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Enfranchising the crowd: Nominee account equity crowdfunding

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Enfranchising the crowd:

Nominee account equity crowdfunding

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Abstract

The nominee approach to equity crowdfunding pools all crowd investors into one (nominee) account where typically the platform acts as the legal owner but the crowd retains beneficial ownership. The platform plays an active digital corporate governance role that simultaneously enfranchises crowd investors with voting and ownership rights but removes the administrative burden on startups of having to deal with several hundred shareholders. Through an inter-platform and intra-platform analysis of a large sample of 1,018 initial equity crowdfunding campaigns, this paper assesses both the short-term and the long-term impact of nominee versus direct ownership. It finds that nominee initial campaigns are on average more successful than direct ownership campaigns in that they are more likely to succeed, raise more funds, attract overfunding and enjoy greater long run success in terms of successful seasoned equity crowdfunded offerings, numbers of such offerings, and probability of survival. These results hold inter-platform between the two main UK equity crowdfunding platforms (Seedrs and Crowdcube) as well as intra-platform, using the post-2015 quasi-natural experiment when the nominee approach became an option for startups raising capital on Crowdcube.

JEL Classification: G240, M130
Keywords: Entrepreneurial finance; corporate governance, nominee account.

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1. Introduction

Equity crowdfunding (ECF) in the UK was pioneered by Crowdcube in February 2011 and was closely followed by Seedrs in July 2012. The initial Crowdcube model conforms well with the pure ECF model of a two-sided platform between the startup and the crowd of investors where the platform acted as a pure intermediary or matchmaker (Evans and Schmalansee, 2016). Despite Crowdcube enjoying first-mover advantage, Seedrs has proved to be a formidable competitor for Crowdcube by introducing a new approach to ECF – the nominee account approach. This aggregates all crowdfunding shareholdings into one nominee account where the nominee (Seedrs) is the legal owner. At the same time, the individual shareholders remain the beneficial owners with the full range of ownership and voting rights. As such, there is no divergence between voting and cash flow rights and so the nominee approach enfranchises the crowd.

The nominee approach also eases the post-ECF campaign administrative burden including the coordination costs of dealing with hundreds of shareholders, which is considered one of the major issues faced by ECF firms (Cumming et al., 2019c). By introducing an active digital corporate governance role for the platform (nominee), Seedrs was the first truly multi-sided model of ECF with three active agents: the crowd, the startup, and the platform as the nominee. As well as taking care of administrative issues, the platform monitors the post-campaign life of a startup to protect its reputational capital, organizes digital voting on major issues like a seasoned equity crowdfunded offering (SECO), and acts as the spokesperson for all shareholders.

This paper's first contribution is a new conceptualization of the nominee account approach to ECF campaigns. By employing a nominee approach, crowdfunding platforms are acting in a similar fashion to venture capital (VC) funds or syndicates of business angels (BAs). This is

because the ECF platform becomes the legal owner of all nominee crowdfunded shares and only the nominee account appears on the startup's share register. By contrast, only the large investors in Crowdcube direct ownership campaigns are the legal owners of the shares leading to a separation between ownership and control or between voting and cash-flow rights. Whilst sharing similarities, ECF nominee campaigns also diverge from VC funds or BA syndicates in other important respects. First, ECF campaigns are more democratic in that all investors pay only a nominal fee to the platform to participate in any ECF campaign they may choose. This contrasts sharply with the large (5%-20%) carry fees paid by accredited investors to the syndicate lead and the additional 5% fee to the AngelList syndicate platform .[1] Second, they allow small investors to invest directly in entrepreneurial firms. At one extreme we have the pure ECF firm which allows small investors to invest in startups but does not effectively deal with collective action problems that limit individual investors' monitoring incentives. On the other, traditional VC funds and BA syndicates are designed for professional (accredited) investors and so exclude small investors. The nominee structure allows for the first-time small investors (the "ordinary Americans", quoting Obama) to invest in startups and small businesses.

The paper's second contribution is that it provides a detailed analysis of the short and long run success of the nominee account versus the direct ownership approach. Our multivariate analysis of a sample of 1,018 (successful and unsuccessful) ECF campaigns on Crowdcube and Seedrs over the 2012-2018 period focuses on the short and long-term success of the nominee relative to the direct ownership approach. First, our inter-platform analysis compares the direct ownership campaigns on Crowdcube with the nominee campaigns on Seedrs. Moreover, we take advantage of a quasi-natural experiment when in 2015 nominee campaigns were first permitted on

[1] See Agrawal et al. (2016) for more details..

the Crowdcube platform also. This unique experimental setting resulted from the introduction of a choice between direct ownership and nominee campaigns within the same platform facilitates an intra-platform analysis. In essence, this shift in Crowdcube ofersings provides a unique quasi-natural experimental setting that provides greater validity on causal inferences than purely statistical adjustments (Shadish et al., 2002). This change in the functioning of one platform in essence allows one to observe a "naturally occurring" variation in the specific factor of the direct versus nominee structure in the absence of confounding effects, as the other aspects of the functioning of these ECF platforms remain unchanged.

The findings indicate that the nominee campaigns are more likely to succeed, raise more funds, and more likely enjoy overfunding relative to the direct ownership campaigns. They also establish that nominee campaigns on average enjoy greater long run success in terms of conducting seasoned equity crowdfunded offerings and numbers of such offerings. However, the probability of long run survival by ECF firms is unaffected by a nominee dummy variable. These results are robust to several checks for potential endogeneity issues.

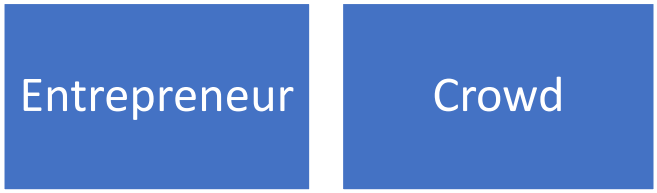
The paper is organized as follows. Section 2 outlines equity crowdfunding innovations in the UK and discusses our hypotheses. Section 3 summarises our research design. while Section 4 presents and discusses our empirical results while Section 5. A final section concludes.

2. Equity crowdfunding innovation and hypotheses

2.1 Innovation and competition in ECF models in the UK

ECF has become a UK success story and a leader in the FinTech sector. In 2017, more than €200 million transactions were recorded in Europe excluding the UK, and around €300 million in the UK alone (Cambridge Centre for Alternative Finance, 2019). Two platforms, namely Crowdcube and Seedrs, account for 85% of the UK equity crowdfunding market (Walthoff-Borm et al., 2018a). Crowdcube originally functioned with a direct ownership model that can be viewed as a two-sided market where the platform brings together entrepreneurs seeking outside equity for their venture and the crowd to generate indirect network externalities for both. Apart from the initial due diligence and generally facilitating the success of campaigns, the platform acts as a pure intermediary or matchmaker in the fundraising process. This is a direct ownership model as the investors are the legal owners of the shares they receive. The platform plays no active role in any other aspect of the funding process. A normal part of the platform operations is facilitating a follow-on or seasoned equity crowdfunded offering (SECO) for a smaller number of successful ventures. This two-sided market is illustrated in Figure 1.

Figure 1. The pure ECF two-sided market

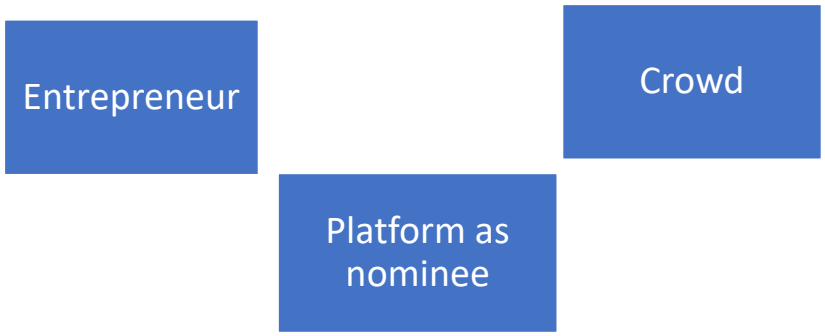


In the UK, this "pure" ECF model has evolved in several directions in response to issues that ECF throws up. Cumming et al. (2019b) document that Crowdcube offers voting A-shares to those investing at or above a monetary threshold such as £5k or £10k to attract potential professional investors to give campaigns traction, while the crowd receives non-voting B-shares. In other contexts, such as Germany, crowd investors are asked to pay higher prices if they receive more

cash-flow and exit rights, consistent with the view that these rights are valuable to the crowd (Hornuf et al., 2021). Overall, it is clear that the pure ECF model, by involving hundreds of shareholders on average, could impose a potentially high corporate governance burden (such as coordination costs) that small startups are ill-equipped to meet (Cumming et al., 2019c).

One way of understanding why Seedrs has managed to offer stiff competition to Crowdcube despite not having the first-mover advantage is to compare their initial equity crowdfunding models using the Evans and Schmalansee (2016) concepts of two- and multi-sided markets. Seedrs innovated by pioneering a multi-sided market via its nominee account approach that had been used by VC funds and BA syndicates (Coakley and Lazos 2021). The Seedrs approach involves the platform performing an active corporate governance role in managing the relationship between the crowd and the startup. Because this role is performed by the platform digitally, we refer to it as digital corporate governance. The nominee model involves relationships between three parties where the platform plays an active digital governance role over the duration of the period during which the ECF firm remains unlisted or private. Evans and Schmalansee (2016) stress that the more distinct parties that are involved in a platform business, the greater the potential indirect network externalities. The Seedrs model is illustrated in Figure 2.

