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Invest or regret? An empirical investigation into funding dynamics during the final days of equity crowdfunding campaigns

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Abstract

In this study, we use the options theory of investment to investigate the funding behaviour of investors in equity crowdfunding. Options theory argues that when faced with uncertainty, investors have the 'option' to delay their irreversible investments, although incur a cost in doing so. Demonstrating that investments in equity crowdfunding are characterised by low levels of irreversibility (i.e., they are semi-reversible), moderate costs of delay and high levels of uncertainty, we follow the predictions of options theory in hypothesising that investors may rationally delay their investments in order to gain new information about the quality of businesses in which they invest. We find empirical evidence in support of these arguments when investigating the dynamics of investment activity in campaigns hosted on the UK equity crowdfunding platform Crowdcube.

Keywords: Equity Crowdfunding; Options Theory; Uncertainty; Cost of Delay

1. Introduction

Crowdfunding is a form of disintermediated finance that allows entrepreneurs to raise funds directly from large numbers of individual contributors in an online setting (Cumming and Zhang, 2016; Cumming and Vismara, 2017). Crowdfunding has been rising in prominence partly due to its potential to assist the smooth functioning of investment markets by reducing demand uncertainty and providing an initial screening of investment opportunities (Strausz, 2017). In a wider sense, crowdfunding has also helped to partially address the difficulties faced by entrepreneurial firms in accessing finance (Denis, 2004), especially given recent declines in the traditional forms of venture capital that previously addressed this gap (Shane and Nicolaou, 2018). Crowdfunding has further benefitted from a combination of the global low-interest rate environment and developments in Internet technologies (Block et al., 2018), as well as key regulatory changes such as Title III of the US JOBS Act, allowing non-accredited investors to exchange crowd-sourced capital directly for equity securities (Li and Martin, 2016).

Despite these benefits, it has been argued that crowdfunding imposes corporate governance costs on entrepreneurs due to the dispersed nature of investors, leading to higher agency costs (Drover et al., 2017) and separation of ownership from control (Cumming, Meoli and Vismara, 2019). Equity crowdfunding may also suffer as a result of pecking order theory, which asserts that managers tend to resist the sacrifice of control associated with the sale of equity and prefer to rely on internal sources of finance or external debt, in that order (Myers and Majluf, 1984). Entrepreneurial firms may therefore turn to equity crowdfunding only as a last resort when these other funding sources are unavailable or have been exhausted (Walthoff-Borm, Schwienbacker and Vanacker, 2018). As a consequence of these issues, the use of crowdfunding can be associated with both adverse selection and moral hazard, as well as other opportunistic behaviours on the part of entrepreneurs (Ahlstrom, Cumming and Vismara, 2018). Hence, crowdfunding is likely to be particularly affected by uncertainty and information asymmetry between investors and entrepreneurs.

We use the options theory of investment posited by Pindyck (1991) and Dixit and Pindyck (1994) as a novel theoretical lens through which to view the funding dynamics of equity crowdfunding campaigns over time. Options theory argues that investors who make irreversible investments under conditions of imperfect information almost always have the ‘option’ to delay their investments, though they will typically incur a cost in doing so. We argue that, due to the relatively low cost of delay associated with equity crowdfunding, investors may rationally hold back their capital expenditures for as long as possible in order to gather more information and reduce uncertainty. The aim of this study is to test these theoretical predictions through undertaking an empirical analysis of funding dynamics within a sample of first-come-first-served (FCFS) equity crowdfunding campaigns listed on the UK platform Crowdcube. We show that various measures of investment activity (i.e., number of investments, average investment amount and the amount of capital raised) tend to increase significantly during the final phase of the funding cycle relative to the middle period. Consistent with options theory, we also show that the increase in activity we observe is particularly pronounced among subsets of campaigns with relatively higher levels of uncertainty and lower cost of delay.

Our study extends the stream of research on funding dynamics in equity crowdfunding. More specifically, we argue that the options theory of investment seemingly provides a more consistent explanation for the pattern of activity we observe during the final days of funding cycle compared with alternative explanations appearing elsewhere in the literature. In our study, we observe a U-shaped pattern of investment over time, with an associated upturn in funding activity during the final few days of fundraising. This pattern of investment is inconsistent with the results of Hornuf and Schwienbacher (2018), who find evidence of an 'L' shaped pattern among FCFS equity crowdfunding campaigns. Additionally, the lack of evidence of a monotonic increase in funding activity over time is at least somewhat inconsistent with the theory of information cascades, which is suggested by Vismara (2018) to be a plausible explanation for funding dynamics in equity crowdfunding.

The remainder of this paper is organised as follows. In the following section, we provide an overview of equity crowdfunding and the Crowdcube platform, before critically reviewing a range of related studies on entrepreneurial finance and equity crowdfunding in Section 3. On the basis of this literature, we outline the options theory of investment in greater detail and propose a series of formal research hypotheses in Section 4. In Section 5, we discuss the context and characteristics of our data and method, before presenting our empirical results and robustness checks in Section 6. Finally, we present a discussion of the implications of our findings in Section 7 along with a broad summary and conclusion in Section 8.

2. Equity Crowdfunding and the Crowdcube Platform

Crowdfunding involves the establishment of a fundraising campaign by a founder, with the goal of meeting a specific monetary target to support a project or activity. Campaigns are typically hosted on an intermediary online platform that solicits monetary contributions from large numbers of funders. Most crowdfunding campaigns operate on the basis of an all-or-nothing approach, meaning that founders only receive the capital raised if their campaign successfully achieves its fundraising target within a specified time period, usually 30 days. Additionally, there are a variety of competing models of crowdfunding that incentivize contributions in different ways, including pure donations, rewards and loan-based models. Our study focuses on the equity crowdfunding model, whereby entrepreneurs (founders) attempt to raise money from investors (funders) by offering an equity stake in their company. Equity crowdfunding represents something of a hybrid between public and private equity, given that investments can be made by members of the public during the fundraising period but typically cannot be sold on secondary markets once the campaign has concluded.

We gather data from Crowdcube, the first equity crowdfunding site to launch in the UK and one of the largest equity platforms in the world[1] (De la Vina and Black, 2017; Walthoff-Borm, Schwienbacker and Vanacker, 2018). Although Crowdcube differs somewhat from UK-based rivals Seedrs and Syndicate Room,[2] it is similar to other large UK platforms in terms of the number of hosted campaigns, website traffic and success rates (Walthoff-Borm, Vanacker and

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[1] We briefly describe the operation of the platform and highlight the most relevant features to our research. A number of previous studies (Vismara, 2018; Vismara, 2017) also provide further information about the platform.

[2] Unlike Crowdcube, Seedrs is not a pure equity platform and Syndicate Room requires at least 25% of the target amount to have been pre-committed by professional investors. See Signori and Vismara (2018) for further details.

Collewaert, 2017). In addition, the FCFS allocation mechanism used by Crowdcube is common to almost all European crowdfunding platforms (Hagedorn and Pinkwart, 2016; Hornuf and Neuenkirch, 2017), meaning that the underlying incentives driving the dynamics of funding activity over time are likely to be quite similar. By comparison, the auction-based system used by other platforms is likely to lead to an even greater incentive to delay investments so as to prevent the signalling of private information to other bidders (Hornuf and Schwienbacher, 2018). We therefore argue that the options theory of investment is both relevant and applicable to the leading allocation mechanisms employed by equity crowdfunding platforms across Europe, which would make our findings generalizable beyond the specific context of Crowdcube.

In order to conform with Financial Conduct Authority regulations, Crowdcube and other UK equity crowdfunding platforms officially operate as passive conduits between entrepreneurs and investors. Otherwise, the platform would be bound by strict rules concerning the sorts of parties that may arrange or introduce investors to new investment opportunities (Dehner and Kong, 2014). According to the Crowdcube website, although they do not provide investment advice or an assessment of the quality of the businesses, they do undertake a thorough screening of the company, its legal structure and directors 3 to 4 weeks prior to the launch of a campaign. Businesses are vetted in this way during the pre-fundraising stage in order to minimise the number of low-quality campaigns and reduce information asymmetry (Löher, 2017).

Once the campaign is launched, Crowdcube encourage entrepreneurs to supply business plans, financial forecasts and other documentation in support of the mandatory written funding pitch appearing on the campaign page, which is often supplemented with a short promotional video. During the campaign, investors can pose questions and share information in public discussion forums. Entrepreneurs can also provide updates on the business and campaign using the same forums.[3] Information regarding the progress of the fundraising campaign, such as the number of investors, the accumulated amount of funding raised and the amount of time remaining, is always available to potential investors. However, Crowdcube offers relatively little in the way of post-campaign services such as exit assistance and secondary market services (Rossi and Vismara, 2018) and there is no ongoing reporting to the platform required once the campaign has concluded (Signori and Vismara, 2018).

3. Literature Review

Equity crowdfunding may be regarded as a form of entrepreneurial finance and shares many characteristics in common with IPOs. Much of the literature on this topic focuses on the issue of uncertainty and the degree of information asymmetry that exists between investors and entrepreneurs. Numerous studies have shown that firms can minimise information asymmetry in IPOs by providing investors access to greater quantities of more precise information about the business (Zhang, 2012), as well as demonstrating credible signals of quality such as retention of ownership (Bruton, Chahine and Filatotchev, 2009). The literature also shows that the problem of information asymmetry tends to result in initial offerings being under-priced, leading to abnormal first-day returns (Bradley et al., 2009). In order to address such problems, third parties such as venture capitalists and business angels provide signals of quality that help investors to assess the true quality of an investment opportunity (Flor and Grell, 2013), as well as promote higher standards of corporate governance (Farag, Mallin and Ow-Yong, 2014).

