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**Entrepreneurial Finance and the Flat-World Hypothesis:
Evidence from Crowd-Funding Entrepreneurs in the Arts**

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Abstract

We examine the geography of early stage entrepreneurial finance in the context of an internet marketplace for funding new musical artist-entrepreneurs. A large body of research documents that investors in early-stage projects are disproportionately co-located with the entrepreneur. Theory predicts this will be particularly true of artist-entrepreneurs with preliminary-stage projects, difficult-to-contract-for effort, difficult-to-observe creativity, negligible tangible assets, and limited reputations. At the same time, however, observers of the spatial effects of the internet and related technologies report that many economic activities have become much less geographically dependent. At an aggregate level, the internet marketplace we examine does indeed demonstrate a spatial transformation of the entrepreneurial finance process: the average distance between investors and artist-entrepreneurs is 4,831 km. However, geography still matters; investors are disproportionately likely to be local and, conditional on investing, local investors invest more. This apparent role for proximity is strongest before entrepreneurs visibly accumulate capital. Within a single round of financing, local investors are more likely to engage earlier in the funding cycle. However, this difference in the timing of investment is almost entirely explained by a particular type of investor, whom we characterize as "family, friends, and fans." We conjecture that these individuals, who are disproportionately co-located with the entrepreneur, have offline information about the entrepreneur and therefore derive less new information from observing the aggregate financing raised. We speculate that the path-dependent role of this offline network in conveying information to the online community limits the "flat world" potential of these communication technologies.

JEL Classifications: R12, Z1, L17, G21, G24
Keywords: Entrepreneurial finance, crowd-funding, internet, family and friends, local bias, social networks.

1 Introduction

One of the most salient effects of the communications revolution brought about by the commercialization of the internet is the variety of long-distance interactions made possible and economically feasible. Popular examples include international retail transactions, off-shoring semi-complex services such as reading medical x-rays, and the cross-border co-production of software. The essence of this phenomenon, eliminating or greatly reducing the role of distance resulting in a spatial transformation of particular economic activities, has been widely documented (Cairncross 1997, Choi and Bell 2010, Brynjolfsson, Hu, and Rahman 2009, Forman, Ghose, and Goldfarb 2009, Goldfarb and Tucker 2010) and was famously characterized by Friedman (2005) as the Flat-World Hypothesis.

Yet, many scholars report empirical evidence suggesting significant limitations to this hypothesis. First, direct interaction facilitated by co-location enhances the transfer of tacit knowledge (Jaffe, Trajtenberg, and Henderson 1993, Zucker, Darby, and Brewer 1998), the delivery of services (Partridge, Rickman, Ali, and Olfert 2008), and the enforcement of contracts (Hortacsu, Martinez-Jerez, and Douglas 2009). Second, tastes are spatially correlated (Blum and Goldfarb 2006). And third, social networks are local (Wellman 2001).

Using data from a "crowd-funding" website that facilitates small investments in early-stage musicians seeking financing for the production of an album, we examine the role of geography in the context of a traditionally localized market that is made accessible online.[1] Specifically, we examine early stage entrepreneurial finance, a setting that is widely recognized to be localized (Tribus 1970, Florida and Kenney 1988, Florida and Smith 1993, Sorenson and Stuart 2001, Powell, Koput, Bowie, and Smith-Doerr 2002, Zook 2002, Mason 2007). Within entrepreneurial finance we focus on funding musical artists, a setting that theory predicts to be particularly localized because of difficult-to-contract-for effort, difficult-to-observe creative ability, negligible tangible assets, and

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[1]As we detail below, the musicians on this website are unsigned artists (i.e., early-stage and without a contract with a record label) with little income from music. They joined the website in order to raise funds to produce an album, the revenues from which would be shared with investors. To attract investors artists record and distribute sample music and video, post information about the vision for their project, communicate generally with the investor community, communicate directly with actual or potential investors, develop a business plan that details how they will spend their $50,000 on the production of their album as well as their plans to subsequently promote their product. In other words, these artists engage in a variety of entrepreneurial activities with a community of investors and thus throughout the paper we refer to these artists as entrepreneurs.

limited reputations. In other words, we explore a type of transaction that one might reasonably expect to remain localized, even in an online setting.

At the same time, however, we focus our attention on an online community platform specifically designed to reduce the transaction costs that are the basis for deterring distant investment. This market platform enables small investment increments as well as small revenue sharing payouts, and provides standardized contracts, centralized monitoring of expenses, and a variety of mechanisms for sharing information.

Our aggregate data suggest that the crowd-funding' mechanism used to finance these early-stage entrepreneurs does indeed transform the traditional spatial characteristics of entrepreneurial finance: on average, more than three-quarters of financing comes from investors who are more than 50 km away. In fact, the average distance between the entrepreneur and investor is 4,831 km. However, upon closer inspection, we find that despite the transformational effect of this technology, it does not eliminate the role of distance. For example, conditional on investing, investors who are co-located with the entrepreneur invest more than double their distant counterparts, on average.

We focus our analysis on how local and distant investors respond to a prominant piece of information revealed about the entrepreneur in real time: the amount of financing raised to date. The system requires entrepreneurs to raise $50,000 before they are able to access any capital, Examining the timing of investments, we find that the probability of a distant investor investing in a given week increases significantly as the amount raised increases, whereas local investors do not increase their propensity to invest upon receiving this information.

We next explore the source of this apparent role for proximity on the timing of investment. The entrepreneurial finance literature makes frequent reference to "family, friends, and fools" as an important source of very early-stage capital, preceding angel investment, venture capital, and other private equity. Cumming and Johan (2009, p. 10) note that "Apart from the founding entrepreneur's savings, family, friends, and fools are a common source of capital for earliest-stage entrepreneurial firms. An entrepreneur without a track record typically has an easier time raising this type of capital because these investors will have known the entrepreneur for a long time. In other words, information asymmetries faced by the 3 Fs are lower than those faced by other sources

of capital."

Thus, we code each investor-entrepreneur pair with an indicator variable for "family, friends, and fans" (FFF) based on particular behavioral traits they exhibit on the site (and check robustness using information from two artists who specifically identified their friends and family among their investors).[2] While FFF are disproportionately local, there is also a substantial number who are distant. We find that, within a single round of financing, FFF investors tend to invest early, whether they are local or distant and non-FFF investors tend to invest late, whether they are local or distant. In other words, conditional on this proxy of offline relationships, there is no difference between local and distant investing.

We interpret these results as providing nuanced support for the Flat-World Hypothesis. Using new communications technologies entrepreneurs are able to, and do, access capital globally for financing early-stage projects; in aggregate, distant investors account for the majority of investment in our sample. In addition, the online platform appears to virtually eliminate the difference between local and distant investors who do not have a personal relationship with the entrepreneurs, at least in terms of their timing of investments. Yet, offline information about the entrepreneur does mediate investors' responsiveness to financing information. Furthermore, offline relations tend to be local, preventing a complete spatial transformation. Of the various limitations to the Flat World hypothesis, our results suggest that a key difference between local and distant investors is explained by spatial correlation of social networks. This is consistent with Nanda and Khanna (2010), who find that cross-border social networks play a key role in entrepreneurial finance when access to capital is particularly difficult.

Moreover, we speculate that there may be an important path dependency in the ability of entrepreneurs to access distant investors, even under conditions of significantly lowered transaction costs. To the extent that our results show that distant investors disproportionately rely on information revealed in the prior investment decisions of others, investors with offline information about the entrepreneur might play an important role in making the early investments that generate that

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[2]Despite the acknowledged importance of FFF, there are surprisingly few empirical studies focussed on this form of investment, likely owing to a paucity of data. However, as Cumming and Johan note, "Recent efforts spurred by the Kaufmann Foundation have begun to fill this gap, but there is significant work to be done in gathering systematic data."

information. If true, this would imply an important limitation to the Flat-World Hypothesis. Although communications technologies enable entrepreneurs from anywhere to access capital globally, in reality only those entrepreneurs with a sufficient base of offline support may be able to do so.

2   Empirical Setting

2.1   Sellaband

Sellaband is an Amsterdam-based crowd-funding platform that enables unsigned musicians to raise financing to produce an album. Launched on August 15, 2006, it was one of the first mainstream websites of its kind and has been referred to as the "granddaddy" of crowd-funding (Kappel 2009). At the time of our data, the Sellaband website worked as follows: [3]

Musical artists set up a profile page on Sellaband, at no charge, where they include a photo, bio, links, blog postings, and up to three demo songs.[4] Investors search the website, learn about artists, listen to their demos and, if they choose, buy one or more shares in an artist's future album at $10 per share. Investors see information posted by the artist as well as how much financing the artist has raised to date. Figure 1 provides a picture of a typical artist profile. Funds raised are held in escrow and may not be accessed until the artist has sold 5,000 shares (raising $50,000). Upon raising $50,000, the artist may spend those funds according to a plan they develop that is approved by Sellaband to record their album. As they incur expenses, they send vendor invoices to Sellaband for payment. Investors also receive a CD. After the album is completed, the revenues from album sales are split equally three ways between the artist, investors, and Sellaband. During our period of observation, approximately three years, 34 artists raised the full $50,000.

The individuals and groups on Sellaband are typically early-stage artists who have never signed a contract with a record label, recorded a professional album, or performed live outside of local pubs or cafés. At this stage of their careers, their income from live shows and music sales is negligible.

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[3]The website has changed substantially since September 2009, reducing the focus on early-stage artists, limiting the ability to receive a monetary return for the investments, and allowing much more flexibility to artists in amount raised and how the money is used.

[4]A "demo," short for demonstration recording," is an informal recording made solely for the purpose of pitching a song rather than for release. It is a way for musicians to approximate their ideas and convey them to record labels, producers, or other artists (Passman 2009).

In other words, these individuals face many of the same financing challenges and constraints as entrepreneurs in many other settings. Artists on Sellaband are there to raise capital to finance the recording of an album. They market themselves, develop a budget, create a plan for promoting their product, and raise financing. Sellaband therefore provides a platform for artists to engage in entrepreneurial activities with a community of investors.

2.2 Data

Our data contain every investment made on the Sellaband website from its launch in August 2006 until September 2009. Over this period, there were 4,712 artists on Sellaband who received at least one $10 investment. Of these, 34 raised the $50,000 required to access their capital to finance the making of their album. Investments are highly skewed: these 34 artists raised 73% of the $2,322,750 invested on the website by a total of 15,517 investors.

