around 13.1% for UK offerings. Although firms are similar in age and size, equity offered is lower (6.94%) in US offerings, the difference being significant at less than 1%. The target is, on average, larger for UK equity crowdfunding offerings (\$0.425 million) than for US equity crowdfunding offerings (\$0.064 million). The difference in the targets could explain the abovementioned difference in the equity offered between UK and US offerings. Patents are more frequent among US crowdfunding offerings (5.8%) than among UK crowdfunding offerings (3.8%), although the difference is not statistically significant. The presence of female funders in UK crowdfunding offerings (15.4%) is similar to that in US crowdfunding offerings (12.8%). Firms with trade debtors are more frequent in the US (18.8% vs. 8%) and are also characterized by a lower ratio of debt to total assets (75.4% vs. 469.1%). The description of the variables employed in the analysis, full descriptive statistics, correlation matrix, and variable descriptions are provided in the Appendix (Tables A1–A5).

[Insert Table 2 here]

<sup>&</sup>lt;sup>18</sup> According to an alternative model, in the first stage, platform choice can be measured as the preference for a platform against each alternative platform—that is, Crowdcube vs. Seedrs, Crowdcube vs. SyndicateRoom, and Seedrs vs. SyndicateRoom. From the selection stage, two different IMR platform variables are generated for each platform, to be included in the second stage. Table A6 and Table A7 provide the results of this alternative model. Most results remain qualitatively unchanged.

#### 4.2 Success of equity crowdfunding offerings

Table 3 presents the results of the system of equations described in Section 3.2, where the probability of success of equity crowdfunding offerings is estimated using IV probit regressions, with Ln(Target) as an instrumented variable in Equation 2 (Models 2, 4, and 6) and *Average target* as an instrumental variable in Equation 1 (Models 1, 3, and 5). Models 1, 3, and 5 report the results on the determinants of the offering target, allowing us to identify the variables that significantly affect the entrepreneurial choice on the offering target (demand side), while Models 2, 4, and 6 show the determinants of offering success, allowing us to investigate offering outcomes (supply side).

Model 1, 3, and 5 show the determinants of the offering target. We find that the offering firms mimic the decisions in previous offerings when deciding the offering target so that the amount to be raised in the offering is strongly correlated with the average amount required by previous offerings in the same industry in the previous year. This is reflected by the coefficient of Average target, which is positively correlated to the dependent variable at less than 1%. This mimicking behavior is present in both the UK and US firms. Interestingly, entrepreneurs of firms located in financial centers are more likely to set higher offering targets (p<0.01 in Model 1 and Model 3), but this effect is not significant in the US subsample. This suggests that being located in a financial center raises expectations of how much entrepreneurs think they can raise, especially in the UK. From the supply side, offerings by firms in financial centers in the UK and US are more likely to be successful (p<0.01 in Models 2 and 4 and p<0.05 in Model 6), meaning that UK entrepreneurs' expectations are met in terms of offering success. The entrepreneurial choice on offering target is also positively affected by Equity offered, Patents, Ln (Age+1), Ln (Total assets+1), and Trade debtors, while Debt ratio is negatively correlated, with all these findings being significant at less than 1% for UK offerings (Model 3). The analysis results of the full sample is consistent with those for the UK subsample. However, the findings are different for US offerings. While most of the variables are not statistically significant in determining the offering target, we find that firms characterized by larger total assets are more likely to set lower offering targets (p<0.05 in Model 5).

Our results on the success of the offering show that a larger percentage of equity offered has a negative and statistically significant effect on offering success (p<0.01 in Models 2, 4, and 6). Given that entrepreneurs are expected to retain more equity when they are more confident that the project will generate future cash flows, this result is evidence that the probability of success for a crowdfunding offering is positively related to entrepreneurs' financial commitment and perceived by external investors as a signal of firm value (Leland and Pyle 1977). This result confirms the validity

of equity offered as a quality signal in UK equity crowdfunding markets and extends its effectiveness to US equity crowdfunding markets.

The probability of success is positively affected by patents (p<0.01 in Model 2). This result is driven by the UK markets, as shown by the positive and statistically significant coefficient in Model 4 (p<0.01). The coefficient of *Patents* is indeed positive but not statistically significant for US offerings in Model 6. Our results show that patenting activity reflects the quality of firm innovation by reducing information asymmetries between external investors and entrepreneurial ventures in UK markets. However, existing studies on equity crowdfunding in the UK suggest that patents do not significantly impact the chances of success in equity crowdfunding (Ralcheva and Roosenboom 2020; Vismara 2018). Thus, our results appear inconsistent with the scare literature on intellectual property as a quality signal in equity crowdfunding. We further investigate the role of patents in Table 5, where we control for differences across UK platforms and provide a possible explanation that reconciles our results with previous findings.

In the UK sample, we also find that firms in financial centers and firms characterized by larger total assets are more likely to launch an offering with a successful outcome (Model 4). The effect of financial centers is positive and significant in the US sample (p<0.05 in Model 6). However, we fail to find evidence that firm size in terms of total assets affects the offering outcome in the US sample. Moreover, while older firms are less likely to be successful in the UK (p<0.01 in Model 4), this evidence is conditional on older firms setting higher targets (p<0.01 in Model 3). More mature firms might not view the opportunity to raise a small amount of capital as appropriate to meet their needs. However, by setting a higher target, it becomes relatively difficult for them to succeed. Conversely, such evidence is not observed in the US, where firm age does not affect the offering target (Model 5) and older firms are more likely to be successful (p<0.05 in Model 6). This evidence could be explained by institutional differences between the US and UK. While entrepreneurial ventures in the UK can raise capital up to £5 million, Regulation CF sets the limit at \$1.07 million in the US. Therefore, more mature firms aiming to raise a larger amount of capital in the US might decide to raise capital under a different regulation. Firms that launch an offering under Regulation CF are more likely to succeed, as the level of uncertainty faced by investors is lower compared to enterprises at their very early stages. Overall, some results differ between the UK and US offerings, which reveals differences in the determinants of success across the two markets.

#### [Insert Table 3 here]

## 4.3 Funding amount of successful equity crowdfunding offerings

We now focus on the amount of capital raised by successful offerings. We report our results in Table 4, where the system of Equations 1 and 2 is replicated by replacing the outcome variable *Success* with *Ln (Funding amount)* and estimated using IV 2SLS regressions. Using the sample of successful initial equity offerings, Models 2, 4, and 6 report the results on the determinants of offering success, while Models 1, 3, and 5 show the determinants of the offering target.

Models 1, 3, and 5 confirm the results on the determinants of offering target obtained in the previous analysis and performed on the whole sample of initial equity crowdfunding offerings. Interestingly, the *Female funder* variable became significant (p<0.01 in Model 1 and p<0.05 in Model 3). While we find that the amount of capital raised by female entrepreneurs is not different from that of male entrepreneurs, this evidence is conditional on female entrepreneurs setting lower targets, especially in the UK market. We further investigate the role of gender in Table 6, where we consider differences across platforms.

We now report the results on the determinants of the fundraising target. Our results related to the impact of equity offered on offering success are confirmed (p<0.01 in Models 2 and 4, p<0.05 in Model 6). This shows that a lower percentage of equity offered not only increases the likelihood of reaching the offering target but also positively affects the amount of capital raised among successful offerings. In line with our results on offering success, *Patents* has a positive and statistically significant influence on the amount of capital raised in the full sample of successful offerings (p<0.01 in Model 2). However, the coefficient of *Patents* is positive but not statistically significant when the US and UK samples are split in Models 4 and 6, respectively.