Our study aligns with a small number of others in the crowdfunding literature that investigate the dynamics of funding for equity crowdfunding campaigns. These studies tend to focus primarily on the patterns of funding observed during the early stages of fundraising. For example, Vulkan, Astebro and Sierra (2016) investigate UK data and found that campaign performance is largely dependent upon attracting investors willing to make larger pledges at an

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[3] For further details about campaign updates, refer to Block et al. (2018).

early stage, with early stage performance found to improve among campaigns with lower goals and lower amounts of equity offered. Petitjean (2018) also show that fundraising performance during the first week of fundraising has a strong predictive power for the ultimate performance of the campaign, leading the authors to conclude that investors tend to be influenced by the actions by others.

Taking a more complete view of funding dynamics over the course of the campaign, Hornuf and Schwienbacher (2018) compare funding patterns for FCFS and auction-based allocation mechanisms. The authors find evidence to suggest that funding patterns for auction-based mechanisms tend to be U-shaped over time, as investors withhold their bids until the last minute so as not to signal their beliefs about the true value of the business to rival bidders. By contrast, the same authors find that the dynamics of campaigns adopting a FCFS mechanism are L-shaped over time, implying relatively little activity during the final stages of the campaign. The authors suggest that the lack of late investments they observed with respect to FCFS may occur because the price of equity remains constant throughout the fundraising period, meaning that investors have no incentive to withhold their investments. The study also suggests that the observed pattern of funding can be explained by imitation and conformity with others.

In a closely related study, Vismara (2018) argues that the actions of high-profile investors during the early part of the fund-raising cycle may lead to informational cascades. This phenomenon involves investors observing and learning from the actions of others, leading to a form of herding behaviour and mimicking leaders (Bikhchandani, Hirshleifer and Welch, 1998). Information cascades occur when individuals perceive the information held by leaders and other prior investors to be superior to their own privately-held information (Banerjee, 1992; Welch, 1992), but can lead to inefficient outcomes in cases where uncertainty is high and/or the information available is noisy (Povel et al., 2016). Following this argument, Vismara (2018) show that successful campaigns tend to enjoy relatively large investments during the early days of the funding cycle. However, the study does not explicitly investigate funding dynamics during the later stages of the funding cycle. By focusing on patterns of investment in the final days of fundraising, our study builds on this literature and offers a detailed insight into the dynamics of fundraising over the entire campaign lifecycle.

4. Theory and Hypothesis Development

We analyse the dynamics of equity crowdfunding using the lens of the options theory of investment. Dixit and Pindyck (1994) argue that most investments have three important characteristics; namely irreversibility, uncertainty, and the possibility of delay. All investments face a degree of uncertainty from a number of potential sources, including information asymmetry, economic policy, project fundamentals or the motivations of other market participants (Baker, Bloom and Davis, 2015; Banerjee and Green, 2015; Stokey, 2016). Investments are also generally considered to be at least imperfectly reversible, with some initial costs which are not fully recoverable after the investment expenditures are made (McDonald and Siegel, 1986).

The ability to delay investment can be thought of as being similar to an 'option' which offers the right—but not the obligation—to make the investment at some future point in time. The main benefit of this option is that investors may be able to access more information over time, which reduces uncertainty regarding the true quality of the investment opportunity (Pindyck, 1991; Dixit and Pindyck, 1994). However, delaying investment incurs costs and in some instances may even be impossible. For instance, firms making investments may need to arrive at decisions quickly in order to deter new market entry or pre-empt competitors' investments. Considering the cost, delay is more rational in cases where the level of uncertainty is likely to fall in the near future (Stokey, 2016). The core argument of options theory is that uncertainty, irreversibility and the cost of delay will affect the timing of investment decisions. Investors, however, need to trade off the various cost of delay against the benefits of waiting in order to potentially derive additional information.

Equity crowdfunding provides a relevant and unique research setting in which to study options theory at the level of the investor, rather than at the firm level which is typical of most studies (e.g., Julio and Yook, 2012; Gulen and Ion, 2016). However, the applicability of options theory will differ significantly according to the allocation mechanism used by any given crowdfunding platform. Under an auction mechanism, equity is not sold until the end of the auction period when all bids have been received. By comparison, under the FCFS mechanism, the available equity can be sold before the end of the advertised funding period, meaning that the campaign may close prematurely. Investors in campaigns using the FCFS mechanism must therefore give careful thought to the timing of their contributions. On the one hand, adequate time must be taken to perform due diligence and related activities, such as engaging in discussions and receiving updates from entrepreneurs. On the other hand, long delays may result in missing out on the investment opportunity altogether. This FCFS mechanism is unique in comparison with other investment settings such as stock markets, where prices move but investments are mostly reversible and investors are in many respects unconstrained regarding the time they can take to invest. We discuss below the core aspects of the options theory of investment in the context of equity crowdfunding in order to develop our hypotheses relating to the ways in which investors make decisions in this context.

4.1 Low Levels of Irreversibility

Investments made via Crowdcube are relatively easy to reverse during and immediately following the fundraising period. For example, investors can apply to the platform to cancel or reduce their investments while the campaign is live, or within seven days after the funding target is met. However, investors incur costs as a result of cancelling their investments, both in terms of the opportunity cost of time[4] and potential sanctions from the platform in the event of numerous requests of this nature. However, once the seven-day cooling off period expires, investments in equity crowdfunding are almost completely irreversible due to an absence of secondary markets (Ahlers et al., 2015). Overall, we suggest that investor behaviour may be more likely to be driven by the low-level of investment irreversibility during the fundraising period, as opposed to the high level of irreversibility after it has ended.

4.2 Moderate Cost of Delaying Investments

Delaying investment is feasible within the framework of FCFS equity crowdfunding up to a point. In this context, the effective price of each share is identical for all investors, irrespective of the timing of their investment. As such, the decision to delay investment has no bearing upon the share price. However, investors are constrained by the time period during which they can make investments. Unlike reward-based crowdfunding where founders seek to raise the greatest amount possible, entrepreneurs are limited in the amount of capital they can raise, given the estimated value of their business and the amount of equity they make available. As such, no further investments are permitted once the entrepreneur has raised an amount equal to the value of equity on offer. This particular setting therefore imposes a time constraint on investors to make their decisions before the available equity is sold. As a consequence, delayed action may result in missing out on the investment opportunity altogether.

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[4] Investors need to e-mail Crowdcube with their account details and the amount they wish to cancel or withdraw. The request then needs to be processed by a member of the Crowdcube team. (Source: help.crowdcube.com).

4.3 High Levels of Uncertainty

Investments in equity crowdfunding are characterised by a high level of uncertainty. Vismara (2018) commented that "uncertainty, intrinsic to all entrepreneurial settings, is more severe in crowdfunding markets, where projects are typically proposed by first-time entrepreneurs" (p. 5). As businesses raising funds using equity crowdfunding are typically small and young, and it is not always straightforward for investors to determine the firm's fundamental value (Ahlers et al., 2015; Hervé et al., 2016; and many others). A further potential source of uncertainty is information asymmetry between investors and entrepreneurs (Cumming and Groh, 2018). Financial markets generally follow a weak form of efficiency whereby prices reflect available information only to the point where the marginal benefit of acquiring additional information equals the marginal cost (Fama, 1991). Given the importance of information in reducing uncertainty, inefficiencies are more likely to occur in situations where the marginal cost of information acquisition is higher, which is an issue that particularly affects small businesses. (Fama, 1998). In the absence of complete information, inefficiencies can also result from behavioural biases such as overconfidence and self-attribution (Daniel, Hirshleifer and Subrahmanyam, 1998).

In addition to information asymmetry and ambiguity regarding the fundamental value of a given business, equity crowdfunding also suffers from outcome uncertainty with respect to achieving declared funding goals. Although investors will receive a refund in the event the campaign is unsuccessful in meeting its target, such investments still impose a degree of cost; the refund process takes time and investors may miss out on other investment opportunities as a result. These assumptions are consistent with Baldwin's (1982) model of non-reversible sequential investments, whereby investors are assumed to require a premium on their return to compensate them for the opportunity costs associated with making an investment. The Crowdcube platform's overfunding feature has a bearing on uncertainty; in this special period, entrepreneurs can attempt to raise additional capital following the conclusion of their initial campaign.[5] However, whether or not a campaign will enter into overfunding is uncertain and decided on a case-by-case basis by the entrepreneur in conjunction with the platform. It is not known during the initial fundraising period which campaigns will enter into overfunding, meaning that investors cannot rely on the opportunity to invest during such a period.

4.4 Research Hypotheses

The arguments presented above suggest that investments in equity crowdfunding have relatively low and fixed levels of irreversibility. However, the high level of uncertainty suggests that investors may rationally elect to exercise the option of delaying their investment. The main benefit of exercising such an option is the opportunity to gain additional information about the business in order to make a more informed investment decision. However, the decision to delay may also impose costs in terms of missed investment opportunities. More importantly, the likelihood of missing out on any given investment opportunity will increase during the final days of the fundraising period, while the marginal quantity and benefit of additional information will also likely decrease.

As information on progress towards the fundraising goal is publicly available and easily accessible, we consider it likely that investors may rationally choose to delay their investment until the amount raised is close to the target. We therefore expect that the number of investors contributing toward a campaign will increase during the final days of the funding cycle. We further argue that the average investment may also increase in size during this period, since those considering investing larger sums will have a greater incentive to undertake due diligence. Combined with the larger expected number of investors, the higher average pledge expected during the final days of the fundraising campaign is likely to lead to a larger monetary amount raised in this period. We therefore hypothesize that:

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[5] More information on the overfunding facility offered by the Crowdcube platform can be found at: https://help.crowdcube.com/hc/en-us/articles/206709910-What-is-overfunding-

H1: The number of investors, average investment and aggregate daily level of investment will tend to increase as campaigns approach the final days of the funding cycle.