To explore the role of geography in the crowd-funding of early-stage entrepreneurial projects, we cleaned and standardized geographic information disclosed by entrepreneurs and investors on Sellaband. For entrepreneurs, location was cross-checked with their official artist website, MySpace, and Facebook profiles. We used the Google Maps APIs[5] to retrieve latitude and longitude for each location[6] and to standardize city names. We then manually checked locations and in the case of multiple or ambiguous matches either cleaned further or coded as missing. Finally, we calculated geodesic distances between artists and investors using a method developed by Thaddeus Vincenty and implemented by Austin Nichols (Nichols 2003). In our focal sample, we have distance measures for 90% of entrepreneur-investor pairs.

The other data we use in our main specifications is the cumulative investment raised by the entrepreneur from all investors as of the previous week. We also use song and video uploads that entrepreneurs post on the website and investor proximity to concert locations (and the dates of those concerts).

We focus our analysis on investments in the 34 entrepreneurs who raised $50,000, examining

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[5]See http://code.google.com/apis/maps/ (accessed 13-04-2010)
[6]According to the data available, we used country, region, city name, and zipcode or country-region-city triads or country-city pairs.

the timing of investment and types of investors. We show robustness of our core results to using the full sample of all entrepreneurs and to other subsamples. We focus on these 34 for several reasons. First, they are more comparable with each other in terms of their performance on the site since they have each successfully gone through the full funding cycle. Second, we eliminate concerns about right truncation of the data by focusing on artists who complete the funding cycle. Third, we have geographic location information for the vast majority of the investors in these 34 entrepreneurs because investors must give their location in order to receive their CD. Finally, since these 34 entrepreneurs account for nearly three-quarters of all funds raised on Sellaband, we argue that little information is lost by focusing on them (and our robustness checks confirm this).

The main sample is therefore constructed by taking the 34 entrepreneurs who reach $50,000 during our observation period. Entrepreneurs enter the sample when they receive their first investment and exit when they reach the target. The resulting panel is unbalanced. We identify every investor who invested at least once in one of these 34 entrepreneurs. Investors enter the sample when they make their first investment on Sellaband (in any entrepreneur) because their profile is visible to entrepreneurs and other investors at that time. Investors never exit the sample.

Our main ($50k) sample of entrepreneur-investor pairs is the Cartesian product of the 34 successful entrepreneurs and all investors who invest at least once in one of them. Each pair appears during each week in which both the entrepreneur and the investor are in the sample.[7] Because we use entrepreneur-investor pair fixed effects in our regression analysis, pairs with no investments are dropped. There are 18,827 entrepreneur-investor pairs with at least one investment from the investor in the entrepreneur and 709,471 entrepreneur-investor-week observations.

We present descriptive statistics for the $50K sample in Table 1a. Of these successful entrepreneurs, the average takes approximately one year (53 weeks) to reach $50,000, although there is considerable variation around the mean from as short as two months to as long as two years. The source of financing is widely distributed; on average entrepreneurs raise their financing from 609 different investors. However, these investors are not necessarily the same across entrepreneurs.

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[7]For example, if Entrepreneur 1 receives her first investment in week 10 and reaches $50K in week 20, then she will appear in the sample from weeks 10 through 20. If Investor 2 made his first investment in week 5, then he is paired with Entrepreneur 1 for weeks 10 through 20. If Investor 3 made his first investment in Week 18, then he is paired with Entrepreneur 1 for weeks 18 through 20.

In fact, there are 8,149 unique individuals who invest in these 34 artists. On average, these investors invest in 2.5 $50k entrepreneurs, they make 4.3 distinct investments (i.e., they often invest on more than one occasion in a single entrepreneur), and they invest a total of $208 across $50k entrepreneurs during the period under study. In other words, investors invest $82 per entrepreneur, on average. In terms of artistic effort, these entrepreneurs post an additional 4.3 demo songs on their profile during the fundraising process, above and beyond the songs they post when they first launch their profile. [8]

In the full sample of entrepreneurs (Table 1b), the average entrepreneur only has 11.4 investors. Overall, investors spend an average of $150 on Sellaband, spread over 3.5 entrepreneurs and 5.5 different investment occasions.

2.3 Geographic variance on Sellaband

Figure 2a presents the geographic distribution of the 34 entrepreneurs who raise $50K. They are distributed over five continents with the majority in Europe and the United States. Figure 2b illustrates the geographic distribution of $50K investors. They represent 80 countries and are particularly concentrated in Europe and the eastern United States.

Table 2 illustrates the quantity of investment by distance. Table 2a splits distance into five groups. The average investment level within 50 km is significantly higher than the investment level over 50 km. In order to simplify the analysis, we group all entrepreneur-investor pairs within 50 km as "local" and all others as "distant." The idea is that "being local" involves an easy commute by car or public transit. Our results are robust to other thresholds. Table 2b shows that although local investments are on average higher than distant, $196 compared to $74, there are many more distant investors and therefore in aggregate they account for the vast majority of total investments. In other words, conditional on making an investment, local investors invest 2.6 times that of distant investors, on average.

Local investors are also more likely to invest in a particular entrepreneur. Conditional on making

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[8] Many artists launch their profile with three songs - the maximum number the system accommodates. In the extreme case where all entrepreneurs launch their profile with three songs, the average number of songs per entrepreneur is 7.3 (3+4.3). We only have data on songs added, not the number of songs posted at the time of launching a new artist profile.

at least one investment in any entrepreneur on Sellaband, 11.4% of individuals who are local to an entrepreneur invest. In contrast, only 1.5% of distant individuals invest. In this way, investors are disproportionately local.

3 Empirical Strategy

Our econometric analysis is a straightforward difference-in-difference framework at the entrepreneur-investor-week level. Investor i will invest in entrepreneur e in week t if the expected value from investment is positive:

$$v_{eit} = \beta_1 CumulativeInv_{t_{et-1}} + \beta_2 Distance_{ei} \times CumulativeInv_{t_{et-1}} + \gamma X_{eit} + \mu_{ei} + \psi_t + \epsilon_{eit}$$

where v_{eit} is the value of investing in entrepreneur e at time t by investor i. The value from investment includes both the monetary expected return of investment as well as any consumption utility derived from investing in that entrepreneur. β_1 is the perceived marginal value of cumulative investment as of the previous week. For example, a higher cumulative investment may indicate that more investors perceive the entrepreneur to be of high quality and therefore a better investment. Alternatively, investors may derive more consumption utility from investing in entrepreneurs who are closer to the \$50K threshold. β_2 measures how the marginal value of cumulative investment changes with distance, γ is the perceived marginal value of the controls (X_{eit}), μ_{ei} is an entrepreneur-investor fixed effect to control for overall tastes of the investor, ψ_t is a week fixed effect to control for changes in the Sellaband environment over time, and ϵ_{eit} is an idiosyncratic error term. The main effect of distance will drop out due to collinearity with the entrepreneur-investor fixed effects.

However, since v_{eit} is a latent variable, we instead examine the decision to invest. Therefore, to understand the value to the investor in investing in entrepreneur e at time t we use the following discrete choice specification:

$$\mathbf{1}(Invest_{eit}) = \beta_1 CumulativeInv_{t_{et-1}} + \beta_2 Distance_{ei} \times CumulativeInv_{t_{et-1}} + \gamma X_{eit} + \mu_{ei} + \psi_t + \epsilon_{eit}$$

Consistent with the suggestions of Angrist and Pischke (2009), we estimate this using a linear probability model although we show robustness to alternative specifications. Likely because our covariates are binary, the predicted probabilities of our estimates all lie between zero and one. Therefore the potential bias of the linear probability model is not an issue in our estimation (Horrace and Oaxaca 2006). The fixed effects mean that our analysis examines the timing of investment for entrepreneur-investor pairs where we observe at least one investment. The fixed effects completely capture the entrepreneur-investor pairs in which we never see investment, and these pairs can therefore be removed from the analysis without any empirical consequences. Standard errors are clustered at the entrepreneur-investor pair level.

With this empirical approach we examine *when* investment occurs, conditional on at least one investment by that investor in that entrepreneur. We assume that the timing of investment is driven by the change in cumulative investment rather than by a change that is specific to the entrepreneur-investor pair. We also assume that the entrepreneur-investor and week fixed effects control for omitted variables. Our main results hold as long as there is not an omitted variable that drives lagged cumulative investment, an increase in the value of distant investing, and a simultaneous decrease in the value of local investing. One plausible variable that might fit such a description is concert touring. As an entrepreneur gains visibility, they may be more able to tour to more distant locations. We therefore show that our results are robust to controls for touring.

4   Results

We build our results in three steps. First, we document that investors' propensity to invest in a given week increases as the entrepreneur visibly accumulates capital on the site. Second, we show that local investors do not follow this pattern. Instead they are most likely to invest early in the cycle, before an entrepreneur has raised $10,000. Finally, we show that this difference between local and distant investors is entirely explained by the group of investors we label Friends, Family, and Fans (FFF). The results are robust to numerous specifications, some of which appear in the paper

and some in the appendix.[9]

4.1 Investment propensity increases with funds raised

In Table 3 we show that investment propensity increases as an entrepreneur accumulates investment. Column (1) reports the main results using the $50K sample. This is our primary sample and all subsequent results are based on this sample unless otherwise noted. The use of the $50K sample ensures this is not a simple selection story where only the better artists appear in the sample with higher cumulative investment. Relative to an entrepreneur with less than $10,000 in investment, a given investor is 2.1 percentage points more likely to invest in a given week if the entrepreneur has $10,000-$20,000 and 8.4 percentage points more likely to invest if they have more than $40,000. These increases are large relative to a base rate of 4.1% on the first $10,000. We illustrate the estimates of the increase in propensity to invest in a given week over different capital levels in Figure 3.

Column (2) shows that the qualitative result is robust to using the full sample of all entrepreneurs. Column (3) shows robustness to a fixed-effects linear regression using quantity invested as the dependent variable rather than a dummy for whether an investment occurred. Column (4) shows robustness to including controls for artistic effort including posting videos and songs to the website and giving live performances in the investor's locale. Videos and concerts are positively related to investments but their inclusion does not affect the relationship between cumulative investment and propensity to invest.[10]

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[9]In the main tables we focus on a core specification and a handful of key robustness checks. In the appendix we verify that our results are robust to numerous alternative specifications of the sample chosen, covariates used, and functional form.

