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Lead Investor Nominee in Equity Crowdfunding

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The lead investor nominee structure in equity crowdfunding (ECF) integrates the strengths of the pure ECF and angel ECF models. By committing their own capital, lead investors address two key challenges: mitigating adverse selection through thorough due diligence and reducing moral hazard by monitoring the firm post-campaign to secure returns. The digital nominee governance structure ensures equal ownership and voting rights for all investors, resolving potential conflicts between angels, accredited investors and the crowd. This model fosters collaboration between professional investors and the crowd, leveraging their respective strengths. Analysis of extensive UK data shows that nominee ECF campaigns outperform direct ownership campaigns in both the short and long term. These findings provide valuable governance insights for platform managers and policymakers.

Introduction

In innovative entrepreneurial finance markets, equity crowdfunding platforms (ECFPs) target a set of heterogeneous 'digital' investors using distinct ECF (equity crowdfunding) models and corporate governance mechanisms (see e.g. Ahlers *et al.*, 2015; Cumming, Vanacker and Zahra, 2021; Drover *et al.*, 2017; Vu and Christian, 2023). ECFPs digitally match startups (entrepreneurs) seeking outside private equity and investors providing funds in exchange for potential future financial returns (Schwienbacher, 2019). One can contrast two types of ECFP approach. In the pure ECF model, firms issue shares, allowing ordinary investors to become shareholders through their investments. The limited individual incentives for crowd or other investors to perform due diligence or monitoring can lead to collective action problems due to coordination failures. By contrast, the pure angel ECF model offers one solution to solve these problems where a lead investor (typically) invests alongside her syndicate of other professional and accredited investors (Agrawal, Catalini and Goldfarb, 2016). However, the pure angel ECF model cannot benefit from the wisdom of the crowd since the latter is excluded.

This paper employs regression analysis of a series of matched samples[1] to study the performance (proxied by a success dummy, amount raised and overfunding) of an extensive sample of successful and unsuccessful initial ECF campaigns during January 2012–December 2018 on the Crowdcube, Seedrs and SyndicateRoom

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[1]This applies for inter-platform comparisons. Intra-platform tests confront endogeneity by using the Heckman method in Table 4 and the two-stage OLS model in Table B3 in Appendix B.

platforms. While most investors on Crowdcube and Seedrs are small crowd investors, these ECFPs also attracted some angels and other accredited investors from the outset (Cumming, Meoli and Vismara, 2019). Wang *et al.* (2019) study co-investment between angels and the crowd on the Seedrs platform and stress the complementarity between them in increasing the efficiency of the ECF market. This paper refers to Crowdcube and Seedrs campaigns as lead investor ECF campaigns where crowd investors invest alongside professional and accredited investors. SyndicateRoom, like AngelList in the United States, deliberately targeted only professional (business angels and venture capitalists, VCs) and qualified (high-net-worth and other) investors from the outset. Although ECF has been widely studied (see Mochkabadi and Volkmann (2018) and Coakley and Lazos (2021) for reviews), the agency issues related to collective action problems and how ECFP corporate governance structures deal with these have been largely neglected (Ahlstrom, Cumming and Vismara, 2018). This paper fills that gap by addressing these issues.

This paper's major contribution is that it provides a detailed analysis of the lead investor nominee structure in ECF and how it deals with both collective action and related corporate governance problems. This model combines aspects of angel ECF (Agrawal, Catalini and Goldfarb, 2016) and pure ECF by attracting both sophisticated and crowd investors to Crowdcube and Seedrs, the United Kingdom's largest ECFPs. Its key campaign feature is the sequencing of investment into private and public phases. The private phase seeks to mimic aspects of the lead investor syndicate in angel crowdfunding. Angels and other qualified investors are granted priority (early) access to this phase, which seeks to attract commitments for approximately 20% of the goal. The largest investor is granted special privileges, for example on the Seedrs platform she is the only investor who is granted direct ownership with private voting rights (all other investors enjoy nominee ownership). The intuition here is that, since the largest investor has skin in the game due to her large personal investment, she is incentivized to conduct thorough due diligence. Likewise, other large investors are also incentivized to conduct their own due diligence. This contributes to resolving the initial collective action problem that bedevils pure ECF where no one investor has such a responsibility and thus allays potential adverse selection concerns.

This initial pre-commitment of around 20% of the goal in the private phase acts as a certification effect for a potentially successful campaign and a quality signal that thorough due diligence has been conducted. Both of these attract investor attention from crowd investors. In turn, this triggers investment cascades from other accredited investors and the crowd (Meoli and Vismara, 2021; Vismara, 2018) and so induces L-shaped dynamics when the campaign goes public. These thus solve initial collective action and traction problems, especially for large ECF campaigns. Moreover, since the largest investor has a long-term perspective (she needs to protect her reputational capital to continue investing and she earns carry on a successful exit), she is also incentivized to engage in active post-campaign monitoring. Monitoring addresses potential moral hazard issues and thus aligns the interests of the ECFP, the largest investor, other investors and the ECF ventures. The merits of lead investor nominee ECF are that accredited investors can enjoy the wisdom of the crowd (Vismara, 2018) and the crowd and other investors can exploit the due diligence and monitoring roles of the largest investor.

This paper's second contribution is that it investigates the corporate governance mechanisms (nominee vs. direct ownership) that can deal with collective action problems to advance a deeper understanding of crowdfunding investment contingencies (Cumming, Meoli and Vismara, 2019, 2021). The private phase campaign must attract other professional investors – business angels, VCs, private equity and family office funds and other accredited investors – to enable the campaign to go public. This potentially could lead to subsequent principal–principal conflicts between angels and other accredited investors and other coordination issues. The digital nominee governance structure pioneered by the Seedrs platform (which is both an adaptation and an extension of angel and VC syndicate governance structures) is designed to resolve such issues in two ways. First, by assigning equal ownership and voting rights to all investors, it enfranchises the crowd and so ensures that nominee campaigns benefit from its wisdom. Wang *et al.* (2019) stress the complementary relationship between angels and the crowd, where the latter plays a leading role in funding small campaigns and a complementary role in large campaigns. Second, by providing an ongoing digital governance structure for successful startups in terms of monitoring and follow-on funding, it aligns the long-term interests (Kleinert, Volkmann and Grünhagen, 2020) of the startup, investors and ECFP, all of whom stand to benefit from a successful exit (Cumming, Vanacker and Zahra, 2021).

The paper's third contribution is that it analyses a unique intra-platform quasi-experiment where Crowdcube (hitherto a direct ownership platform) offered the option of nominee ECF campaigns from 2015. Using this experiment extends the analysis of ECFPs from a *static* comparison to a *dynamic* perspective. In particular, the paper complements and builds upon previous evidence on nominee campaigns (e.g. Walthoff-Borm, Schwienbacher and Vanacker, 2018). It produces intra-platform evidence that lead investor nominee campaigns are more likely to perform better in the short run relative to direct ownership campaigns. It also establishes

that nominee campaigns on average enjoy better long-run performance in terms of conducting follow-on ECF and other offerings and the numbers of such offerings (Coakley, Lazos and Liñares-Zegarra, 2022a; Signori and Vismara, 2018).

The paper is organized as follows. The next two sections discuss competing ECFP models in the United Kingdom and hypothesis development. Then, we summarize our research design and discuss the empirical results and robustness tests, respectively. The final section concludes.

Competing ECFPs

The United Kingdom's developed ECF ecosystem exhibited great diversity among its three large platforms, Seedrs, Crowdcube and SyndicateRoom, from the outset. Crowdcube started with a direct ownership governance structure in 2011 and quickly established itself as the leading UK ECF platform (Rossi, Vanacker and Vismara, 2021). Seedrs distanced itself from Crowdcube in 2012 by employing a nominee governance model run by the platform. Prior to 2016, these platforms operated a very informal precondition (technically a provision point mechanism, PPM) where the founder drew on friends and family and, sometimes, an angel to secure a pre-commitment of funds prior to the public launch of the campaign. These pure ECF campaigns on the two platforms faced free-rider and collective action problems. No one investor was incentivized to conduct thorough due diligence prior to investing, nor to monitor the firm after a successful campaign. Moreover, while they enjoyed the wisdom of the crowd, pure ECF campaigns tended to raise relatively small amounts of funds.