Figure 2. The simple nominee account multi-sided market



In this model, the platform as nominee plays three roles. First, it operates a digital governance system and so relieves the startup of the administrative burden associated with corporate governance. Second, by offering a comprehensive set of equal ownership, voting and related rights to all crowdfunding investors, it offers one solution to the collection action dilemma of dispersed shareholders. Finally, it simplifies the exit process for ECF firms via a takeover by a larger firm or via IPO on London's Alternative Investment Market (AIM) as tag-along and drag-along rights enable outside investors like VC funds conveniently to deal with the nominee acting on behalf of all ECF shareholders.

2.2 Literature and hypothesis development

One striking corporate governance contrast in the UK ECF market is that between the Crowdcube direct ownership model and the Seedrs nominee or pooled ownership models. It can be challenging to test hypotheses on governance structures while trying to isolate other platform features. Crowdcube and Seedrs crowdfunding platforms share many common features. Apart from their governance structures, these platforms all employ posted (fixed) prices and not auction pricing, the all-or-nothing (AON) funding approach (Cumming et al., 2019a), the first-come, first-served (FCFS) allocation mechanism (Hornuf and Schwienbacher, 2018), the same minimum investment of just £10 for crowd investors, and all permit overfunding beyond the initial target or goal. However, there are other unobservable features (e.g. quality of platform management team) that the above common features cannot fully allay some of these concerns.

Our empirical analysis involves two applications. First, we seek to compare a large sample of Crowdcube direct ownership and Seedrs nominee campaigns while controlling for unobserved platform heterogeneity. Other studies have compared these two platforms in a similar vein.

Walthoff-Brom et al. (2018a) find that ECF firms financed through a nominee structure make smaller losses, while ECF firms financed through a direct shareholder structure have more patent applications, including foreign patents. Butticè et al. (2020) find that a successful ECF campaign facilitates the attraction of VC financing, in particular for campaigns with a nominee structure. Second, we benefit from a quasi-natural experiment to check the causality of our findings. We are fortunate that the UK market provides an excellent laboratory setting for testing the effects of the nominee versus direct ownership approach for a sample of all campaigns conducted on the Crowdcube platform. This refers to the fact that, from February 2015, Crowdcube offers nominee account as well as direct ownership ECF campaigns to startups. From the launch of Crowdcube until February 2015, by selecting Crowdcube as their crowdfunding platform, entrepreneurs automatically selected a direct shareholder structure as well. After February 2015, Crowdcube provided nominee services as well (for a few months, this option was available only for firms raising over £250,000). By focusing on Crowdcube nominee account campaigns, we can evaluate the impact of the nominee account approach in a setting where platform effects absent.

Short run success

The nominee account approach enjoys several attractions for startups and other ventures embarking on an ECF campaign. The first relates to the paradox of attracting large numbers of crowd investors. On one hand, startups know that, ceteris paribus, attracting large numbers of investors is generally a prerequisite to running a successful initial ECF campaign. On the other, they will be aware of the potentially high administrative and coordination costs of attracting large numbers and their lack of personnel to deal with such issues. The nominee account structure resolves this issue for startups through the platform's digital corporate governance structure.

The second attraction is that the nominee shareholder account approach enfranchises crowd investors to the extent that they enjoy equal voting and ownership rights as professional investors. Importantly, it implies that investors remain the beneficial owners of their shares. This structure has several attractive features including overriding other less advantageous ownership structures for investors. Prime among these is that all investors – both small and institutional investors – hold A-class shares with voting rights and pre-emption rights in relation to follow-on campaigns. The implication is that there is no separation between ownership and control.

The final attraction is that the nominee structure acts as a certification effect (signaling device) for potential investors who can be confident that their ownership rights will not be diluted even in the presence of institutional investors. The resultant alignment of all shareholder interests removes potential ownership and control conflicts and encourages investors to make larger investments. The upshot is that backers are more likely to invest larger sums of money.

The above considerations lead to the following ceteris paribus predictions for the choice between nominee account versus direct ownership initial ECF campaigns. The predictions apply to direct and nominee campaigns both between the Seedrs and Crowdcube platforms and also for these two types of campaigns on the Crowdcube platform since 2015:

P1. An initial nominee account ECF campaign is more likely to be successful than an initial direct ownership ECF campaign.

Success in this context is measured in three ways: the probability of running a successful initial ECF campaign, attracting higher amounts of funds, and enjoying overfunding.

Long run ECF campaign success

Cumming et al. (2019c) point that one of the problems ECF firms face is the administrative and coordination costs of dealing with large numbers of small individual shareholders. We shall later see that the mean number of funders is 339 for Seedrs nominee and 838 for Crowdcube nominee campaigns. This is important for organizing follow-on funding like a SECO which has to be approved by the shareholders. In this context, the nominee can play a role akin to that of a lead investor as in VC funds or BA syndicates because it can act as a blockholder with a holding equal to the share of equity capital offered by the startup.[2] When the equity offered exceeds 10% (and it typically does), the nominee has the right to call an extraordinary meeting or to change the date of meetings organized by the startup (Walfhoff-Borm et al. 2018b). Moreover, the nominee structure will likely attract startups with a progressive corporate governance structure.

Importantly, the nominee share structure protects investors from potential future dilution by including special ownership rights for all shareholders but also by giving rights to a majority shareholder that may wish to sell its startup stake. These include tag along and drag along rights, both of which refer to rights relative to the majority shareholder in a startup. If the majority shareholder wishes to sell her stake, tag-along rights give the minority crowd shareholders the right to sell their stakes also on the same terms. So tag-along rights protect the crowd's ownership rights by enabling them to realize favorable sales terms that otherwise probably would be unattainable.

Drag-along rights enable a majority shareholder to force a minority shareholder to sell her stake in a company. The majority owner doing the dragging must offer the minority shareholder the same price and terms and conditions as any other seller. Drag-along rights also protect other minority shareholders that wish to exit in situations where one or a few minority shareholders do

[2] See Edman and Holderness (2017) for a recent overview of the voice and exit roles of blockholders.

not wish to sell. These rights are relevant in a post-initial ECF campaign case where a new majority shareholder such as a VC firm of BA wishes to invest in the startup. In this case, the new shareholder will normally insist on drag-along rights. This discussion leads to the following prediction:

> P2. An ECF firm with a nominee account structure is more likely than one with a direct ownership structure to enjoy long run ECF campaign success.

Success in this context is measured in three ways: the probability of running a first SECO, the probability of running multiple SECOs, and the probability of failing.

3. Research design

This section outlines the data sources, discusses the variables, and describes the methodology employed in this study. Table A1 gives information about variable definition.

3.1 Sample and variables

Sample. We collect data from TAB – that was acquired by the Eikon database - on 1,018 (successful and unsuccessful) ECF campaigns on Crowdcube and Seedrs over the 2012-2018 period. When studying the inter-platform effect of the nominee ownership approach, Crowdcube nominee campaigns are removed to compare shareholder structures across platforms. In other words, we study differences between the Seedrs nominee and Crowdcube direct ownership approaches. While Crowdcube pioneered the direct ownership approach, it also began to offer nominee campaigns from February 2015 and was the first UK platform to offer this choice. This offers the possibility of studying the intra-platform effect of nominee ownership on the Crowdcube

platform. Our study spans the period from January 2012 to December 2018. Our dataset was augmented with firm-level data gathered from the UK Companies House which is a government agency website that makes available basic information about all quoted and unquoted UK firms. It has been deployed in other ECF studies such as Signori and Vismara (2018) and Walthoff-Borm et al., 2018a).

Dependent variables. This paper employs two sets of dependent variables, one for initial campaign or short term success and the other for success in the long run.

Short-term success. Three dependent variables are used to proxy short-term success. The first is a Success dummy that takes value 1 for successful campaigns and 0 otherwise. The second is the Amount raised by the end of the campaign. The final is an Overfunding dummy which takes value 1 if the amount raised exceeds the initial goal and 0 otherwise.

Long run campaign success. Three dependent variables are used to proxy for this. The first is a dummy variable that takes value 1 if a firm has conducted at least one seasoned equity crowdfunded offering (SECO) and 0 otherwise. The second is the total number of SECOs conducted. The last dependent variable that proxies failure takes the value 1 if the firm has defaulted, or is in liquidation, or in administration and 0 if it still operates. Signori and Vismara (2018) and Hornuf et al. (2018) follow a similar approach.

Variable of interest. Our study employs two sets of variables of interest to study the effect of nominee ownership at inter- and intra-platform levels.

Inter-platform. This is a binary variable that takes value 1 for Seedrs nominee campaigns and 0 for Crowdcube direct offerings.

Intra-platform. This is a binary variable that takes value 1 for nominee campaigns and 0 for direct offerings on the Crowdcube platform only.