#### [Insert Table 4 here]

## 4.4 Differences across UK platforms

Our analysis also addresses the process of selecting platforms in UK equity crowdfunding markets. Table 5 presents the results of the system of Equations 3, 4, and 5. In Models 1, 4, and 7, we find that, besides our measure of *Platform preference*, identifying an effect of previous choices within the same industry on the selection of the crowdfunding platform, firm characteristics affect the observed matching between entrepreneurial ventures and platforms. The matching we observe is the result of two different effects—entrepreneurs' choice and platforms' screening. As we cannot disentangle the two effects, we show the results on how some enterprise characteristics are correlated to the likelihood of listing on a platform over another, providing explanations that take into account this limitation.

We find that entrepreneurial ventures on SyndicateRoom are larger (p<0.01 in Model 7), older (p<0.05 in Model 7), and more likely to hold patents (p<0.01 in Model 7) than those on Crowdcube and Seedrs. Smaller and younger enterprises might find it difficult to attract lead investors to commit before the offering is launched. Thus, less established enterprises might prefer entrepreneur-led platforms like Crowdcube and Seedrs, which do not require the involvement of lead investors. An alternative explanation is the more stringent due diligence performed by SyndicateRoom, resulting in more established enterprises listing on the platform. Compared to Crowdcube and SyndicateRoom, offerings on Seedrs offer a lower percentage of the equity to external investors (p<0.01 in Model 4). As the decision on the amount of equity to offer is taken at the launch of the offering, entrepreneurs may also be affected by the platform itself, especially in the case of an investor-led platform like SyndicateRoom. In our study, female funders prefer SyndicateRoom over other platforms (p<0.10 in Model 7), while they tend to avoid Crowdcube (p<0.01 in Model 1). When comparing the platforms in pairs, we also find that female entrepreneurs are more likely to list on Seedrs than on Crowdcube (p<0.05 in Model 1 of Table A6 in the Appendix). Although Crowdcube and Seedrs are both entrepreneur-led platforms, Seedrs appears to be more inclusive for underrepresented groups of enterprises.

Models 2, 5, and 8 show the results on the determinants of the fundraising target at the platform level. The entrepreneurial choice of offering target is confirmed to be positively affected by *Equity offered, Financial center, Ln (Total assets*+1), and *Trade debtors*, while *Debt ratio* is negatively correlated, with all the findings being statistically significant in entrepreneur-led platforms, as shown in Models 2 and 5. Interestingly, the coefficients of *Patents* and Ln(age+1) are positive and statistically significant at less than 1% for Crowdcube offerings (Model 2), while they are positive but not statistically significant for Seedrs offerings (Model 5). The *Female founder* variable has a negative impact on the fundraising target, although this effect is limited to Crowdcube (Model 2). The findings are different for offerings launched on the investor-led platform SyndicateRoom, where most of the variables are not statistically significant in determining the offering target (Model 8). The differences in the determinants of fundraising target across platforms might be explained by the differences in how the platforms interact and influence entrepreneurs while structuring the equity crowdfunding offering.

We now report the results on the determinants of offering success across platforms. As shown by Models 3, 6, and 9, the percentage of equity offered negatively affects offering success, although the effect is not significant in Model 9. While we previously confirm the importance of equity offered using the universe of initial equity crowdfunding offerings in the UK, we now find the same result at the platform level for Crowdcube and Seedrs. However, we fail to find statistically significant evidence for SyndicateRoom. In addition, the effects of patents on offering success change across platforms. Patents are positively associated with the success of equity crowdfunding offerings in SyndicateRoom only. Consistent with Rajan's (2012) model of standardization following differentiation, the differentiated nature of an enterprise's assets is necessary for the very early stage of entrepreneurial ventures. At this stage, to produce significant net present value, entrepreneurial ventures need to differentiate themselves from potential competitors. However, as time goes by, a differentiated enterprise becomes increasingly difficult for outsiders to finance because of the associated high degree of uncertainty. For this reason, entrepreneurs need to commit to undertaking a standardization process that will make the firm's key human capital more replaceable. By increasing external replaceability, patents are at the core of this standardization process. Thus, patents should matter more for entrepreneurial ventures in their later stages. In our study, entrepreneurial ventures on SyndicateRoom are indeed larger and more mature than those on Crowdcube and Seedrs.

#### [Insert Table 5 here]

We investigate the determinants of the amount of capital raised by successful offerings at the platform level. Our results are summarized in Table 6, where the system of Equations 3, 4, and 5 is replicated by replacing the outcome variable *Success* with *Ln* (*Funding amount*). Using the sample of successful initial equity offerings, most results are qualitatively unchanged. Our study provides further insights into the role of gender in influencing the amount of capital raised in successful offerings. Once again, we find differences across platforms. The coefficient of Female founder was significant for successful offerings only in the investor-led platform SyndicateRoom, while it is negative but not statistically significant in the entrepreneur-led platforms Crowdcube and Seedrs. The different findings between entrepreneur-led and investor-led platforms reflect the characteristics of their different investment models. In entrepreneur-led platforms, entrepreneurial ventures raise capital on their own investment terms, including the valuation of the company and the amount of equity to be offered. Conversely, in investor-led platforms, entrepreneurs have to negotiate investment terms with a lead investor. As entrepreneurs are likely to push to get the best possible valuation, the lead investor agrees on a negotiated valuation which is convenient for investors as well. Our results suggest that female entrepreneurs might be less effective than male entrepreneurs in negotiating with lead investors, resulting in a lower target amount.

### [Insert Table 6 here]

#### 5. Conclusions

This study offers comprehensive insight into the universe of 3,576 initial equity crowdfunding offerings in UK and US markets from 2012 to 2019. We find that retaining equity positively affects the offering success and amount of capital raised by equity crowdfunding offerings. This result confirms the previous evidence on the effectiveness of equity retention as a quality signal in UK equity crowdfunding markets and extends its effectiveness to the underexplored setting of equity crowdfunding markets in the US. However, we detect differences across UK platforms. The effect of equity retention is indeed concentrated in entrepreneur-led platforms like Crowdcube and Seedrs, but we fail to find evidence that equity offered impacts offering success and the amount of capital raised in the investor-led platform SyndicateRoom. Patents have no significant effect on offering success and the amount of capital raised in US equity crowdfunding markets. For the UK, the findings are mixed. Specifically, we find no effect of patents on Crowdcube and Seedrs, but for the investor-led platform SyndicateRoom, patents are a significant predictor of the success of equity crowdfunding offerings. Differences across platforms should therefore be considered when investigating equity crowdfunding. We also show that entrepreneurs of firms located in financial centers are more likely to set a higher offering target, especially in the UK. Moreover, female founders with a successful offering are more likely to set a lower target in UK markets. Finally, we investigate the factors affecting the matching between entrepreneurial ventures and crowdfunding platforms by showing that entrepreneurial ventures on SyndicateRoom are more established than those on entrepreneur-led platforms Crowdcube and Seedrs. As the UK equity crowdfunding market consolidates via platform mergers, it is of interest to understand how the differences between platforms will be integrated. Similar to the UK, a consolidation of equity crowdfunding markets is likely to take place in other countries, including the US.