[10]For this table, as well as tables 4 and 6, we show robustness to several more specifications in the appendix. Table A1 repeats the main results of the paper to facilitate comparison. In terms of the sample, we show robustness to the full sample (Table A2), the sample of entrepreneurs who reach $1000 in investments (Table A3), the sample of entrepreneurs who reach $5,000 in investments (Table A4), the sample constructed by dropping entrepreneurs from the Netherlands (the home country of the website) (Table A5), and the sample constructed by dropping entrepreneurs from the music hubs of New York City, Los Angeles, Nashville, London, and Paris (Tables A6 and A7). In terms of covariates, we show robustness to defining cumulative investment as appearing on the Sellaband "charts" as one of the 25 artists closest to raising $50,000 (Table A8), to including just video and song uploads (Table A9), to including just whether the entrepreneur performed in the investor's locale (Table A10), and to including videos, songs, and performances (Table A11). In terms of the functional form, we show robustness to fixed-effects logit (Table A12), fixed-effects poisson regression on the total parts invested (Table A13), and linear regression on the total parts invested and (when applicable) disinvested (Table A14). The appendix also shows robustness of Tables 4 and 6 to alternative measures of "local" (Tables A15 and A16), treating missing geographic information as distant (Table A17), combining

Overall, Table 3 shows that investment accelerates as an entrepreneur gets closer to $50,000. This is suggestive evidence of path dependency: past investment may increase the propensity to invest. It is only suggestive because, in the absence of a truly exogenous shock to investment, we cannot reject the possibility that some other activity may cause the acceleration in investment. Nevertheless, to the extent that the fixed effects and the covariates on entrepreneurial effort control such activities, the underlying pattern in the data, combined with the prominent placement of cumulative investment information on the website, suggest that high levels of cumulative investment may cause an increase the rate at which new investment arrives.

4.2 Local and distant investors are different

In Table 4 we stratify the data between local and distant investors. Local investors are more likely to invest over the first $20,000 than later. In contrast, the results for distant investors resemble the overall results shown in Table 3. Columns (1) and (2) show our main specification. Columns (3) and (4) show robustness to the full set of entrepreneurs and columns (5) and (6) show robustness to defining local as 25 rather than 50 km.

As mentioned above, our interpretation of these results holds as long as there is not an omitted variable that drives lagged cumulative investment, an increase in the value of distant investing, and a decrease in the value of local investing. In columns (7) and (8) we address the possibility that entrepreneurs increase their effort to attract distant investors as they become more successful. They might perform concerts further from home or they might post more material on their website. Specifically, we show robustness to whether the entrepreneur performs within 50 km of the investor and whether the entrepreneur posted a new song or video to their website. The qualitative differences between local and distant investment patterns remain.

Columns (9) and (10) show robustness to using parts rather than discretizing the dependent variable. The parts results show a flat relationship between investment propensity and cumulative investment for local investors largely because the local investments are highly skewed with a very

distant and local in the same regression and using interactions (Table A18), and to alternative definitions of FFF (Table A19).

small number of large investments (over $5,000) driving the results. Still, distant investors increase their propensity to invest as the entrepreneur accumulates capital whereas local investors do not.

In Figure 4 we provide a graphical representation of the propensity to invest at different stages in the investment cycle. Local and distant investors clearly display opposite patterns; distant investors' propensity to invest rises as the entrepreneur accumulates capital, whereas local investors' propensity does not.

4.3 Friends, Family, and Fans

In this section we show that a particular type of investor, whom we label as "Friends, Family, and Fans" (FFF) of a particular entrepreneur, explains the observed difference between local and distant investors. These individuals likely joined this market-making platform to fund that particular entrepreneur. We define FFF by the following three characteristics:

1. The FFF investor invested in the focal entrepreneur before investing in any other (i.e. the investor is likely to have joined the system *for* the focal entrepreneur)

2. The FFF investor's investment in the focal entrepreneur is their largest investment

3. The investor invests in no more than three other entrepreneurs (i.e. the focal entrepreneur remains a key reason for being on the site)

To confirm the validity of our measure, we asked two successful entrepreneurs on Sellaband to identify investors they knew independently of Sellaband. Specifically, we asked them to identify from their list of investors all family members, friends, and fans that they knew prior to joining Sellaband. Our measure captured all investors that these two entrepreneurs identified, as well as a number of investors that the entrepreneurs did not know personally.

In Table 5 we provide descriptive statistics for the FFF sample. Using investor-level measures of the use of the website's communications tools (emails sent through the website and comments on webpages), in Table 5a we show that they use Sellaband less intensively than other investors. Specifically, they send approximately 34 times fewer emails, post 29 times fewer comments, receive five times fewer emails, and receive 16 times fewer comments than non-FFF investors, on average.

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We conjecture that FFF might behave differently on the Sellaband site because they interact with the entrepreneur through other channels. Overall, these data suggest that FFF are a distinct group.

Furthermore, in Table 5b we show that FFF investors are disproportionately active at the beginning of the investment process. On average, FFF account for approximately one third of the focal entrepreneur's total investment when they have raised their first $500 (or similarly after the first four weeks). In contrast, they account for only one fifth by the end of the fundraising cycle.

In Table 5c we show that although some FFF investors are distant, they are disproportionately local. In terms of number of investors, FFF account for 63% of local investors but only 16% of distant investors. In terms of dollars, FFF account for 43% of local investment but only 16% of distant investment. Together, the statistics in these tables raise the possibility that the difference between local and distant investors might be explained by FFF.

Next, we run our main specification on local and distant investors, but include an interaction of capital levels with an indicator for FFF (Table 6). The results show that local and distant investors are qualitatively similar, conditional on FFF. Particularly, in all specifications, for both local and distant investors, FFF tend to invest early in the funding cycle and non-FFF tend to invest later. We illustrate this result in Figure 5 which shows that non-FFF investors, both local and distant, increase their propensity to invest as the entrepreneur accumulates capital whereas FFF investors do not.

A potential concern with our interpretation of these results is that our definition only proxies for Friends, Family, and Fans. It is likely that we include many investors who are not really FFF, and that we exclude some investors that are FFF. In order to address this concern, we examined investments in the two entrepreneurs who identified their Friends, Family, and Fans. By focusing on just these two entrepreneurs, we do not have enough local investments to identify the coefficients of the main regression. Therefore, we combine local and distant investors and re-run the FFF analysis using all investors in these two entrepreneurs and the FFF that they identified. We present the results in Table 7. Column (1) shows results from the main specification that includes week-level fixed effects. Even with the limited sample, for the FFF group we see that investment propensity decreases as cumulative investment approaches $50,000. With just two entrepreneurs, the week-

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level fixed effects mean that there is little variation in the data to identify the main effect of the level of cumulated investment. For this reason, in column (2) we estimate the same regression without the week fixed effects and in column (3) we show results with no fixed effects but add controls for changes in artistic effort over time. Overall, Table 7 shows that the results of Table 6 are robust to this survey-based definition of FFF. We interpret this result as providing validity for our definition of FFF.

In summary, our results suggest that there is no systematic difference between local and distant investors, except to the extent that social networks (as measured by FFF) are disproportionately local.

5 Conclusion

We examine the role of geography in an online crowd-funding platform for early stage musical artists. Because these artists engage in entrepreneurial activities with a community of investors, we use this setting to understand how online mechanisms interact with the financing of early stage entrepreneurial ventures. We find that the propensity to invest is independent of geographic distance between entrepreneur and investor in a setting where investment is facilitated by an online crowd-funding market platform and conditioned on the entrepreneur's offline network. This result contrasts with the existing literature on early-stage entrepreneurial finance that emphasizes the importance of local interactions. Instead, our result suggests that online mechanisms can reduce many of the challenges associated with investing in early-stage projects over long distances. Only the spatial correlation of pre-existing social networks is not resolved. Furthermore, our result emphasizes the important role that friends, family, (and fans) may play online and offline in generating early investment in entrepreneurial ventures. Speculatively, this early investment may serve as a signal to later investors and increase the likelihood of further funding by way of access to distant sources of capital.

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Table 1a: Descriptive stats - $50K (main) Sample

	Obs.	Mean	Std. Dev.	Min	Max
Entrepreneur Level					
Investors at $50K	34	608.8	220.9	316	1,338
Weeks to $50K	34	53.1	34.6	8	124
Songs uploaded†	34	4.29	8.02	0	32
Videos uploaded	34	0.68	0.47	0	1
Investor level					
Number of 50K entrepreneurs invested in	8,149	2.54	4.23	1	34
Number of distinct investments	8,149	4.33	12.78	1	330
Total amount invested across 50K entrepreneurs ($)	8,149	208	1,083.9	0	33,430
Entrepreneur-Investor level					
Investment amount ($)	18,827	82	379.8	0	23,500
Geographic distance (km)	18,827	5,118	5,658	0.003	19,827
Number of investments in same entrepreneur	18,827	1.7	2.3	1	72
Position in funding cycle at first investment ($)	18,827	12,099	13,361	0	49,990
Entrepreneur-Investor-Week level					
Investment amount ($)	709,471	2.378	40.82	0	15,000
Live show proximate to investor	709,471	0.002	0.046	0	1

†Entrepreneurs may upload 1 to 3 songs when registering on the website. Since we do not have access to this data, the initial songs are not included in this count.

Table 1b: Descriptive stats - Full Sample

	Obs.	Mean	Std. Dev.	Min	Max
Entrepreneur Level					
Investors	4,712	11.4	60.5	1	1,338
Total Investment	4,712	49.3	437.5	0	5,000
Songs uploaded†	4,712	1.82	2.686	0	59
Videos uploaded	4,712	0.11	0.378	0	8
Investor level					
Number of entrepreneurs invested in	15,517	3.46	21.1	1	1,835
Number of distinct investments	15,517	5.52	34.3.1	1	2,155
Total amount invested across all entrepreneurs ($)	15,517	149.7	991.9	0	38,440
Entrepreneur-Investor level					
Investment amount ($)	24,862	42.69	253.61	0	23,500
Geographic distance (km)	24,862	4,831.5	5,523.6	.003	19,863
Number of investments in same entrepreneur	24,862	1.79	2.52	1	72
Position in funding cycle at first investment ($)	24,862	9,998	12,464	0	49,990
Entrepreneur-Investor-Week level					
Investment amount ($)	1,175,492	1.83	33.71	0	15,000

†Entrepreneurs may upload 1 to 3 songs when registering on the website. Since we do not have access to this data, the initial songs are not included in this count.