SyndicateRoom commenced business in 2013 as a direct ownership angel ECFP. It pioneered the angel lead investor ECF model in the United Kingdom. The lead investor organized a syndicate in the private phase of the ECF campaign to pre-commit 25% of the target capital as a precondition for the campaign to go public and she also monitored the post-campaign firm. SyndicateRoom's modus operandi was similar to that of AngelList in the United States (Agrawal, Catalini and Goldfarb, 2016). The lead investor had to make a substantial investment herself and so conducted thorough due diligence to attract other professional investors to her syndicate and to tackle potential adverse selection problems. These early pledges ignited investor attention from day one of the public campaigns and led to cascading investor behaviour and L-shaped early funding dynamics (Meoli and Vismara, 2021; Vismara, 2018). This type of PPM was crucial to SyndicateRoom, whose successful campaigns were substantially larger than those on Crowdcube and Seedrs (Coakley and Lazos, 2021).

While the SyndicateRoom model overcame collective action problems, it could not enjoy the wisdom of the crowd as ordinary investors could not invest on this platform. The Crowdcube and Seedrs platforms, seeing the success of SyndicateRoom, sought to mimic aspects of the lead investor approach from late 2015. For example, they introduced priority or early access to their campaigns for professional and accredited investors only. Seedrs introduced a 'largest investor' category that was offered voting rights via direct ownership, while all other investors were assigned nominee ownership. Crowdcube specified a minimum investment (e.g. £50k) to enjoy direct ownership. Existing findings support the presence of professional investors like angels in the early stage. The Wang *et al.* (2019) findings from a Seedrs sample show that angels invest in two campaigns on average and the mean amount invested is around £117k per offering.[2] This was 100 times more than the sum pledged by retail investors and underlines the key role of professional investors. Their data also reveal that the presence of angels and the amount that they invest increased significantly in the post-2016 period, which is consistent with the rise of the lead investor model in that period.

The nominee governance approach helps the lead (largest) investor and platform solve collective action problems among shareholders by acting as a single representative for multiple investors and streamlining decision-making via digital voting processes. By consolidating the votes and interests of a dispersed shareholder base, the nominee can efficiently represent and advocate for their collective interests, reducing coordination costs and overcoming free-rider problems. This centralized approach ensures that shareholder rights are exercised effectively, aligning actions towards common goals.

The lead investor nominee structure has a more complex share ownership structure, involving an angel (broadly defined) lead investor, other qualified investors and the crowd, with potential for coordination problems between the crowd and qualified investors and principal–principal conflicts between different groups of qualified shareholders. The digital nominee governance structure adopted by Seedrs from the outset is well suited both to dealing with coordination issues involving the high investor numbers associated with large ECF campaigns and to resolving possible principal–principal conflicts (Coakley and Lazos, 2021). This explains why it was adopted by both SyndicateRoom and Crowdcube (as an option) from late 2015.

[2]These data are consistent with angels acting as lead investors by making substantial personal investments prior to the campaign going public.

Hypothesis development

This paper analyses the short and long-run performance of a variety of initial ECF campaigns on various ECFPs. The ECFPs use signals to highlight the aspects of their initial ECF campaigns that may be attractive to investors. Perhaps the most critical signal is the ownership and corporate governance systems, and the rights they offer to ventures seeking to raise outside equity (Cumming, Vanacker and Zahra, 2021). Platforms offer a choice between traditional direct ownership – where the investor directly owns the shares (with or without voting rights) – and digital nominee ownership, which is novel in the equity funding context. Nominee ECF ownership is quite innovative and involves paperless shares held electronically with equal voting rights. ECFPs borrowed the idea from VC syndicates and adapted it to accommodate the much larger numbers of ECF shareholders. It was also one of the earliest manifestations of the dematerialization of shares that is currently being implemented in stock markets in Europe. Its similarities with VC syndicates act as an indirect quality signal that will appeal in particular to sophisticated and other accredited investors.

On the one hand, ECFPs use observable and credible signals about the quality of their new ventures seeking funds to convey their unobservable quality to potential investors to reduce information asymmetry. For example, Kleinert *et al.* (2022) argue that the ECFP selection criteria used to screen new ventures include patents, sales agreements, team experience and VC backing as signals of quality. This paper highlights that ECFPs signal to potential investors through the distinctive share ownership and corporate governance structures they offer to potential investors. The main distinction here is between traditional direct ownership and digital nominee ownership (Cumming, Vanacker and Zahra, 2021).

In general, direct ownership signals that investors enjoy individual voting and related rights but not necessarily so in the case of ECF firms (Cumming, Meoli and Vismara, 2019). The ECF nominee ownership and governance structure digitally bundles all ECF investors – excluding the largest investor(s) – in a campaign into one nominee account operated and monitored by the ECFP. This is a quality signal that implies that all investors enjoy equal ownership, voting and follow-on rights (proportional to their holding). Importantly, it signals that principal–principal conflicts are unlikely. Cumming, Meoli and Vismara (2019) highlight problems with the early Crowdcube direct ownership approach, which sought to attract large shareholders (those investing at/above threshold amounts – the modal and mean values were £5k and £9k, respectively) by offering them voting rights. They establish that a higher separation between ownership and control rights in direct ownership campaigns lowers the probability of a successful offering, the likelihood of attracting professional investors and the long-run prospects.

These considerations lead to our first main hypothesis:

H1: ECF offerings with nominee ownership perform better than direct ownership offerings.

The lead investor nominee ECF model that combines aspects of the pure ECF and the angel ECF model emerged in late 2015. Its nominee structure is designed to mitigate principal–principal conflicts. In turn, the approximately 20% pre-commitment of the largest investor group in the early private campaign phase acts as a quality signal (Kleinert *et al.*, 2022) in campaigns. As such, it provides a certification effect for due diligence and garnering early pledges from other accredited investors and for future monitoring of the venture. Finally, the nominee structure also signals that coordination and related administrative campaign-related costs for startups are minimized since the platform as nominee digitally manages the arm's-length relationship between the shareholders and the venture founder team through electronic voting and online decision-making, updates and meetings.

SyndicateRoom switched from direct ownership to a nominee lead investor ECF platform that was fostered by the growing involvement of angel, VC and other accredited investors from late 2015. It was also likely influenced by the prior success of nominee ECF on the Seedrs platform. The pre-commitment by the lead (largest) investor syndicate (group) to about 20% of the target in the private phase of the campaign serves as a quality signal to other investors when the campaign goes public. This is turn leads to early L-shaped dynamics that are vital for the funding of large campaigns (Agrawal, Catalini and Goldfarb, 2016). This leads to H2a for the post-2016 period:

H2a: ECF offerings with nominee ownership perform better than direct ownership offerings on competing platforms.

Crowdcube acknowledged the clear merits of nominee ECF campaigns from February 2015. It thus began to offer nominee as well as direct ownership campaigns on its platform. Moreover, it followed Seedrs and SyndicateRoom in moving to a lead investor nominee structure as an option from late 2015. Thus, Crowdcube lead investor nominee campaigns are also predicted to *perform better than* their direct ownership counterparts in line with H2b:

H2b: ECF offerings with nominee ownership perform better than direct ownership offerings on the same platform.