# References

- Aggarwal, Reena, Nagpurnanand R. Prabhala, and Manju Puri. 2002. 'Institutional Allocation in Initial Public Offerings: Empirical Evidence'. *The Journal of Finance* 57 (3): 1421–42. https://doi.org/10.1111/1540-6261.00465.
- Ahlers, Gerrit K.C., Douglas Cumming, Christina Günther, and Denis Schweizer. 2015. 'Signaling in Equity Crowdfunding'. *Entrepreneurship Theory and Practice* 39 (4): 955–80. https://doi.org/10.1111/etap.12157.
- Beauhurst. 2020. 'Beauhurst Report: Equity Investment in the UK in 2019'. https://www.beauhurst.com/research/the-deal/.
- Bernstein, Shai. 2015. 'Does Going Public Affect Innovation?: Does Going Public Affect Innovation?' *The Journal of Finance* 70 (4): 1365–1403. https://doi.org/10.1111/jofi.12275.
- Block, Joern H., Massimo G. Colombo, Douglas J. Cumming, and Silvio Vismara. 2018. 'New Players in Entrepreneurial Finance and Why They Are There'. *Small Business Economics* 50 (2): 239–50. https://doi.org/10.1007/s11187-016-9826-6.
- Block, Joern H., Alexander Groh, Lars Hornuf, Tom Vanacker, and Silvio Vismara. 2020. 'The Entrepreneurial Finance Markets of the Future: A Comparison of Crowdfunding and Initial Coin Offerings'. *Small Business Economics* forthcoming (April). https://doi.org/10.1007/s11187-020-00330-2.
- Chemmanur, Thomas J., Elena Loutskina, and Xuan Tian. 2014. 'Corporate Venture Capital, Value Creation, and Innovation'. *Review of Financial Studies* 27 (8): 2434–73. https://doi.org/10.1093/rfs/hhu033.
- Crunchbase. 2020. 'The Crunchbase Data Difference'. https://about.crunchbase.com/products/thecrunchbase-difference/.
- Cumming, Douglas J., Sofia A. Johan, and Yelin Zhang. 2019. 'The Role of Due Diligence in Crowdfunding Platforms'. *Journal of Banking & Finance* 108 (November): 105661. https://doi.org/10.1016/j.jbankfin.2019.105661.
- Cumming, Douglas J., Gaël Leboeuf, and Armin Schwienbacher. 2020. 'Crowdfunding Models: Keep-It-All vs. All-Or-Nothing'. *Financial Management* 49 (2): 331–60. https://doi.org/10.1111/fima.12262.
- Cumming, Douglas J., Michele Meoli, and Silvio Vismara. 2019a. 'Does Equity Crowdfunding Democratize Entrepreneurial Finance?' *Small Business Economics* forthcoming (June). https://doi.org/10.1007/s11187-019-00188-z.
- Cumming, Douglas J., Michele Meoli, and Silvio Vismara. 2019b. 'Investors' Choices between Cash and Voting Rights: Evidence from Dual-Class Equity Crowdfunding'. *Research Policy* 48 (8): 103740. https://doi.org/10.1016/j.respol.2019.01.014.
- Cumming, Douglas J., Tom Vanacker, and Shaker A. Zahra. 2019. 'Equity Crowdfunding and Governance: Toward an Integrative Model and Research Agenda'. *Academy of Management Perspectives* forthcoming (January). https://doi.org/10.5465/amp.2017.0208.
- Cummings, Michael E., Hans Rawhouser, Silvio Vismara, and Erin L. Hamilton. 2020. 'An Equity Crowdfunding Research Agenda: Evidence from Stakeholder Participation in the Rulemaking Process'. *Small Business Economics* 54 (4): 907–32. https://doi.org/10.1007/s11187-018-00134-5.
- Farre-Mensa, Joan, Deepak Hegde, and Alexander Ljungqvist. 2020. 'What Is a Patent Worth? Evidence from the U.S. Patent "Lottery". *The Journal of Finance* 75 (2): 639–82. https://doi.org/10.1111/jofi.12867
- Hellmann, Thomas, and Manju Puri. 2000. 'The Interaction Between Product Market and Financing Strategy: The Role of Venture Capital'. *The Review of Financial Studies* 13 (4): 26. https://doi.org/10.1093/rfs/13.4.959

- Hornuf, Lars, Matthias Schmitt, and Eliza Stenzhorn. 2018. 'Equity Crowdfunding in Germany and the United Kingdom: Follow-up Funding and Firm Failure'. *Corporate Governance: An International Review* 26 (5): 331–54. https://doi.org/10.1111/corg.12260.
- Johan, Sofia, and Yelin Zhang. 2020. 'Quality Revealing versus Overstating in Equity Crowdfunding'. *Journal of Corporate Finance* 65 (December): 101741. https://doi.org/10.1016/j.jcorpfin.2020.101741.
- Leland, Hayne E., and David H. Pyle. 1977. 'Informational Asymmetries, Financial Structure, and Financial Intermediation'. *The Journal of Finance* 32 (2): 371–87. https://doi.org/10.2307/2326770.
- Meoli, Michele, Alice Rossi, and Silvio Vismara (2020). Financial literacy and investment crowdfunding. SSRN: https://ssrn.com/abstract=3699565.
- Mohammadi, Ali, and Kourosh Shafi. 2018. 'Gender Differences in the Contribution Patterns of Equity-Crowdfunding Investors'. *Small Business Economics* 50 (2): 275–87. https://doi.org/10.1007/s11187-016-9825-7.
- Rajan, Raghuram G. 2012. 'Presidential Address: The Corporation in Finance'. *The Journal of Finance* 67 (4): 1173–1217. https://doi.org/10.1111/j.1540-6261.2012.01745.x.
- Ralcheva, Aleksandrina, and Peter Roosenboom. 2020. 'Forecasting Success in Equity Crowdfunding'. *Small Business Economics* 55 (1): 39–56. https://doi.org/10.1007/s11187-019-00144-x.
- Rossi, Alice, and Silvio Vismara. 2018. 'What Do Crowdfunding Platforms Do? A Comparison between Investment-Based Platforms in Europe'. *Eurasian Business Review* 8 (1): 93–118. https://doi.org/10.1007/s40821-017-0092-6.
- Rossi, Alice, Silvio Vismara, and Michele Meoli. 2019. 'Voting Rights Delivery in Investment-Based Crowdfunding: A Cross-Platform Analysis'. *Journal of Industrial and Business Economics* 46 (2): 251–81. https://doi.org/10.1007/s40812-018-0109-x.
- SEC. 2020. 'Regulation A Lookback Study and Offering Limit Review Analysis, 2020'. https://www.sec.gov/smallbusiness/exemptofferings/rega/2020Report.
- Shafi, Kourosh. 2019. 'Investors' Evaluation Criteria in Equity Crowdfunding'. *Small Business Economics* forthcoming (July). https://doi.org/10.1007/s11187-019-00227-9.
- Signori, Andrea, and Silvio Vismara. 2018. 'Does Success Bring Success? The Post-Offering Lives of Equity-Crowdfunded Firms'. *Journal of Corporate Finance* 50 (June): 575–91. https://doi.org/10.1016/j.jcorpfin.2017.10.018.
- Stevenson, Regan, Sean R McMahon, Chaim Letwen, and Michael P Ciuchta. 2020. 'Equity Crowdfunding: Is It a Choice for Some Entrepreneurs?' *Small Business Economics* forthcoming.
- Vismara, Silvio. 2016. 'Equity Retention and Social Network Theory in Equity Crowdfunding'. Small Business Economics 46 (4): 579–90. https://doi.org/10.1007/s11187-016-9710-4.
- Vismara, Silvio. 2018. 'Information Cascades among Investors in Equity Crowdfunding'. *Entrepreneurship Theory and Practice* 42 (3): 467–97. https://doi.org/10.1111/etap.12261.
- Vismara, Silvio. 2019. 'Sustainability in Equity Crowdfunding'. *Technological Forecasting and Social Change* 141 (April): 98–106. https://doi.org/10.1016/j.techfore.2018.07.014.
- Walthoff-Borm, Xavier, Armin Schwienbacher, and Tom Vanacker. 2018. 'Equity Crowdfunding: First Resort or Last Resort?' *Journal of Business Venturing* 33 (4): 513–33. https://doi.org/10.1016/j.jbusvent.2018.04.001.
- Walthoff-Borm, Xavier, Tom Vanacker, and Veroniek Collewaert. 2018. 'Equity Crowdfunding, Shareholder Structures, and Firm Performance'. *Corporate Governance: An International Review* 26 (5): 314–30. https://doi.org/10.1111/corg.12259.