Table 2a: Local versus Distant - $50K Sample

Distance	Obs.	Mean Investment	Total Investment	% of Total
0-5 km	191	255.76	48,850	2.9%
5-50 km	973	184.62	179,640	10.6%
50-500 km	4,403	67.67	297,970	17.5%
500-3,000 km	4,232	79.56	336,680	19.8%
> 3,000 km	9,028	75.15	678,410	39.9%
Not Available	1,999	79.26	158,450	9.3%

Table 2b: Local versus Distant, consolidated - $50K Sample

	Obs.	Mean Investment	Total Investment	% of Total
Local (under 50 km)	1,164	196	228,490	13.4%
Distant (over 50 km)	17,663	74	1,313,060	77.2%
Not Available	1,999	79	158,450	9.3%

Table 3: Investment propensity increases over time

	(1)	(2)	(3)	(4)
	$50K sample	Full sample	Total Parts	Additional covariates
$10-20K accum. capital	0.0213***	0.0109***	0.1216***	0.0211***
	(0.001)	(0.001)	(0.018)	(0.001)
$20-30K accum. capital	0.0261***	0.0134***	0.1654***	0.0277***
	(0.002)	(0.001)	(0.028)	(0.002)
$30-40K accum. capital	0.0420***	0.0266***	0.2575***	0.0442***
	(0.002)	(0.001)	(0.035)	(0.002)
$40-50K accum. capital	0.0840***	0.0691***	0.6279***	0.0871***
	(0.003)	(0.002)	(0.056)	(0.003)
Videos uploaded (lagged)				0.0084*
				(0.004)
Songs uploaded (lagged)				-0.0011
				(0.001)
Investor proximate to Live Show				0.0098*
				(0.006)
Observations	709,471	1,175,492	709,471	703,417
R-squared	0.012	0.010	0.002	0.011
Number of group	18,827	24,862	18,827	18,827

Dependent variable is any investment in columns (1)-(2)-(4) and total investment in column (3). Unless otherwise specified, sample is the $50K sample. Column (4) adds controls for videos and songs uploaded by the entrepreneur, and live shows proximate to investor. All regressions include a full set of fixed effects for each entrepreneur-investor pair (differenced out) and each week. Robust standard errors clustered at the pair level in parentheses.
*** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table 4: Local and distant investors are different

	(1) $50K sample LOCAL	(2) $50K sample DISTANT	(3) Full sample LOCAL	(4) Full sample DISTANT	(5) Local defined as 25 km LOCAL	(6) Local defined as 25 km DISTANT	(7) $50K sample with controls LOCAL	(8) $50K sample with controls DISTANT	(9) Total Parts LOCAL	(10) Total Parts DISTANT
$10-20K accum. capital	0.0020	0.0215***	-0.0075*	0.0116***	-0.0102	0.0218***	0.0051	0.0212***	0.2116	0.1173***
	(0.008)	(0.001)	(0.005)	(0.001)	(0.009)	(0.001)	(0.008)	(0.001)	(0.171)	(0.017)
$20-30K accum. capital	-0.0287***	0.0283***	-0.0257***	0.0154***	-0.0455***	0.0283***	-0.0258**	0.0299***	0.1290	0.1640***
	(0.010)	(0.002)	(0.006)	(0.001)	(0.012)	(0.002)	(0.010)	(0.002)	(0.249)	(0.027)
$30-40K accum. capital	-0.0334***	0.0451***	-0.0275***	0.0293***	-0.0430***	0.0444***	-0.0309***	0.0473***	0.1218	0.2621***
	(0.011)	(0.002)	(0.007)	(0.001)	(0.013)	(0.002)	(0.011)	(0.002)	(0.273)	(0.034)
$40-50K accum. capital	-0.0254*	0.0891***	-0.0153**	0.0741***	-0.0283*	0.0873***	-0.0211	0.0922***	0.2909	0.6516***
	(0.013)	(0.003)	(0.008)	(0.002)	(0.016)	(0.003)	(0.013)	(0.003)	(0.577)	(0.053)
Videos uploaded (lagged)							0.2435***	0.0011		
							(0.045)	(0.004)		
Songs uploaded (lagged)							-0.0038	-0.0010		
							(0.003)	(0.001)		
Investor proximate to Live Show							0.0094	0.0031		
							(0.009)	(0.015)		
Observations	57,855	651,616	99,564	1,075,928	36,186	673,285	57,711	645,706	57,855	651,616
R-squared	0.042	0.012	0.033	0.010	0.035	0.012	0.042	0.012	0.004	0.003
Number of group	1,164	17,663	1,715	23,147	748	18,079	1,164	17,663	1,164	17,663

Dependent variable is any investment in columns (1)–(8) and total investment in column (9)–(10). Unless otherwise specified, sample is the $50K sample. Local is defined as within 50 km unless otherwise specified. Columns (7)–(8) add controls for videos and songs uploaded by the entrepreneur and live shows proximate to investor. All regressions include a full set of fixed effects for each entrepreneur-investor pair (differenced out) and each week. Robust standard errors clustered at the pair level in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 5a: FFF use the website differently

	FFF	Not FFF
Average # of emails sent to entrepreneurs	0.24	8.25
Average # of comments sent to entrepreneurs	0.44	12.74
Average # of emails received from entrepreneurs	13.19	68.97
Average # of comments received from entrepreneurs	1.14	18.77

Table 5b: FFF are disproportionately active at the beginning

	First $500	First 4 weeks	Full $50k
FFF	34%	37%	22%
Not FFF	66%	63%	78%

Table 5c: FFF are disproportionately local

Pairs	Local 25 km	Distant	Local 50 km	Distant	Local 100 km	Distant
FFF	65%	18%	63%	16%	55%	16%
Not FFF	35%	82%	37%	84%	45%	84%

Dollars	Local 25 km	Distant	Local 50 km	Distant	Local 100 km	Distant
FFF	36%	18%	43%	16%	43%	15%
Not FFF	64%	82%	57%	84%	57%	85%

Table 6: Local and distant investors are similar, conditional on FFF

	(1) $50K sample LOCAL	(2) $50K sample DISTANT	(3) Full Sample LOCAL	(4) Full Sample DISTANT	(5) Local defined as 25 km LOCAL	(6) Local defined as 25 km DISTANT	(7) $50K sample with controls LOCAL	(8) $50K sample with controls DISTANT	(9) Total Parts LOCAL	(10) Total Parts DISTANT
$10-20K accum. capital	0.0322***	0.0233***	0.0173***	0.0140***	0.0194*	0.0232***	0.0324***	0.0229***	0.5943***	0.1268***
	(0.009)	(0.001)	(0.006)	(0.001)	(0.011)	(0.001)	(0.009)	(0.001)	(0.212)	(0.017)
$20-30K accum. capital	0.0276**	0.0329***	0.0218***	0.0208***	0.0057	0.0327***	0.0277**	0.0343***	0.7685**	0.1787***
	(0.012)	(0.002)	(0.007)	(0.001)	(0.014)	(0.002)	(0.012)	(0.002)	(0.308)	(0.027)
$30-40K accum. capital	0.0337**	0.0517***	0.0357***	0.0376***	0.0178	0.0503***	0.0335**	0.0536***	0.7840***	0.2878***
	(0.014)	(0.002)	(0.011)	(0.002)	(0.017)	(0.002)	(0.014)	(0.002)	(0.300)	(0.035)
$40-50K accum. capital	0.0521***	0.1086***	0.0590***	0.0952***	0.0448**	0.1068***	0.0539***	0.1115***	1.4283	0.7572***
	(0.017)	(0.003)	(0.015)	(0.002)	(0.021)	(0.003)	(0.017)	(0.003)	(0.980)	(0.057)
$10-20K accum. capital * FFF	-0.0803***	-0.0909***	-0.0551***	-0.0753***	-0.0759***	-0.0943***	-0.0738***	-0.0854***	-0.9861***	-0.4108***
	(0.012)	(0.006)	(0.008)	(0.004)	(0.014)	(0.006)	(0.012)	(0.006)	(0.276)	(0.053)
$20-30K accum. capital * FFF	-0.1184***	-0.1377***	-0.0905***	-0.1150***	-0.1098***	-0.1356***	-0.1121***	-0.1305***	-1.3505***	-0.5489***
	(0.013)	(0.007)	(0.009)	(0.005)	(0.015)	(0.007)	(0.013)	(0.007)	(0.294)	(0.062)
$30-40K accum. capital * FFF	-0.1397***	-0.1644***	-0.1146***	-0.1477***	-0.1288***	-0.1638***	-0.1337***	-0.1565***	-1.4375***	-0.6860***
	(0.015)	(0.007)	(0.013)	(0.005)	(0.017)	(0.007)	(0.015)	(0.007)	(0.293)	(0.071)
$40-50K accum. capital * FFF	-0.1590***	-0.2521***	-0.1281***	-0.2338***	-0.1514***	-0.2463***	-0.1531***	-0.2444***	-2.1922***	-1.2360***
	(0.018)	(0.008)	(0.016)	(0.06)	(0.022)	(0.007)	(0.018)	(0.008)	(0.782)	(0.081)
Videos uploaded (lagged)							0.2444***	0.0034		
							(0.044)	(0.004)		
Songs uploaded (lagged)							-0.0035	-0.0018*		
							(0.003)	(0.001)		
Investor proximate to Live Show							0.0090	0.0043		
							(0.009)	(0.015)		
Observations	57,855	651,616	99,564	1,075,928	36,186	673,285	57,711	645,706	57,855	651,616
R-squared	0.050	0.019	0.037	0.015	0.043	0.019	0.050	0.018	0.005	0.004
Number of group	1,164	17,663	1,715	23,147	748	18,079	1,164	17,663	1,164	17,663

Dependent variable is any investment in columns (1)-(8) and total investment in column (9)-(10). Unless otherwise specified, sample is the $50K sample. Local is defined as within 50 km unless otherwise specified. Columns (7)-(8) add controls for videos and songs uploaded by the entrepreneur and live shows proximate to investor. All regressions include a full set of fixed effects for each entrepreneur-investor pair (differenced out) and each week. Robust standard errors clustered at the pair level in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table 7: FFF definition based on interviews with two entrepreneurs

VARIABLES	(1) With Week FEs	(2) Without Week FEs	(3) Without Week FEs
$10-20K accum. capital	0.0256	0.0202***	0.0203***
	(0.020)	(0.004)	(0.005)
$20-30K accum. capital	-0.0174	0.0321***	0.0420***
	(0.019)	(0.006)	(0.006)
$30-40K accum. capital	-0.0582***	0.0070	0.0191**
	(0.019)	(0.008)	(0.008)
$40-50K accum. capital	0.0081	0.0964***	0.1083***
	(0.026)	(0.011)	(0.012)
$10-20K accum. capital * FFF	-0.1147	-0.1189	0.0167
	(0.116)	(0.115)	(0.087)
$20-30K accum. capital * FFF	-0.1750	-0.1803	-0.0206
	(0.120)	(0.126)	(0.088)
$30-40K accum. capital * FFF	-0.1513	-0.1443	0.0223
	(0.125)	(0.133)	(0.090)
$40-50K accum. capital * FFF	-0.3652***	-0.3685***	-0.2122**
	(0.134)	(0.141)	(0.099)
Videos uploaded (lagged)			0.0861***
			(0.015)
Songs uploaded (lagged)			-0.0124
			(0.010)
Investor proximate to Live Show			-0.0478
			(0.030)
Observations	25,521	25,521	24,895
R-squared	0.026	0.009	0.012
Number of group	1,128	1,128	1,128