Control variables. To account for unobserved heterogeneity, a set of control variables is used that has been shown to affect ECF outcomes. Crowdcube introduced the nominee option in February 2015 and this might have changed entrepreneur decisions regarding platform choice. Thus we use the PostFeb15 dummy variable that takes value 1 for offerings conducted after February 2015, zero otherwise. Duration is added as a control variable in our regressions, as in Vismara (2016) among others. Vulkan et al. (2016) study equity crowdfunding dynamics from Seedrs campaigns and their findings reveal a negative relation between funding goal and the likelihood of success. Therefore, Goal is used as a control variable. Signori and Vismara (2018) focus on firm failure and follow-on (seasoned) equity crowdfunding offerings. Their study includes firms that conducted campaigns on Crowdcube and documents in their first step Heckman procedure that the amount of equity offered negatively affects campaign success. Therefore, the amount of Equity is used as a control variable as well.

Younger firms and those with younger teams are more likely to conduct successful campaigns. Ralcheva and Roosenboom (2019) study forecasting success in ECF and provide evidence in support of this. Thus, Firm and Management team age are employed as control variables. Ahlers et al. (2015) employ data from the Australian equity crowdfunding platform ASSOB and focus on which signals might be effective in reducing information asymmetry and so increase the likelihood of success. Their findings reveal that – among others - larger management team sizes may act as effective signals and increase the likelihood of success for an ECF campaign. Coakley et al. (2021b) focus on human capital and their results suggest that teams in which at least 1 member holds a doctor of philosophy are more likely to conduct successful offerings. Therefore,

Team size and Advanced degree are included as control variables. Diversification and year dummies are added to our regressions as in Signori and Vismara (2018). Finally, industry dummies are added as in Ahlers et al. (2015).

3.2 Methodology

Our study consists of two parts focusing on the effect of nominee ownership on short and long-term success. This section describes first the method employed to investigate short-term success at the inter- and intra-platform levels. The methods employed for both are designed to confront potential endogeneity issues. We also conduct further robustness checks in Section 5 for endogeneity relating to nominee approach choice following Cumming et al. (2019b).

Inter-platform short-term success. To study the effect of inter-platform nominee ownership on ECF short-term outcomes, we follow a similar approach to that of Walthoff-Brom et al. (2018b) and employ the propensity score method proposed by Rosenbaum and Rubin (1983) to confront potential endogeneity. It may be present in our study since we do not control for other platform characteristics – due diligence for example - that may affect our results (Rossi et al, 2019; Cumming et al, 2019d). Therefore Seedrs nominee firms are matched with Crowdcube direct ownership firms according to firm age, pre-money valuation and industry group using the nearest neighbor algorithm. Our method can be summarized by the following equations,

$$Success_d = \alpha_1 + B_1 Nominee\_inter + \Gamma_1 Controls + \varepsilon_1 \quad (1)$$

$$Ln(Amount) = \alpha_2 + B_2 Nominee\_inter + \Gamma_2 Controls + \varepsilon_2 \quad (2)$$

$$Overfunding_d = \alpha_3 + B_3 Nominee\_inter + \Gamma_3 Controls + \varepsilon_3 \quad (3)$$

where *Nominee_inter* is the nominee dummy employed for the inter-platform focus and *Controls* is the vector of control variables employed in this study. Equations (1) and (3) are estimated using a probit model and (2) using OLS.

Intra-platform short-term success. To study short term success within a platform, we focus on Crowdcube campaigns. Such a study may be susceptible to platform selection bias. Therefore, we follow a similar approach to Cumming et al. (2019b) and employ the 2-stage Heckman method to confront this type of endogeneity. The first step employs a Crowdcube dummy as dependent variable from a sample of initial Crowdcube and Seedrs -successful and unsuccessful - campaigns. The exclusion variable – not used in the second step - is the platform preference variable measured as the number of campaigns conducted on Crowcube over the number of Seedrs campaigns that belong to the same industry group within 12 months prior to each observation. The second step employs data – from a sample of initial Crowdcube – successful and unsuccessful - campaigns.

Our method can be summarized by the following equations in which eq. (4) is the first step of Heckman method and the rest are the second step,

$$Crowdcube_d = \alpha_4 + \beta_4 Platform\_pref + \Gamma_4 Controls + \varepsilon_4 \quad (4)$$

$$Success_d = \alpha_5 + B_5 Nominee\_intra + \Gamma_5 Controls + \delta_5 Inv.Mills\_p + \varepsilon_5 \quad (5)$$

$$Ln(Amount) = \alpha_6 + B_6 Nominee\_intra + \Gamma_6 Controls + \delta_6 Inv.Mills + \varepsilon_6 \quad (6)$$

$$Overfunding_d = \alpha_7 + B_7 Nominee\_intra + \Gamma_7 Controls + \delta_7 Inv.Mills\_p + \varepsilon_7 \quad (7)$$

where *Nominee_intra* is a nominee dummy employed for the intra-platform focus, *Controls* is the vector of control variables and $Inv.Mills$ is the inverse Mill's ratio. Eq. (4), (5) and (7) are estimated employing the probit model and (6) using OLS.

Long run campaign success. For post-initial campaign success, we study the effect of the nominee approach on the likelihood of conducting a first SECO, number of SECOs and firm failure. SECOs are observed only for those firms that conduct initial successful campaigns. Thus, we follow a similar approach as in Signori and Vismara (2018) and Coakley et al. (2021a) employing the Heckman method to confront sample selection bias. The first step employs data from initial Crowdcube and Seedrs – both successful and unsuccessful – campaigns in which a success dummy is the dependent variable and competing offerings is the instrumental variable. It spans the period from January 2012 to December 2018. The second step employs data from Crowdcube and Seedrs initial successful campaigns augmented by the Inverse Mills ratio. Our method can be summarized by the following equations in which eq. (8) is the first stage of Heckman method and the remaining are the second stage.

$$Success_d = \alpha_8 + \beta_8 Competing_{offerings} + \Gamma_8 Controls + \varepsilon_8 \quad (8)$$

$$1st\ SECO = \alpha_9 + B_9 Nominee\_inter + \Gamma_9 Controls + \delta_9 Inv.Mills\_p + \varepsilon_9 \quad (9)$$

$$No.SECOs = \alpha_{10} + B_{10} Nominee\_inter + \Gamma_{10} Controls + \delta_{10} Inv.Mills\_p + \varepsilon_{10} \quad (10)$$

$$Failure_d = \alpha_{11} + B_{11} Nominee_{inter} + \Gamma_{11} Controls + \delta_{11} Inv.Mills\_p + \varepsilon_{11} \quad (11)$$

Equations (8), (9), and (11) employ a probit model whereas equation (10) uses the zero-inflated negative binomial method.[3]

4. Empirical results

4.1 Descriptive statistics

[3] In unreported results we also employ the Cox and Weibull hazard model that take into account time to fail and results remain qualitatively similar to the probit results.

Table 1 reports the results from an equality of means test between initial Seedrs nominee and Crowdcube direct ECF campaigns that were successful over the period from January 2012 to December 2018.

[Table 1 around here]

Results in Panel A suggest that the nominee campaigns do not exhibit any significant differences with direct ownership across Success, Amount and Overfunding. Nominee campaigns are conducted by smaller teams. This highlights the role of human capital in ECF (Piva and Rossi-Lamastra, 2018). They also issue a significantly smaller proportion of Equity at the 1% level. This may reflect the startup quality of firms that employ the nominee approach to raise equity. Lower equity may be an effective signal (Ahlers et al, 2015; Vismara 2016) and high-quality signallers underpin effective signals (Spence 1973). Crowdube campaigns are conducted by ventures that have larger founder teams and issue a higher equity proportion. This is consistent with existing studies which document heterogeneity in ECF campaigns across platforms (Rossi et al, 2019).

Table 1 also provides information on whether our matching procedure results in a balanced sample according to the matching criteria imposed. Firm age for nominee firms does not exhibit significant differences with their matched counterparts. In unreported results, we also check whether nominee firms exhibit significant differences with direct according to pre-money valuation and industry group. The results suggest that they share similar pre-money valuations. When we focus on industry groups, however, there are significant differences in the retailing sector only. Bonardo et al. (2011) face a similar issue and check the sensitivity of their results by removing these observations which are associated with an imbalanced dataset. Table B1 of our study removes retailing sector offerings and the nominee coefficients are positive and significant at 5% level or lower.

We perform an equality of means test between successful nominee and direct offerings that have been conducted on Crowdcube from February 2015 to December 2018. Table 2 summarizes the results.

[Table 2 around here]

The results show that there are significant differences between direct and nominee offerings conducted on Crowdcube. Nominee campaigns raise more capital (£k) and attract more funders. The difference coefficients are significant at the 1% level. Firms that opt for the nominee approach to raise capital via ECF issue significantly less equity and have large teams. Nominee startups also set a significantly higher target capital amount (£k

We test for evidence of multicollinearity among the variables employed in our regressions. Table 3 reports the correlation matrix values. Panel A (B) reports the values for the inter- (intra-) platform variables.