Long-run performance

Here we follow the ECF literature in referring to the post-initial ECF campaign performance of firms as their long-run performance (Coakley, Lazos and Liñares-Zegarra, 2022b; Hornuf, Schmitt and Stenzhorn, 2018; Signori and Vismara, 2018). The typical ECF firm is young and will thus require follow-on funding to scale and grow. Here the nominee structure acts as a signalling device or certification effect for both existing and new investors. Supportive of this idea, Coakley, Lazos and Liñares-Zegarra (2022a) study seasoned (follow-on) equity crowdfunded offerings (SECOs). Their results show that both the Seedrs and SyndicateRoom nominee models dominate the direct ownership model in terms of the probability of conducting a successful first SECO campaign. Walthoff-Borm, Vanacker and Collewaert (2018) establish that nominee ECF firms make smaller post-campaign losses than their direct ownership counterparts. Signori and Vismara (2018) also find that a successful initial ECF campaign facilitates the attraction of VC financing, particularly for campaigns with a nominee structure.

The nominee approach is a signal of quality for ECF campaigns as it is typically used for VC syndicates (Agrawal, Catalini and Goldfarb, 2016.) It signals lower chances of agency conflicts with and between qualified existing and follow-on investors. Moreover, by providing an ongoing digital monitoring system for successful startups and a structure for follow-on funding, the nominee structure aligns the long-term interests (Kleinert, Volkmann and Grünhagen, 2020) of the startup, investors and the ECFP. All of these stand to benefit, either from reputational effects or via carry from an eventual successful exit (Cumming, Vanacker and Zahra, 2021). This leads to the following hypotheses:

H3a: ECF offerings with nominee ownership have a higher probability of a successful follow-on campaign than direct ownership offerings.

H3b: ECF offerings with nominee ownership are likely to enjoy more follow-on campaigns than direct ownership ECF offerings.

Methodology

Short-term performance

Our study compares Seedrs nominee with Crowdcube direct offerings and SyndicateRoom and Crowdcube nominee with Crowdcube direct campaigns to analyse the effect of the nominee ownership structure on ECF firm short-term outcomes. Due diligence may differ across platforms, which in turn may affect campaign outcomes (Kleinert *et al.*, 2022). As a result, there may be differences in startup intrinsic value across platforms. We deal with this potential endogeneity issue by constructing a subsample in which nominee and direct offerings share similar characteristics, thereby isolating the effect of nominee on campaign outcomes. This check mitigates the likelihood that our results are driven by the possibility that higher-quality startups underpin a specific corporate governance scheme due to, for example, more thorough due diligence being undertaken by a platform.

The coarsened exact matching method is employed to construct a subsample in which nominee ECF firms share similar characteristics to direct ownership ECF firms. The advantage of this method is that it belongs to the class of monotonic imbalance bounding methods. It bounds the error in estimating the average treatment effect and that regarding model dependence. Thus, it may result in better balance compared to other matching methods (Blackwell *et al.*, 2009). We follow a similar approach as in Walthoff-Borm, Schwienbacher and Vanacker (2018) in employing matching criteria that are shown to affect campaign success and can be viewed as quality signals. Seedrs and SyndicateRoom nominee campaign firms are matched with Crowdcube direct ownership campaign firms according to firm age, pre-money valuation, industry group, equity and goal (industry dummies are used in the regressions). Our method can be summarized as follows:

Seedrs nominee vs. Crowdcube direct campaigns

$$Success\_d = \alpha_1 + \mathrm{B}_1 Sdrs\_Nominee + \Gamma_1 Controls + \varepsilon_1 \quad (1)$$

$$Amount = \alpha_2 + \mathrm{B}_2 Sdrs\_\mathrm{Nominee} + \Gamma_2 Controls + \varepsilon_2 \quad (2)$$

$$Overfund = \alpha_3 + \mathrm{B}_3 Sdrs\_Nominee + \Gamma_3 Controls + \varepsilon_3 \quad (3)$$

SyndicateRoom nominee vs. Crowdcube direct campaigns

$$Success\_d = \alpha_4 + \mathrm{B}_4 SR\_Nominee + \Gamma_4 Controls + \varepsilon_4 \quad (4)$$

$$Amount = \alpha_5 + \mathrm{B}_5 SR\_Nominee + \Gamma_5 Controls + \varepsilon_5 \quad (5)$$

$$Overfund = \alpha_6 + \mathrm{B}_6 SR\_Nominee + \Gamma_6 Controls + \varepsilon_6 \quad (6)$$

where *Sdrs_Nominee* (*SR_Nominee*) is the nominee dummy comparison between Seedrs and Crowdcube direct (SyndicateRoom nominee and Crowdcube direct) and *Controls* is the vector of control variables employed in this study. Equations (1) and (4) are estimated using a logit model, whereas the others use ordinary least squares (OLS). Controls include equity, advanced degree, team size, diversification, the logarithm of goal,

firm age and team age, and year and industry fixed effects. Appendix A justifies the choice of these variables.

Long-run campaign performance

Post-initial campaign success is studied by analysing the effect of the nominee approach on the likelihood of conducting a first SECO, the number of successful SECOs and the likelihood of firm failure. SECOs are observed only for those firms that first conduct initial campaigns. Thus, a similar approach to that of Signori and Vismara (2018) and Coakley, Lazos and Liñares-Zegarra (2022a) employs the Heckman method to confront sample selection bias. The first step in Equation (7) employs data from initial Crowdcube, Seedrs and SyndicateRoom – both successful and unsuccessful – campaigns, in which a success dummy (*Success_d*) is the dependent variable and competing offerings (*Competing_offs*) is the instrumental variable. The latter is defined as the number of live competing offerings on the public launch date on the same platform (Vismara, 2018) and spans the period from January 2012 to December 2018:

$$Success\_d = a_7 + B_7 Competing\_offs + \Gamma_7 Controls + \varepsilon_7 \quad (7)$$

The logic is that, with only a limited number of investors and many investment options, their distribution across projects may become thin. Hence, many projects, including good ones, might fail to get funded. The number of competing offerings on the day of the initial ECF offering is unlikely to impact the success of a potential follow-on offering taking place at a later date. This instrument therefore satisfies the exclusion restriction (Roberts and Whited, 2013) in that competing offerings are unlikely directly to affect the outcome variables that refer to SECOs.

The second-step Heckman regressions in Equations (8)–(10) employ data from successful initial Seedrs nominee and Crowdcube direct ownership campaigns augmented by the related inverse Mills ratio (*Inv.Mills*) in each case. The corresponding regressions in Equations (11)–(13) employ data from successful initial SyndicateRoom and Crowdcube direct ownership campaigns.

Seedrs nominee vs. Crowdcube direct

$$SECO\_d = \alpha_8 + B_8 Sdrs\_Nominee + \Gamma_8 Controls + \delta_8 Inv.\ Mills + \varepsilon_8 \quad (8)$$

$$SECO\_nos = \alpha_9 + B_9 Sdrs\_Nominee + \Gamma_9 Controls + \delta_9 Inv.Mills + \varepsilon_9 \quad (9)$$

$$Failure\_d = \alpha_{10} + B_{10} Sdrs\_Nominee + \Gamma_{10} Controls + \delta_{10} Inv.\ Mills + \varepsilon_{10} \quad (10)$$

SyndicateRoom vs. Crowdcube direct

$$SECO\_d = \alpha_{11} + B_{11} SR\_Nominee + \Gamma_{11} Controls + \delta_{11} Inv.Mills + \varepsilon_{11} \quad (11)$$

$$SECO\_nos = \alpha_{12} + B_{12} SR\_Nominee + \Gamma_{12} Controls + \delta_{12} Inv.Mills + \varepsilon_{12} \quad (12)$$

$$Failure\_d = \alpha_{13} + B_{13} SR\_Nominee + \Gamma_{13} Controls + \delta_{13} Inv.Mills + \varepsilon_{13} \quad (13)$$

Equation (7) uses a probit model, whereas Equations (8), (10), (11) and (13) are estimated via a logit model and Equations (9) and (12) via the zero-inflated negative binomial method. Following Signori and Vismara (2018), duration and funders are included in the controls as well.