To further determine the extent to which options theory helps to explain the funding dynamics observed during the final days of a funding cycle, we investigate how the decision to delay investments varies with both the level of uncertainty and cost of delay (Bloom, Bond and Ven Reenen, 2007; Bloom, 2009). In line with the predictions of options theory, investors will be more likely to delay investing in campaigns with higher levels of uncertainty so they have more time to gather information and reduce information asymmetry. Also following options theory, we predict that investors will be more likely to delay investment when the cost of doing so is smaller. Accordingly, we hypothesize that:

H2: The number of investors, average investment and aggregate daily level of investment during the final days of an equity crowdfunding cycle will be relatively larger for campaigns associated with higher levels of uncertainty compared with those associated with lower levels of uncertainty.

H3: The number of investors, average investment and aggregate daily level of investment during the final days of an equity crowdfunding cycle will be relatively larger for campaigns associated with lower cost of delay compared with those associated with higher cost of delay.

5. Data and Method

We use an automated program to scrape daily data for all of the 104 campaigns that commenced and concluded on the Crowdcube website between August 2015 and February 2016. A majority of our data are collected from information and documentation made available online via each campaign webpage. We also supplement this campaign data with information on the exact age of the company based on the records held by Companies House in the UK, calculated according to the difference in days between the date of incorporation and the start of the crowdfunding campaign. Additionally, we construct a measure of volatility in the wider financial market by measuring the standard deviation of FTSE returns over a rolling 30-day window preceding each campaign day.

Due to our use of 10 dummy variables associated with specific days in the funding cycle, we were forced to exclude 13 campaigns that were active for a period of fewer than 11 days before achieving their funding target. From an absolute total of 104 campaigns, our final sample therefore consists of an unbalanced panel of 2,608 daily observations relating to 91 campaigns, with an average of around 29 fundraising days observed per campaign.[6] Our sample size is closely comparable to that used in a number of recent relevant studies of equity crowdfunding. For example, Hornuf and Neuenkirch (2017) and Hornuf and Schwienbacher (2018) conducted their analysis on a sample of 44 FCFS equity crowdfunding campaigns from Germany.[7] While our sample size may be slightly smaller than the 132 campaigns used by Vismara (2018), the summary and descriptive statistics presented below indicate that the characteristics of the two samples are very similar in most other respects.

5.1 Dependent Variables

In order to test our research hypotheses, we calculate a number of different measures of daily funding activity. First, following both Hornuf and Schwienbacher (2018) and Vismara (2018), we measure daily investment flows in terms of the number of investors contributing funding towards the campaign on each day of the funding cycle. We also measure the average size of investment, which is simply calculated as the daily amount of capital raised divided by the number of investors recorded on each day. Finally, we follow Block, Hornuf and Moritz (2018) in capturing aggregate daily monetary inflows by simply recording the total amount of capital raised on each given day.

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[6] The average length of projects in Vismara (2018) was nearly 60 days as this was the standard campaign duration at the time his sample was constructed in 2014.

[7] The sample used by Hornuf and Schwienbacher (2018) contains 89 campaigns, although 45 of them were from a second-price auction platform.

5.2 Independent Variables

Similar to studies by Hornuf and Schwienbacher (2018); Kuppuswamy and Bayus (2018); and Vismara (2018), we include dummy variables reflecting the first and last five days of each campaign. *First Day (Last Day)* takes the value of 1 if it is the first (last) day of funding cycle. The variable *First Day (B)*, where B=1,2,3,4 takes the value of 1 exactly B days after the first day, or 0 otherwise. The variable *Last Day (B)*, where B=1,2,3,4 takes the value of 1 if a campaign is B days before the last day, or 0 otherwise. For instance, *Last Day (2)* takes the value of 1 if the campaign is 2 days before its last day of fundraising and 0 otherwise. In our regression analysis, the coefficients associated with these variables are interpreted as the difference of funding flows during these campaign days compared with the averages observed during the middle period of the funding cycle, (i.e., outside of the first and last five days). Although we do not report the results for the sake of brevity, we also run our models with dummy variables for each day of the campaign rather than just the first and last five. The pattern of funding we observe in these alternate specifications is consistent with the more parsimonious set results presented here, and are available from the authors on request.

Table 1 includes descriptive statistics and definitions for the variables captured by our dataset. We show that campaigns receive an average of just over 4 investments totalling around £8,320 on a typical day of fundraising. However, in each case, the mean values of these variables are larger than the medians, implying a small number of disproportionately successful campaigns within the dataset. Campaigns tend to enjoy a relatively active exchange of information between investors and entrepreneurs, with each campaign achieving an aggregate of 54 Facebook shares to-date on any given day of the campaign, with around 11 updates having been made by the entrepreneurs up to that date. On average, a Crowdcube campaign will compete against approximately 24 other campaigns that are active at the same time, while each day, around 137 investments are made across all of the campaigns hosted on the platform.

<TABLE 1: Descriptive Statistics>

Consistent with Vismara (2018), our dataset also contains a set of campaign-specific variables to control for the possibility of selection bias, whereby those campaigns with stronger signals of quality attract greater numbers of investors at all stages of the funding cycle. These controls include the size of the executive and non-executive management teams (social capital) and whether the campaign description makes explicit mention of a patent either awarded or pending (intellectual capital), as well as whether the business has achieved positive sales during the previous financial year. On average, we show that each business is fronted by a team of just over two executive entrepreneurs, supported by a team of just over three non-executive managers. Only around 10% of campaigns in the sample make explicit mention of a patent, while almost exactly two-thirds of the sample report having achieved positive sales. Other variables suggest that the average business has been active for a period of just over three years at the time the campaign is launched. A minority of businesses in the sample are supported by sophisticated investors (angels or VCs) at the time of the listing, while a majority have not paid any form of dividend, nor formally anticipate an IPO as an exit strategy for investors.

The properties of our data seem to be largely consistent with other studies of equity crowdfunding in the UK. For example, the average equity we observe being sold by each campaign is 12%, which is close to the averages of 14% and 16% reported by Vismara (2016) and Walthoff-Borm, Schwienbacker and Vanacker (2018), respectively. The average campaign target of £329,000 in our dataset is higher than the £144,000 reported by Vismara (2016), but well within the typical range of £100,000 to £2,000,000 reported by Estrin, Gozman and Khavul (2018). Given the differences in sample period used by these studies, these figures may reflect an increase in the size of campaign targets over time. Such a trend is consistent with the findings of Vulkan, Astebro and Sierra (2016), who observed that average funding goals on the rival platform Seedrs have also tended to increase over time from £68,000 in 2012 to £200,000 in

2015, with average investment sizes also rising from £400 to £1,400 over the same period. The average investment size also shows evidence of similar growth over time, with our study showing an average of £1,146 compared with the £2,000 observed by Estrin, Gozman and Khavul (2018). These same authors also find evidence of a wider geographic dispersion of campaigns across the UK over time, which is consistent with the 48% of London-based campaigns observed by Vismara (2016) compared with the 31% in our (more recent) dataset. Overall, we are satisfied that the properties of our dataset are in line with the level and trends observed in other studies using data from Crowdcube and other similar platforms. Our empirical results are therefore likely to be reasonably generalisable within the context of equity crowdfunding, at least in the UK.

5.3 Indicators of Uncertainty

To investigate hypothesis H2, we identify high and low uncertainty campaigns in a number of ways. First, the subset of campaigns that enter into an overfunding period are likely to be regarded as having lower levels of outcome uncertainty compared with the initial fundraising cycle, given that they have already sold the full amount of equity that was initially offered and thus raised the necessary funds to fulfil their original investment plans. Following our main argument, investors who are concerned by the risk of missing investment opportunities will choose to invest during the normal fundraising period. We should therefore expect to observe a relative decline in the number of investors and funding amounts during the final days of the overfunding period compared with the final days of the initial funding period. Second, we split the campaigns in our dataset into two groups on the basis of whether or not the business has recorded positive sales in the last accounting year. Businesses that have already generated revenues are likely to be regarded by investors as having lower levels of uncertainty, thereby reducing the incentive to delay investment. We therefore expect to observe a reduction in the concentration of investors and funding during the final days of these campaigns compared with those businesses with no record of positive sales.

5.4 Indicator of the Cost of Delay

In investigate hypothesis H3, we further divide the campaigns in our sample according to the likely cost of delay faced by potential investors. As argued in previous sections, the major cost associated with exercising the option to delay is the risk of missing investment opportunities. However, measuring the cost (risk) of missing investment opportunities is challenging, given that individual investors will each have different preferences and attitudes regarding risk. In practice, investors can assess the risk of missing investment opportunities by monitoring information on funding progress, which is publicly visible on the campaign website. Campaigns that are observed to approach their funding goals more quickly are likely to be perceived as presenting a higher risk in this regard. For example, potential investors in a campaign that achieves its funding goal within 10 days will generally face a higher risk of missing the investment opportunity compared with campaigns that take 30 days to reach their goal. We therefore use the campaign duration as an indicator of the cost of delay, assuming that campaigns with longer durations will be associated with a lower cost of delay and vice versa.

6. Empirical Results

6.1 Univariate Analysis

Table 2 provides a summary of key descriptive statistics for observations on particular funding days at both the beginning and end of the campaign, compared against equivalent descriptive statistics for the middle period. In each case, t-statistics are provided to test the statistical significance of the difference in means observed between each respective funding day and the middle period. The data show the highest levels of activity typically occur on the very first day of funding and remain strong during First Day (1) and First Day (2) before declining thereafter. A similar pattern can be observed in reverse during the final days of fundraising, with activity that is statistically indistinguishable from the middle of the funding period during Last Day (4) and Last Day (3). However, funding activity is shown to increase modestly during Last Day (2) and

Last Day (1) before increasing sharply on the Last Day. Taken together, these results strongly imply a U-shaped funding pattern over time for equity crowdfunding campaigns in our sample.