[Table 3 around here]

The results suggest that multicollinearity is likely not to be an issue in our study. The Panel A Results suggest that (ignoring our dependent variables) the highest correlation value of 0.55 between Ln(Goal) and Amount, and Ln(Funders) and Success. The highest correlation value in Panel B is between Ln(Funders) and our dependent variables.

4.2 Multivariate analysis

This section discusses the results of the multivariate analysis from employing the matched sample the propensity score method. The first part focuses on campaign short term success at both the inter- and intra-platform levels whereas the second aims to shed light on the association between Crowdcube nominee campaigns and long run success.

Inter-platform nominee effect on short-term success

Table 4 reports the results of the effect of a nominee dummy on short term success at the inter-platform level. Model (1) reports the nominee coefficients when a success dummy is the dependent variable whereas models (2) and (3) use the total Amount and Overfunding.

[Table 4 around here]

Model (1) results suggest a positive association between Nominee and Success. The Nominee coefficient is significantly positive at the 5% level. Startups that employ a Seedrs nominee campaign to raise capital are 38% more likely to succeed. A plausible explanation may be that Nominee signals investor protection. As such, it may be an effective signal that reduces information asymmetry and increases the likelihood of success. Our results are broadly consistent with Cumming et al. (2019b) in which ownership and control separation negatively affects campaign success. Nominee campaigns grant equal rights to all investors.

The model (2) findings reveal that nominee offerings are more likely to raise more capital as the coefficient is positive and significant at the 1% level. Nominee campaigns raise on average £132k more. This supports the view that nominees are comparable to a syndicated VC fund in which large amounts are invested. Our results are also broadly consistent with existing studies that focus on investor protection and capital raised in which there is evidence for a positive association. La Porta et. al. (1997) and Demirguc-Kunt and Maksimovic (1998) establish that firms find it more difficult to raise equity capital in countries where legal protections for minority shareholders are not strong. Crowd investors are a good example of the latter. Results in model (3) reflect a positive association between Nominee and Overfunding and the nominee coefficient is positive and significant at the 1% level. In other words, startups using nominee ECF campaigns to issue equity are more likely to exceed their initial target.

The nominee approach to ECF in the UK was pioneered by Seedrs. The above findings suggest that a framework that protects investor rights positively affects ECF outcomes in the short run. One explanation for this is that investor protection is an effective signal for reducing information asymmetry which in turn may positively affect short term campaign outcomes. By helping startups to attract more capital, the nominee approach can foster ECF growth and help make the ECF market sustainable.

Intra-platform nominee effect on short-term success

This subsection investigates the effect on short term success of nominee versus direct ownership campaigns on the Crowdcube platform. Table 5 reports the impact of a Nominee campaign dummy on several measures of short-term success from a sample of Crowdcube offerings.

[Table 5 around here]

Model (1) reports the results from the Heckman first step method. The dependent variable is a Crowdcube dummy from a sample of Crowdcube and Seedrs initial campaigns. The other models report the second stage Heckman results from a sample of Crowdcube campaigns which include both direct ownership and nominee account campaigns. Models (2) to (4) span the January 2012 – December 2018 period, whereas the others cover the period from February 2015 – the date Crowdcube introduced nominee campaigns - to December 2018.

The model (1) results suggest that the introduction of nominee campaigns by Crowdcube in February 2015 shifted entrepreneur decisions to conduct such campaigns on Crowdcube as opposed to on Seedrs. The PostFeb15 coefficient is positive and significant at the 5% level suggesting that additional nominee campaigns are conducted on Crowdcube after February 2015 compared to Seedrs. The Platform preference coefficient is positive and significant at the 1% level

as in Cumming et al. (2019b). This suggests that entrepreneurs are more likely to choose a platform where firms from the same industry group conducted initial campaigns in the last 12 months.

Model (2) reports the impact of choosing a Nominee campaign on its likelihood of success. The coefficient is positive and significant at the 1% level, indicating that Crowdcube nominee account campaigns are more likely to succeed. Model (3) focuses on the impact of the Nominee variable on the total Amount raised. The Nominee coefficient is also positive and significant at the 5% level. The model (4) results show that the Nominee coefficient has a positive and significant impact on Overfunding at the 1% level. In other words, nominee account campaigns are more likely to exceed their initial target compared to direct ownership campaigns.

The positive association between Nominee and short term ECF success outcomes is documented in the other models as well except for model (6). The Inverse Mills ratio is significant in many models – four out of six - suggesting that platform selection matters reflecting the presence of platform effects in ECF.

Nominee account and long run success

This subsection studies the effect of a Nominee campaign dummy on various measures of long run (post-initial campaign) success. Results are summarized in Table 6.

[Table 6 around here]

The model (1) column reports the results of the Heckman first-stage probit model in which a success dummy is the dependent variable from a sample of initial - successful and unsuccessful - Crowdcube and Seedrs campaigns over the 2012-2018 period. These results suggest that the higher the number of competing offerings on a platform, the less likely a campaign is to succeed as in Signori and Vismara (2018).

The other columns report the second stage results for a sample of successful Crowdcube and Seedrs campaigns. The model (2) probit results suggest that the Nominee (initial campaign) dummy increase the probability of conducting a first SECO. The coefficient is positive and significant at the 5% level and suggests that the Seedrs nominee campaigns are 51% more likely than the Crowdcube direct ownership campaigns to conduct multiple SECOs. This supports our hypothesis P2. This is consistent with the Coakley et al. (2021a) results for a sample of SECOs on UK platforms. Our results are also broadly consistent with Ralcheva and Roosenboom (2019). They report in Table 4 that 14.2 % of Seedrs offerings conducted at least one follow-on, whereas the corresponding rate is 8.9% for Crowdcube. Sample selection does not seem to be an issue – an inverse Mills ratio significant at the 10% level only - as in Signori and Vismara (2018).

The model (3) zero-inflated negative binomial results suggest that the Nominee dummy increases the probability of conducting multiple SECOs. The Nominee coefficient is positive and significant at a 5% level in line with P2 also. The coefficient suggests that the Seedrs nominee campaigns are 66% more likely than the Crowdcube direct ownership campaigns to conduct multiple SECOs. However, the inverse Mills ratio significant at the 5% level suggesting that the model does not fully deal with sample selection issues. Finally, the model (4) probit results indicate that the Nominee dummy is independent of failure as its coefficient – while negative – is insignificant at conventional levels. This result neither supports nor rejects P3. More recent data may shed more light on this issue.

In summary, our findings highlight the importance of the nominee approach for long run post-initial ECF campaign success. They reveal that firms conducting nominee account initial campaigns on Seedrs are more likely to conduct a first SECO than their Crowdcube direct ownership counterparts. They are also more likely to conduct multiple SECOs. This is important

as, increasingly, SECOs are the main source of follow-on funding for ECF firms (British Business Banks 2019). It is also consistent with the argument of the Seedrs co-founder Jeff Lynn that the nominee approach makes it easier for startups to raise further capital.[4] Finally, the results show no significant relationship between the nominee approach and long run firm failure success.

5. Robustness tests

This section reports on the robustness test results. For the tests that focus on the Nominee impact on short term success proxies, we check the sensitivity of our results by employing different specification criteria for the propensity score method. For the tests that focus on the Nominee impact on long term success measures, the 2018 campaigns are removed from the sample and duration is replaced with quick success.

5.1 Inter-platform short term success

Additional matching criteria. Nominee campaign firms are matched with direct firms according to pre-money valuation, firm age and industry group. Stuart (2010) highlights the importance of covariate selection and argues that selected covariates should be associated with the treatment – the nominee account in our case – and/or the outcome of interest. A consistent finding across studies is that equity and goal affect the outcome of the campaign (Ahlers et al, 2015; Vulkan et al, 2016). Moreover, ECF has grown exponentially over the years. Our next test adds goal, equity and campaign year in our matching criteria. Thus, nominee firms are matched with direct according

[4] See Benefits of our nominee structure | Seedrs Help Center

to pre-money valuation, firm age, industry group, goal, equity and campaign year. Cumming et al. (2019a) follow a similar approach.

The results are summarized in Table 7.

[Table 7 around here]

The implications of this study do not change even when one employs different matching criteria in the propensity score procedure. Firms that employ the nominee account to raise equity are more likely to succeed and raise more capital. They are also more likely to get overfunded, i.e raise more than the initial target. All coefficients are positive and significant at the 5% level or lower.

Caliper. So far, we employ the nearest neighbor to match direct with nominee offerings. The nearest neighbor algorithm, however, may result in bad matches (Bonardo et al, 2011). Another popular approach is to employ propensity score with caliper. This has been employed in other ECF studies such as Vismara (2019). Direct campaigns are matched with nominee campaigns when their difference in propensity scores are lower than the value of caliper. Observations are discarded otherwise.

Rosenbaum and Rubin (1985) argue that caliper should be 25% of the standard deviation of the logit of propensity score if someone wants to achieve a bias reduction at 90% at least. In a more recent study, Austin (2011) conducts a Monte Carlo simulation experiment and his results suggest that the optimal value of caliper is 20% of the standard deviation of the logit of propensity score. We follow the latter approach for our next robustness test and employ the same matching criteria as in Table 4. Table 8 summarizes the results.

[Table 8 around here]

Results remain qualitatively similar even when one employs the propensity score with caliper. There is a positive relation between nominee and short term ECF outcomes with coefficients being positive and significant at 5% or lower.