	IPOs	Equity Crowdfunding	VCs and BAs
Stakeholders			
Issuers	Most businesses do not have access to public offerings. Public offerings are too expensive for most entrepreneurs.	Open to nonpublic firms in traditional sectors. Business models should not be overly complex as investors have low incentives and capabilities to perform in-depth due diligence.	Not all businesses and industries satisfy growth and exit preferences of venture capital firms. Private stock offerings reduce disclosure costs, but are largely limited to accredited investors
Investors	Investors must be either accredited or a personal acquaintance to invest in anything but large public offerings.	Accredited and non-accredited investors both can access, though investment limits vary based on investor income/net worth.	High levels of capital, typically invested by high net worth individuals.
Intermediaries	Disintermediated finance (retail investors) and intermediated finance (institutional investors, e.g. mutual funds, hedge funds, insurance) Stock exchanges engage in extensive due diligence, financials and market analysis Documents vetted by national agencies (e.g. SEC).	Disintermediated finance with money invested directly from investors, which include both institutional and retail investors. Platforms select the ventures that appear online. Investment information available online (business plan, online pitch) on the platform website.	Disintermediated finance (BAs) and intermediated finance (VCs). Entrepreneurs share pitch deck, executive summary, or full business plan. Investment decisions are influenced by in-person pitches by entrepreneurs.
Market			
Primary market Secondary market	Public offerings Public trade opportunities.	Public offerings Private deals (new opportunities for secondary trades only for few platforms).	Private deals Private deals.
Effect			
Selection Treatment	Due diligence performed by stock exchanges. Ongoing listing requirements by stock exchanges. Vigilance by national agencies and (inter)national information intermediaries.	Due diligence and screening performed by equity crowdfunding platforms. Platforms that work under a nominee structure hold the voting power of crowdfunders and exercise monitoring on their behalf. Investors unlikely to become involved in managing firm.	Investment selection done by single investors or networks (BAs) and fund managers (VCs). Direct involvement and value added activities (e.g. coaching) of BAs or fund managers. Investors are often knowledgeable and may stay involved in the firm.
Demand and supply			
Supply of capital	Investor protection achieved through due diligence, high levels of disclosures, legal accountability, and offering prospectuses.	Loose regulation and investor protection; low maximum level of investments.	Investor protection is achieved through due diligence and detailed contracts.
Demand of capital	Costly capital formation because of fixed direct compliance costs and indirect disclosure costs (lower in second markets dedicated to entrepreneurial and high-tech firms).	Compliance costs and entry barriers much lower than public offerings. Success fee to be paid to equity crowdfunding platforms.	No placement costs; only selection and monitoring costs.

# Table 1. Comparison of entrepreneurial finance markets.

# Table 2. Descriptive statistics.

T-tests on the difference in means between the US and UK offerings. The sample is made of 3,576 initial equity crowdfunding offerings in UK and US markets in the period from 2012 to 2019. *Success* is a dummy variable equal to 1 if the offering is successful, 0 otherwise. *Funding amount* is the amount of capital raised in a successful offering, measured in m\$. *Equity offered* is the percentage of equity offered to investors. *Patents* is a dummy variable equal to 1 if the firm has patents, 0 otherwise. *Target* is the amount of capital to be raised in the offering, measured in m\$. *Female founder* is a dummy variable equal to 1 if the founder of the offering firms is a woman, 0 otherwise. *Financial center* is a dummy variable equal to 1 if the firm has patents of the offering firms is a woman, 0 otherwise. *Age* measures the number of years from the establishment of the firm to the offering. *Total assets* variable measures total assets in the year before the offering. *Trade debtors* is a dummy variable equal to 1 if the firm has trade debtors at the time of the offering, 0 otherwise. *Debt ratio* is the ratio of the debt to total assets, measured in the year before the offering. \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% levels.

	UK population				US population			
	Obs	Mean	Min	Max	Obs	Mean	Min	Max
Success	2,959	0.418	0	1	617	0.511**	0	1
Funding amount (m\$)	1,237	0.732	0.001	15.061	317	0.222***	0.001	1.070
Equity offered (%)	2,959	13.185	0.050	100	617	6.947***	0.061	87.992
Patents	2,959	0.038	0	1	617	0.058	0	1
Target (m\$)	2,959	0.425	0.001	14.853	617	0.064***	0	1.070
Female founder	2,959	0.154	0	1	617	0.128	0	1
Financial center	2,959	0.334	0	1	617	0.169***	0	1
Age (years)	2,959	3.035	0	20	617	2.762	0	45
Total assets (m\$)	2,959	0.262	0	47.194	617	0.350	0	52.635
Trade debtors	2,959	0.080	0	1	617	0.188**	0	1
Debt ratio	2,959	0.754	0	14.000	617	4.691***	0	1,553.600

# Table 3. Determinants of success of the equity crowdfunding offerings.

This table reports the results of a system of two equations estimated using IV probit regressions. The sample is made of 3,576 initial equity crowdfunding offerings in UK and US markets in the period from 2012 to 2019. The first equation estimates the *Ln* (*Target*) (Model 1, 3, and 5) and the second equation estimates the *Success* (Model 2, 4, and 6). The instrumented variable for the second equation is *Ln* (*Target*), and the instrumental variable used in the first equation is *Average target*, measured as the average value of the target calculated using all equity offerings in the same industry and platform in the 12 months prior to each observation. *Success* is a dummy variable equal to 1 if the offering is successful, 0 otherwise. *Equity offered* is the percentage of equity offered to investors. *Patents* is a dummy variable equal to 1 if the firm has patents, 0 otherwise. *Ln* (*Target*) is the natural logarithm of the amount of capital to be raised in the offering, measured in m\$. *Female founder* is a dummy variable equal to 1 if the firm is headquartered in a financial center identified using the Global Financial Centers Index, 0 otherwise. *Ln* (*Age+1*) is the logarithm of the number of years from the establishment of the firm to the offering. *Ln* (*Total assets+1*) is the logarithm of total assets in the year before the offering. *Trade debtors* is a dummy variable equal to 1 if the firm has trade debtors at the time of the offering, 0 otherwise. *Debt ratio* is the ratio of the debt to total assets, measured in the year before the offering, winsorized with top 5% set to the 95<sup>th</sup> percentile. *UK* is a dummy variable equal to 1 if the firm is from the UK sample, 0 otherwise. Standard errors are in parentheses. Year and industry (1-digit SIC level) fixed effects are included. Significance level at 1% (\*\*\*), 5% (\*\*), and 10% (\*).