Dependent variable is any investment. Sample is the $50K sample. All regressions include a full set of fixed effects for each entrepreneur-investor pair (differenced out). Column 1 has week fixed effects and column 2 and 3 do not. Column 3 adds controls for songs and videos uploaded by the entrepreneur and live shows proximate to the investor. Local and distant combined for sample size reasons. Robust standard errors clustered at the pair level in parentheses. *** p<0.01, ** p<0.05, * p<0.1
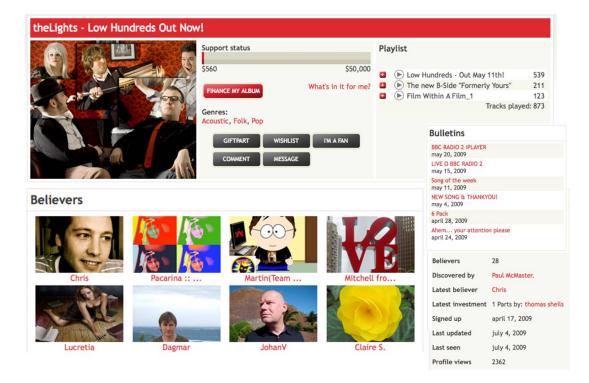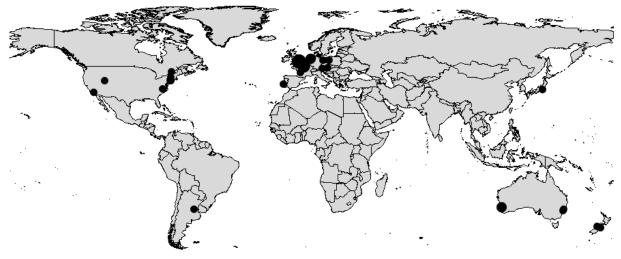
Figure 1: Sellaband screenshot

Figure 2a: Map of $50K entrepreneurs locations
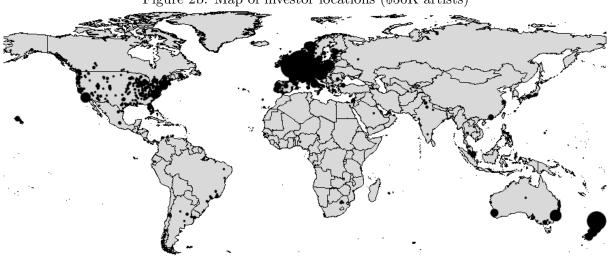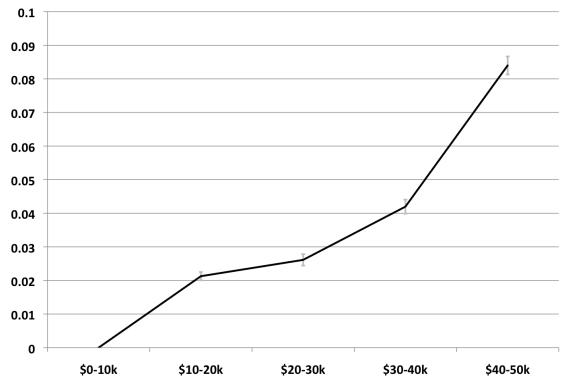
Figure 2b: Map of investor locations ($50K artists)

Figure 3: Relative propensity to invest for all investors over capital levels. Baseline is propensity to invest between $0-10K.
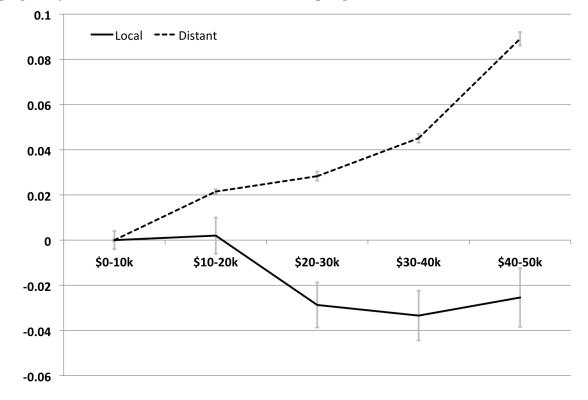
Figure 4: Relative propensity to invest over capital levels for local versus distant investors. Baseline is propensity to invest between \$0-10K within each group.
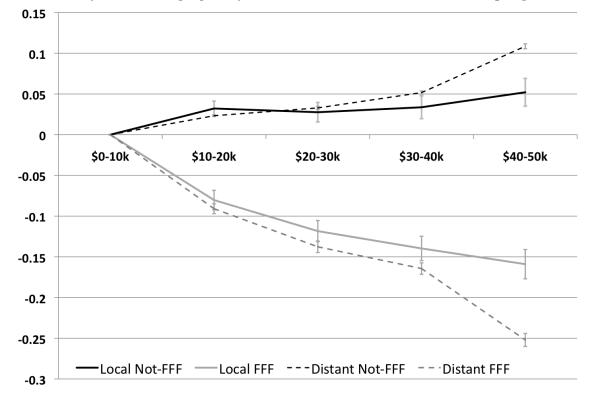
Figure 5: Relative propensity to invest over capital levels for FFF versus not-FFF investors (both local and distant). Baseline is propensity to invest between $0-10K within each group.

6 Appendix

Table A-1: $50K (main) Sample

VARIABLES	(1) Invest =1	(2) LOCAL	(3) DISTANT	(4) LOCAL	(5) DISTANT
$10-20K accum. capital	0.0213***	0.0020	0.0215***	0.0322***	0.0233***
	(0.001)	(0.008)	(0.001)	(0.009)	(0.001)
$20-30K accum. capital	0.0261***	-0.0287***	0.0283***	0.0276**	0.0329***
	(0.002)	(0.010)	(0.002)	(0.012)	(0.002)
$30-40K accum. capital	0.0420***	-0.0334***	0.0451***	0.0337**	0.0517***
	(0.002)	(0.011)	(0.002)	(0.014)	(0.002)
$40-50K accum. capital	0.0840***	-0.0254*	0.0891***	0.0521***	0.1086***
	(0.003)	(0.013)	(0.003)	(0.017)	(0.003)
$10-20K accum. capital * FFF				-0.0803***	-0.0909***
				(0.012)	(0.006)
$20-30K accum. capital * FFF				-0.1184***	-0.1377***
				(0.013)	(0.007)
$30-40K accum. capital * FFF				-0.1397***	-0.1644***
				(0.015)	(0.007)
$40-50K accum. capital * FFF				-0.1590***	-0.2521***
				(0.018)	(0.008)
Observations	709,471	57,855	651,616	57,855	651,616
R-squared	0.012	0.042	0.012	0.050	0.019
Number of group	18,827	1,164	17,663	1,164	17,663

Dependent variable is any investment in columns (1)-(5) and sample is the $50K sample. All regressions include a full set of fixed effects for each entrepreneur-investor pair (differenced out) and each week. Robust standard errors clustered at the pair level in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table A-2: Full Sample

VARIABLES	(1) Full Sample Invest=1	(2) Full Sample LOCAL	(3) Full Sample DISTANT	(4) Full Sample LOCAL	(5) Full Sample DISTANT
$10-20K accum. capital	0.0109***	-0.0075*	0.0116***	0.0173***	0.0140***
	(0.001)	(0.005)	(0.001)	(0.006)	(0.001)
$20-30K accum. capital	0.0134***	-0.0257***	0.0154***	0.0218***	0.0208***
	(0.001)	(0.006)	(0.001)	(0.007)	(0.001)
$30-40K accum. capital	0.0266***	-0.0275***	0.0293***	0.0357***	0.0376***
	(0.001)	(0.007)	(0.001)	(0.011)	(0.002)
$40-50K accum. capital	0.0691***	-0.0153**	0.0741***	0.0590***	0.0952***
	(0.002)	(0.008)	(0.002)	(0.015)	(0.002)
$10-20K accum. capital * FFF				-0.0551***	-0.0753***
				(0.008)	(0.004)
$20-30K accum. capital * FFF				-0.0905***	-0.1150***
				(0.009)	(0.005)
$30-40K accum. capital * FFF				-0.1146***	-0.1477***
				(0.013)	(0.005)
$40-50K accum. capital * FFF				-0.1281***	-0.2338***
				(0.016)	(0.006)
Observations	1,175,492	99,564	1,075,928	99,564	1,075,928
R-squared	0.010	0.033	0.010	0.037	0.015
Number of group	24,862	1,715	23,147	1,715	23,147

Dependent variable is any investment in columns (1)-(5) and sample is the full sample. All regressions include a full set of fixed effects for each entrepreneur-investor pair (differenced out) and each week. Robust standard errors clustered at the pair level in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table A-3: $1K Sample

VARIABLES	(1) $1K Sample Invest =1	(2) $1K Sample LOCAL	(3) $1K Sample DISTANT	(4) $1K Sample LOCAL	(5) $1K Sample DISTANT
$10-20K accum. capital	0.0108***	-0.0076*	0.0116***	0.0172***	0.0140***
	(0.001)	(0.005)	(0.001)	(0.006)	(0.001)
$20-30K accum. capital	0.0133***	-0.0260***	0.0154***	0.0215***	0.0207***
	(0.001)	(0.006)	(0.001)	(0.007)	(0.001)
$30-40K accum. capital	0.0267***	-0.0276***	0.0294***	0.0354***	0.0376***
	(0.001)	(0.007)	(0.002)	(0.011)	(0.002)
$40-50K accum. capital	0.0692***	-0.0147*	0.0741***	0.0590***	0.0952***
	(0.002)	(0.008)	(0.002)	(0.015)	(0.002)
$10-20K accum. capital * FFF				-0.0552***	-0.0755***
				(0.008)	(0.004)
$20-30K accum. capital * FFF				-0.0905***	-0.1151***
				(0.009)	(0.005)
$30-40K accum. capital * FFF				-0.1144***	-0.1479***
				(0.013)	(0.005)
$40-50K accum. capital * FFF				-0.1274***	-0.2338***
				(0.016)	(0.006)
Observations	1,155,845	98,118	1,057,727	98,118	1,057,727
R-squared	0.010	0.033	0.010	0.038	0.015
Number of group	24,411	1,681	22,730	1,681	22,730