5.2 Intra-platform short term success

The next robustness test takes into account the potentially endogenous nature of nominee when one focuses on the intra-platform effect in the short run. For example, teams with specific characteristics may select a specific corporate governance scheme. We follow closely the setup in Cumming et al. (2019b) and employ a Generalized Structural method in the second step of the Heckman method. This consists of four models. The first employs the nominee approach as dependent variable and uses the Pr(Nominee) mimicking variable as instrument. This variable is calculated as the average value of nominee from previous Crowdcube campaigns conducted in the same year.[5] The remaining models employ the dependent variables used in Table 5.

The results are summarized in Table 9.

[Table 9 around here]

The implication of our study does not change in this case either. Even when one accounts for the potentially endogenous nature of nominee, nominee firms outperform their direct counterparts with their coefficients being positive and significant at 10% level or lower. Moreover, the instrumented variable is positive and significant at the 1% level, satisfying the relevance criterion. This together with its predetermined nature (average of past values of other firms) justifies our choice of Pr(Nominee) as a valid instrument.

[5] In unreported results, we vary the observation windows and results remain qualitatively similar.

5.3 Long term success

The last two robustness tests focus on long term success. They involve removing the last year's (2018) offerings and replacing duration with a quick success dummy as in Signori and Vismara (2018). Tables 10 and 11 summarize the results.

[Tables 10 and 11 around here]

The implication of Nominee in the long run does not change in these cases either. Results in both Tables are qualitatively similar to the baseline findings of this study. Ventures that employ the nominee account to issue equity via ECF are more likely to conduct a first SECO. They are also more likely to conduct multiple SECOs. Their coefficients are positive and significant at the 5% level in models (1) and (2). Those firms that reach their target in less than 20 days are more likely to conduct first and multiple SECOs. The coefficient of quick success is positive and significant at the 1% level as in Signori and Vismara (2018). They argue that a favorable assessment in the initial campaign signals startup quality for its future success. A popular example from the market is Monzo which raised £1m in 96 seconds on Crowdcube in 2016. They conducted multiple SECOs since enjoying quick success then. Monzo attained unicorn status in October 2018.

6. Conclusions

Equity crowdfunding raises unique corporate governance issues, some of which are beginning to be studied (Cumming et al. 2018c). This paper focuses on an important innovation implemented by the Seedrs platform from its establishment in 2012. This involved the introduction of nominee ownership ECF campaigns accompanied by a novel system of digital corporate governance operated by the platform acting as nominee. This new approach has similarities with that of VC

funds and BA syndicates.[6] It pools all crowdfunding shareholders into a nominee account where typically the platform acts as the legal owner of the shares but the crowd retains beneficial ownership with a range of protections for all shareholders, large and small. These include equal voting, pre-emption and other anti-dilution shareholder rights.

In sum, the nominee approach enfranchises crowd investors with the full range of ownership and voting rights and enjoys the unique feature of no separation between ownership and control. The platform plays an active digital corporate governance role as a potential blockholder. This serves two purposes. On one hand, it addresses the free-rider problem of small (crowdfunding) shareholders having little time or expertise to monitor their investment (Edmans and Holderness, 2017). On the other, it removes the burden on startups of dealing and communicating with typically some four hundred shareholders in the ECF firm.

This paper empirically investigates the inter-platform effect of the nominee account approach on Seedrs and Crowdcube ECF campaigns using a sample of 1,018 (successful and unsuccessful) initial campaigns over the 2012-2018 period. It finds that nominee initial ECF campaigns are more likely to succeed, to be oversubscribed, and raise more funds, relative to direct campaigns. A possible explanation may lie in the investor protection scheme the nominee approach offers. This may serve as an effective signal to investors that reduces information asymmetry which in turn positively affects short-term ECF outcomes. Results suggest that a corporate governance scheme that protects investor rights is employed by high-quality startups. This paper also studies the intra-platform effect of nominee ownership offered on the Crowdcube platform from February 2015. This provides a quasi-natural experimental setting for testing for intra-platform effects. The

[6] Relatedly, Agrawal et al. (2016) raise the question of whether BA syndicates may become the killer app of equity crowdfunding on the basis that syndicated equity deals on AngelList have rapidly overtaken non-syndicated deals since their introduction in June 2013. Thus, they are implicitly counterposing direct ownership or pure ECF campaigns and VC and BA deals.

results indicate that Crowdcube nominee offerings are also more likely to succeed, to be oversubscribed, and to raise more capital.

This study also investigates the post-initial campaign or long run impact of the nominee approach. Here it focuses on the effect of nominee relative to direct ownership on the likelihood of a venture conducting a first SECO, multiple SECOs, and of failing. The findings reveal that nominee account ECF firms are more likely to conduct a first and multiple SECOs for follow-on funding. There is no evidence of the impact of nominee ownership on subsequent venture failure. These results are robust to several checks for potential endogeneity issues.

Our study has implications for policy and practice. Policy makers are interested in creating a framework that leads to a sustainable ECF market. Investors react to tax incentives and allocate more investments – around 23.6% - to firms under the generous tax incentive scheme known as the SEIS. This however makes the crowd less smart by decreasing its incentives for screening (Chen et al, 2018). Policy makers and platforms could find ways to incentivize SEIS firms to pitch their campaigns via the nominee scheme. The platform acting as a blockholder along with its concern to protect its reputational capital could offset the lower screening propensity of the crowd. This in turn could filter out low-quality startups.

As with any study, ours comes with limitations. We focus on the effect of just the nominee ownership relative to the direct ownership structure. However, we leave unstudied however what type of investors each structure attracts. There is an exchange of information between experienced and inexperienced investors and this improves the overall efficiency of the ECF market (Wang et al, 2019). Professional investors may act as mentors for entrepreneurs which can be beneficial for the growth of a startup. Therefore, it is reasonable to assume that professional investors might be

more inclined to choose the direct scheme to contact the entrepreneur directly and provide guidance and possibly influence. By contrast, inexperienced investors lack the sophistication to monitor startups. Thus, it may be more likely for them to choose nominee campaigns. A study that focuses on the association between nominee and investor type may be an interesting topic for future research.

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Table 1. Inter-platform equality of means test between direct and nominee campaigns

Table 1 presents the results from the equality of means test between successful nominee and direct ownership campaigns on the Crowdcube and Seedrs platforms over the period from January 2012 to December 2018. Seedrs nominee are matched with Crowdcube direct campaigns according to firm age, pre-money valuation and industry group. The Direct (Nominee) column reports the mean value for the corresponding variable of direct (nominee) campaigns. The difference column reports the mean difference along with its statistical significance for an equality of means test. Significance levels are denoted as * for $p \leq 0.10$, ** for $p \leq 0.05$ and *** when $p \leq 0.01$. The sample consists of initial ECF See Table A1 for variable definition.

	Nominee	**Direct**	**Difference**
Amount (£k)	339	321	18
Overfunding	0.89	0.91	-0.02
PostFeb15	0.67	0.58	0.09*
Funders	217	241	-24
High Academic status	0.04	0.07	-0.03
Team size	2.0	2.3	-0.3**
Equity (%)	10.5	15.3	-4.8***
Firm age (years)	2.8	2.9	-0.1
Goal (£k)	260	220	40
Duration (days)	67	40	27***
Diversification	1.16	1.21	-0.05
Team age (years)	39.2	41.5	-1.3**

Table 2. Intra-platform equality of means test between direct and nominee campaigns

Table 2 presents the results from the equality of means test between successful nominee and direct campaigns on Crowdcube for the period from February 2015 to December 2018. The Direct (Nominee) column reports the mean value for the corresponding variable of direct (nominee) campaigns. The difference column reports the mean difference along with its statistical significance for an equality of means test. Significance levels are denoted as * for $p \leq 0.10$, ** for $p \leq 0.05$ and *** when $p \leq 0.01$. See Table A1 for variable definition.

	Nominee	**Direct**	**Difference**
Amount (£k)	838	509	329***
Overfunding	1	0.98	0.02
Funders	554	402	152**
Advanced degree	0.02	0.08	-0.06
Team size	3.1	2.4	0.7***
Equity (%)	12.2	15.4	-3.2***
Firm age (years)	4.3	3.2	1.1**
Goal (£k)	596	318	278***
Duration (days)	38.9	44.9	-6
Diversification	1.1	1.2	-0.1
Team age (years)	44.7	41.3	3.4**

Table 3. Correlation matrix

Table 3 reports the correlation vales among the variables employed in this study. Panel A reports the correlation values from a sample that spans the period from January 2012 to December 2018 and involves a matched set of initial Crowdcube and Seedrs campaigns. Panel B reports the correlation values from a sample that spans the period from February 2015 to December 2018 and involves a set of initial Crowdcube campaigns. * denotes significance level at 1% level. See Table A1 for variable definition.