	Full sa	mple	UI	K	U	S
	(1)	(2)	(3)	(4)	(5)	(6)
	Ln (Target)	Success	Ln (Target)	Success	Ln (Target)	Success
Equity offered	0.030***	-0.033***	0.031***	-0.027***	-0.000	-0.029***
	(0.002)	(0.004)	(0.002)	(0.008)	(0.001)	(0.011)
Patents	0.481***	0.492***	0.543***	0.711***	0.022	0.003
	(0.068)	(0.119)	(0.080)	(0.152)	(0.018)	(0.240)
Ln (target)	-	-0.034	-	-0.257	-	0.056
-	-	(0.058)	-	(0.168)	-	(0.054)
Female founder	-0.039	-0.097	-0.031	-0.104	0.012	-0.187
	(0.038)	(0.064)	(0.042)	(0.069)	(0.012)	(0.160)
Financial center	0.082***	0.298***	0.103***	0.299***	0.009	0.281**
	(0.030)	(0.051)	(0.033)	(0.055)	(0.011)	(0.142)
Ln (age+1)	$0.104^{***}$	-0.117***	0.156***	-0.136**	0.001	0.170**
	(0.023)	(0.040)	(0.026)	(0.055)	(0.006)	(0.086)
Ln (total assets+1)	0.033***	0.050***	0.037***	0.066***	-0.002**	-0.008
	(0.003)	(0.005)	(0.003)	(0.007)	(0.001)	(0.013)
Trade debtors	0.192***	0.046	0.235***	0.225**	0.014	-0.093
	(0.051)	(0.087)	(0.062)	(0.109)	(0.013)	(0.166)
Debt ratio	-0.068***	-0.032	-0.074***	-0.053*	-0.003	0.009
	(0.013)	(0.022)	(0.016)	(0.027)	(0.003)	(0.043)
Average target	0.562***	-	0.258***	-	0.994***	-
	(0.019)	-	(0.026)	-	(0.004)	-
UK	0.331***	0.246***	-	-	-	-
	(0.044)	(0.074)	-	-	-	-
Constant	10.859***	0.696	10.062***	3.367*	13.914***	-1.142
	(0.584)	(1.070)	(0.620)	(1.826)	(0.031)	(0.745)
No. obs.	3,576	3,576	2,959	2,959	617	617
Log-likelihood	-6,300	-6,300	-5,226	-5,226	-167.7	-167.7

## Table 4. Determinants of funding amount of the successful equity crowdfunding offerings.

This table reports the results of a system of two equations estimated using IV 2SLS regressions. The sample is made of 1,.554 initial equity crowdfunding offerings in UK and US markets that successfully raised funds in the period from 2012 to 2019. The first equation estimates the *Ln* (*Target*) (Model 1, 3, and 5) and the second equation estimates the *Ln* (*Funding amount*) (Model 2, 4, and 6). The instrumented variable for the second equation is *Ln* (*Target*), and the instrumental variable used in the first equation is *Average target*, measured as the average value of the target calculated using successful equity offerings in the same industry and platform in the 12 months prior to each observation. *Ln* (*Funding amount*) is the logarithm of the amount of capital raised in a successful offering, measure in m\$. *Equity offered* is the percentage of equity offered to investors. *Patents* is a dummy variable equal to 1 if the firm has patents, 0 otherwise. *Ln* (*Target*) is the natural logarithm of the amount of capital to be raised in the offering, measured in a financial center identified using the Global Financial Centers Index, 0 otherwise. *Ln* (*Age+1*) is the logarithm of the number of years from the establishment of the firm to the offering. *Ln* (*Total assets+1*) is the logarithm of total assets in the year before the offering. *Trade debtors* is a dummy variable equal to 1 if the firm is neasured in the year before the offering, winsorized with top 5% set to the 95<sup>th</sup> percentile. *UK* is a dummy variable equal to 1 if the firm is from the UK sample, 0 otherwise. Standard errors are in parentheses. Year and industry (1-digit SIC level) fixed effects are included. Significance level at 1% (\*\*\*), 5% (\*\*), and 10% (\*).

	I	Full sample		UK		US
	(1)	(2)	(3)	(4)	(5)	(6)
	Ln (Target)	Ln (Funding amount)	Ln (Target)	Ln (Funding amount)	Ln (Target)	Ln (Funding amount)
Equity offered	0.037***	-0.024***	0.032***	-0.020***	0.055***	-0.042**
	(0.004)	(0.004)	(0.004)	(0.002)	(0.009)	(0.017)
Patents	0.314***	0.197***	0.311***	0.005	0.222	0.284
	(0.090)	(0.070)	(0.099)	(0.039)	(0.195)	(0.271)
Ln (target)	-	0.949***	-	0.953***	-	0.856***
	-	(0.057)	-	(0.034)	-	(0.147)
Female founder	-0.179***	0.059	-0.164**	0.028	-0.117	0.290
	(0.061)	(0.046)	(0.065)	(0.025)	(0.148)	(0.224)
Financial center	0.107**	0.032	0.158***	0.012	-0.140	0.192
	(0.048)	(0.035)	(0.051)	(0.020)	(0.115)	(0.174)
Ln (age+1)	0.129***	-0.022	0.204***	0.015	-0.003	-0.174
	(0.039)	(0.030)	(0.044)	(0.018)	(0.075)	(0.113)
Ln (total assets+1)	0.035***	0.005	0.038***	0.002	0.010	0.028
	(0.005)	(0.004)	(0.005)	(0.003)	(0.012)	(0.018)
Trade debtors	0.224***	0.015	0.162**	0.013	0.283**	-0.052
	(0.070)	(0.054)	(0.080)	(0.030)	(0.140)	(0.219)
Debt ratio	-0.082***	0.013	-0.094***	-0.005	-0.003	0.051
	(0.020)	(0.016)	(0.023)	(0.009)	(0.038)	(0.056)
Average target	0.875***	-	0.737***	-	3.433***	-
	(0.067)	-	(0.068)	-	(0.340)	-
UK	0.078	1.095***	-	-	-	-
	(0.069)	(0.051)	-	-	-	-
Constant	9.252***	0.179	9.295***	1.025**	10.559***	1.869
	(0.910)	(0.830)	(0.906)	(0.454)	(0.437)	(1.805)
No. obs.	1,554	1,554	1,237	1,237	317	317
$\mathbb{R}^2$	0.346	0.758	0.361	0.919	0.463	0.281