Empirical results

Descriptive statistics

Table 1 reports summary statistics from the raw sample. It includes 1,166 successful and unsuccessful offerings that have been conducted on the Crowdcube, Seedrs and SyndicateRoom platforms between January 2012 and December 2018.

Table 1a reports the summary statistics. Some 63% of firms successfully reach their target and raise a mean amount of £345k when their funding goal needs are estimated to be a mean of £320k. The mean number of funders is 199. Around 43% of the firms in our sample opted for the nominee scheme. Firms are young on average, with a mean pre-money valuation of £3.08m. Their teams are relatively small (2.35 members) and young (3.5 years). This is consistent with existing research (Kleinert, Volkmann and Grünhagen, 2020; Ralcheva and Roosenboom, 2020). Finally, firms offer 14% of their equity to investors on average.

Equality of means tests between samples

Table 1b reports the results of an equality of means tests between samples of successful and unsuccessful nominee and direct offerings across the three subsamples this study deploys. Panel A employs data on the Seedrs nominee and Crowdcube direct ownership initial campaigns of 2012–2018. Panel B employs data on the SyndicateRoom nominee and Crowdcube direct initial campaigns of 2012–2018. Panel C uses data from the Crowdcube platform for February 2015 to December 2018. Nominee offerings are matched with direct ownership offerings according to pre-money valuation, equity, goal, firm age and industry group in Panels A and B.

Table 1a. Summary statistics

	Obs.	Mean	SD	Min	Max
Success	1166	0.63	0.48	0	1
Amount (£k)	1166	344.9	534.53	0.03	7188.33
Overfund (£k)	1166	24.63	271.31	−1378.2	2514.1
Nominee	1166	0.43	0.49	0	1
Advanced degree	1166	0.07	0.27	0	1
Team size	1166	2.35	1.42	1	11
Equity (%)	1166	14.20	8.39	0.08	67.74
Firm age	1166	3.475	3.73	0.016	29.71
Goal	1166	320.27	403.33	994	6000
Diversification	1166	1.16	0.50	1	4
Team age (in years)	1166	42.51	10.22	19.42	71.82

Note: This table reports summary statistics that include the number of observations, standard deviation, mean, minimum and maximum values. The sample spans the period between January 2012 and December 2018 on Crowdcube, Seedrs and SyndicateRoom – successful and unsuccessful offerings. See Table A1 in Appendix A for variable definitions.

Panel A reports equality of means test results for the matched sample of some 344 Seedrs nominee and Crowdcube direct campaigns. The differences between nominee and direct campaigns are overwhelmingly insignificant, as expected from a matching exercise. Some 60% of firms successfully reach (exceed) their goal of around £200k and raise a mean amount of approximately £180k when their funding goal is approximately £200k. The only statistically significant difference at the 5% level is team age, and here the actual difference is just 2 years.

Panel B reports equality of means test results for the matched sample of some 154 SyndicateRoom nominee and Crowdcube direct campaigns. Here there are some significant differences, as might be expected from comparing an angel ECF platform to an ECF platform. Thus, both the mean amount raised (£357k vs. £248k) and the goal (£372k vs. £271k) of SyndicateRoom nominee campaigns are significantly larger than the corresponding Crowdcube direct campaigns, respectively. Post-February 2015, all SyndicateRoom campaigns are nominees, while 77% of Crowdcube campaigns are direct ownership.

Finally, Panel C reports intra-platform equality of means test results for a sample of some 517 Crowdcube nominees versus direct campaigns. The results show significant differences between most campaign variables. In particular, nominee campaigns perform significantly better than direct campaigns in terms of success (0.91 vs. 0.58), amount raised (£802k vs. £348k) and overfunding (208 vs. 33). They also offer a significantly lower percentage of their equity (13.2% vs. 14.9%).

Multivariate analysis: Nominee effect

Any inter-platform study must confront potential selection bias. One platform may attract higher-quality startups via, for instance, more thorough due diligence by the lead investor. Extant findings suggest that due diligence differs across platforms, and this may affect campaign outcomes (Cumming, Johan and Zhang, 2019). The question is whether the nominee effect is driving our results or whether the effect is the outcome of higher-quality startups selecting nominees. To confront this potential selection bias, the coarsened exact matching method is employed so that nominee and direct offering startups share similar characteristics or exhibit similar characteristics to those outlined in the methodology section.

Table 2 reports the results of the effect of a nominee dummy on short-run performance at the inter-platform level using the matched samples of ECF initial campaigns between Seedrs and SyndicateRoom nominee and Crowdcube direct ownership firms. The dependent variables are proxies for short-run performance: campaign success in logit regression (columns 1 and 4), amount (£k) raised and overfund in OLS regressions (columns 2, 3, 5 and 6), respectively. The first three models use data from the Seedrs–Crowdcube platforms, while the others employ data from the SyndicateRoom–Crowdcube platforms.

The marginal effect of *Sdrs_Nominee* in Model (1) is 0.03 and is significant at the 5% level, implying that Seedrs nominee campaigns are 3% more likely to succeed than matched Crowdcube direct campaigns. These suggest that Seedrs campaigns are also likely to raise £33.7k more capital. These results lend support to H1. They are consistent with other studies which establish that nominee ECF campaigns *perform better than* their direct ownership counterparts (Cumming, Vanacker and Zahra, 2021; Rossi, Vismara and Meoli, 2019; Walthoff-Borm, Vanacker and Collewaert, 2018).

Focusing on the SyndicateRoom nominee dummy (*SR_Nominee*), the Model (4) marginal effect results reveal that lead investor angel ECF offerings are 16% more likely to be successful, to raise £132k more capital on average and to exhibit a much higher overfund. These coefficients are all significant at the 1% level

Table 1b. Equality of means tests

Panel A: Matched Seedrs nominee vs. Crowdcube direct ownership campaigns				
	N	Nominee	Direct	Difference
Success	344	0.60	0.62	−0.02
Amount (£k)	344	186	180	6
Overfund	344	−13	−31	18
PostFeb15	344	0.78	0.72	0.06
Advanced degree	344	0.06	0.05	−0.01
Team size	344	2.1	2.3	−0.02
Equity (%)	344	11.01	12.06	−1.05*
Firm age (years)	344	2.73	2.78	−0.05
Goal (£k)	344	199	211	−12
Diversification	344	1.17	1.15	0.02
Team age (years)	344	39.6	41.9	−2.3**
Panel B: Matched SyndicateRoom nominee vs. Crowdcube direct ownership campaigns				
	N	Nominee	Direct	Difference
Success	154	0.52	0.64	−0.12
Amount (£k)	154	357	248	109***
Overfund	154	−15	−22	7
PostFeb15	154	1	0.77	0.23***
Advanced degree	154	0.15	0.10	0.05
Team size	154	3.1	2.5	0.6**
Equity (%)	154	14.1	13.6	0.5
Firm age (years)	154	3.5	3.2	0.3
Goal (£k)	154	372	271	101***
Diversification	154	1.08	1.10	−0.02
Team age (years)	154	44.5	42.4	2.1
Panel C: Crowdcube nominee vs. Crowdcube direct ownership campaigns				
	N	Nominee	Direct	Difference
Success	517	0.91	0.58	0.33***
Amount (£k)	517	802	348	454***
Overfund	517	208	33	175***
Advanced degree	517	0.03	0.06	−0.03
Team size	517	3.1	2.2	0.9***
Equity (%)	517	13.2	14.9	−1.7
Firm age (years)	517	4.4	3.5	0.9*
Goal (£k)	517	594	315	279***
Diversification	517	1.12	1.19	−0.07
Team age (years)	517	45.1	41.8	3.3**

Note: This table reports the results of an equality of means test between matched successful and unsuccessful Seedrs nominees and Crowdcube direct offerings across the three subsamples this study deploys. Panel A employs data on the Seedrs nominee and Crowdcube direct ownership initial campaigns for 2012–2018. Panel B employs data on the SyndicateRoom nominee and Crowdcube direct initial campaigns for 2012–2018. Panel C uses data from the Crowdcube platform from February 2015 to December 2018. Nominee offerings are matched with direct ownership offerings according to pre-money valuation, equity, goal, firm age and industry group in Panels A and B. Panel C employs data for Crowdcube campaigns. The difference column reports the mean difference along with its statistical significance for an equality of means test. See Table A1 for variable definitions. Significance levels are denoted as follows.