<TABLE 2: Descriptive Statistics – Data Subsets>

Examining in greater detail, while the number of investors is seen to increase during a majority of both the first and last funding days relative to the middle period, the average investment size and amounts raised increase more markedly on the final day. This pattern implies that investors pledging larger sums outside of the first three days may typically elect to wait until the final day before committing to the campaign. Previous research has shown that funders in the early stages of a crowdfunding campaign may be disproportionately likely to be friends or family of the founder(s), while funders in the later stages are likely to be strangers (Kuppuswamy and Bayus, 2018). The evidence we present above is consistent with this scenario, given that investors looking to pledge larger sums, but lacking any direct ties to the entrepreneur(s), are likely to be affected to a greater extent by information asymmetry. Such investors would therefore be more likely to delay their investments to the very end of the funding cycle in order to obtain more information. Developing these initial results, we present below the results of an extensive multivariate analysis in order to test our hypotheses more rigorously.

6.2 Multivariate Analysis

Table 3 reports the results from a random-effects panel regression analysis of the temporal dynamics of campaign funding cycles. As the dependent variable (number of investors per day) in Specification I is a non-negative integer or count variable, we estimate a negative binomial panel regression to correct for over-dispersion. For Specification II, we perform the same analysis using GLS panel regression on the natural log of the number of investors, while Specifications III and IV employ the same approach using the natural log of the average investment size and total monetary amount raised by a given campaign on a given day, respectively. In each case, we allow for the clustering of bootstrapped or robust standard errors at the campaign level as appropriate.

<TABLE 3: Funding Dynamics in Equity Crowdfunding (Random Effects)>

The results presented in Specification I shows that the number of investors tends to be significantly higher during the first five days of the campaign. However, investor numbers are also shown to increase as the end of the campaign approaches, particularly during the last three days of the funding cycle compared with the middle phase. More specifically, Specifications II and I, respectively, suggest that campaigns tend to experience an increase of around 98% to 122% in the number of investors contributing on the final day relative to the middle phase of the funding cycle. The coefficient estimates presented in Specification III suggests that the average amount contributed on the final day tends to be around nine times larger during the middle of the fundraising cycle, which is the largest difference observed for any day outside of the First Day. Correspondingly, it is not surprising to observe in Specification IV that the amount raised on the final day tends to be around 14 times higher than during the middle period, implying that investors planning to make larger investments may withhold their capital until the very end of funding cycle. These results highlight how patterns observed in the aggregate amount of capital raised may be influenced to a greater extent by variations in average investment size rather than the number of investors. Altogether, our empirical findings support research hypothesis H1.

Coefficient estimates for our control variables are comparable with those appearing in prior studies. Consistent with Block et al. (2018) and Hornuf and Schwienbacher (2018), we find that number of discussions and Facebook shares are positively associated with the number of investors, but not with the average size of investment or daily amounts raised. This finding highlights the importance of information provided during the funding cycle in terms of attracting a greater volume of investors. However, the lack of significance of the same variable in Specification III implies that those investing larger sums do not seem to be as likely to be persuaded to contribute in this way. Further, our results show mixed evidence on the effect of increased numbers of competing campaigns and investments, implying that a greater volume of investment activity across the platform as a whole tends to be associated with greater levels of investment on a given day in the fundraising cycle for any individual campaign. We also show that increased stock market volatility is associated with larger numbers of investors on a given day, while investor numbers tend to be higher on Tuesdays, Wednesdays and over the weekend, relative to Mondays. In each case, no strong relationship is observed with the average size of investment or daily amount raised. We also find evidence to suggest that campaigns with higher targets, larger management teams and positive sales records tend to attract both greater quantities and higher amounts of investment.

To supplement the above results, we present in Table 4 the results of similar panel regressions including campaign fixed-effects and omitting any non-time varying controls. Although not reported, we also check for the consistency of these specifications by following the recommendations of Allison and Waterman (2002) relating to negative binomial models with fixed-effects. We find the results generated by this process to be consistent with those reported by the standard fixed-effect panel models. The coefficient estimates reported in Table 4 relating to key independent variables are consistent with those appearing in Table 3, which implies that our findings are robust to the choice of modelling using fixed or random effects. However, Sargan-Hansen tests performed on the fixed versus random effects models show that fixed effects are preferred to random effects. As such, we report only results using campaign fixed-effects for all of the additional modelling presented below.

<TABLE 4: Funding Dynamics in Equity Crowdfunding (Campaign Fixed-Effects)>

6.3 High/Low Uncertainty

While the above analysis generally supports our first research hypothesis, we undertake additional analysis to confirm the relevance of options theory by investigating whether the level of uncertainty impacts upon the pattern of campaign funding. First, we investigate funding dynamics in the overfunding stage, which we argue is associated with reduced outcome uncertainty relative to campaigns in the initial fundraising period. Table 5 replicates the main analysis on the subsample of 32 campaigns that enter an overfunding stage for an average of 17 funding days each, leading to a total of 559 daily campaign observations. Due to the typically shorter duration of overfunding compared with the initial fundraising period, we restrict our main independent variables to capture only the first and last three days of overfunding, once again measured relative to the middle period. We argue that this approach is reasonable, given that the results we presented earlier show that differences in investment activity tend to be most pronounced within three days of the campaign start and/or end. Adopting this strategy also allows us to retain the largest possible sample size.

<TABLE 5: Funding Dynamics – Overfunding Period>

The results presented in Table 5 indicate that an increase in fundraising activity continues to be observed in the first and last days compared with the middle of the overfunding period. However, the magnitudes of increases in funding activity observed in the first and last days of the overfunding period are relatively smaller than the equivalent measures observed during the regular funding stage, and often considerably so. While the coefficient estimates relating to number of investors are comparable to those presented in Table 4, the differences are more pronounced in terms of the average investment size and amount raised on the final day relative to the middle period. The average investment size on the final day of the overfunding period is shown to be around four times larger than the middle period, compared with an estimated nine times larger during regular fundraising. We also estimate that the aggregate amount raised on the final day of overfunding is around eight times larger than in the middle period, compared with an estimated 14 times larger during regular fundraising. Given that the overfunding period is not guaranteed, our results imply that those investing larger sums tend to do so at the end of the regular fundraising period rather than risking the opportunity to invest (or not) during the overfunding stage. The result also implies that investors in equity crowdfunding take into account the risks of missing investment opportunities when they time their investments. The smaller magnitude of the upturn in investment activity observed in the overfunding period further demonstrates that there tends to be a relative reduction in the concentration of funding around the end of this additional funding period, which is consistent with options theory due to lower uncertainty and reduced benefit of waiting up until the end of the overfunding period to invest.

In Table 6, we present further analysis of investor behaviour in high and low uncertainty campaigns by dividing the data sample according to whether or not the business has recorded positive sales in the previous accounting year. We argue that businesses showing evidence of positive sales would be regarded as having lower levels of uncertainty and information asymmetry compared with those that have not recorded positive sales. For both types of businesses, we again observe an increase in funding activity as the campaign reaches its conclusion. However, in common with the results from the overfunding stage, we find that the magnitude of the increase in activity relative to the middle period is quite different between high and low uncertainty campaigns.

The results in Table 6 demonstrate that the numbers of funders, average pledges and total amounts raised are markedly higher on the final day of fundraising for campaigns with higher uncertainty relative to those with low uncertainty. For example, depending on the specification, we estimate that the number of investors tends to increase by around 130% to 210% on the final day for high uncertainty campaigns (vs. an increase of around 85% to 107% for low uncertainty campaigns), while the size of average pledge is around 16 times larger for high uncertainty campaigns (vs. an estimated 7 times larger for low uncertainty campaigns). Correspondingly, the total amount raised on the final day of the campaign relative to the middle period is estimated to be around 32 times larger for high uncertainty campaigns, versus an estimated 10 times larger for low uncertainty campaigns. These findings suggest that investors tend to delay their (larger) investments to a greater extent when the level of uncertainty is higher, which is again consistent with the prediction made by options theory. Together with the results from the overfunding stage presented in Table 5, the evidence we present in this section leads us to accept research hypothesis H2. Therefore, our findings suggest that investors in high uncertainty campaigns are more likely than investors in low uncertainty campaigns to wait until the very end of the funding period in order to obtain as much additional information as possible before investing.

<TABLE 6: Funding Dynamics – High/Low Uncertainty (Positive Sales)>

6.4 High/Low Cost of Delay

In Table 7 we analyse the dynamics of campaigns with high and low cost of delay by dividing the data sample according to the total duration of the fundraising period. We argue that those campaigns investors see as approaching their funding target more quickly will be interpreted as presenting a higher cost of delay, while those that take longer to progress towards their funding goal will be interpreted as presenting a lower cost of delay. In both cases, we again observe a U-shaped funding pattern consistent with the results presented earlier. However, side-by-side comparison shows that the increase in activity in the final days relative to the middle period is more pronounced among campaigns with a low cost of delay compared with those with a high cost of delay.

More specifically, we show that the number of investors tends to increase by around 137% to 160% on the final day of campaigns with a low cost of delay (vs. around 70% to 106% for campaigns with a high cost of delay). We further show that the size of the average pledge on the final day tends to be around 10 times larger for campaigns with a low cost of delay (vs. an estimated nine times larger for those with a high cost of delay). Taken together, these estimates explain why campaigns with low cost of delay are estimated to raise around 14 times more funds on aggregate during the final day (vs. an estimated 20 times more for those with high cost of delay). Consistent with options theory, these results suggest that investors tend to delay their (larger) investments to a greater extent when the cost of delay is lower. Conversely, investors are shown to be less likely to delay investments until the final day for campaigns that reach their target more quickly (i.e., demonstrate a higher cost of delay). Taken together, these findings lead us to accept research hypothesis H3.