## Table 5. Two-stage selection model of success of the equity crowdfunding offerings across UK platforms.

This table reports the results of two-stage selection models. The sample is made of 2,959 initial equity crowdfunding offerings in UK markets in the period from 2012 to 2019. Models 1 to 3 refer to platform Crowdcube, while Models 4 to 6 to platform Seedrs, and Model 7 to 9 to platform SyndicateRoom. The first stage is a bivariate probit regression on the likelihood of issuing an offering in Crowdcube, with respect to Seedrs and SyndicateRoom (Model 1). Crowdcube is a dummy variable equal to 1 if the offering is issued in Crowdcube, 0 otherwise. Platform preference is measured as the number of offerings listed on Crowdcube, divided by the number of offerings listed on Crowdcube, Seedrs and SyndicateRoom, in the 12 months prior to each observation. The second stage is a system of two equations estimated using IV probit regressions. Success is a dummy variable equal to 1 if the offering is successful, 0 otherwise. The first equation estimates the Ln (Target) (Model 2) and the second equation estimates the Success (Model 3). The instrumented variable for the second equation is Ln(Target), and the instrumental variable used in the first equation is Average target, measured as the average value of the target calculated using all equity offerings in the same industry and platform in the 12 months prior to each observation. *Equity offered* is the percentage of equity offered to investors. *Patents* is a dummy variable equal to 1 if the firm has patents, 0 otherwise. Ln (Target) is the natural logarithm of the amount of capital to be raised in the offering, measured in m\$. Female founder is a dummy variable equal to 1 if the founder of the offering firms is a woman, 0 otherwise. Financial center is a dummy variable equal to 1 if the firm is headquartered in a financial center identified using the Global Financial Centers Index, 0 otherwise. Ln (Age+1) is the logarithm of the number of years from the establishment of the firm to the offering. Ln (Total assets +1) is the logarithm of total assets in the year before the offering. Trade debtors is a dummy variable equal to 1 if the firm has trade debtors at the time of the offering, 0 otherwise. Debt ratio is the ratio of the debt to total assets, measured in the year before the offering, winsorized with top 5% set to the 95<sup>th</sup> percentile. Standard errors are in parentheses. Year and industry (1-digit SIC level) fixed effects are included. Significance level at 1% (\*\*\*), 5% (\*\*), and 10% (\*).

		Crowdcube			Seedrs		Svr	dicateRoom	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Crowdcube	Ln (Target)	Success	Seedrs	Ln (Target)	Success	SyndicateRoom	Ln (Target)	Success
Equity offered	0.027***	0.011**	-0.030***	-0.049***	0.035***	-0.075***	0.049***	0.035**	-0.028
	(0.004)	(0.005)	(0.008)	(0.004)	(0.009)	(0.022)	(0.006)	(0.015)	(0.029)
Patents	-0.173	0.377***	0.172	-0.508***	0.284	0.278	0.854***	0.414	1.469***
	(0.126)	(0.097)	(0.227)	(0.145)	(0.209)	(0.341)	(0.146)	(0.290)	(0.504)
Ln (target)	-	-	-0.062	-	-	-0.129	-	-	-0.929***
-	-	-	(0.234)	-	-	(0.268)	-	-	(0.275)
Female founder	-0.202***	-0.096*	-0.014	0.102	0.025	-0.177	0.185*	-0.101	-0.417*
	(0.068)	(0.054)	(0.115)	(0.070)	(0.073)	(0.116)	(0.097)	(0.126)	(0.220)
Financial center	-0.049	0.101**	0.363***	0.059	0.156***	0.245***	0.021	0.002	0.036
	(0.052)	(0.043)	(0.085)	(0.054)	(0.056)	(0.094)	(0.084)	(0.099)	(0.195)
Ln (age+1)	0.113***	0.205***	-0.441***	-0.172***	0.045	-0.109	0.167**	0.072	-0.098
	(0.042)	(0.039)	(0.087)	(0.043)	(0.047)	(0.089)	(0.070)	(0.110)	(0.180)
Ln (total assets+1)	-0.005	0.027***	0.070***	-0.020***	0.027***	0.039***	0.063***	0.028	0.028
	(0.006)	(0.005)	(0.011)	(0.006)	(0.007)	(0.014)	(0.008)	(0.023)	(0.042)
Trade debtors	-0.341***	0.199**	0.170	0.539***	0.416***	0.231	-0.296**	0.225	0.974***
	(0.100)	(0.086)	(0.184)	(0.103)	(0.121)	(0.228)	(0.132)	(0.149)	(0.363)
Debt ratio	0.079***	-0.088***	-0.014	-0.086***	-0.092**	-0.083	-0.002	-0.010	-0.135**
	(0.025)	(0.019)	(0.045)	(0.028)	(0.036)	(0.067)	(0.033)	(0.039)	(0.055)
Platform preference	3.790***	-	-	3.866***	-	-	9.714***	-	-
	(0.468)	-	-	(0.474)	-	-	(2.828)	-	-
Average target	-	0.540***	-	-	0.432***	-	-	0.496***	-
	-	(0.108)	-	-	(0.077)	-	-	(0.098)	-
<b>IMR</b> <sub>Platform</sub>	-	0.009	-0.074	-	0.291	0.515	-	0.237	-0.447
	-	(0.197)	(0.363)	-	(0.207)	(0.399)	-	(0.455)	(0.757)
Constant	-3.081***	11.462***	2.040	-0.047	12.039***	2.398	-8.402	13.224***	12.924***
	(0.432)	(0.468)	(2.552)	(0.173)	(0.287)	(3.086)	(122.347)	(1.303)	(4.352)
No. obs.	2,959	1,534	1,534	2,959	1,173	1,173	2,959	252	252
Log-likelihood	-1,856	-2,513	-2,513	-1,743	-2,031	-2,031	-635.6	-383.1	-383.1

# Table 6. Two-stage selection model of funding amount of the successful equity crowdfunding offerings across UK platforms.

This table reports the results of two-stage selection models. The sample is made of 1,237 initial equity crowdfunding offerings in UK markets that successfully raised funds in the period from 2012 to 2019. Models 1 and 2 refer to platform Crowdcube, while Models 3 to 4 to platform Seedrs, and Model 5 to 6 refer to platform SyndicateRoom. The first stage is a bivariate probit regression on the likelihood of issuing an offering in Crowdcube, with respect to Seedrs and SyndicateRoom (see Model 1 in Table 5). The second stage is a system of two equations estimated using IV 2SLS regressions. The first equation estimates the Ln (*Target*) (Model 1) and the second equation estimates the Ln (*Funding amount*) (Model 2). Ln (*Funding amount*) is the logarithm of the amount of capital raised in a successful offering, measure in m\$. *Average target* is measured as the average value of the target calculated using successful equity offerings in the 12 months prior to each observation. *Equity offered* is the percentage of equity offered to investors. *Patents* is a dummy variable equal to 1 if the firm has patents, 0 otherwise. Ln (*Target*) is the natural logarithm of the amount of capital to be raised in a financial center is a dummy variable equal to 1 if the firm is headquartered in a financial center identified using the Global Financial Centers Index, 0 otherwise. Ln(Age+1) is the logarithm of the number of years from the establishment of the firm has trade debtors at the time of the offering, 0 otherwise. *Debt ratio* is the ratio of the debt to total assets, measured in the year before the offering. *Trade debtors* is a dummy variable equal to 1 if the firm, winsorized with top 5% set to the 95<sup>th</sup> percentile. Standard errors are in parentheses. Year and industry (1-digit SIC level) fixed effects are included. Significance level at 1% (\*\*\*), 5% (\*\*), and 10% (\*).