*$p \leq 0.10$.
**$p \leq 0.05$.
***$p \leq 0.01$.

and support H1. These results are likely due to a combination of the certification effects of the lead investor in terms of her due diligence, the syndicate committing to pledging 40% of the goal and post-campaign monitoring. The lead investor can also induce other professional investors to make relatively large contributions to her syndicate (Ralcheva and Roosenboom, 2020).

The lead investor ECF effect

The UK ECF market has evolved from the pure ECF model dominated by crowd investors outlined in Vismara (2016) to the lead investor ECF model where an angel lead investor, VCs and other accredited investors participate as a syndicate alongside the crowd.

Table 2. Short-run performance of nominee vs. direct ownership campaigns

	(1) Success	(2) Amount	(3) Overfund	(4) Success	(5) Amount	(6) Overfund
Sdrs_Nominee	0.03**	33.7**	27.3			
	(2.45)	(2.02)	(1.64)			
SR_Nominee				0.16***	131.9***	152.2***
				(3.09)	(3.71)	(3.81)
Advanced degree	0.15	21.1	40.6	0.27**	62.3	66.9
	(0.99)	(0.49)	(0.94)	(2.37)	(1.30)	(1.24)
Team size	−0.007	8.29	4.20	0.04***	3.19	5.88
	(−1.25)	(1.11)	(0.56)	(4.73)	(0.26)	(0.42)
Equity	−0.006***	−4.10**	−3.33**	0.01	4.39	3.99
	(−2.60)	(−2.43)	(−1.98)	(1.28)	(1.34)	(1.09)
Ln(Firm age)	−0.01	−2.76	−9.83	−0.23	−51.3*	−66.5*
	(−0.15)	(−0.23)	(−0.81)	(−0.96)	(−1.66)	(−1.91)
Ln(Goal)	−0.09	144.2***	−55.4***	−0.26	144.9***	−218.7***
	(−1.46)	(11.05)	(−4.26)	(−1.28)	(4.40)	(−5.90)
Diversification	−0.015	44.6**	34.8*	0.12	4.84	13.2
	(−0.39)	(2.41)	(1.89)	(1.04)	(0.10)	(0.25)
Ln(Team age)	−0.19**	−29.3	14.9	−0.29***	53.3	168.1*
	(−2.48)	(−0.77)	(0.39)	(−20.05)	(0.62)	(1.74)
PostFebruary2015	0.014	39.0	30.0	0.89***	315.4	298.1
	(0.16)	(0.51)	(0.39)	(34.19)	(1.48)	(1.24)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	338	344	344	150	154	154
R-squared		0.412	0.226		0.409	0.474
Pseudo R-squared	0.252			0.313		

Note: This table reports the effect of a nominee dummy on short-run performance for a sample employing the coarsened exact matching method. Seedrs and SyndicateRoom nominee campaigns are matched with Crowdcube direct ownership campaigns according to pre-money valuation, equity, goal, firm age and industry group. Models (1) and (4) report marginal effects of a logit method when the *Success* dummy is employed as dependent variable. The rest report marginal effects of an OLS method when total *Amount* (£k) and *Overfund* (Amount − Goal) are employed as dependent variables. Models (1) to (3) employ data from Seedrs nominee and Crowdcube direct, while the rest use data from SyndicateRoom nominee and Crowdcube direct. The sample spans the period from January 2012 to December 2018 from a sample of initial Crowdcube direct ownership and Seedrs nominee firms. See Table A1 for variable definitions. Significance levels for marginal effects are denoted as follows.
*p ≤ 0.10.
**p ≤ 0.05.
***p ≤ 0.01.

Since these campaigns can lead to potential principal–principal conflicts between groups of investors (angel vs. VCs for instance, or accredited vs. crowd investors), the performance of these campaigns is benchmarked against direct ownership campaigns.

Table 3 reports the results of employing a difference-in-differences approach to test for the lead investor nominee structure. This has the advantage of comparing variation between control and treated groups as one moves from the early ECF years (2012–2015) to the more recent years (2016–2018).

The Model (1) to (3) results are for the Seedrs nominee (*Sdrs_Nominee*) lead investor ECF campaigns and the Model (4) to (6) results are for the SyndicateRoom nominee (*SR_Nominee*) campaigns, both relative to Crowdcube direct campaigns. The variables of interest are coefficients on the interaction terms *Sdrs_Nominee*Post2016 and SR_Nominee* Post2016*.

The Model (1) and (3) results strongly suggest that the growing presence of a lead investor nominee structure in the post-2016 ECF campaigns may be driving the Seedrs nominee outperformance in earlier results. The *Sdrs_Nominee*Post2016* interaction terms for all three dependent variables are significantly positive at the 5%, 10% and 5% levels, respectively. Moreover, the results are economically significant also. This suggests that post-2016 (lead investor) nominee campaigns are more likely to perform better than Crowdcube (lead investor) direct campaigns across all three performance measures and so support H2a. The *Sdrs_Nominee* marginal effects are significantly negative at the 5% level with values for *Success_d* only, suggesting that Seedrs campaigns underperformed relative to Crowdcube direct campaigns during the pre-2016 period of mostly pure ECF campaigns. Thus, the nominee governance structure is associated with superior performance for lead investor ECF campaigns. The Model (4) and (5) re-

Table 3. Post-2016 nominee vs. direct campaigns

	(1) Success	(2) Amount	(3) Overfund	(4) Success	(5) Amount	(6) Overfund
Sdrs_Nominee	−0.28***	−1.13	−24.6			
	(−5.15)	(−0.04)	(−0.95)			
SR_Nominee				−0.57***	−215.7*	−249.6**
				(−19.33)	(−1.94)	(−2.00)
Sdrs_Nom*2016	0.34***	58.7*	88.0**			
	(6.15)	(1.71)	(2.58)			
SR_Nominee*Post2016				0.60***	385.2***	445.4***
				(17.00)	(3.28)	(3.39)
Post2016	−0.48**	−41.4	9.58	−0.54***	−264.6**	−305.1**
	(−2.76)	(−0.36)	(0.09)	(−4.33)	(−2.24)	(−2.30)
Advanced degree	0.14	19.3	38.8	0.27***	78.3*	85.4
	(0.79)	(0.45)	(0.91)	(2.70)	(1.67)	(1.63)
Team size	−0.01***	7.43	2.76	0.03*	3.78	6.79
	(−7.78)	(0.99)	(0.37)	(1.70)	(0.31)	(0.50)
Equity	−0.01***	−4.00**	−3.19*	0.01	4.02	3.61
	(−15.17)	(−2.37)	(−1.91)	(1.45)	(1.27)	(1.02)
Ln(Firm age)	−0.02	−2.70	−9.67	−0.25	−51.7*	−66.7**
	(−0.22)	(−0.22)	(−0.81)	(−0.91)	(−1.72)	(−1.99)
Ln(Goal)	−0.09	142.5***	−58.2***	−0.25	142.9***	−221.5***
	(−1.37)	(10.93)	(−4.51)	(−1.48)	(4.47)	(−6.19)
Diversification	0.003	45.3**	36.4**	0.18*	32.8	45.2
	(0.12)	(2.46)	(2.00)	(1.70)	(0.72)	(0.89)
Ln(Team age)	−0.09	−29.3	15.0	−0.23***	51.5	163.2*
	(−1.43)	(−0.77)	(0.40)	(−3.32)	(0.62)	(1.76)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	338	344	344	150	154	154
R-squared		0.417	0.241		0.444	0.510
Pseudo R-squared	0.271			0.311		