<TABLE 7: Funding Dynamics – High/Low Cost of Delay (Total Duration)>

7. Discussion

Across all of the models and specifications outlined in the previous section, we show consistent evidence of a U-shaped pattern of funding activity over time in terms of the number of investors and magnitude of financial contributions to equity crowdfunding campaigns. We find this pattern to be consistent within both the full sample as well as sub-samples of campaigns with differing levels of uncertainty and cost of delay. We find the overall trends identified by our study to be more pronounced among those campaigns with higher levels of uncertainty and with lower cost of delay. Essentially, our findings suggest that investments made during the final days of the fundraising cycle are similarly important in determining campaign outcomes compared with investments made during the first days. The important practical implication is that crowdfunding platforms should encourage entrepreneurs to provide additional information in order to reduce information asymmetry and encourage into action those investors taking the option to delay their investments. However, while the pattern of results across specifications is consistent with the predictions of options theory, it is unlikely that this theory alone is sufficient to wholly explain the funding dynamics we observe in our data. We discuss each of the other plausible theoretical explanations in this section, along with reasons why we feel these alternatives cannot entirely replace options theory as a means by which to explain the patterns of funding observed in our data.

One factor that could potentially result in the patterns of funding we observe in this study is altruism or a desire to help entrepreneurs meet their targets. This motivation has been suggested to be at least somewhat prevalent among reward-based crowdfunding campaigns (Wash, 2013; Kuppuswamy and Bayus, 2017). However, we argue that our findings are inconsistent with such theories on at least two grounds. First, we suggest there is likely to be a stark difference in motivations of funders among different crowdfunding models. Investors in equity crowdfunding are likely to be motivated to a greater extent by the possibility of financial returns compared with funders of other types of crowdfunding such as reward or donation-based models (Cholakova and Clarysse, 2015). Motivation to contribute to these other forms of crowdfunding campaigns includes offering support to family members, friends or local businesses; none of which are likely to be as prevalent in the context of equity crowdfunding (Baeck, Collins and Zhang, 2014). It is therefore unlikely that investments flows increase in the final days of equity crowdfunding campaigns because investors behave altruistically. Second, even if investment flows were to increase for this reason, it is difficult to explain why this funding pattern appears to be influenced by the level of uncertainty and cost of delay.

Another potential explanation for the pattern of funding we observe is herding behaviour (Herzenstein, Dholakia and Andrews, 2011; Zhang and Liu, 2012). However, we argue that herding theory is also somewhat inconsistent with the patterns of funding we observe. Indeed, if investors merely followed the activities of their peers, we should observe a continuously increasing number of investors and amount of money raised during the course of the funding cycle. The fact that we do not observe such a trend is indicative that the information cascades might not be as important in determining campaign outcomes as claimed by Vismara (2018). Such a finding is not entirely without precedent, as information cascades may be fragile and quickly dislodged (Bikhchandani, Hirshleifer and Welch, 1998). Information cascades may also be associated with information blockages, which make the choices of previous investors less informative to subsequent observers (Hirshleifer and Teoh, 2003). Given the apparent inconsistency with information cascade theory, our findings may actually suggest that investors in equity crowdfunding are more sophisticated than previously thought and do not simply copy the actions of other high-profile investors.

The evidence we present also rules out the possibility of procrastination (Roth and Ockenfels, 2002) wherein individuals tend to delay their decisions despite there being no real advantage in doing so. Even if the patterns we observe are caused by procrastinating investors, this does not adequately explain why we tend to observe larger investments being made towards the end of the funding cycle. Moreover, it is also difficult to explain why these types of investors would be more prevalent among campaigns with higher levels of uncertainty or lower cost of delay. Altogether, while we cannot claim that the options theory of investment is able to explain the entirety of variations in funding activities we observe over time, we suggest it offers the most convincing single explanation relative to the alternatives outlined above.

7.1 Limitations

Our study is somewhat constrained by a number of limitations. Although we attempt to capture all publicly available information from the Crowdcube platform, we are unable to capture data on all of the information that might influence investor behaviour. There may be unobserved factors that affect our results, despite our use of fixed-effect panel regressions to at least partly mitigate the issue of unobserved heterogeneity across individual campaigns. Further, the difference between the temporal patterns of funding observed by Hornuf and Schwienbacher (2018) and our study may be a consequence of their focus on German equity crowdfunding platforms compared with our use of data from the UK. It is therefore possible that the extent to which investor behaviour in equity crowdfunding can be explained by the options theory of investment differs according to platform or cultural contexts. Further research on the topic is needed to determine the validity of this assertion.

Additionally, our empirical analysis only presents indirect evidence in support of options theory. Unfortunately, we do not have complete information on the activities of individual investors, such as the time when they begin to take an interest in the business or the amount of time they spend undertaking due diligence. It is plausible that, rather than observing the entire fundraising cycle and waiting to invest at the optimal time, investors simply contribute towards a campaign the very first time they come across it, without giving the investment such careful thought as we assume in this study. While it is possible to interpret our results as evidence of tactical investment in the final days before the conclusion of the campaign, we may be observing a purely behavioural phenomenon. Unfortunately, our data do not allow us to test if this is the case. We also lack data on the channels through which investors gain information about equity crowdfunding campaigns. Further to written updates, entrepreneurs may also organise face-to-face meetings with other investors or may initiate contact via other external channels (e.g., social media, e-mail) to share information. While we are able to demonstrate that investors who delay their investments tend to also invest larger sums, we do not have specific information on the characteristics of any individual investor, such as whether they are private or institutional.

Another concern relates to the potentially endogenous nature of investment flows during the final days of the funding cycle and the success or failure of equity crowdfunding campaigns. One may argue that investors are disproportionately attracted to campaigns that are close to achieving their funding goal, which in itself leads to an increase in funding and a greater likelihood of success. While this factor might influence investor behaviour to some extent, it does not explain why the increase in investment flows is significantly smaller during the final days of campaigns associated with lower levels of uncertainty or higher cost of delay. Altogether, we use all of the information realistically available to us and, while our study may suffer from certain limitations, we can find no evidence to refute the use of options theory as a means of explaining variation in equity crowdfunding investments over time, nor any other explanation that offers an equally convincing explanation.

8. Conclusion

We contribute to the line of research in equity crowdfunding relating to the dynamics of funding patterns and the behaviours of investors. Using the theoretical framework of options theory, we show that a significant proportion of investors tend to make their investments during the final days of the funding cycle. We also find that those making larger investments are more likely to delay their actions compared with those making smaller investments, and thus appear to be an important determinant of campaign success.

Our extended analysis showing the impacts of both uncertainty and cost of delay on the temporal pattern of investments provides further support for options theory, whereby investors are shown to delay investments to a greater extent for campaigns that demonstrate higher levels of uncertainty and lower cost of delay. We conclude that, because of the relatively high uncertainty and moderate cost of delay associated with equity crowdfunding campaigns, investors tend to rationally withhold their investment decisions until the final days of the campaign in order to acquire more information. However, once the level of uncertainty diminishes over the course of the fundraising cycle, investors tend to act late in the process so as not to miss out on the investment opportunity.

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Tables: Invest or regret? An empirical investigation into funding dynamics during the final days of equity crowdfunding campaigns

ve Statistics

	Description	Mean	Median	Std. Dev.
LES				
	The number of individual investors contributing to a campaign on each day	4.23	2	10.48
	The average investment to a campaign on each day (£)	1,146	110	3,479
	The total monetary amount raised by a campaign on each day (£)	8,320	355	46,443
TROLS				
	A cumulative measure of the number of times the campaign is shared on Facebook	53.79	30	80.64
	A cumulative measure of the number of updates provided by the campaign founders	10.66	9	8.01
	The aggregate number of active campaigns hosted on the Crowdcube platform on a given date	23.84	25	6.12
	The aggregate number of investments recorded on the Crowdcube platform on a given date	136.76	113	107.58
	The standard deviation of FTSE returns over a rolling 20-day period up to and including a given date	0.013	0.012	0.004
CONTROLS				
	The total amount that the founders of the crowdfunding campaign seek to raise (£)	328,681	250,000	333,364
	The percentage of equity in the business offered by the campaign founders in return for the target sum (%)	12.34	11.12	6.20
	The aggregate number of days that the campaign runs	28.66	29	10.25
	The number of founders/executives mentioned by name in the campaign listing	2.10	2	1.11
n	Number of non-executive managers or board members mentioned by name in the campaign listing	3.30	3	2.32
	The length of time in days between the date of incorporation and the start of the campaign	1100.07	869	956.36
	A count of the number of additional documents provided to supplement the campaign listing	2.53	3	1.39
	Dummy variable; =1 if the Seed Enterprise Investment Scheme (SEIS) tax relief is available for investors; 0 otherwise	0.15	-	-
	Dummy variable; =1 if the campaign is listed in the technology category; 0 otherwise	0.10	-	-
	Dummy variable; =1 if the financial snapshot shows positive revenue in the previous accounting year; 0 otherwise	0.66	-	-
	Dummy variable; =1 if the campaign listing or documentation mentions a patent (pending); 0 otherwise	0.10	-	-
	Dummy variable; =1 if the campaign listing or documentation states an IPO as the target exit strategy; 0 otherwise	0.27	-	-
	Dummy variable; =1 if the financial snapshot shows dividends have been paid to shareholders; 0 otherwise	0.05	-	-
	Dummy variable; =1 if the campaign listing or documentation mentions the involvement of an angel or VC; 0 otherwise	0.24	-	-
	Dummy variable; =1 if the business is based in London; 0 otherwise	0.31	-	-

scriptive statistics. Campaign-specific controls are calculated at the campaign-level for a total of 91 campaigns hosted on the UK FCFS equity crowdfunding platform Crov
ependent variables and time-varying controls are calculated based on a total of 2,608 daily observations of activity for these 91 campaigns.