Dependent variable is any investment in columns (1)-(5) and sample is the $1K sample (all entrepreneurs who have raised at least 1,000$). All regressions include a full set of fixed effects for each entrepreneur-investor pair (differenced out) and each week. Robust standard errors clustered at the pair level in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table A-4: $5K Sample

VARIABLES	(1) $5K Sample Invest =1	(2) $5K Sample LOCAL	(3) $5K Sample DISTANT	(4) $5K Sample LOCAL	(5) $5K Sample DISTANT
$10-20K accum. capital	0.0114***	-0.0087*	0.0121***	0.0160***	0.0144***
	(0.001)	(0.005)	(0.001)	(0.006)	(0.001)
$20-30K accum. capital	0.0141***	-0.0286***	0.0162***	0.0190**	0.0214***
	(0.001)	(0.006)	(0.001)	(0.007)	(0.001)
$30-40K accum. capital	0.0279***	-0.0302***	0.0307***	0.0328***	0.0387***
	(0.002)	(0.007)	(0.002)	(0.011)	(0.002)
$40-50K accum. capital	0.0705***	-0.0171**	0.0755***	0.0561***	0.0963***
	(0.002)	(0.008)	(0.002)	(0.015)	(0.002)
$10-20K accum. capital * FFF				-0.0551***	-0.0756***
				(0.008)	(0.005)
$20-30K accum. capital * FFF				-0.0909***	-0.1150***
				(0.009)	(0.005)
$30-40K accum. capital * FFF				-0.1148***	-0.1477***
				(0.013)	(0.005)
$40-50K accum. capital * FFF				-0.1276***	-0.2338***
				(0.016)	(0.006)
Observations	1,070,501	89,276	981,225	89,276	981,225
R-squared	0.011	0.035	0.011	0.040	0.016
Number of group	23,269	1,544	21,725	1,544	21,725

Dependent variable is any investment in columns (1)-(5) and sample is the $5K sample (all entrepreneurs who have raised at least 5,000$). All regressions include a full set of fixed effects for each entrepreneur-investor pair (differenced out) and each week. Robust standard errors clustered at the pair level in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table A-5: No entrepreneurs from Holland

VARIABLES	(1) Invest =1	(2) LOCAL	(3) DISTANT	(4) LOCAL	(5) DISTANT
$10-20K accum. capital	0.0244***	-0.0150	0.0251***	0.0133	0.0270***
	(0.001)	(0.013)	(0.001)	(0.016)	(0.001)
$20-30K accum. capital	0.0285***	-0.0634***	0.0312***	0.0018	0.0349***
	(0.002)	(0.016)	(0.002)	(0.019)	(0.002)
$30-40K accum. capital	0.0458***	-0.0726***	0.0499***	0.0116	0.0564***
	(0.002)	(0.019)	(0.002)	(0.023)	(0.002)
$40-50K accum. capital	0.0885***	-0.0720***	0.0944***	0.0230	0.1128***
	(0.003)	(0.019)	(0.003)	(0.026)	(0.003)
$10-20K accum. capital * FFF				-0.0938***	-0.0960***
				(0.022)	(0.007)
$20-30K accum. capital * FFF				-0.1521***	-0.1382***
				(0.023)	(0.008)
$30-40K accum. capital * FFF				-0.1853***	-0.1698***
				(0.026)	(0.008)
$40-50K accum. capital * FFF				-0.2032***	-0.2633***
				(0.029)	(0.009)
Observations	558,150	20,841	537,309	20,841	537,309
R-squared	0.011	0.039	0.012	0.050	0.018
Number of group	16,372	663	15,709	663	15,709

Dependent variable is any investment in columns (1)-(5) and sample is the $50K sample without entrepreneurs from Holland. All regressions include a full set of fixed effects for each entrepreneur-investor pair (differenced out) and each week. Robust standard errors clustered at the pair level in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table A-6: No entrepreneurs from music hubs (NYC, LA, Nashville, London, or Paris)

VARIABLES	(1) Invest =1	(2) LOCAL	(3) DISTANT	(4) LOCAL	(5) DISTANT
$10-20K accum. capital	0.0195***	0.0121	0.0188***	0.0405***	0.0198***
	(0.001)	(0.009)	(0.001)	(0.011)	(0.001)
$20-30K accum. capital	0.0314***	-0.0170	0.0335***	0.0339**	0.0358***
	(0.002)	(0.015)	(0.002)	(0.017)	(0.002)
$30-40K accum. capital	0.0451***	-0.0248	0.0477***	0.0314*	0.0525***
	(0.003)	(0.015)	(0.003)	(0.018)	(0.003)
$40-50K accum. capital	0.0969***	-0.0204	0.1022***	0.0460*	0.1191***
	(0.003)	(0.020)	(0.004)	(0.024)	(0.004)
$10-20K accum. capital * FFF				-0.0693***	-0.0592***
				(0.013)	(0.007)
$20-30K accum. capital * FFF				-0.1033***	-0.1017***
				(0.014)	(0.008)
$30-40K accum. capital * FFF				-0.1181***	-0.1551***
				(0.017)	(0.009)
$40-50K accum. capital * FFF				-0.1409***	-0.2400***
				(0.021)	(0.010)
Observations	482,683	44,928	437,755	44,928	437,755
R-squared	0.013	0.043	0.014	0.049	0.020
Number of group	12,310	796	11,514	796	11,514

Dependent variable is any investment in columns (1)-(5) and sample is the $50K sample without entrepreneurs from music hubs (New York, Los Angeles, Nashville, London, or Paris). All regressions include a full set of fixed effects for each entrepreneur-investor pair (differenced out) and each week. Robust standard errors clustered at the pair level in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table A-7: No entrepreneurs from music hubs (NYC, LA, Nashville, London, or Paris) and controlling for live shows

VARIABLES	(1) Invest =1	(2) LOCAL	(3) DISTANT	(4) LOCAL	(5) DISTANT
$10-20K accum. capital	0.0183***	0.0123	0.0175***	0.0371***	0.0184***
	(0.001)	(0.009)	(0.001)	(0.011)	(0.001)
$20-30K accum. capital	0.0334***	-0.0188	0.0355***	0.0287*	0.0374***
	(0.002)	(0.015)	(0.002)	(0.017)	(0.002)
$30-40K accum. capital	0.0475***	-0.0274*	0.0501***	0.0252	0.0544***
	(0.003)	(0.015)	(0.003)	(0.018)	(0.003)
$40-50K accum. capital	0.1006***	-0.0222	0.1060***	0.0404*	0.1223***
	(0.003)	(0.020)	(0.004)	(0.024)	(0.004)
$10-20K accum. capital * FFF				-0.0618***	-0.0553***
				(0.013)	(0.007)
$20-30K accum. capital * FFF				-0.0966***	-0.0931***
				(0.014)	(0.008)
$30-40K accum. capital * FFF				-0.1116***	-0.1450***
				(0.017)	(0.009)
$40-50K accum. capital * FFF				-0.1335***	-0.2307***
				(0.021)	(0.010)
Videos uploaded (lagged)	0.0019	0.1633***	-0.0029	0.1670***	-0.0021
	(0.005)	(0.059)	(0.005)	(0.058)	(0.005)
Songs uploaded (lagged)	-0.0009	-0.0020	-0.0008	-0.0013	-0.0013
	(0.001)	(0.003)	(0.001)	(0.003)	(0.001)
Investor proximate to Live Show	0.0124*	0.0365***	-0.0052	0.0378***	-0.0027
	(0.007)	(0.014)	(0.020)	(0.014)	(0.020)
Observations	478,251	44,815	433,436	44,815	433,436
R-squared	0.012	0.040	0.013	0.046	0.018
Number of group	12,310	796	11,514	796	11,514

Dependent variable is any investment in columns (1)-(5) and sample is the $50K sample without entrepreneurs from music hubs (New York, Los Angeles, Nashville, London, or Paris). Controls for videos and songs uploaded by the entrepreneurs, as well as live shows proximate to the investor are included. All regressions include a full set of fixed effects for each entrepreneur-investor pair (differenced out) and each week. Robust standard errors clustered at the pair level in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table A-8: Overall charts rather than cumulative investment

VARIABLES	(1) Invest =1	(2) LOCAL	(3) DISTANT	(4) LOCAL	(5) DISTANT
Entrepreneur in overall charts (lagged)	0.0161***	-0.0161***	0.0180***	-0.0009	0.0210***
	(0.001)	(0.004)	(0.001)	(0.007)	(0.001)
Entrepreneur in overall charts * FFF				-0.0260***	-0.0321***
				(0.007)	(0.003)
Observations	703,417	57,711	645,706	57,711	645,706
R-squared	0.007	0.038	0.007	0.038	0.007
Number of group	18,827	1,164	17,663	1,164	17,663

Dependent variable is any investment in columns (1)-(5) and sample is the $50K sample. Instead of cumulative investment, the regressions introduce a dummy for the presence of the entrepreneurs on the overall charts (Top 25). All regressions include a full set of fixed effects for each entrepreneur-investor pair (differenced out) and each week. Robust standard errors clustered at the pair level in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table A-9: Controlling for songs and video uploads

VARIABLES	(1) Invest =1	(2) LOCAL	(3) DISTANT	(4) LOCAL	(5) DISTANT
$10-20K accum. capital	0.0211***	0.0051	0.0212***	0.0323***	0.0229***
	(0.001)	(0.008)	(0.001)	(0.009)	(0.001)
$20-30K accum. capital	0.0277***	-0.0257**	0.0299***	0.0277**	0.0343***
	(0.002)	(0.010)	(0.002)	(0.012)	(0.002)
$30-40K accum. capital	0.0442***	-0.0307***	0.0473***	0.0338**	0.0536***
	(0.002)	(0.011)	(0.002)	(0.014)	(0.002)
$40-50K accum. capital	0.0870***	-0.0214	0.0922***	0.0536***	0.1115***
	(0.003)	(0.013)	(0.003)	(0.017)	(0.003)
$10-20K accum. capital * FFF				-0.0738***	-0.0854***
				(0.012)	(0.006)
$20-30K accum. capital * FFF				-0.1121***	-0.1305***
				(0.013)	(0.007)
$30-40K accum. capital * FFF				-0.1338***	-0.1564***
				(0.015)	(0.007)
$40-50K accum. capital * FFF				-0.1531***	-0.2444***
				(0.018)	(0.008)
Videos uploaded (lagged)	0.0084*	0.2433***	0.0011	0.2441***	0.0034
	(0.004)	(0.045)	(0.004)	(0.044)	(0.004)
Songs uploaded (lagged)	-0.0012	-0.0041	-0.0010	-0.0038	-0.0018*
	(0.001)	(0.003)	(0.001)	(0.003)	(0.001)
Observations	703,417	57,711	645,706	57,711	645,706
R-squared	0.011	0.042	0.012	0.050	0.018
Number of group	18,827	1,164	17,663	1,164	17,663