	(	Crowdcube		Seedrs	Sy	SyndicateRoom		
	(1)	(2)	(3)	(4)	(5)	(6)		
	Ln (Target)	Ln (Funding amount)	Ln (Target)	Ln (Funding amount)	Ln (Target)	Ln (Funding amount)		
Equity offered	-0.012	-0.024***	0.086***	-0.028***	0.009	0.006		
	(0.008)	(0.004)	(0.018)	(0.007)	(0.016)	(0.005)		
Patents	0.238	-0.008	0.779***	0.139	-0.136	0.153*		
	(0.152)	(0.069)	(0.295)	(0.089)	(0.302)	(0.090)		
Ln (target)	-	0.991***	-	0.994***	-	0.937***		
	-	(0.070)	-	(0.049)	-	(0.072)		
Female founder	-0.023	-0.001	-0.171	0.025	-0.438***	0.171***		
	(0.095)	(0.043)	(0.132)	(0.039)	(0.145)	(0.053)		
Financial center	0.141**	0.008	0.229**	0.021	0.026	0.021		
	(0.064)	(0.030)	(0.100)	(0.031)	(0.122)	(0.035)		
Ln (age+1)	0.172***	0.025	0.266***	-0.001	-0.122	0.053		
	(0.067)	(0.033)	(0.093)	(0.030)	(0.120)	(0.037)		
Ln (total assets+1)	0.037***	-0.001	0.040***	0.002	-0.012	0.019**		
	(0.007)	(0.004)	(0.012)	(0.004)	(0.025)	(0.007)		
Trade debtors	0.345***	0.024	-0.007	-0.075	0.503**	0.005		
	(0.130)	(0.064)	(0.224)	(0.064)	(0.194)	(0.072)		
Debt ratio	-0.172***	0.009	-0.008	-0.025	-0.095**	-0.017		
	(0.032)	(0.018)	(0.066)	(0.019)	(0.042)	(0.015)		
Average target	0.534***	-	1.207***	-	0.735***	-		
	(0.083)	-	(0.206)	-	(0.182)	-		
<b>IMR</b> <sub>Platform</sub>	-1.103***	0.189	-0.650	0.070	-0.764*	0.355**		
	(0.350)	(0.169)	(0.476)	(0.138)	(0.448)	(0.151)		
Constant	10.444***	0.798	9.018***	0.257	14.397***	-0.655		
	(0.887)	(0.808)	(0.606)	(0.490)	(1.840)	(1.253)		
No. obs.	628	628	445	445	164	164		
R <sup>2</sup>	0.305	0.884	0.414	0.954	0.362	0.932		

# Appendix

# Table A1

Data on US offerings are from the SEC EDGAR database. Data on UK offerings are from Orbis Europe (accounting data), Crunchbase (patents), and crowdfunding platforms (dependent variables).

Variable	Definition
Success	Dummy = 1 if the offering is successful, 0 otherwise
Funding amount (m\$)	Amount of capital raised in a successful offering
Equity Offered (%)	Percentage of equity offered to investors
Patents	Dummy = 1 if the firm has patents, 0 otherwise
Target (m\$)	Target capital to be raised in the offering
Female founder	Dummy = 1 if the founder of the offering firms is a woman, 0 otherwise
Financial center	Dummy = 1 if the firm is headquartered in a financial center identified using the Global Financial Centers
	Index, 0 otherwise
Age (years)	Number of years from the establishment of the firm to the offering
Total assets (m\$)	Total assets, measured in the year before the offering
Trade debtors	Dummy = 1 if the firm has trade debtors at the time of the offering, 0 otherwise.
Debt ratio	Ratio of the debt to total assets, measured in the year before the offering

# Table A2

This table reports descriptive statistics on UK offerings.

	UK	population				
	Ν	Mean	St. Dev.	Median	Min	Max
Success	2,959	0.418	0.493	0	0	1
Funding Amount (m\$)	1,237	0.732	1.349	0.383	0.001	15.061
Equity offered (%)	2,959	13.185	8.698	12	0.050	100
Patents	2,959	0.038	0.191	0	0	1
Target (m\$)	2,959	0.425	0.869	0.236	0.001	14.853
Female founder	2,959	0.154	0.361	0	0	1
Financial center	2,959	0.334	0.472	0	0	1
Age (years)	2,959	3.035	3.681	2	0	20
Total Assets (m\$)	2,959	0.262	1.341	0	0	47.194
Trade debtors	2,959	0.080	0.272	0	0	1
Debt ratio	2,959	0.754	2.068	0	0	14

# Table A3

This table reports descriptive statistics on the US offerings.

	US	5 population				
	Ν	Mean	St. Dev.	Median	Min	Max
Success	617	0.511	0.500	1	0	1
Funding Amount (m\$)	317	0.222	0.315	0.082	0.001	1.070
Equity offered (%)	617	6.947	9.456	4.723	0.061	87.992
Patents	617	0.058	0.234	0	0	1
Target (m\$)	617	0.064	0.129	0.010	0	1.070
Female founder	617	0.128	0.334	0	0	1
Financial center	617	0.169	0.375	0	0	1
Age (years)	617	2.762	4.291	1	0	45
Total Assets (m\$)	617	0.350	2.376	0	0	52.635
Trade debtors	617	0.188	0.391	0	0	1
Debt ratio	617	4.691	65.183	0	0	1,553.600

# Table A4

Correlation matrix on UK offerings. Variance inflation factors (VIFs) are obtained after estimating an OLS regression of success against all variables. Significance level at 1% (\*\*\*), 5% (\*\*), and 10% (\*).

	Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	VIF
(1)	Success	1.000										
(2)	Equity offered	-0.269***	1.000									1.08
(3)	Patents	0.130***	-0.061***	1.000								1.05
(4)	Target	0.169***	0.038**	0.156***	1.000							1.22
(5)	Female founder	0.051***	-0.024	0.028	0.070***	1.000						1.04
(6)	Financial center	0.137***	-0.081***	-0.054***	0.050***	0.094***	1.000					1.06
(7)	Age	0.146***	-0.171***	0.129***	0.301***	0.095***	-0.076***	1.000				1.48
(8)	Total assets	0.317***	-0.184***	0.152***	0.344***	0.169***	0.115***	0.523***	1.000			1.93
(9)	Trade debtors	0.180***	-0.132***	0.085***	0.222***	0.090***	-0.004	0.260***	0.375***	1.000		1.19
(10)	Debt ratio	0.105***	-0.052***	0.054***	0.089***	0.096***	0.062***	0.255***	0.450***	0.140***	1.000	1.27
	Mean VIF											1.26

# Table A5

Correlation matrix on US offerings. Variance inflation factors (VIFs) are obtained after estimating an OLS regression of success against all variables. Significance level at 1% (\*\*\*), 5% (\*\*), and 10% (\*).

	Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	VIF
(1)	Success	1.000										
(2)	Equity offered	-0.145***	1.000									1.25
(3)	Patents	0.062	-0.104***	1.000								1.05
(4)	Target	-0.026	0.345***	0.068*	1.000							1.26
(5)	Female founder	-0.054	0.092**	-0.075*	-0.111***	1.000						1.05
(6)	Financial center	0.074*	0.058	-0.001	-0.003	0.087**	1.000					1.01
(7)	Age	0.129***	-0.171***	0.156***	0.057	0.023	-0.006	1.000				1.70
(8)	Total assets	0.085**	-0.160***	0.179***	0.147***	0.008	0.005	0.632***	1.000			2.15
(9)	Trade debtors	0.045	-0.077*	0.128***	0.200***	-0.011	0.038	0.411***	0.582***	1.000		1.56
(10)	Debt ratio	-0.028	0.039	-0.003	0.031	-0.020	-0.022	-0.022	0.003	-0.016	1.000	1.00
	Mean VIF											1.34

# Table A6. Determinants of platform's choice among UK platforms.

This table reports the results of the first stage of a selection model. The first stage is a system of three equations estimated using probit regressions on the likelihood of issuing an offering in a platform, with respect to another. Model 1 estimates the likelihood of issuing an offering in Crowdcube, with respect to Seedrs. *Crowdcube* is a dummy variable equal to 1 if the offering is issued in Crowdcube, 0 otherwise. *Platform preference* is measured as the number of offerings listed on Crowdcube, divided by the number of offerings listed on Seedrs, in the 12 months prior to each observation. Model 2 and Model 3 estimate the likelihood of issuing an offering on Crowdcube with respect SyndicateRoom, and the likelihood of issuing an offering on Seedrs with respect to SyndicateRoom, respectively. *Equity offered* is the percentage of equity offered to investors. *Patents* is a dummy variable equal to 1 if the firm has patents, 0 otherwise. *Ln (Target)* is the natural logarithm of the amount of capital to be raised in the offering, measured in m\$. *Female founder* is a dummy variable equal to 1 if the founder of the offering firms is a woman, 0 otherwise. *Ln (Age+1)* is the logarithm of the number of years from the establishment of the firm has trade debtors at the time of the offering, 0 otherwise. *Debt ratio* is the ratio of the debt to total assets, measured in the year before the offering, winsorized with top 5% set to the 95<sup>th</sup> percentile. Standard errors are in parentheses. Year and industry (1-digit SIC level) fixed effects are included. Significance level at 1% (\*\*\*), 5% (\*\*), and 10% (\*).

	(1)	(2)	(3)
	Crowdcube vs. Seedrs	Crowdcube vs. SyndicateRoom	Seedrs vs. SyndicateRoom
Equity offered	0.046***	-0.037***	-0.072***
	(0.004)	(0.007)	(0.008)
Patents	0.328**	-0.791***	-1.170***
	(0.163)	(0.161)	(0.203)
Female founder	-0.157**	-0.274**	-0.115
	(0.075)	(0.111)	(0.118)
Financial center	-0.051	-0.055	0.002
	(0.056)	(0.096)	(0.102)
Ln (age+1)	0.164***	-0.119	-0.265***
	(0.045)	(0.083)	(0.080)
Ln (total assets+1)	0.013**	-0.066***	-0.058***
	(0.006)	(0.010)	(0.010)
Trade debtors	-0.567***	0.136	0.519***
	(0.111)	(0.151)	(0.164)
Debt ratio	0.087***	0.040	-0.081*
	(0.030)	(0.035)	(0.045)
Platform preference	3.320***	-6.095***	-5.399***
	(0.488)	(1.981)	(1.665)
Constant	1.232	12.049	13.112
	(125.321)	(615.395)	(349.892)
No. obs.	2,707	1,786	1,425
Log-likelihood	-1,619	-523.0	-444.4

# Table A7. Determinants of success the equity crowdfunding offerings across UK platforms.

This table reports the results of the second stage of a selection model. The second stage is a system of two equations estimated using IV probit regressions. *Success* is a dummy variable equal to 1 if the offering is successful, 0 otherwise. The first equation estimates the *Ln* (*Target*) (Model 2, 4, and 6) and the second equation estimates the *Success* (Model 3, 5, and 7). The instrumented variable for the second equation is *Ln* (*Target*), and the instrumental variable used in the first equation is *Average target*, measured as the average value of the target calculated using all equity offerings in the same industry and platform in the 12 months prior to each observation. *Equity offered* is the percentage of equity offered to investors. *Patents* is a dummy variable equal to 1 if the firm has patents, 0 otherwise. *Ln* (*Target*) is the natural logarithm of the amount of capital to be raised in the offering, measured in m\$. *Female founder* is a dummy variable equal to 1 if the firm is headquartered in a financial center identified using the Global Financial Centers Index, 0 otherwise. *Ln* (*Age+1*) is the logarithm of the number of years from the establishment of the firm has trade debtors at the time of the offering, 0 otherwise. *Debt ratio* is the ratio of the debt to total assets, measured in the year before the offering, winsorized with top 5% set to the 95<sup>th</sup> percentile. Inverse Mills Ratios are estimated from the first stage regression and included in all second stage regressions (see Table 4). Standard errors are in parentheses. Year and industry (1-digit SIC level) fixed effects are included. Significance level at 1% (\*\*\*), 5% (\*\*), and 10% (\*).

	Crowdcube		Seedrs		SyndicateRoom	
	(1)	(2)	(3)	(4)	(5)	(6)
	Ln (Target)	Success	Ln (Target)	Success	Ln (Target)	Success
Equity offered	0.008	-0.026***	0.029***	-0.079***	0.041***	-0.036
	(0.006)	(0.010)	(0.010)	(0.022)	(0.014)	(0.032)
Patents	0.287**	0.234	0.055	0.386	0.421	1.676***
	(0.123)	(0.242)	(0.226)	(0.365)	(0.272)	(0.496)
Ln (target)	-	-0.052	-	-0.088	-	-0.905***
	-	(0.236)	-	(0.287)	-	(0.289)
Female founder	-0.115**	-0.002	-0.002	-0.132	-0.175	-0.365
	(0.052)	(0.115)	(0.076)	(0.124)	(0.151)	(0.262)
Financial center	0.097**	0.363***	0.146***	0.246***	-0.015	0.052
	(0.043)	(0.085)	(0.055)	(0.094)	(0.102)	(0.203)
Ln (age+1)	0.199***	-0.434***	0.026	-0.121	0.104	-0.142
	(0.040)	(0.087)	(0.049)	(0.088)	(0.105)	(0.189)
Ln (total assets+1)	0.022***	0.073***	0.019**	0.041***	0.019	0.037
	(0.006)	(0.012)	(0.008)	(0.013)	(0.027)	(0.048)
Trade debtors	0.214**	0.142	0.478***	0.271	0.131	1.046***
	(0.098)	(0.205)	(0.130)	(0.248)	(0.162)	(0.373)
Debt ratio	-0.087***	-0.011	-0.096***	-0.091	0.029	-0.172*
	(0.019)	(0.045)	(0.037)	(0.069)	(0.052)	(0.090)
Average target	0.538***	-	0.416***	-	0.494***	-
	(0.108)	-	(0.076)	-	(0.099)	-
<b>IMR</b> <sub>SyndicateRoom</sub>	0.271	-0.221	0.566***	-0.176	-	-
	(0.172)	(0.350)	(0.189)	(0.443)	-	-
IMR <sub>Crowdcube</sub>	-	-	0.189	0.763	-0.436	0.193
	-	-	(0.237)	(0.483)	(0.701)	(1.245)
<b>IMR</b> <sub>Seedrs</sub>	-0.019	0.014	-	-	0.597	-0.591
	(0.194)	(0.347)	-	-	(0.452)	(0.832)
Constant	11.599***	1.775	12.358***	1.793	13.784***	12.144**
	(0.481)	(2.642)	(0.309)	(3.447)	(1.345)	(4.827)
No. obs.	1,534	1,534	1,173	1,173	252	252
Log-likelihood	-2,512	-2,512	-2,027	-2,027	-381.4	-381.4