Note: This table reports the impact of a nominee dummy variable on measures of short-run performance to test for the post-2016 rise of lead investor ECF campaigns. Nominee campaigns are matched with Crowdcube direct ownership campaigns according to pre-money valuation, equity, goal, firm age and industry group. Models (1) to (3) report the results for a Seedrs nominee dummy variable while Models (4) to (6) report them for a SyndicateRoom nominee angel lead investor dummy variable. Models (1) and (4) involve a probit regression when a *Success* dummy is employed as dependent variable and report marginal effects. Models (2) and (5) (respectively, (3) and (6)) employ an OLS method when the total *Amount* (£k) (*Overfund* = Amount – Goal) is the dependent variable. The sample spans the period from January 2012 to December 2018 for initial Crowdcube direct, Seedrs and SyndicateRoom campaigns. See Table A1 for variable definitions. Significance levels for marginal effects are denoted as follows.
*p ≤ 0.10.
**p ≤ 0.05.
***p ≤ 0.01.

sults support outperformance by SyndicateRoom nominee campaigns in line with H2a also. The coefficients on the *SR_Nominee*Post2016* interaction term are positive and significant at 1% for all dependent variables

The Tables B5 and B6 results on *Sdrs_Nominee*Post201*x (x = 7 and 8, respectively) in Appendix B confirm that the Seedrs nominee campaigns are more likely to perform better than their Crowdcube direct investor ECF campaigns both post-2017 and post-2018, while the corresponding results for SR nominee lead investor campaigns weaken for post-2018. These findings imply that Seedrs lead investor ECF nominee campaigns perform better than their SR counterparts post-2016. This finding and the lack of evidence supporting the wisdom of the crowd may help explain the demise of the SyndicateRoom ECF platform at the end of 2018.

Crowdcube intra-platform quasi-experiment

In February 2015, Crowdcube acknowledged the merits of nominee campaigns by offering nominee as well as direct ownership campaigns on its platform. Selection effect evidence in Cumming, Meoli and Vismara (2019) suggests that entrepreneurs prefer a platform in which same-industry startups have already sought to raise capital. Therefore, we follow a similar approach to Cumming, Meoli and Vismara (2019) to account for this type of endogeneity by employing a two-stage Heckman method. The first step employs a Crowdcube dummy (*Crowdcube_d*) 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 (*Platform preference*) measured as the number of

Table 4. Intra-platform nominee short-run performance

	(1) Crowdcube_d	(2) Success	(3) Amount	(4) Overfund
Nominee		0.34***	192.4***	114.5**
		(9.07)	(3.33)	(2.35)
Advanced degree	0.099***	0.10	132.9*	81.5
	(4.74)	(1.21)	(1.78)	(1.29)
Team size	0.076***	0.06**	91.9***	65.6***
	(3.59)	(2.51)	(5.28)	(4.46)
Equity	0.043***	0.006	11.8*	4.35
	(71.23)	(0.63)	(1.73)	(0.76)
Ln(Firm age)	0.069***	−0.016	21.1	17.5
	(5.11)	(−0.58)	(0.99)	(0.97)
Ln(Goal)	0.23***	0.004	500.5***	102.2***
	(10.29)	(0.07)	(10.71)	(2.59)
Diversification	0.062***	−0.003	−1.57	−6.26
	(877.22)	(−0.08)	(−0.04)	(−0.21)
Ln(Team age)	0.23***	−0.23*	−144.8	−142.4*
	(8.16)	(−1.95)	(−1.65)	(−1.92)
PostFebruary2015	0.17***			
	(15.58)			
Platform preference	0.053***			
	(4.84)			
Inverse Mills ratio		0.22	776.6**	264.5
		(0.45)	(2.21)	(0.89)
Year fixed effects	Yes	Yes	Yes	Yes
Industry fixed effects	No	Yes	Yes	Yes
Observations	1018	513	515	515
R-squared			0.536	0.192
Pseudo R-squared	0.096	0.148		

Note: This table reports the impact of a nominee dummy variable on measures of short-run performance for a sample of Crowdcube offerings. Model (1) reports the first-stage Heckman coefficients for initial Crowdcube and Seedrs offerings in which a Crowdcube dummy is the dependent variable. The other models report the second-stage Heckman coefficients for Crowdcube offerings. Models (2)–(4) employ a probit (with marginal effects) and OLS regressions, respectively. The data span the period from February 2015 to December 2018. See Table A1 for variable definitions. Significance levels are denoted as follows.

*$p \leq 0.10$.
**$p \leq 0.05$.
***$p \leq 0.01$.

Crowdcube campaigns over the number of Seedrs campaigns in the same industry over the 12 months prior to each observation. The use of this variable seeks to capture any selection bias towards Crowdcube.[3]

The second step employs a sample of Crowdcube's initial campaigns (both successful and unsuccessful). Dependent variables include *Success_d*, *Amount* and *Overfund*. Table 4 presents the results.

The *PostFebruary2015* dummy coefficient of 0.17 in Model (1) is positive and significant at the 5% level. This suggests that entrepreneurs are more likely to choose Crowdcube rather than Seedrs to run their campaign in the post-February 2015 period.

The Model (2) to (4) results give the impact of nominee campaigns (*Cr_Nominee*) on short-run performance. The marginal effects are significantly positive at the 5% level or better, indicating that Crowdcube nominee account campaigns perform better than their direct ownership counterparts in the short run. They are more likely to reach their target, raise more capital and exhibit higher overfund. These results strongly support H2b – that Crowdcube nominees perform better than Crowdcube direct ownership ECF campaigns in the 2015–2018 period.

Post-initial campaign firm performance

Proxies for long-run success used in the ECF literature relate to the success and number of follow-on or seasoned equity crowdfunding offerings (SECOs) on the same platform. A SECO offers a readily available follow-on funding source facilitated by the lead investor nominee structure, whereas injections of VC and other funds are more infrequent. The results are summarized in Table 5.

[3]Table B3 reports the results of an extra test for nominee selection within a platform by employing the two-stage OLS model. Results are robust in this case too.

Table 5. Nominee and long-run performance

	(1) Success_d	(2) SECO_d	(3) SECO no	(4) Failure_d	(5) SECO_d	(6) SECO no	(7) Failure_d
Sdrs_Nominee	–	0.57***	0.74***	−0.13	–	–	–
		(6.20)	(66.90)	(−0.72)			
SR_Nominee	–	–	–	–	1.17***	1.03***	0.007
					(19.12)	(17.22)	(0.06)
PostFebruary2015	0.48	−1.08***	−1.16***	0.26	−1.21***	−1.64***	0.49***
	(1.53)	(−7.21)	(−2.90)	(0.70)	(−4.06)	(−7.79)	(3.41)
Ln(Funders)	1.17***	0.40***	0.46***	−0.12***	0.41***	0.31***	−0.24**
	(6.02)	(3.36)	(74.57)	(−3.73)	(3.37)	(2.66)	(−2.12)
Advanced degree	0.37***	0.063	−0.15	−0.21	0.19*	0.13***	−0.33
	(6.06)	(0.33)	(−0.63)	(−0.93)	(1.75)	(7.72)	(−1.20)
Team size	0.16***	0.022	0.16	−0.095	0.12***	0.21***	−0.027***
	(2.81)	(0.19)	(1.51)	(−1.45)	(7.44)	(10.34)	(−2.93)
Equity	0.017***	−0.0074***	−0.0065***	−0.0031	−0.0066	−0.011**	−0.0014
	(5.88)	(−7.99)	(−8.58)	(−0.29)	(−1.22)	(−1.99)	(−0.13)
Ln(Firm age)	0.016	−0.23***	−0.27***	−0.013	−0.17*	−0.20***	0.0094
	(0.30)	(−18.90)	(−5.19)	(−0.57)	(−1.82)	(−2.79)	(0.16)
Ln(Goal)	−0.40***	0.018	0.028	−0.19***	−0.021	0.14	−0.17***
	(−3.21)	(0.63)	(0.29)	(−26.68)	(−0.18)	(1.41)	(−4.28)
Ln(Duration)	0.61***	−0.18***	−0.16**	−0.019	−0.091	−0.01	0.044
	(4.83)	(−4.42)	(−2.55)	(−0.72)	(−1.30)	(−1.41)	(0.49)
Diversification	−0.17***	−0.12	0.077	0.35***	0.079	0.32***	0.18
	(−3.07)	(−0.58)	(0.44)	(3.76)	(1.39)	(45.60)	(1.63)
Ln(Team age)	−0.12	−0.30***	−0.57***	0.096	−0.46**	−0.61**	0.17***
	(−0.87)	(−32.43)	(−4.22)	(0.98)	(−2.37)	(−2.28)	(3.14)
Ln(1+ Competing offerings)	−1.03***	–	–	–	–	–	–
	(−4.56)						
Inverse Mills ratio	–	0.48**	0.64***	−0.25	0.13	−0.24	−0.32
		(1.96)	(24.31)	(−1.53)	(0.18)	(−0.25)	(−0.88)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1103	486	598	578	396	489	468
Pseudo R-squared	0.494	0.165	–	0.240	0.200	–	0.243