Dependent variable is any investment in columns (1)-(5), sample is the $50K sample and controls for videos and songs uploaded by the entrepreneurs are included. All regressions include a full set of fixed effects for each entrepreneur-investor pair (differenced out) and each week. Robust standard errors clustered at the pair level in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table A-10: Controlling for live shows

VARIABLES	(1) Invest =1	(2) LOCAL	(3) DISTANT	(4) LOCAL	(5) DISTANT
$10-20K accum. capital	0.0213***	0.0021	0.0215***	0.0322***	0.0233***
	(0.001)	(0.008)	(0.001)	(0.009)	(0.001)
$20-30K accum. capital	0.0261***	-0.0288***	0.0283***	0.0276**	0.0329***
	(0.002)	(0.010)	(0.002)	(0.012)	(0.002)
$30-40K accum. capital	0.0420***	-0.0336***	0.0451***	0.0335**	0.0517***
	(0.002)	(0.011)	(0.002)	(0.014)	(0.002)
$40-50K accum. capital	0.0840***	-0.0251*	0.0891***	0.0524***	0.1086***
	(0.003)	(0.013)	(0.003)	(0.017)	(0.003)
$10-20K accum. capital * FFF				-0.0803***	-0.0909***
				(0.012)	(0.006)
$20-30K accum. capital * FFF				-0.1184***	-0.1377***
				(0.013)	(0.007)
$30-40K accum. capital * FFF				-0.1396***	-0.1644***
				(0.015)	(0.007)
$40-50K accum. capital * FFF				-0.1590***	-0.2521***
				(0.018)	(0.008)
Investor proximate to Live Show	0.0079	0.0090	-0.0053	0.0085	-0.0043
	(0.006)	(0.009)	(0.015)	(0.009)	(0.015)
Observations	709,471	57,855	651,616	57,855	651,616
R-squared	0.012	0.042	0.012	0.050	0.019
Number of group	18,827	1,164	17,663	1,164	17,663

Dependent variable is any investment in columns (1)-(5), sample is the $50K sample and a control for live shows proximate to the investor is included. All regressions include a full set of fixed effects for each entrepreneur-investor pair (differenced out) and each week. Robust standard errors clustered at the pair level in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table A-11: Controlling for live shows, songs, and video uploads

VARIABLES	(1) Invest =1	(2) LOCAL	(3) DISTANT	(4) LOCAL	(5) DISTANT
$10-20K accum. capital	0.0211***	0.0051	0.0212***	0.0324***	0.0229***
	(0.001)	(0.008)	(0.001)	(0.009)	(0.001)
$20-30K accum. capital	0.0277***	-0.0258**	0.0299***	0.0277**	0.0343***
	(0.002)	(0.010)	(0.002)	(0.012)	(0.002)
$30-40K accum. capital	0.0442***	-0.0309***	0.0473***	0.0335**	0.0536***
	(0.002)	(0.011)	(0.002)	(0.014)	(0.002)
$40-50K accum. capital	0.0871***	-0.0211	0.0922***	0.0539***	0.1115***
	(0.003)	(0.013)	(0.003)	(0.017)	(0.003)
$10-20K accum. capital * FFF				-0.0738***	-0.0854***
				(0.012)	(0.006)
$20-30K accum. capital * FFF				-0.1121***	-0.1305***
				(0.013)	(0.007)
$30-40K accum. capital * FFF				-0.1337***	-0.1565***
				(0.015)	(0.007)
$40-50K accum. capital * FFF				-0.1531***	-0.2444***
				(0.018)	(0.008)
Videos uploaded (lagged)	0.0084*	0.2435***	0.0011	0.2444***	0.0034
	(0.004)	(0.045)	(0.004)	(0.044)	(0.004)
Songs uploaded (lagged)	-0.0011	-0.0038	-0.0010	-0.0035	-0.0018*
	(0.001)	(0.003)	(0.001)	(0.003)	(0.001)
Investor proximate to Live Show	0.0098*	0.0094	0.0031	0.0090	0.0043
	(0.006)	(0.009)	(0.015)	(0.009)	(0.015)
Observations	703,417	57,711	645,706	57,711	645,706
R-squared	0.011	0.042	0.012	0.050	0.018
Number of group	18,827	1,164	17,663	1,164	17,663

Dependent variable is any investment in columns (1)-(5), sample is the $50K sample and controls for videos and songs uploaded by the entrepreneurs as well as live shows proximate to investor are included. All regressions include a full set of fixed effects for each entrepreneur-investor pair (differenced out) and each week. Robust standard errors clustered at the pair level in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table A-12: Logit

VARIABLES	(1) Invest =1	(2) LOCAL	(3) DISTANT	(4) LOCAL	(5) DISTANT
$10-20K accum. capital	0.5156***	0.2256**	0.5138***	0.7930***	0.6178***
	(0.024)	(0.093)	(0.026)	(0.124)	(0.027)
$20-30K accum. capital	0.5873***	-0.4573***	0.6319***	1.1096***	0.8655***
	(0.031)	(0.129)	(0.032)	(0.159)	(0.033)
$30-40K accum. capital	1.0305***	-0.2008	1.0652***	1.6613***	1.3640***
	(0.036)	(0.152)	(0.037)	(0.190)	(0.039)
$40-50K accum. capital	1.5759***	-0.1075	1.6240***	1.7933***	2.0462***
	(0.037)	(0.168)	(0.038)	(0.207)	(0.040)
$10-20K accum. capital * FFF				-1.4185***	-1.9948***
				(0.151)	(0.078)
$20-30K accum. capital * FFF				-3.1988***	-3.7121***
				(0.179)	(0.095)
$30-40K accum. capital * FFF				-4.1826***	-4.9322***
				(0.236)	(0.114)
$40-50K accum. capital * FFF				-4.3448***	-6.3427***
				(0.268)	(0.129)
Observations	708,745	57,814	650,931	57,814	650,931
Number of group	18,234	1,127	17,107	1,127	17,107
Log Likelihood	-85886	-5617	-79640	-5356	-77703

Dependent variable is any investment in columns (1)-(5) and sample is the $50K sample. All Logit regressions include a full set of fixed effects for each entrepreneur-investor pair (differenced out) and each week. Robust standard errors clustered at the pair level in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table A-13: Positive Parts, fixed effects Poisson

VARIABLES	(1) Invest =1	(2) LOCAL	(3) DISTANT	(4) LOCAL	(5) DISTANT
$10-20K accum. capital	0.4916***	0.0903	0.5285***	0.7445**	0.6370***
	(0.070)	(0.205)	(0.072)	(0.369)	(0.076)
$20-30K accum. capital	0.6074***	0.1706	0.6724***	1.0537***	0.8356***
	(0.094)	(0.264)	(0.099)	(0.339)	(0.100)
$30-40K accum. capital	0.9863***	0.2075	1.1094***	1.2831***	1.3499***
	(0.110)	(0.272)	(0.112)	(0.384)	(0.114)
$40-50K accum. capital	1.7357***	0.8234***	1.8772***	1.9119***	2.2126***
	(0.105)	(0.294)	(0.112)	(0.450)	(0.112)
$10-20K accum. capital * FFF				-1.4577***	-1.3178***
				(0.461)	(0.160)
$20-30K accum. capital * FFF				-2.1031***	-2.1758***
				(0.521)	(0.236)
$30-40K accum. capital * FFF				-3.0062***	-3.1157***
				(0.593)	(0.298)
$40-50K accum. capital * FFF				-3.0738***	-4.4042***
				(0.681)	(0.345)
Observations	708,966	57,820	651,146	57,820	651,146
Number of group	18,322	1,129	17,193	1,129	17,193
Log Likelihood	-344290	-36571	-301464	-35013	-294578

Dependent variable is positive parts in columns (1)-(5) and sample is the $50K sample. All Poisson regressions include a full set of fixed effects for each entrepreneur-investor pair (differenced out) and each week. Robust standard errors clustered at the pair level in parentheses. Estimated using xtpqml in stata (Simcoe 2007). *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table A-14: Total Parts, OLS

VARIABLES	(1) Invest =1	(2) LOCAL	(3) DISTANT	(4) LOCAL	(5) DISTANT
$10-20K accum. capital	0.1216***	0.2116	0.1173***	0.5943***	0.1268***
	(0.018)	(0.171)	(0.017)	(0.212)	(0.017)
$20-30K accum. capital	0.1654***	0.1290	0.1640***	0.7685**	0.1787***
	(0.028)	(0.249)	(0.027)	(0.308)	(0.027)
$30-40K accum. capital	0.2575***	0.1218	0.2621***	0.7840***	0.2878***
	(0.035)	(0.273)	(0.034)	(0.300)	(0.035)
$40-50K accum. capital	0.6279***	0.2909	0.6516***	1.4283	0.7572***
	(0.056)	(0.577)	(0.053)	(0.980)	(0.057)
$10-20K accum. capital * FFF				-0.9861***	-0.4108***
				(0.276)	(0.053)
$20-30K accum. capital * FFF				-1.3505***	-0.5489***
				(0.294)	(0.062)
$30-40K accum. capital * FFF				-1.4375***	-0.6860***
				(0.293)	(0.071)
$40-50K accum. capital * FFF				-2.1922***	-1.2360***
				(0.782)	(0.081)
Observations	709,471	57,855	651,616	57,855	651,616
R-squared	0.002	0.004	0.003	0.005	0.004
Number of group	18,827	1,164	17,663	1,164	17,663

Dependent variable is total parts in columns (1)-(5) and sample is the $50K sample. Total parts includes a small number of disinvestments where investors withdraw money from an entrepreneur. Therefore, the analysis is done with OLS rather than fixed effects poisson. All regressions include a full set of fixed effects for each entrepreneur-investor pair (differenced out) and each week. Robust standard errors clustered at the pair level in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table A-15: Local defined as within 25 km

VARIABLES	(1) LOCAL 25 km	(2) DISTANT	(3) LOCAL 25 km	(4) DISTANT
$10-20K accum. capital	-0.0102	0.0218***	0.0194*	0.0232***
	(0.009)	(0.001)	(0.011)	(0.001)
$20-30K accum. capital	-0.0455***	0.0283***	0.0057	0.0327***
	(0.012)	(0.002)	(0.014)	(0.002)
$30-40K accum. capital	-0.0430***	0.0444***	0.0178	0.0503***
	(0.013)	(0.002)	(0.017)	(0.002)
$40-50K accum. capital	-0.0283*	0.0873***	0.0448**	0.1068***
	(0.016)	(0.003)	(0.021)	(0.003)
$10-20K accum. capital * FFF			-0.0759***	-0.0943***
			(0.014)	(0.006)
$20-30K accum. capital * FFF			-0.1098***	-0.1356***
			(0.015)	(0.007)
$30-40K accum. capital * FFF			-0.1288***	-0.1638***
			(0.017)	(0.007)
$40-50K accum. capital * FFF			-0.1514***	-0.2463***
			(0.022)	(0.007)
Observations	36,186	673,285	36,186	673,285
R-squared	0.035	0.012	0.043	0.019
Number of group	748	18,079	748	18,079