Table 2: Descriptive Statistics - Data Subsets

	Mean	t-Stat.	Median	Std. Dev.	Min	Max
FIRST DAY						
Daily No. of Investors	25.07	5.21***	11	40.94	0	261
Daily Average Investment (£)	4,309	3.63***	1,319	8,928	0	55,087
Daily Amount Raised (£)	88,927	3.78***	20,410	214,402	0	1,670,988
FIRST DAY (1)						
Daily No. of Investors	8.75	4.90***	5	11.72	0	93
Daily Average Investment (£)	1,378	1.48	283	2,967	0	20,113
Daily Amount Raised (£)	12,036	3.12***	2,000	24,755	0	146,990
FIRST DAY (2)						
Daily No. of Investors	5.09	3.78***	3	5.93	0	36
Daily Average Investment (£)	3,066	2.61***	390	7,864	0	57,153
Daily Amount Raised (£)	11,375	3.08***	1,790	23,006	0	171,460
FIRST DAY (3)						
Daily No. of Investors	4.62	3.19***	3	5.62	0	28
Daily Average Investment (£)	1,140	0.79	283	2,745	0	18,525
Daily Amount Raised (£)	5,593	1.15	1,030	13,948	0	102,170
FIRST DAY (4)						
Daily No. of Investors	3.96	2.08**	2	5.65	0	37
Daily Average Investment (£)	642	-1.80*	117	1,241	0	7,750
Daily Amount Raised (£)	3,155	-1.06	600	5,904	0	43,170
MIDDLE PERIOD						
Daily No. of Investors	2.70	-	1	4.61	0	62
Daily Average Investment	906	-	79	2,763	0	45,055
Daily Amount Raised	3,877	-	200	11,941	0	173,520
LAST DAY (4)						
Daily No. of Investors	2.84	0.30	1	4.15	0	27
Daily Average Investment (£)	644	-1.34	100	1,740	0	11,790
Daily Amount Raised (£)	3,576	-0.29	120	9,664	0	58,950
LAST DAY (3)						
Daily No. of Investors	3.21	0.72	1	6.69	0	54
Daily Average Investment (£)	827	-0.30	125	2,387	0	20,200
Daily Amount Raised (£)	4,422	0.45	300	11,317	0	78,620
LAST DAY (2)						
Daily No. of Investors	5.26	2.12**	2	11.94	0	102
Daily Average Investment (£)	1,036	0.62	250	1,890	0	10,250
Daily Amount Raised (£)	11,550	1.27	720	57,697	0	540,670
LAST DAY (1)						
Daily No. of Investors	4.16	2.07**	2	6.68	0	49
Daily Average Investment (£)	986	0.30	177	2,473	0	20,030
Daily Amount Raised (£)	4,898	1.13	500	8,167	0	37,250
LAST DAY						
Daily No. of Investors	7.84	4.99***	5	9.76	0	65
Daily Average Investment (£)	1,912	2.66***	664	3,548	0	21,960
Daily Amount Raised (£)	20,555	3.94***	2,830	40,299	0	263,340

Table 2 reports descriptive statistics based on data for funding observed on selected days for 91 campaigns hosted on the UK FCFS equity crowdfunding platform Crowdcube between August 2015 and March 2016. The two-tailed t-tests compare funding during each of the first and last five days respectively against the middle funding period, assuming unequal variance. Hypotheses of equal means rejected at: ***=99%; **=95%; *=90% confidence levels.

Table 3: Funding Dynamics of Equity Crowdfunding (Random Effects)

	Model I		Model II		Model III		Model IV	
	Daily No. of Investors (Negative Binomial)		*Daily No. of Investors (GLS)*		*Daily Average Investment (GLS)*		*Daily Amount Raised (GLS)*	
	Coeff.	Std. Error	Coeff.	Std. Error	Coeff.	Std. Error	Coeff.	Std. Error
MAIN INDEPENDENT VARIABLES								
First Day	2.402	(0.148)***	1.752	(0.110)***	3.069	(0.332)***	4.560	(0.410)***
First Day (1)	1.495	(0.134)***	1.073	(0.099)***	1.874	(0.258)***	2.671	(0.320)***
First Day (2)	0.984	(0.124)***	0.625	(0.079)***	1.801	(0.295)***	2.175	(0.329)***
First Day (3)	0.890	(0.094)***	0.561	(0.072)***	1.395	(0.273)***	1.703	(0.297)***
First Day (4)	0.544	(0.101)***	0.320	(0.072)***	0.589	(0.278)**	0.888	(0.320)***
Last Day (4)	-0.046	(0.095)	-0.018	(0.068)	-0.075	(0.257)	-0.257	(0.305)
Last Day (3)	-0.069	(0.114)	-0.042	(0.069)	0.242	(0.270)	0.273	(0.279)
Last Day (2)	0.264	(0.094)***	0.208	(0.068)***	0.920	(0.246)***	0.894	(0.265)***
Last Day (1)	0.136	(0.087)	0.107	(0.072)	0.426	(0.265)	0.489	(0.312)
Last Day	0.798	(0.071)***	0.684	(0.067)***	2.118	(0.216)***	2.631	(0.235)***
TIME-VARYING CONTROLS								
Ln Facebook	0.073	(0.035)***	0.068	(0.031)**	0.071	(0.082)	0.137	(0.104)
Ln Updates	0.374	(0.071)***	0.138	(0.052)***	0.137	(0.170)	0.245	(0.225)
Ln Active Campaigns	-0.570	(0.145)***	-0.381	(0.079)***	-0.098	(0.279)	-0.581	(0.363)
Ln Competing Investors	0.614	(0.052)***	0.394	(0.037)***	0.527	(0.131)***	0.938	(0.159)***
Ln FTSE Volatility	0.458	(0.132)***	0.226	(0.097)**	0.301	(0.299)	0.502	(0.379)
DAY OF THE WEEK CONTROLS								
Tuesday	0.184	(0.098)*	0.118	(0.051)**	0.174	(0.168)	0.237	(0.196)
Wednesday	0.184	(0.097)*	0.134	(0.049)***	0.039	(0.181)	0.171	(0.228)
Thursday	0.125	(0.087)	0.101	(0.053)*	0.140	(0.179)	0.232	(0.197)
Friday	0.133	(0.090)	0.062	(0.051)	-0.051	(0.193)	0.087	(0.209)
Saturday	0.130	(0.085)	0.106	(0.052)**	0.077	(0.178)	0.183	(0.209)
Sunday	0.195	(0.087)**	0.130	(0.050)***	0.039	(0.185)	0.080	(0.216)
CAMPAIGN-SPECIFIC CONTROLS								
Ln Target	0.046	(0.137)	0.343	(0.077)***	0.830	(0.191)***	1.079	(0.246)***
Ln Equity Offered	-0.042	(0.149)	-0.085	(0.103)	0.024	(0.280)	-0.052	(0.389)
Ln Total Duration	-0.465	(0.282)*	-0.232	(0.140)*	0.073	(0.399)	-0.164	(0.514)
Ln Number of Executives	-0.157	(0.285)	0.094	(0.157)	-0.105	(0.393)	-0.014	(0.527)
Ln Size of Management Team	0.108	(0.154)	0.163	(0.078)**	0.477	(0.228)**	0.627	(0.292)**
Ln Company Age	0.154	(0.145)	-0.002	(0.060)	-0.006	(0.137)	-0.022	(0.186)
Ln Number of Documents	0.082	(0.190)	0.007	(0.113)	0.153	(0.312)	0.125	(0.414)
Tax Incentive	0.214	(0.267)	0.262	(0.113)**	0.250	(0.415)	0.479	(0.520)
Technology	0.036	(0.239)	-0.072	(0.122)	0.372	(0.332)	0.318	(0.414)
Positive Sales	0.072	(0.250)	0.293	(0.119)**	0.707	(0.342)**	1.033	(0.445)**
Patent	0.059	(0.308)	0.078	(0.201)	0.137	(0.648)	0.371	(0.812)
IPO Exit	-0.138	(0.244)	-0.125	(0.115)	-0.657	(0.284)**	-0.652	(0.388)*
Dividends	0.176	(0.557)	0.074	(0.197)	0.412	(0.499)	0.614	(0.700)
Sophisticated Investors	-0.219	(0.292)	-0.103	(0.134)	-0.119	(0.370)	-0.218	(0.481)
London	0.024	(0.237)	-0.021	(0.110)	-0.327	(0.307)	-0.293	(0.402)
Constant Term	-0.279	(2.082)	-3.008	(1.127)***	-9.183	(3.300)***	-10.733	(4.249)**
Wald Chi-Squared	3569.23.470***		2157.800***		85.760***		1580.390***	
Log Likelihood / R²	-5552.501		0.354		0.173		0.232	

Table 3 reports funding dynamics based on 2,608 daily observations from 91 campaigns hosted on the UK FCFS equity crowdfunding platform Crowdcube between August 2015 and March 2016. Key independent variables are day dummies. First Day (Last Day) takes value of 1 if it is the first (last) day of funding cycle. First Day (B), where B=1;2;3;4 take value of 1 if a campaign is B days after the first day of funding cycle. Last Day (B), where B=1;2;3;4 take value of 1 if a campaign is B days before the last day. Ln Facebook is the logarithm of Facebook as defined in Table 1. Ln Updates, Ln Active Campaigns, Ln Competing Investors, Ln FTSE Volatility, Ln Target, Ln Equity Offered, Ln Total Duration, Ln Number of Executives, Ln Size of Management Team, Ln Company Age and Ln Number of Documents are defined similar to Ln Facebook. Tuesday takes value of 1 if the campaign-day observation is Tuesday and 0 otherwise. Other day of the week variables are defined similarly. All other control variables are defined in Table 1. Robust standard errors in parenthesis are clustered at campaign level. ***, ** and *, indicate significance of parameter estimates at the 1%, 5%, and 10% level respectively. Chi-Squared and Log Likelihood are reported in Model I, F-Values and Adjusted R² are reported in Models II-IV.