Note: This table reports the impact of a (Seedrs and SydndicateRoom) nominee dummy variable on long-run performance using a Heckman two-step procedure. The Model (1) results give the coefficients of the first-step regression, where a *Success* dummy is the dependent variable in the sample of all firms conducting (successful and unsuccessful) ECF offerings for the first time. The other model results are the second-stage Heckman coefficients from the sample of successful firms. Models (2) and (5) employ a SECO dummy, whereas Models (3) and (6) employ the number of SECOs. Models (4) and (7) employ a *Failure* dummy. The probit method is employed in Models (1), (2), (4), (5) and (7), whereas the zero-inflated negative binomial model is used in Models (3) and (6). The sample spans the period from January 2012 to December 2018 from a sample of initial Crowdcube, Seedrs and SyndicateRoom offerings. See Table A1 for variable definitions. Significance levels for marginal effects are denoted as follows.
*$p \leq 0.10$.
**$p \leq 0.05$.
***$p \leq 0.01$.

The Model (1) column reports the results of the Heckman first-stage probit model in which a success dummy (*Success_d*) is the dependent variable from a sample of initial – successful and unsuccessful – Crowdcube, Seedrs and SyndicateRoom campaigns over the 2012–2018 period. These results suggest that the higher the number of competing offerings (*Ln*(1+*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. The Model (2) probit results suggest that the (initial campaign) nominee dummy (*Sdrs_Nominee*) significantly increases the probability of conducting a nominee rather than a direct ownership first SECO. The Model (3) zero-inflated negative binomial results indicate that *Sdrs_Nominee* significantly increases the probability of conducting multiple nominees rather than direct ownership of SECOs. The coefficients in both cases are significant at the 1% level and support H3 that ventures which choose nominee follow-on offerings are more likely to be successful (Coakley, Lazos and Liñares-Zegarra, 2022a). This result is important as, increasingly, SECOs are the main source of follow-on funding for ECF firms (British Business Bank, 2019).

Similar findings are documented for the SyndicateRoom nominee angel SECOs as the Model (4) and (5) results indicate a significantly (at the 1% level) positive effect for a successful SECO and multiple

SECOs, respectively. It is also worth noting that the *SR_Nominee* coefficients are considerably larger than those for *Sdrs_Nominee*, highlighting the importance of accredited investors and strongly supporting H3. They are consistent with Butticè, Di Pietro and Tenca (2020), in which professional investors may opt for the nominee structure since it can increase the likelihood of startups raising capital from VC funds in the future. Finally, Table 5 shows that neither the Seedrs nor the SyndicateRoom dummy variable has a significant relationship with failure. This is consistent with Signori and Vismara (2018), who found that none of the companies initially backed by qualified investors in their sample failed. It is also consistent with the Hornuf, Schmitt and Stenzhorn (2018) finding that the likelihood of failure by UK ECF firms with follow-on campaigns was lower than that of their German counterparts.

Robustness tests. Robustness tests are presented in Appendix B. They show that the results are robust to alternative proxies of short-run performance, nominee selection within a platform, prior financing from VCs, imbalance tests and outlier effect.

Discussion and conclusions

ECF raises unique agency cost challenges, some of which are beginning to be studied. Collective action problems arise in ECF markets due to coordination failures linked to the free-rider problem and to the costs of undertaking due diligence and monitoring (Cumming, Vanacker and Zahra, 2021; Vismara, 2022). This paper documents the rise of the lead investor nominee structure to attract other accredited investors as well as the crowd to ECF platforms. This model deals with these issues by requiring the largest (lead) and other qualified investors to pre-commit for around 20% of the target prior to the campaign going public. The largest investor's own stake incentivizes her to conduct thorough due diligence, thus addressing adverse selection issues. She and the other qualified investors are also motivated to continue monitoring the ECF firm until it makes a successful exit to earn carry.

This paper focuses on the micro-functioning of ECF markets to examine how contrasting ECF governance mechanisms (nominee vs. direct ownership) address the collective action problem in ECF. Since the new nominee governance approach pioneered by Seedrs has similarities with that of VC funds and BA syndicates, it readily attracts accredited investors like angels and VC funds. Interestingly, while the Agrawal, Catalini and Goldfarb (2016) study and subsequent rise of the AngelList platform highlight the success of angel ECF in the United States with much higher numbers of angels, the UK case illustrates the superiority of the lead investor nominee structure model where other accredited investors co-invest alongside the largest investor and, more significantly, the crowd. Moreover, traditional accredited investors can invest in these ECF campaigns without having to pay the high syndicate fees typical of VC and private equity funds.

The paper employs a platform corporate governance lens to interpret the nominee structure as a digital solution to the potential agency issues and principal–principal conflicts. The nominee approach averts principal–principal conflicts by enfranchising both the crowd and accredited investors with the same ownership, voting and pre-emption rights. The platform and largest investor play an active digital corporate governance role in preparing and readying the venture for follow-on funding rounds and, eventually, for an exit. Finally, it should be noted that a Seedrs innovation – providing the first on-platform secondary marketplace for trading a selection of their ECF shares since July 2017 – has also mitigated information asymmetry issues for these shares (Lukkarinen and Schwienbacher, 2023).

Our study has implications for policy and practice. Policymakers are interested in creating a framework that leads to a robust and sustainable ECF market that is capable of funding both large and small ECF campaigns. In this respect, the pure ECF model with only crowd investors had severe limitations. By contrast, the lead investor nominee structure model succeeded due to the largest (lead) investor assuming responsibility for initial due diligence, securing pledges for a sizeable proportion (20%) of the campaign goal in the private campaign phase and post-campaign monitoring of the successful venture. Securing substantial early pledges prior to the campaign going public provides a new mechanism that could potentially trigger early herding behaviour (Meoli and Vismara, 2021) and thus solve the collective action problem of large ECF campaigns that operate the 'all-or-nothing' funding model. SyndicateRoom's success with its lead investor model paved the way for both Seedrs and Crowdcube to develop their own lead investor nominee structure models based on the expertise of a professional investor and other accredited investors, as well as the wisdom of the crowd.

The empirical findings confirm that lead investor nominee structure campaigns generally perform better than their direct ownership counterparts in terms of initial campaign success and the amount of funds raised. Nominee ECF firms conducting successful initial ECF campaigns are also more likely to conduct a first SECO and to conduct multiple SECOs than their direct ownership counterparts. These results hold both between and within crowdfunding platforms. The findings are confirmed by analysing a quasi-experiment when nominee ownership became an option on Crowdcube. The results show that lead investor nominee structure campaigns

are more likely to perform better than their direct ECF campaign counterparts.