Dependent variable is any investment in columns (1)-(4) and sample is the $50K sample. All investors within 25 km from the entrepreneurs are here coded as local investors. All regressions include a full set of fixed effects for each entrepreneur-investor pair (differenced out) and each week. Robust standard errors clustered at the pair level in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table A-16: Local defined as within 100 km

VARIABLES	(1) LOCAL 100 km	(2) DISTANT	(3) LOCAL 100 km	(4) DISTANT
$10-20K accum. capital	0.0082	0.0216***	0.0340***	0.0236***
	(0.006)	(0.001)	(0.007)	(0.001)
$20-30K accum. capital	-0.0225***	0.0290***	0.0307***	0.0336***
	(0.008)	(0.002)	(0.009)	(0.002)
$30-40K accum. capital	-0.0254***	0.0458***	0.0379***	0.0527***
	(0.009)	(0.002)	(0.011)	(0.002)
$40-50K accum. capital	-0.0140	0.0902***	0.0637***	0.1099***
	(0.011)	(0.003)	(0.014)	(0.003)
$10-20K accum. capital * FFF			-0.0898***	-0.0876***
			(0.010)	(0.007)
$20-30K accum. capital * FFF			-0.1301***	-0.1346***
			(0.011)	(0.007)
$30-40K accum. capital * FFF			-0.1508***	-0.1657***
			(0.013)	(0.008)
$40-50K accum. capital * FFF			-0.1813***	-0.2533***
			(0.015)	(0.008)
Observations	78,897	630,574	78,897	630,574
R-squared	0.039	0.012	0.049	0.018
Number of group	1,572	17,255	1,572	17,255

Dependent variable is any investment in columns (1)-(4) and sample is the $50K sample. All investors within 100 km from the entrepreneurs are here coded as local investors. All regressions include a full set of fixed effects for each entrepreneur-investor pair (differenced out) and each week. Robust standard errors clustered at the pair level in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table A-17: If geographic information is missing, coded as distant

VARIABLES	(1) Invest =1 with NAs	(2) LOCAL	(3) DISTANT or NAs	(4) LOCAL	(5) DISTANT or NAs
$10-20K accum. capital	0.0180***	0.0020	0.0181***	0.0322***	0.0230***
	(0.001)	(0.008)	(0.001)	(0.009)	(0.001)
$20-30K accum. capital	0.0216***	-0.0287***	0.0235***	0.0276**	0.0313***
	(0.002)	(0.010)	(0.002)	(0.012)	(0.002)
$30-40K accum. capital	0.0357***	-0.0334***	0.0382***	0.0337**	0.0487***
	(0.002)	(0.011)	(0.002)	(0.014)	(0.002)
$40-50K accum. capital	0.0731***	-0.0254*	0.0772***	0.0521***	0.1049***
	(0.003)	(0.013)	(0.003)	(0.017)	(0.003)
$10-20K accum. capital * FFF				-0.0803***	-0.1118***
				(0.012)	(0.005)
$20-30K accum. capital * FFF				-0.1184***	-0.1474***
				(0.013)	(0.005)
$30-40K accum. capital * FFF				-0.1397***	-0.1703***
				(0.015)	(0.006)
$40-50K accum. capital * FFF				-0.1590***	-0.2436***
				(0.018)	(0.006)
Observations	783,372	57,855	725,517	57,855	725,517
R-squared	0.012	0.042	0.011	0.050	0.021
Number of group	20,826	1,164	19,662	1,164	19,662

Dependent variable is any investment in columns (1)-(5) and sample is the $50K sample. If geographic information on the investor is missing, the investor is coded as a distant investor. All regressions include a full set of fixed effects for each entrepreneur-investor pair (differenced out) and each week. Robust standard errors clustered at the pair level in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table A-18: Distant and local in same regression

VARIABLES	(1) Invest=1	(2) Invest=1
$10-20K accum. capital	-0.0228***	0.0045
	(0.006)	(0.007)
$20-30K accum. capital	-0.0376***	0.0119
	(0.006)	(0.009)
$30-40K accum. capital	-0.0369***	0.0230*
	(0.007)	(0.012)
$40-50K accum. capital	-0.0276***	0.0449***
	(0.008)	(0.015)
$10-20K accum. capital * FFF		-0.0791***
		(0.012)
$20-30K accum. capital * FFF		-0.1111***
		(0.013)
$30-40K accum. capital * FFF		-0.1296***
		(0.015)
$40-50K accum. capital * FFF		-0.1476***
		(0.018)
$10-20K accum. capital * Distant	0.0447***	0.0192***
	(0.006)	(0.007)
$20-30K accum. capital * Distant	0.0653***	0.0206**
	(0.006)	(0.009)
$30-40K accum. capital * Distant	0.0804***	0.0269**
	(0.007)	(0.012)
$40-50K accum. capital * Distant	0.1149***	0.0619***
	(0.008)	(0.015)
$10-20K accum. capital * Distant * FFF		-0.0119
		(0.013)
$20-30K accum. capital * Distant * FFF		-0.0265*
		(0.014)
$30-40K accum. capital * Distant * FFF		-0.0350**
		(0.017)
$40-50K accum. capital * Distant * FFF		-0.1043***
		(0.019)
Observations	709,471	709,471
R-squared	0.013	0.019
Number of group	18,827	18,827

Dependent variable is any investment in columns (1)-(2) and sample is the $50K sample. Distant and local are presented here in same regression (i.e. interaction term). All regressions include a full set of fixed effects for each entrepreneur-investor pair (differenced out) and each week. Robust standard errors clustered at the pair level in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table A-19: Alternative specifications for FFF

VARIABLES	(1) First Invt LOCAL	(2) First Invt DISTANT	(3) First Invt Largest Invt No Other LOCAL	(4) First Invt Largest Invt No Other DISTANT	(5) First Invt Most 3 others LOCAL	(6) First Invt Most 3 others DISTANT	(7) First Invt Largest invt LOCAL	(8) First Invt Largest invt DISTANT	(9) Largest invt No more than 3 others LOCAL	(10) Largest invt No more than 3 others DISTANT
$10-20K accum. capital	0.0400***	0.0242***	0.0271***	0.0229***	0.0345***	0.0236***	0.0345***	0.0236***	0.0311***	0.0236***
	(0.010)	(0.001)	(0.009)	(0.001)	(0.009)	(0.001)	(0.009)	(0.001)	(0.009)	(0.001)
$20-30K accum. capital	0.0367***	0.0360***	0.0171	0.0324***	0.0320***	0.0344***	0.0277**	0.0336***	0.0259**	0.0334***
	(0.013)	(0.002)	(0.012)	(0.002)	(0.012)	(0.002)	(0.012)	(0.002)	(0.012)	(0.002)
$30-40K accum. capital	0.0430***	0.0566***	0.0164	0.0508***	0.0397***	0.0539***	0.0333**	0.0525***	0.0368**	0.0524***
	(0.015)	(0.002)	(0.014)	(0.002)	(0.015)	(0.002)	(0.014)	(0.002)	(0.014)	(0.002)
$40-50K accum. capital	0.0707***	0.1208***	0.0331*	0.1065***	0.0558***	0.1147***	0.0620***	0.1099***	0.0557***	0.1090***
	(0.019)	(0.003)	(0.017)	(0.003)	(0.018)	(0.003)	(0.018)	(0.003)	(0.018)	(0.003)
$10-20K accum. capital * FFF	-0.0797***	-0.0805***	-0.0784***	-0.0962***	-0.0803***	-0.0870***	-0.0751***	-0.0895***	-0.0782***	-0.0755***
	(0.012)	(0.005)	(0.012)	(0.007)	(0.012)	(0.006)	(0.012)	(0.006)	(0.012)	(0.006)
$20-30K accum. capital * FFF	-0.1148***	-0.1292***	-0.1115***	-0.1455***	-0.1203***	-0.1367***	-0.1075***	-0.1365***	-0.1153***	-0.1175***
	(0.013)	(0.006)	(0.013)	(0.008)	(0.013)	(0.006)	(0.013)	(0.007)	(0.013)	(0.006)
$30-40K accum. capital * FFF	-0.1329***	-0.1560***	-0.1240***	-0.1714***	-0.1431***	-0.1627***	-0.1257***	-0.1628***	-0.1436***	-0.1429***
	(0.016)	(0.006)	(0.015)	(0.008)	(0.016)	(0.006)	(0.015)	(0.007)	(0.016)	(0.006)
$40-50K accum. capital * FFF	-0.1599***	-0.2498***	-0.1414***	-0.2597***	-0.1576***	-0.2567***	-0.1566***	-0.2485***	-0.1634***	-0.2225***
	(0.018)	(0.006)	(0.018)	(0.009)	(0.019)	(0.007)	(0.018)	(0.008)	(0.018)	(0.007)
Observations	57,855	651,616	57,855	651,616	57,855	651,616	57,855	651,616	57,855	651,616
R-squared	0.049	0.021	0.048	0.018	0.050	0.020	0.048	0.019	0.050	0.018
Number of group	1,164	17,663	1,164	17,663	1,164	17,663	1,164	17,663	1,164	17,663

Dependent variable is any investment in columns (1)-(10) and sample is the $50K sample. In columns (1)-(2), an investor is defined as FFF if she invested in that entrepreneur before investing in any other. In columns (3)-(4), an investor is defined as FFF if she invested in that entrepreneur before investing in any other, her investment in the focal entrepreneur is her largest investment and she invests in no other entrepreneurs. In columns (5)-(6), an investor is defined as FFF if she invested in that entrepreneur before investing in any other and she did not invest in more than three other entrepreneurs. In columns (7)-(8), an investor is defined as FFF if she invested in that entrepreneur before investing in any other and her investment in the focal entrepreneur is her largest investment. In columns (9)-(10), an investor is defined as FFF if her investment in the focal entrepreneur is her largest investment and she did not invests in more than three other entrepreneurs. All regressions include a full set of fixed effects for each entrepreneur-investor pair (differenced out) and each week. Robust standard errors clustered at the pair level in parentheses. *** p<0.01, ** p<0.05, * p<0.1