Table 4: Funding Dynamics of Equity Crowdfunding (Fixed Effects)

	Model I		Model II		Model III		Model IV	
	Daily No. of Investors		*Daily No. of Investors*		*Daily Average Investment*		*Daily Amount Raised*	
	(Negative Binomial)		*(GLS)*		*(GLS)*		*(GLS)*	
	Coeff.	Std. Error	Coeff.	Std. Error	Coeff.	Std. Error	Coeff.	Std. Error
MAIN INDEPENDENT VARIABLES								
First Day	2.441	(0.115)***	1.736	(0.120)***	2.771	(0.373)***	4.242	(0.465)***
First Day (1)	1.531	(0.104)***	1.067	(0.102)***	1.677	(0.278)***	2.460	(0.341)***
First Day (2)	1.039	(0.082)***	0.621	(0.079)***	1.645	(0.309)***	2.007	(0.348)***
First Day (3)	0.944	(0.077)***	0.559	(0.074)***	1.277	(0.282)***	1.574	(0.308)***
First Day (4)	0.579	(0.097)***	0.317	(0.073)***	0.490	(0.275)*	0.780	(0.315)**
Last Day (4)	-0.019	(0.097)	-0.019	(0.069)	-0.031	(0.259)	-0.215	(0.307)
Last Day (3)	-0.059	(0.098)	-0.044	(0.069)	0.287	(0.270)	0.317	(0.281)
Last Day (2)	0.265	(0.094)***	0.205	(0.067)***	0.967	(0.243)***	0.940	(0.262)***
Last Day (1)	0.168	(0.107)	0.104	(0.072)	0.482	(0.270)*	0.543	(0.316)*
Last Day	0.831	(0.087)***	0.680	(0.067)***	2.178	(0.220)***	2.688	(0.240)***
TIME-VARYING CONTROLS								
Ln Facebook	0.061	(0.036)*	0.063	(0.040)	0.031	(0.097)	0.112	(0.126)
Ln Updates	0.395	(0.062)***	0.134	(0.060)**	0.000	(0.230)	0.077	(0.283)
Ln Active Campaigns	-0.520	(0.121)***	-0.391	(0.082)***	-0.224	(0.283)	-0.748	(0.369)**
Ln Competing Investors	0.611	(0.052)***	0.400	(0.037)***	0.573	(0.133)***	0.982	(0.162)***
Ln FTSE Volatility	0.433	(0.138)***	0.260	(0.115)**	0.327	(0.382)	0.530	(0.472)
DAY OF THE WEEK CONTROLS								
Tuesday	0.195	(0.087)**	0.118	(0.051)**	0.178	(0.168)	0.241	(0.195)
Wednesday	0.195	(0.081)**	0.133	(0.049)***	0.044	(0.180)	0.173	(0.227)
Thursday	0.142	(0.083)*	0.100	(0.053)*	0.141	(0.178)	0.232	(0.196)
Friday	0.145	(0.084)*	0.064	(0.051)	-0.031	(0.192)	0.108	(0.209)
Saturday	0.148	(0.085)*	0.108	(0.052)**	0.102	(0.176)	0.209	(0.208)
Sunday	0.209	(0.075)***	0.133	(0.050)***	0.057	(0.185)	0.097	(0.215)
Constant Term	-0.410	(0.847)	0.794	(0.553)	3.085	(1.678)*	4.118	(2.075)**
Chi-Squared / F	2540.980***		59.300***		21.830***		45.160***	
Log Likelihood / R^2	-5053.969		0.236		0.078		0.120	

Table 4 reports funding dynamics based on 2,608 daily observations from 91 campaigns hosted on the UK FCFS equity crowdfunding platform Crowdcube between August 2015 and March 2016. Key independent variables are day dummies. First Day (Last Day) takes value of 1 if it is the first (last) day of funding cycle. First Day (B), where B=1;2;3;4 take value of 1 if a campaign is B days after the first day of funding cycle. Last Day (B), where B=1;2;3;4 take value of 1 if a campaign is B days before the last day. All other variables are defined in Table 3. Robust standard errors in parenthesis are clustered at campaign level. ***, ** and *, indicate significance of parameter estimates at the 1%, 5%, and 10% level respectively. Chi-Squared and Log Likelihood are reported in Model I, F-Values and Adjusted R^2 are reported in Models II-IV.

Table 5: Funding Dynamics - Overfunding Period

	Model I		Model II		Model III		Model IV	
	Daily No. of Investors (Negative Binomial)		*Daily No. of Investors (GLS)*		*Daily Average Investment (GLS)*		*Daily Amount Raised (GLS)*	
	Coeff.	Std. Error	Coeff.	Std. Error	Coeff.	Std. Error	Coeff.	Std. Error
MAIN INDEPENDENT VARIABLES								
First Day	1.123	(0.094)***	1.007	(0.111)***	2.131	(0.233)***	2.900	(0.232)***
First Day (1)	0.289	(0.221)	0.221	(0.183)	0.307	(0.418)	0.676	(0.336)*
First Day (2)	0.363	(0.109)***	0.276	(0.127)**	0.667	(0.359)*	0.531	(0.369)
Last Day (2)	0.312	(0.158)**	0.324	(0.143)**	0.470	(0.330)	0.661	(0.345)*
Last Day (1)	0.606	(0.097)***	0.642	(0.089)***	0.767	(0.252)***	1.090	(0.271)***
Last Day	0.735	(0.107)***	0.832	(0.123)***	1.497	(0.247)***	2.051	(0.270)***
TIME-VARYING CONTROLS								
Ln Facebook	0.015	(0.043)	0.001	(0.032)	0.014	(0.075)	0.023	(0.088)
Ln Updates	0.470	(0.274)*	0.117	(0.275)	-0.117	(0.702)	-0.104	(0.664)
Ln Active Campaigns	-0.953	(0.274)***	-0.333	(0.180)*	1.030	(0.826)	0.624	(0.641)
Ln Competing Investors	0.602	(0.098)***	0.602	(0.107)***	0.320	(0.251)	0.777	(0.290)**
Ln FTSE Volatility	0.238	(0.265)	-0.117	(0.275)	0.255	(0.604)	0.245	(0.491)
DAY OF THE WEEK CONTROLS								
Tuesday	-0.058	(0.099)	-0.107	(0.101)	-0.400	(0.314)	-0.309	(0.239)
Wednesday	-0.029	(0.106)	-0.011	(0.112)	-0.236	(0.229)	-0.327	(0.260)
Thursday	0.044	(0.092)	0.028	(0.117)	0.136	(0.205)	0.016	(0.282)
Friday	0.097	(0.095)	0.089	(0.115)	-0.114	(0.334)	-0.071	(0.352)
Saturday	0.101	(0.109)	0.061	(0.134)	-0.320	(0.210)	-0.194	(0.283)
Sunday	0.097	(0.092)	0.065	(0.125)	-0.258	(0.337)	-0.004	(0.318)
Constant Term	0.422	(1.775)	-0.862	(1.541)	2.388	(3.329)	3.311	(2.585)
Chi-Squared / F	7290.220***		200.69***		70.920***		500.710***	
Log Likelihood / R^2	-1511.000		0.256		0.042		0.121	

Table 5 reports funding dynamics based on 559 daily observations from 32 campaigns hosted on the UK FCFS equity crowdfunding platform Crowdcube between August 2015 and March 2016. Key independent variables are day dummies. First Day (Last Day) takes value of 1 if it is the first (last) day of funding cycle. First Day (B), where B=1;2 take value of 1 if a campaign is B days after the first day of funding cycle. Last Day (B), where B=1;2 take value of 1 if a campaign is B days before the last day. All other variables are defined in Table 3. Robust standard errors in parenthesis are clustered at campaign level. ***, ** and *, indicate significance of parameter estimates at the 1%, 5%, and 10% level respectively. Chi-Squared and Log Likelihood are reported in Model I, F-Values and Adjusted R^2 are reported in Models II-IV.

ding Dynamics – High/Low Uncertainty (Positive Sales)

