
This is an electronic reprint of the original article.
This reprint may differ from the original in pagination and typographic detail.

Maula, Markku V. J.; Lukkarinen, Anna

Attention across borders: Investor attention as a driver of cross-border equity crowdfunding investments

Published in:
Strategic Entrepreneurship Journal

DOI:
[10.1002/sej.1424](https://doi.org/10.1002/sej.1424)

Published: 01/12/2022

Document Version
Publisher's PDF, also known as Version of record

Published under the following license:
CC BY

Please cite the original version:
Maula, M. V. J., & Lukkarinen, A. (2022). Attention across borders: Investor attention as a driver of cross-border equity crowdfunding investments. *Strategic Entrepreneurship Journal*, 16(4), 699-734.
<https://doi.org/10.1002/sej.1424>

This material is protected by copyright and other intellectual property rights, and duplication or sale of all or part of any of the repository collections is not permitted, except that material may be duplicated by you for your research use or educational purposes in electronic or print form. You must obtain permission for any other use. Electronic or print copies may not be offered, whether for sale or otherwise to anyone who is not an authorised user.

RESEARCH ARTICLE



WILEY

Attention across borders: Investor attention as a driver of cross-border equity crowdfunding investments

Markku V. J. Maula | Anna Lukkarinen

Department of Industrial Engineering and Management, School of Science, Aalto University, Espoo, Finland

Correspondence

Markku V. J. Maula, Department of Industrial Engineering and Management, School of Science, Aalto University, PO Box 15500, 00076 Aalto, Finland.
Email: markku.maula@aalto.fi

Funding information

Jenny ja Antti Wihurin Rahasto, Grant/Award Number: 00180234

Abstract

Research Summary: Digital equity crowdfunding platforms have brought an unprecedented number of international investment opportunities to investors' reach. Although most equity crowdfunding investments are still made domestically, cross-border investments often have a decisive role in a campaign's success. We therefore ask what drives cross-border investments and theorize how international investors' attention directs their investment choices. We leverage unique data and several complementary approaches to examine this question. Our contribution to the equity crowdfunding literature is twofold: (a) we theorize and empirically show how international investor attention affects cross-border equity crowdfunding investments, and (b) we conduct the first empirical study of the drivers of cross-border investments in equity crowdfunding. These findings also have implications for new venture internationalization research and the broader literature on investor attention.

Managerial Summary: Although most equity crowdfunding investments are still made domestically, cross-border investing is growing, and cross-border investments are often critical for campaign success. We show that to attract cross-border investments, it is important for platforms and fundraising companies to capture foreign investors'

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2022 The Authors. *Strategic Entrepreneurship Journal* published by John Wiley & Sons Ltd on behalf of Strategic Management Society.

attention. Platforms and companies can support this through measures such as international digital marketing. In addition, we found that cross-border investors are more likely to invest in companies with investors' nationalities represented in the team. Companies can thus benefit from nurturing international diversity and marketing in their team members' countries of nationality. Also, companies can seek investments even from distant countries because once investors invest abroad, distance—be it geographic, institutional, cultural, or linguistic—no longer plays a major role in their investment decisions.

KEYWORDS

cross-border investments, digital platforms, equity crowdfunding, investor attention

1 | INTRODUCTION

Equity crowdfunding has grown to become a major form of entrepreneurial finance, with a significant amount of recent research analyzing different aspects of the phenomenon (Block, Colombo, Cumming, & Vismara, 2018; Drover et al., 2017; Mochkabadi & Volkmann, 2020). The equity crowdfunding industry has recently begun facing increasing pressure to internationalize, with platforms needing to grow and improve profitability (Schwienbacher, 2019) and policymakers such as the European Union paving the way for increased volume of cross-border equity crowdfunding to support economic development (European Commission, 2017, 2018; Vismara, 2016).

Despite these efforts, most equity crowdfunding investments are still made domestically (Ziegler et al., 2020). Therefore, it is important to understand what, beyond regulation (Zetzsche & Preiner, 2018), drives cross-border investments in equity crowdfunding. Although traditional forms of international entrepreneurial finance, such as cross-border venture capital, have been studied extensively (e.g., Balachandran & Hernandez, 2021; Cumming, Knill, & Syvrud, 2016; Dai & Nahata, 2016; Devigne, Manigart, Vanacker, & Mulier, 2018; Guler & Guillén, 2010; Liu & Maula, 2016; Madhavan & Iriyama, 2009; Meuleman, Jääskeläinen, Maula, & Wright, 2017), equity crowdfunding is thus far understudied in the international entrepreneurship literature. However, the digitalization of international entrepreneurial finance, which allows platforms to connect geographically dispersed entrepreneurs and investors (Nambisan, Zahra, & Luo, 2019), challenges the generalizability of the existing findings on cross-border investments in entrepreneurial ventures to the digital setting. Consequently, the lack of prior research on the cross-border dimension of equity crowdfunding represents a significant gap in the existing equity crowdfunding and international entrepreneurship research.