Panel A. Seedrs nominee and Crowdcube direct offerings

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
(1) Success	1.00													
(2) Amount	0.26*	1.00												
(3) Overfunding	0.89*	0.29*	1.00											
(4) Nominee	-0.04	-0.02	-0.05	1.00										
(5) PostFeb15	-0.31*	0.09	-0.15*	0.04	1.00									
(6) Ln (Funders)	0.55*	0.51*	0.58*	-0.15*	0.11*	1.00								
(7) Advanced degree	0.07	0.06	0.09	-0.03	0.06	0.14*	1.00							
(8) Team size	0.08	0.25*	0.09	-0.08	0.06	0.25*	0.16*	1.00						
(9) Equity	-0.03	0.05	-0.05	0.26*	-0.06	-0.01	-0.01	-0.06	1.00					
(10) Ln (Firm age)	-0.07	0.20*	-0.01	-0.08	0.17*	0.20*	0.11*	0.26*	-0.09	1.00				
(11) Ln (Goal)	-0.17*	0.55*	-0.08	-0.19*	0.32*	0.37*	0.10*	0.28*	0.22*	0.30*	1.00			
(12) Ln (Duration)	-0.17*	-0.04	-0.11*	0.40*	0.38*	0.01	0.05	-0.06	-0.13*	0.11*	0.01	1.00		
(13) Diversification	0.07	0.04	0.07	-0.03	0.02	0.11*	0.11*	0.01	-0.01	0.04	0.04	0.07	1.00	
(14) Ln (Team age)	-0.06	0.15*	-0.02	-0.07	0.03	0.02	0.10*	0.27*	-0.03	0.27*	0.27*	-0.13*	0.03	1.00

Panel B. Crowdcube direct and nominee offerings

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
(1) Success	1.00												
(2) Amount	0.39*	1.00											
(3) Overfunding	0.98*	0.38*	1.00										
(4) Nominee	0.21*	0.26*	0.21*	1.00									
(5) Ln (Funders)	0.63*	0.69*	0.65*	0.25*	1.00								
(6) Advanced degree	0.04	0.13*	0.04	-0.04	0.11	1.00							
(7) Team size	0.16*	0.44*	0.15*	0.18*	0.30*	0.14*	1.00						
(8) Equity	0.03	-0.10	0.03	-0.07	-0.01	-0.01	-0.09	1.00					
(9) Ln (Firm age)	-0.03	0.20*	-0.02	0.12*	0.15*	0.04	0.23*	-0.20*	1.00				
(10) Ln (Goal)	0.01	0.67*	0.01	0.24*	0.44*	0.12*	0.40*	-0.09	0.28*	1.00			
(11) Ln (Duration)	0.02	0.02	0.02	-0.01	0.06	0.03	0.03	0.06	0.01	0.08	1.00		
(12) Diversification	-0.04	-0.04	-0.05	-0.04	-0.01	0.05	-0.10	0.04	-0.04	-0.01	-0.01	1.00	
(14) Ln (Team age)	-0.03	0.17*	-0.05	0.11	0.06	0.14*	0.29*	-0.12*	0.24*	0.29*	0.09	0.01	1.00

Table 4. Inter-platform nominee and short-term success

Table 4 reports the impact of a Nominee dummy variable on several measures of short-term success employing the propensity score method. The Seedrs Nominee campaigns are matched with the Crowdcube Direct ownership campaigns according to firm age, pre-money valuation and industry group. Models (1) and (3) report the coefficients of a probit method when a Success dummy and Overfunding are employed as dependent variables respectively. Model (2) reports the coefficients of an OLS method when total amount (in thousands) is employed as dependent variable. Significance levels for marginal effects are denoted as * for p ≤ 0.10, ** for p ≤ 0.05 and *** when p ≤ 0.01. The sample spans the period from January 2012 to December 2018 from a sample of initial Crowdcube and Seedrs offerings. See Table A1 for variable definition.

	(1)	(2)	(3)
Nominee	0.38**	132.2***	0.46***
	(2.19)	(2.93)	(2.84)
Post February 2015	0.63*	-3.95	0.43
	(1.81)	(-0.11)	(1.25)
Ln (Funders)	1.80***	150.4***	1.74***
	(10.70)	(8.00)	(9.44)
Advanced degree	-0.030	-39.5	0.25
	(-0.09)	(-0.92)	(0.75)
Team size	0.0092	11.8	-0.084
	(0.13)	(1.23)	(-1.34)
Equity	0.0066	0.14	0.017
	(0.48)	(0.11)	(1.45)
Ln (Firm age)	-0.11	4.13	-0.041
	(-1.35)	(0.40)	(-0.52)
Ln (Goal)	-0.95***	202.5***	-0.83***
	(-7.96)	(4.48)	(-7.64)
Ln (Duration)	-0.079	-24.7**	-0.29***
	(-0.60)	(-2.41)	(-2.66)
Diversification	-0.058	-15.6	-0.085
	(-0.33)	(-0.77)	(-0.54)
Ln (Team age)	0.24	16.9	0.35
	(0.68)	(0.36)	(1.10)
Observations	679	688	679
R-squared		0.467	
Pseudo R-squared	0.616		0.527
Year dummies	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes

Table 5. Intra-platform nominee and short-term success

Table 5 reports the impact of a Nominee dummy variable on several measures of short-term success from a sample of Crowdcube offerings. Model (1) reports the 1st stage Heckman coefficients from a sample of initial Crowdcube and Seedrs offerings in which a Crowdcube dummy is the dependent variable. The other models report the 2nd stage Heckman coefficients from a sample of Crowdcube offerings. Models (2) and (3), (5) and (6) employ a Success dummy and Amount as dependent variables whereas model (4) and (7) employ the Overfunding dummy. Models (2) (3) and (4) span the period from January 2012 to December 2018, whereas models (5), (6) and (7) span the period from February 2015 to December 2018. Significance levels for marginal effects are denoted as * for p ≤ 0.10, ** for p ≤ 0.05 and *** when p ≤ 0.01. See Table A1 for variable definition.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Nominee		1.14***	103.2**	1.32***	1.23***	75.7	1.28***
		(3.54)	(2.09)	(3.90)	(3.50)	(1.60)	(4.98)
Post February 2015	0.28**	-2.09	-53.0	-0.028			
	(2.22)	(-0.51)	(-0.41)	(-0.03)			
Advanced degree	0.087***	0.027	60.2	0.10	-0.14	19.9	0.26
	(19.06)	(0.08)	(1.05)	(0.29)	(-0.32)	(0.34)	(0.95)
Team size	0.044***	0.016	26.4**	-0.058	0.060	37.3***	0.098*
	(3.73)	(0.23)	(2.49)	(-0.84)	(0.68)	(3.35)	(1.88)
Equity	0.046***	0.0021	-3.56*	-0.0068	-0.0044	-5.97**	-0.023**
	(14.45)	(0.16)	(-1.69)	(-0.53)	(-0.27)	(-2.50)	(-2.16)
Ln (Firm age)	0.029***	-0.016	-22.5*	-0.025	-0.084	-11.6	-0.096
	(5.21)	(-0.18)	(-1.67)	(-0.29)	(-0.81)	(-0.77)	(-1.43)
Ln (Goal)	0.22***	-0.77***	309.9***	-1.19***	-1.16***	272.5***	-0.24**
	(2.71)	(-6.23)	(15.87)	(-8.36)	(-6.68)	(11.91)	(-2.36)
Ln (Duration)	-1.15***	-0.12	-7.08	0.14	-0.19	-1.80	0.37***
	(-19.02)	(-0.81)	(-0.33)	(1.05)	(-0.99)	(-0.06)	(2.74)
Diversification	0.12***	-0.20	-43.3*	-0.32**	-0.17	-35.5	-0.12
	(3.73)	(-1.25)	(-1.69)	(-2.08)	(-0.86)	(-1.32)	(-1.04)
Ln (Team age)	0.30***	-0.39	-66.9	0.011	-0.044	-95.1	-0.77***
	(3.76)	(-1.07)	(-1.18)	(0.03)	(-0.10)	(-1.47)	(-2.72)
Ln (Funders)	0.001***	1.62***	204.5***	1.90***	2.16***	241.5***	0.79***
	(7.55)	(13.31)	(13.56)	(12.92)	(11.59)	(15.19)	(11.27)
Platform preference	0.026***						
	(5.86)						
Inverse Mills ratio		-0.18	-152.4*	-1.41***	-0.33	-193.5**	-1.68***
		(-0.34)	(-1.91)	(-2.83)	(-0.50)	(-2.06)	(-4.06)
Observations	1018	667	669	651	513	515	513
R-squared			0.644			0.698	
Pseudo R-squared	0.302	0.592		0.577	0.649		0.152
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry dummies	No	Yes	Yes	Yes	Yes	Yes	Yes

Table 6. Nominee and long-term success

Table 6 reports the coefficients on whether nominee affects short-term success when one employs the Heckman method. Model (1) reports the coefficients of the first step in which a success dummy is the dependent variable whereas the rest report the second stage Heckman coefficients from a sample of successful offerings. Model (2) employs a SECO dummy whereas models (3) and (4) employ the number of SECOs and failure dummy respectively. The probit method is employed in models (2) and (4), whereas the zero inflated negative binomial model Is used in model (3). Significance levels for marginal effects are denoted as * for p ≤ 0.10, ** for p ≤ 0.05 and *** when p ≤ 0.01. The sample spans the period from January 2012 to December from a sample of initial Crowdcube and Seedrs offerings. See Table A1 for variable definition.