	TABLE 6A: LOW UNCERTAINTY - POSITIVE SALES (60 CAMPAIGNS; 1,712 OBSERVATIONS)								TABLE 6B: HIGH UNCERTAINTY - NO POSITIVE (31 CAMPAIGNS; 896 OBSERVATIONS)					
	Model I		Model II		Model III		Model IV		Model V		Model VI		Model VII	
	Daily No. of Investors (Negative Binomial)		*Daily No. of Investors (GLS)*		*Daily Average Investment (GLS)*		*Daily Amount Raised (GLS)*		*Daily No. of Investors (Negative Binomial)*		*Daily No. of Investors (GLS)*		*Daily Average Investment (GLS)*	
	Coeff.	Std. Error	Coeff.	Std. Error	Coeff.	Std. Error	Coeff.	Std. Error	Coeff.	Std. Error	Coeff.	Std. Error	Coeff.	Std. Error
DENT VARIABLES														
	2.225	(0.126)***	1.668	(0.143)***	2.585	(0.462)***	3.989	(0.594)***	2.514	(0.312)***	1.758	(0.212)***	2.826	(0.542)***
	1.338	(0.135)***	1.017	(0.133)***	1.435	(0.356)***	2.201	(0.446)***	1.770	(0.170)***	1.091	(0.145)***	1.964	(0.438)***
	0.944	(0.107)***	0.639	(0.095)***	1.575	(0.371)***	1.933	(0.427)***	1.075	(0.215)***	0.539	(0.138)***	1.649	(0.579)***
	0.806	(0.086)***	0.540	(0.091)***	0.912	(0.330)***	1.244	(0.352)***	1.078	(0.193)***	0.538	(0.128)***	1.778	(0.523)***
	0.518	(0.106)***	0.321	(0.097)***	0.650	(0.357)*	0.737	(0.409)*	0.637	(0.197)***	0.264	(0.098)**	0.066	(0.395)
	-0.005	(0.121)	-0.032	(0.093)	-0.249	(0.348)	-0.506	(0.406)	-0.038	(0.170)	0.023	(0.093)	0.361	(0.383)
	-0.127	(0.117)	-0.088	(0.087)	0.165	(0.311)	0.246	(0.325)	0.132	(0.164)	0.070	(0.108)	0.567	(0.508)
	0.251	(0.114)**	0.211	(0.090)**	0.808	(0.279)***	0.808	(0.293)***	0.320	(0.167)*	0.215	(0.083)**	1.357	(0.461)***
	0.161	(0.135)	0.133	(0.096)	0.566	(0.329)*	0.560	(0.385)	0.232	(0.170)	0.073	(0.102)	0.361	(0.461)
	0.728	(0.091)***	0.616	(0.085)***	1.897	(0.271)***	2.323	(0.293)***	1.131	(0.149)***	0.827	(0.108)***	2.771	(0.361)***
CONTROLS														
	0.015	(0.042)	0.017	(0.052)	-0.134	(0.115)	-0.047	(0.155)	0.117	(0.069)*	0.110	(0.055)*	0.255	(0.184)
	0.401	(0.067)	0.198	(0.071)***	0.167	(0.256)	0.255	(0.324)	0.240	(0.152)	0.007	(0.081)	-0.287	(0.363)
ns	-0.705	(0.141)***	-0.620	(0.100)***	-0.846	(0.370)**	-1.698	(0.467)***	-0.201	(0.248)	-0.080	(0.114)	0.621	(0.315)*
estors	0.572	(0.068)***	0.419	(0.048)***	0.466	(0.166)***	0.901	(0.202)***	0.744	(0.084)***	0.359	(0.063)***	0.756	(0.219)***
	0.331	(0.138)**	0.231	(0.137)*	-0.030	(0.476)	0.151	(0.569)	0.513	(0.200)***	0.358	(0.157)**	1.170	(0.459)**
EEK CONTROLS														
	0.156	(0.105)	0.105	(0.070)	0.071	(0.204)	0.163	(0.257)	0.301	(0.147)**	0.138	(0.064)**	0.406	(0.301)
	0.173	(0.078)**	0.148	(0.065)**	0.066	(0.215)	0.228	(0.300)	0.260	(0.118)**	0.098	(0.072)	-0.025	(0.346)
	0.117	(0.087)	0.091	(0.074)	0.066	(0.216)	0.174	(0.253)	0.269	(0.121)**	0.121	(0.065)*	0.279	(0.333)
	0.085	(0.084)	0.030	(0.066)	-0.133	(0.227)	0.006	(0.247)	0.327	(0.142)**	0.127	(0.078)	0.159	(0.385)
	0.130	(0.081)	0.123	(0.065)*	0.212	(0.210)	0.274	(0.260)	0.283	(0.131)**	0.083	(0.085)	-0.060	(0.345)
	0.169	(0.077)**	0.124	(0.062)**	0.091	(0.216)	0.110	(0.263)	0.393	(0.153)***	0.147	(0.089)	0.012	(0.355)
	0.083	(0.873)	1.453	(0.640)**	4.574	(2.047)**	6.531	(2.389)***	-1.568	(1.459)	0.261	(0.733)	2.229	(1.954)
	1477.800***		43.170***		13.910***		29.730***		1322.050***		282.540 ***		50.850 ***	
^{2}	-3674.093		0.198		0.060		0.100		-1353.107		0.379		0.167	

ding dynamics based on 2,608 daily observations from 91 campaigns hosted on the UK FCFS equity crowdfunding platform Crowdcube between August 2015 and March
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Day (B), where B=1;2;3;4 take value of 1 if a campaign is B days before the last day. All other variables are defined in Table 3. Robust standard errors in parenthesis are clu
indicate significance of parameter estimates at the 1%, 5%, and 10% level respectively. Chi-Squared and Log Likelihood are reported in Models I & V, F-Values and Adjus
VI-VIII.

ding Dynamics – High/Low Cost of Delay (Total Duration)

	TABLE 7A: LOW COST OF DELAY – TOTAL DURATION > MEDIAN (45 CAMPAIGNS; 1,556 OBSERVATIONS)								TABLE 7B: HIGH COST OF DELAY – TOTAL DURATIO (46 CAMPAIGNS; 1,052 OBSERVATIONS)					
	Model I		Model II		Model III		Model IV		Model V		Model VI		Model VII	
	Daily No. of Investors (Negative Binomial)		*Daily No. of Investors (GLS)*		*Daily Average Investment (GLS)*		*Daily Amount Raised (GLS)*		*Daily No. of Investors (Negative Binomial)*		*Daily No. of Investors (GLS)*		*Daily Average Investment (GLS)*	
	Coeff.	Std. Error	Coeff.	Std. Error	Coeff.	Std. Error	Coeff.	Std. Error	Coeff.	Std. Error	Coeff.	Std. Error	Coeff.	Std. Error
DENT VARIABLES														
	2.295	(0.191)***	1.740	(0.144)***	2.610	(0.510)***	4.073	(0.654)***	2.300	(0.342)***	1.503	(0.208)***	1.984	(0.546)***
	1.361	(0.154)***	0.982	(0.151)***	1.081	(0.377)***	1.763	(0.472)***	1.578	(0.213)***	0.998	(0.139)***	1.638	(0.369)***
	0.954	(0.140)***	0.623	(0.098)***	1.848	(0.435)***	2.153	(0.478)***	1.013	(0.192)***	0.513	(0.125)***	0.951	(0.417)**
	0.958	(0.116)***	0.612	(0.113)***	0.855	(0.382)**	1.275	(0.403)***	0.828	(0.143)***	0.422	(0.095)***	1.354	(0.420)***
	0.397	(0.129)***	0.188	(0.109)*	0.329	(0.407)	0.458	(0.457)	0.684	(0.143)***	0.363	(0.094)***	0.377	(0.389)
	0.005	(0.110)	-0.010	(0.091)	0.161	(0.356)	-0.128	(0.422)	-0.039	(0.209)	-0.015	(0.106)	-0.095	(0.379)
	0.000	(0.131)	0.000	(0.097)	0.389	(0.348)	0.402	(0.366)	-0.110	(0.157)	-0.077	(0.102)	0.356	(0.421)
	0.318	(0.098)***	0.297	(0.095)***	0.879	(0.275)***	0.968	(0.322)***	0.275	(0.158)*	0.151	(0.090)*	1.210	(0.391)***
	0.381	(0.149)***	0.309	(0.111)***	0.597	(0.346)*	0.905	(0.421)**	-0.101	(0.167)	-0.070	(0.088)	0.562	(0.413)
	0.955	(0.084)***	0.864	(0.096)***	2.348	(0.302)***	2.977	(0.377)***	0.721	(0.119)***	0.530	(0.090)***	2.235	(0.311)***
CONTROLS														
	0.037	(0.051)	0.074	(0.050)	0.035	(0.134)	0.163	(0.170)	0.083	(0.060)	-0.001	(0.063)	-0.174	(0.159)
	0.382	(0.084)***	0.136	(0.072)*	0.099	(0.266)	0.123	(0.344)	0.215	(0.169)	0.031	(0.092)	-0.609	(0.377)
ns	-0.528	(0.175)***	-0.449	(0.098)***	-0.439	(0.350)	-1.090	(0.466)**	-0.686	(0.218)***	-0.252	(0.161)	0.296	(0.618)

estors	0.530 (0.055)***	0.394 (0.047)***	0.468 (0.181)**	0.848 (0.218)***	0.811 (0.096)***	0.406 (0.061)***	0.741 (0.188)***
	0.320 (0.147)**	0.110 (0.144)	-0.272 (0.467)	-0.316 (0.567)	0.590 (0.225)***	0.388 (0.146)**	0.650 (0.569)
EEK CONTROLS							
	0.192 (0.079)**	0.115 (0.064)*	0.012 (0.208)	0.111 (0.236)	0.143 (0.144)	0.102 (0.085)	0.358 (0.288)
	0.179 (0.080)**	0.130 (0.064)**	-0.073 (0.231)	0.154 (0.309)	0.190 (0.126)	0.121 (0.077)	0.198 (0.291)
	0.215 (0.100)**	0.148 (0.072)**	-0.005 (0.204)	0.158 (0.239)	-0.008 (0.137)	0.023 (0.078)	0.327 (0.326)
	0.140 (0.090)	0.064 (0.072)	-0.057 (0.275)	0.203 (0.281)	0.135 (0.105)	0.065 (0.072)	0.030 (0.258)
	0.198 (0.077)**	0.121 (0.066)*	0.054 (0.214)	0.265 (0.267)	0.059 (0.104)	0.080 (0.083)	0.172 (0.311)
	0.268 (0.077)***	0.156 (0.065)**	-0.049 (0.222)	0.082 (0.269)	0.074 (0.097)	0.091 (0.078)	0.229 (0.314)
	-0.399 (0.863)	0.393 (0.698)	1.887 (2.106)	2.355 (2.593)	0.353 (1.388)	1.166 (0.847)	3.154 (3.659)
	953.97***	51.85***	19.50***	40.59***	1049.37***	44.42***	16.86***
^{2}	-3265.14	0.24	0.08	0.11	-1758.12	0.23	0.06

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Day (B), where B=1;2;3;4 take value of 1 if a campaign is B days before the last day. All other variables are defined in Table 3. Bootstrapped standard errors in parenthesis
, ** and *, indicate significance of parameter estimates at the 1%, 5%, and 10% level respectively. Chi-Squared and Log Likelihood are reported in Models I & V, F-Values
dels II-IV & VI-VIII.

Invest or regret? An empirical investigation into funding dynamics during the final days of equity crowdfunding campaigns

Highlights

- We use options theory to investigate funding dynamics in equity crowdfunding.
- We hypothesise that investors may delay their investments to gain information.
- We show investment activity increases during the final phase of the funding cycle.
- The increase is greater for campaigns with high uncertainty and low cost of delay.
- Overall, our findings are consistent with the predictions of option theory.