Investors react to tax incentives and allocate more investments (around 24%) to firms under the United Kingdom's generous tax incentive scheme known as the SEIS (Seed Enterprise Investment Scheme) for seed-stage funding rounds. This, however, may make the crowd less smart by decreasing its incentives for thorough screening. Policymakers and platforms could find ways to incentivize SEIS firms to pitch their campaigns via the nominee scheme. The platform's lead investor, its concern to protect its reputational capital and its new PPM prior to a campaign going public are designed to offset the lower screening propensity of the crowd. The underlying logic is to help filter out low-quality startups and focus funding on high-quality firms.

As with any study, ours comes with limitations. It focuses only on the effect of the nominee ownership relative to the direct ownership structure. However, due to a lack of data, it is unable to study exactly what types of investors each structure attracts. There is an exchange of information between the experienced angel (accredited) and inexperienced crowd investors, and this improves the overall efficiency of the ECF market. The largest (lead) investor is incentivized to monitor entrepreneurs, and this can be beneficial for the subsequent growth of a startup. By contrast, inexperienced investors lack the sophistication to monitor startups. However, they may also be attracted by equivalent ownership and voting rights and so may be more likely to choose nominee campaigns. A study that focuses on the association between the nominee structure and investor types could be an interesting topic for future research.

References

Agrawal, A., C. Catalini and A. Goldfarb (2016). 'Are syndicates the killer app of equity crowdfunding?', *California Management Review*, **58**, pp. 111–124.

Ahlers, G. K., D. Cumming, C. Günther and D. Schweizer (2015). 'Signaling in equity crowdfunding', *Entrepreneurship Theory and Practice*, **39**, pp. 955–980.

Ahlstrom, D., D. J. Cumming and S. Vismara (2018). 'New methods of entrepreneurial firm financing: fintech, crowdfunding and corporate governance implications', *Corporate Governance: An International Review*, **26**, pp. 310–313.

Blackwell, M., S. Iacus, G. King and G. Porro (2009). 'CEM: coarsened exact matching in Stata', *The Stata Journal*, **9**, pp. 524–546.

British Business Bank (2019). 'The Small Business Equity Tracker Report'. Available at https://www.britishpatientcapital.co.uk/wp-content/uploads/2020/09/SmallBusiness-Equity-Tracker-2019-tagged.pdf.

Butticè, V., F. Di Pietro and F. Tenca (2020). 'Is equity crowdfunding always good? Deal structure and the attraction of venture capital investors', *Journal of Corporate Finance*, **65**, art. 101773.

Coakley, J. and A. Lazos (2021). 'New developments in equity crowdfunding: a review', *Review of Corporate Finance*, **1**, pp. 341–405.

Coakley, J., A. Lazos and J. M. Liñares-Zegarra (2022a). 'Seasoned equity crowdfunded offerings', *Journal of Corporate Finance*, **77**, art. 101880.

Coakley, J., A. Lazos and J. M. Liñares-Zegarra (2022b). 'Equity crowdfunding founder teams: campaign success and venture failure', *British Journal of Management*, **33**, pp. 286–305.

Cumming, D. J., S. A. Johan and Y. Zhang (2019). 'The role of due diligence in crowdfunding platforms', *Journal of Banking and Finance*, **108**, art. 105661.

Cumming, D. J., M. Meoli and S. Vismara (2019). 'Investors' choices between cash and voting rights: evidence from dual-class equity crowdfunding', *Research Policy*, **48**, art. 103740.

Cumming, D. J., T. Vanacker and S. A. Zahra (2021). 'Equity crowdfunding and governance: toward an integrative model and research agenda', *Academy of Management Perspectives*, **35**, pp. 69–95.

Drover, W., L. Busenitz, S. Matusik, D. Townsend, A. Anglin and G. Dushnitsky (2017). 'A review and road map of entrepreneurial equity financing research: venture capital, corporate venture capital, angel investment, crowdfunding, and accelerators', *Journal of Management*, **43**, pp. 1820–1853.

Hornuf, L., M. Schmitt and E. Stenzhorn (2018). 'Equity crowdfunding in Germany and the UK: follow-up funding and firm survival', *Corporate Governance: An International Review*, **26**, pp. 331–354.

Kleinert, S., J. Bafera, D. Urbig and C. K. Volkmann (2022). 'Access denied: how equity crowdfunding platforms use quality signals to select new ventures', *Entrepreneurship Theory and Practice*, **46**, pp. 1626–1657.

Kleinert, S., C. Volkmann and M. Grünhagen (2020). 'Third-party signals in equity crowdfunding: the role of prior financing', *Small Business Economics*, **54**, pp. 341–365.

Lukkarinen, A. and A. Schwienbacher (2023). 'Secondary market listings in equity crowdfunding: the missing link?', *Research Policy*, **52**, art. 104648.

Meoli, M. and S. Vismara (2021). 'Information manipulation in equity crowdfunding markets', *Journal of Corporate Finance*, **67**, art. 101866.

Mochkabadi, K. and C. K. Volkmann (2018). 'Equity crowdfunding: a systematic review of the literature', *Small Business Economics*, **54**, pp. 75–118.

Ralcheva, A. and P. Roosenboom (2020). 'Forecasting success in equity crowdfunding', *Small Business Economics*, **55**, pp. 39–56.

Roberts, M. R. and T. M. Whited (2013). 'Endogeneity in empirical corporate finance'. In G. M. Constantinides, M. Harris and R. M. Stulz (eds), *Handbook of the Economics of Finance*, Vol. 2, Part A, pp. 493–572. Amsterdam: Elsevier.

Rossi, A., T. Vanacker and S. Vismara (2021). 'Equity crowdfunding: new evidence from US and UK markets', *Review of Corporate Finance*, **1**, pp. 407–453.

Rossi, A., S. Vismara and M. Meoli (2019). 'Voting rights delivery in investment-based crowdfunding: a cross-platform analysis', *Journal of Industrial and Business Economics*, **46**, pp. 251–281.

Schwienbacher, A. (2019). 'Equity crowdfunding: anything to celebrate?', *Venture Capital*, **21**, pp. 65–74.

Shipman, J. E., Q. T. Swanquist and R. L. Whited (2017). 'Propensity score matching in accounting research', *The Accounting Review*, **92**, pp. 213–244.

Signori, A. and S. Vismara (2018). 'Does success bring success? The post-offering lives of equity-crowdfunded firms', *Journal of Corporate Finance*, **50**, pp. 575–591.

Vismara, S. (2016). 'Equity retention and social network theory in equity crowdfunding', *Small Business Economics*, **46**, pp. 579–590.

Vismara, S. (2018). 'Information cascades among investors in equity crowdfunding', *Entrepreneurship Theory and Practice*, **42**, pp. 467–497.

Vismara, S. (2022). 'Expanding corporate finance perspectives to equity crowdfunding', *Journal of Technology Transfer*, **47**, pp. 1629–1639.

Vu, A. N. and J. Christian (2023). 'UK equity crowdfunding: the impact of competition, Brexit and Covid-19', *British Journal of Management*, **35**, pp. 321–344

Walthoff-Borm, X., T. Vanacker and V. Collewaert (2018). 'Equity crowdfunding, shareholder structures, and firm performance', *Corporate Governance: An International Review*, **26**, pp. 314–330.

Walthoff-Borm, X., A. Schwienbacher and T. Vanacker (2018). 'Equity crowdfunding: first or last resort?' *Journal of Business Venturing*, **33**, pp. 513–533.

Wang, W., A. Mahmood, C. Sismeiro and N. Vulkan (2019). 'The evolution of equity crowdfunding: insights from co-investments of angels and the crowd', *Research Policy*, **48**, art. 103727.

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