	(1)	(2)	(3)	(4)
Nominee		0.51**	0.66**	-0.091
		(2.45)	(2.01)	(-0.47)
Post February 2015	0.37	-1.09**	-1.18***	0.29
	(0.94)	(-2.42)	(-2.76)	(0.56)
Ln (Funders)	1.66***	0.54***	0.60**	0.045
	(11.28)	(2.75)	(2.24)	(0.27)
Advanced degree	-0.013	0.024	-0.20	-0.19
	(-0.05)	(0.07)	(-0.41)	(-0.60)
Team size	0.049	0.013	0.15*	-0.086
	(0.93)	(0.21)	(1.67)	(-1.39)
Equity	0.012	-0.0059	-0.0052	0.000047
	(1.41)	(-0.58)	(-0.35)	(0.00)
Ln (Firm age)	-0.083	-0.23***	-0.29***	-0.020
	(-1.26)	(-3.35)	(-2.97)	(-0.30)
Ln (Goal)	-0.69***	-0.059	-0.056	-0.25**
	(-6.80)	(-0.54)	(-0.41)	(-2.17)
Ln (Duration)	0.25**	-0.17***	-0.15	-0.034
	(2.01)	(-2.70)	(-1.10)	(-0.62)
Diversification	-0.19	-0.12	0.075	0.33**
	(-1.54)	(-0.76)	(0.35)	(2.52)
Ln (Team age)	-0.28	-0.28	-0.56	0.13
	(-0.90)	(-0.89)	(-1.55)	(0.46)
Ln (1+ Competing offerings)	-0.39***			
	(-2.61)			
Inverse Mills ratio		0.64*	0.73**	0.18
		(1.93)	(2.12)	(0.63)
Observations	957	486	598	578
Pseudo R-squared	0.589	0.172		0.240
Year dummies	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes

Table 7. Robustness: Different matching criteria and short-term success

Table 7 reports the coefficients on whether nominee affects short-term success when one employs the propensity score method. Nominee campaigns are matched with direct according to campaign year, goal equity, firm age, pre-money valuation and industry group. Models (1) and (3) report the coefficients of a probit method when a success dummy and overfunding are employed as dependent variables respectively. Model (2) reports the coefficients of an OLS method when total amount (in thousands) is employed for dependent variable. Significance levels for marginal effects are denoted as* for p ≤ 0.10, ** for p ≤ 0.05 and *** when p ≤ 0.01. The sample spans the period from January 2012 to December 2018 from a sample of initial Crowdcube and Seedrs offerings. See Table A1 for variable definition

	(1)	(2)	(3)
Nominee	0.54***	134.1***	0.53***
	(2.99)	(3.32)	(3.30)
Post February 2015	0.98***	-35.4	0.87**
	(2.75)	(-0.53)	(2.45)
Ln (Funders)	1.99***	177.6***	1.98***
	(11.76)	(7.46)	(12.12)
Advanced degree	0.49	-36.2	0.55
	(1.43)	(-0.86)	(1.52)
Team size	-0.029	34.5**	0.031
	(-0.42)	(2.47)	(0.49)
Equity	0.019	2.85	0.019
	(1.13)	(1.43)	(1.35)
Ln (Firm age)	-0.13*	-38.2	-0.010
	(-1.65)	(-1.59)	(-0.13)
Ln (Goal)	-0.81***	275.0***	-0.74***
	(-6.82)	(4.86)	(-6.24)
Ln (Duration)	-0.24***	-54.0***	-0.39***
	(-2.81)	(-2.64)	(-4.75)
Diversification	-0.20	-39.9	-0.19
	(-0.98)	(-1.46)	(-0.95)
Ln (Team age)	-0.031	-50.6	-0.15
	(-0.09)	(-0.94)	(-0.43)
Observations	678	688	678
R-squared		0.460	
Pseudo R-squared	0.625		0.572

Table 8. Robustness: Caliper and short-term success

Table 8 reports the coefficients on whether nominee affects short-term success when one employs the propensity score method with caliper which is chosen to be at 20% of the standard deviation of the logit of propensity score. Nominee campaigns are matched with direct according to firm age, pre-money valuation and industry group. Models (1) and (3) report the coefficients of a probit method when a success dummy and over-subscription are employed as dependent variables respectively. Model (2) reports the coefficients of an OLS method when total amount (in thousands) is employed as dependent variable. Significance levels for marginal effects are denoted as* for p ≤ 0.10, ** for p ≤ 0.05 and *** when p ≤ 0.01. The sample spans the period from January 2012 to December 2018 from a sample of initial Crowdcube and Seedrs offerings. See Table A1 for variable definition.

	(1)	(2)	(3)
Nominee	0.37**	132.4***	0.44***
	(2.12)	(2.90)	(2.76)
Post February 2015	0.64*	-2.05	0.44
	(1.83)	(-0.05)	(1.29)
Ln (Funders)	1.80***	150.3***	1.74***
	(10.69)	(8.01)	(9.43)
Advanced degree	-0.031	-39.9	0.25
	(-0.09)	(-0.93)	(0.75)
Team size	0.0084	12.0	-0.085
	(0.12)	(1.25)	(-1.36)
Equity	0.0059	0.055	0.017
	(0.43)	(0.04)	(1.39)
Ln (Firm age)	-0.11	4.54	-0.039
	(-1.33)	(0.44)	(-0.50)
Ln (Goal)	-0.94***	203.5***	-0.82***
	(-7.93)	(4.46)	(-7.60)
Ln (Duration)	-0.075	-24.9**	-0.29***
	(-0.57)	(-2.39)	(-2.63)
Diversification	-0.062	-15.8	-0.088
	(-0.35)	(-0.78)	(-0.56)
Ln (Team age)	0.22	15.0	0.33
	(0.62)	(0.32)	(1.03)
Observations	675	684	675
R-squared		0.467	
Pseudo R-squared	0.614		0.525
Year dummies	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes

Table 9. Intra-platform nominee approach and short-term success

Table 9 reports the impact of a Nominee dummy variable on several measures of short-term success from a sample of Crowdcube offerings. Model (1) reports the 1st stage Heckman coefficients from a sample of initial Crowdcube and Seedrs offerings in which a Crowdcube dummy is the dependent variable. The remaining models report the 2nd stage Heckman coefficients from a sample of Crowdcube offerings. It employs the Generalized Structural Equation Method (GSEM) method that consists of four models. The first GSEM uses models (2) to (5) and spans the period from January 2012 to December 2018, whereas the second GSEM employs the rest and covers the period from February 2015 to December 2018. Models (2) and (6) employ the nominee dummy as dependent variable and a mimicking variable that is not used in other models. Dependent variable in Models (3) and (7) is a success dummy whereas total amount raised is the dependent variable in models (4) and (8). The remaining models use an over-subscription dummy. Significance levels for marginal effects are denoted as * for p ≤ 0.10, ** for p ≤ 0.05 and *** when p ≤ 0.01. See Table A1 for variable definition.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Nominee			1.14***	103.2**	1.32***		1.23***	75.65*	1.41***
			(3.54)	(2.15)	(3.90)		(3.50)	(1.65)	(3.77)
Post February 2015	0.28**	3.36	-2.09	-53.0	-0.028				
	(2.22)	(0.01)	(-0.51)	(-0.42)	(-0.03)				
Advanced degree	0.087***	-1.09**	0.027	60.2	0.10	-1.08**	-0.14	19.9	0.005
	(19.06)	(-2.24)	(0.08)	(1.08)	(0.29)	(-2.24)	(-0.32)	(0.35)	(0.01)
Team size	0.044***	0.06	0.016	26.4**	-0.058	0.062	0.060	37.3***	0.024
	(3.73)	(0.99)	(0.23)	(2.56)	(-0.84)	(0.99)	(0.68)	(3.45)	(-0.28)
Equity	0.046***	-0.014	0.0021	-3.56*	-0.0068	-0.014	-0.0044	-5.97**	-0.014
	(14.45)	(-0.89)	(0.16)	(-1.73)	(-0.53)	(-0.89)	(-0.27)	(-2.57)	(-0.93)
Ln (Firm age)	0.029***	0.019	-0.016	-22.5*	-0.025	0.019	-0.084	-11.6	-0.04
	(5.21)	(0.18)	(-0.18)	(-1.71)	(-0.29)	(0.18)	(-0.81)	(-0.80)	(-0.40)
Ln (Goal)	0.22***	0.33*	-0.77***	309.9***	-1.19***	0.33*	-1.16***	272.5***	-1.24**
	(2.71)	(1.94)	(-6.23)	(16.29)	(-8.36)	(1.94)	(-6.68)	(12.27)	(-7.02)
Ln (Duration)	-1.15***	-0.12	-0.12	-7.08	0.14	-0.13	-0.19	-1.80	0.02
	(-19.02)	(-0.65)	(-0.81)	(-0.34)	(1.05)	(-0.65)	(-0.99)	(-0.06)	(0.12)
Diversification	0.12***	-0.03	-0.20	-43.3*	-0.32**	-0.03	-0.17	-35.5	-0.33*
	(3.73)	(-0.15)	(-1.25)	(-1.73)	(-2.08)	(-0.15)	(-0.86)	(-1.36)	(-1.86)
Ln (Team age)	0.30***	0.87*	-0.39	-66.9	0.011	0.87*	-0.044	-95.05	-0.24
	(3.76)	(1.77)	(-1.07)	(-1.21)	(0.03)	(1.77)	(-0.10)	(-1.51)	(-0.51)
Ln (Funders)	0.001***	0.31***	1.62***	204.5***	1.90***	0.32***	2.16***	241.5***	2.27***
	(7.55)	(2.63)	(13.31)	(13.92)	(12.92)	(2.63)	(11.59)	(15.65)	(11.27)
Pr (Nominee)		17.8***				17.8***			
		(4.42)				(4.42)			
Platform preference	0.026***								
	(5.86)								
Inverse Mills ratio		-0.13	-0.18	-152.4*	-1.41***	-0.13	-0.33	-193.5**	-1.04
		(-0.20)	(-0.34)	(-1.91)	(-2.83)	(-0.20)	(-0.50)	(-2.13)	(-1.61)
Observations	1018	669	669	669	669	515	515	515	515
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry dummies	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table 10. Robustness: Long-term success removing 2018 camapigns

Table 10 reports the 2nd stage Heckman coefficients on whether nominee affects long-term success when one employs the Heckman method. Model (1) employs a SECO dummy for dependent variable whereas models (2) and (3) employ the number of SECOs and failure dummy respectively. The probit method is employed in models (1) and (3), whereas the zero inflated negative binomial model Is used in model (2). Significance levels for marginal effects are denoted as* for p ≤ 0.10, ** for p ≤ 0.05 and *** when p ≤ 0.01. The sample spans the period from January 2012 to December from a sample of initial Crowdcube and Seedrs offerings. See Table A1 for variable definition.

	(1)	(2)	(3)
Nominee	0.51**	0.66**	-0.12
	(2.45)	(2.01)	(-0.60)
Post February 2015	-1.09**	-1.18***	0.31
	(-2.42)	(-2.76)	(0.58)
Ln (Funders)	0.54***	0.60**	0.069
	(2.75)	(2.24)	(0.39)
Advanced degree	0.024	-0.20	-0.18
	(0.07)	(-0.41)	(-0.53)
Team size	0.013	0.15*	-0.079
	(0.21)	(1.67)	(-1.25)
Equity	-0.0059	-0.0052	-0.00032
	(-0.58)	(-0.35)	(-0.03)
Ln (Firm age)	-0.23***	-0.29***	-0.043
	(-3.35)	(-2.97)	(-0.64)
Ln (Goal)	-0.059	-0.056	-0.28**
	(-0.54)	(-0.41)	(-2.28)
Ln (Duration)	-0.17***	-0.15	-0.036
	(-2.70)	(-1.11)	(-0.65)
Diversification	-0.12	0.075	0.39***
	(-0.76)	(0.35)	(2.75)
Ln (Team age)	-0.28	-0.56	0.11
	(-0.89)	(-1.55)	(0.36)
Inverse Mills ratio	0.64*	0.73**	0.19
	(1.93)	(2.12)	(0.63)
Observations	486	505	489
Pseudo R-squared	0.172		0.214
Year dummies	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes

Table 11. Robustness: Long-term success -Quick success instead of duration

Table 11 reports the 2nd stage Heckman coefficients on whether nominee affects long-term success when one employs the Heckman method and uses quick success instead of duration. Model (1) employs a SECO dummy as dependent variable whereas models (2) and (3) employ the number of SECOs and failure dummy respectively. The probit method is employed in models (1) and (3), whereas the zero inflated negative binomial model Is used in model (2). Significance levels for marginal effects are denoted as * when p < 0.10, ** when p < 0.05 and *** when p < 0.01. The sample spans the period from January 2012 to December from a sample of initial Crowdcube and Seedrs offerings. See Table A1 for variable definition.

	(1)	(2)	(3)
Nominee	0.49**	0.61**	-0.078
	(2.47)	(2.11)	(-0.42)
Post February 2015	-0.99**	-1.17**	0.33
	(-2.17)	(-2.57)	(0.64)
Ln (Funders)	0.56***	0.61**	0.062
	(2.90)	(2.34)	(0.37)
Advanced degree	0.031	-0.26	-0.18
	(0.09)	(-0.51)	(-0.55)
Team size	0.021	0.15*	-0.086
	(0.34)	(1.78)	(-1.40)
Equity	-0.0039	-0.0023	0.00075
	(-0.37)	(-0.15)	(0.08)
Ln (Firm age)	-0.24***	-0.28***	-0.020
	(-3.38)	(-3.04)	(-0.30)
Ln (Goal)	-0.084	-0.078	-0.27**
	(-0.75)	(-0.59)	(-2.23)
Quick success	0.74***	0.99***	0.20
	(3.26)	(3.19)	(0.99)
Diversification	-0.14	0.032	0.33**
	(-0.89)	(0.16)	(2.51)
Ln (Team age)	-0.31	-0.61	0.12
	(-0.96)	(-1.59)	(0.41)
Inverse Mills ratio	0.68**	0.76**	0.20
	(2.05)	(2.25)	(0.69)
Observations	486	598	578
Pseudo R-squared	0.179		0.241
Year dummies	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes

Table A1. Variable definition

Variable	Definition	Data source
Success	A binary variable that takes value 1 for those campaigns that reach their target, zero otherwise	Constructed employing data from TAB
Funders	The number of investors at the end of the campaign	TAB
Amount	Total amount raised at the end of the campaign	TAB
Over-subscription	A dummy variable that takes value 1 if amount over goal is greater than 1, zero otherwise.	Constructed employing data from TAB
1st SECO	A dummy variable that takes value 1 if a firm has conducted a first SECO, zero otherwise	Constructed employing data from TAB
Number of SECOs	The total number of follow-on offerings	Constructed employing data from TAB
Firm failure	A dummy variable that takes value 1 if a firm has defaulted or is in administration or liquidation, zero otherwise.	UK Companies House
Nominee	A dummy variable that takes value 1 for campaigns that employ the nominee account, zero otherwise	Constructed employing data from TAB
PostFeb15	A dummy variable that takes value 1 for Crowdcube and Seedrs campaigns conducted after February 2015, zero otherwise	Constructed employing data from TAB
Advanced degree	A dummy variable that takes value 1 if at least 1 member holds the title Dr or Professor, zero otherwise	UK Companies House
Team size	The number of team members on public launch date	UK Companies House
Equity	Equity issued during the campaign	TAB
Firm age	The age of the firm on public launch date	UK Companies House
Goal	The target amount set at the beginning of the campaign	TAB
Duration	The number of days a campaign is live	TAB
Diversification	The number of 4-digit code for a firm	UK Companies House
Team age	The average age of team members	UK Companies House
Platform preference	The number of Crowdcube offerings over Seedrs offerings conducted by firms which belong to the same industry group in the last twelve months prior to each observation	Constructed employing data from TAB
Competing offerings	The number of live competing offerings on public launch date on the same platform	Constructed employing data from TAB

Table B1. Nominee and short-term success – Removing retailing sector offerings

Table B1 reports the coefficients on whether nominee affects short-term success when one employs the propensity score method and excludes retailing sector offerings. Nominee campaigns are matched with direct according to firm age, pre-money valuation and industry group. Models (1) and (3) report the coefficients of a probit method when a success dummy and over-subscription are employed as dependent variables respectively. Model (2) reports the coefficients of an OLS method when total amount (in thousands) is employed for dependent variable. Significance levels for marginal effects are denoted as * for p ≤ 0.10, ** for p ≤ 0.05 and *** when p ≤ 0.01. The sample spans the period from January 2012 to December 2018 from a sample of initial Crowdcube and Seedrs offerings. See Table A1 for variable definition.

	(1)	(2)	(3)
Nominee	0.42**	133.3***	0.48***
	(2.36)	(2.94)	(3.00)
Post February 2015	0.67*	-2.36	0.45
	(1.88)	(-0.06)	(1.30)
Ln (Funders)	1.86***	152.1***	1.75***
	(10.32)	(7.99)	(9.44)
Advanced degree	-0.063	-40.6	0.25
	(-0.19)	(-0.94)	(0.74)
Team size	0.025	12.8	-0.076
	(0.34)	(1.33)	(-1.21)
Equity	0.0040	0.15	0.017
	(0.29)	(0.11)	(1.39)
Ln (Firm age)	-0.11	4.32	-0.045
	(-1.33)	(0.41)	(-0.57)
Ln (Goal)	-0.96***	201.8***	-0.82***
	(-7.76)	(4.48)	(-7.50)
Ln (Duration)	-0.089	-24.8**	-0.29***
	(-0.65)	(-2.40)	(-2.65)
Diversification	-0.11	-17.2	-0.13
	(-0.63)	(-0.82)	(-0.81)
Ln (Team age)	0.29	16.6	0.38
	(0.81)	(0.35)	(1.20)
Observations	672	681	672
R-squared		0.468	
Pseudo R-squared	0.623		0.529
Year dummies	Yes	Yes	Yes
Industry dummies	Yes	Yes	

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No.	Authors	Title
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