To bridge this gap, we ask the following question: what drives cross-border investments in equity crowdfunding? We theorize that international investor attention (i.e., attracting limited attention of international investors) will play a critical role in cross-border equity investments. As the digital platforms and virtual interactions characteristics of equity crowdfunding open up vast spaces of investment opportunities to internationally oriented crowdfunding investors, even at large investor–venture distances (Cummings, Rawhouser, Vismara, & Hamilton, 2020), investors can only pay attention to a small proportion of the opportunities available around the world. As the attention of individuals is limited (Simon, 1957), investors can only choose from the restricted set of options on which they focus their attention (Kahneman, 1973; Merton, 1987). Recognizing the limited attention of investors, a stream of finance

research on public stock markets has emerged on investor attention, which examines the implications of investors' limited attention being attracted to particular events, firms, or industries (Barber & Odean, 2008; Cziraki, Mondria, & Wu, 2021; Da, Engelberg, & Gao, 2011; Que & Zhang, 2021), with the investor attention being proxied, for instance, using company news (Barber & Odean, 2008) or search indices of company stocks either as company level aggregate (Da et al., 2011) or split based on geographical location (Cziraki et al., 2021), in the absence of more direct measures of investor attention. Building on these studies, in our study on cross-border equity crowdfunding, we define international investor attention as the attention the focal campaigns receive among potential foreign investors, proxied by prospective investors' visits to the campaign pages in the home countries of potential foreign investors.¹ The wealth of online information available on an abundance of international investment opportunities emphasizes the role of limited attention (Haas, Criscuolo, & George, 2015; Hansen & Haas, 2001; Mondria, Wu, & Zhang, 2010; van Knippenberg, Dahlander, Haas, & George, 2015) in the investment decision-making of cross-border equity crowdfunding investors. We thereby focus on examining how international investor attention affects cross-border equity crowdfunding investments.

We build on the attention literature from finance and management to theorize how attention drives investments in cross-border equity crowdfunding. First, building on research on the relevance of the attention received by investment opportunities for investment decisions in public stock markets (e.g., Barber & Odean, 2008; Chi & Shanthikumar, 2017; Cziraki et al., 2021; Da et al., 2011; Mondria et al., 2010) and venture capital (VC; Jin, Wu, & Hitt, 2017; Petkova, Rindova, & Gupta, 2013; Que & Zhang, 2021), we hypothesize that investor attention received by an equity crowdfunding campaign abroad (controlling for investor attention in the home country) increases the campaign's likelihood of receiving cross-border investments. Second, beyond overall campaign-level cross-border investments, we further consider which cross-border investors invest in which campaigns. As a stricter test of the attention mechanism, we hypothesize that international investor attention in a specific country drives investments from cross-border investors in that country.²

In testing our hypotheses, we leverage a unique and comprehensive set of campaign-, investor-, and investment-level data made available to us by the first equity crowdfunding platform in Europe to have begun cross-border activity with a Markets in Financial Instruments Directive (MiFID) license (European Commission, 2017). These data include 17,191 investments made in 187 campaigns conducted via the platform during the sample period from 2012 to 2017. These include 1,469 cross-border equity crowdfunding investments (8.5% of all investments) in 135 campaigns made by investors from 64 countries worldwide in ventures located in the six European countries served by the platform. The data show that cross-border funding had a decisive role in bringing campaigns to success, as 40% of the successful campaigns would not have reached their funding targets without cross-border investments.

We address the research question using three complementary empirical approaches to examine the predicted mechanism of international investor attention driving cross-border investments. First, we conduct a campaign-level analysis of the effect of international investor attention on the likelihood of campaigns receiving cross-border investments when controlling for domestic investor attention and other factors. Second, as a stricter test of the international investor attention mechanism, we drill down to the campaigns that did attract cross-border investments through a dyad-level case-control analysis (Kossinets & Watts, 2009; Meuleman et al., 2017; Sorenson & Stuart, 2008; Zhelyazkov & Tatarynowicz, 2021) that allows us to analyze which cross-border investors invest in which campaigns. In the tests of these hypotheses, the international attention mechanism is additionally identified using causal mediation analysis (e.g., Imai, Keele, & Tingley, 2010) that pinpoints the role of international marketing as an antecedent of international investor attention and international investor attention as a causal mechanism through which international marketing leads to cross-border equity crowdfunding investments. Third, to gain qualitative insights that can guide our argumentation and interpretation, we also conducted 51 interviews with equity crowdfunding investors to determine their views on the role of investor attention in cross-border equity crowdfunding.

We find strong and consistent empirical support for our hypotheses and conclude that international investor attention drives investments in cross-border equity crowdfunding. These findings highlight the important role that international attention plays for international firms and investors (e.g., Bouquet & Birkinshaw, 2008; Bouquet, Morrison, & Birkinshaw, 2009; Chen, 2017; Cziraki et al., 2021; Mondria et al., 2010; Monteiro, 2015). Specifically, our findings demonstrate the importance of international attention in the digital platform context of cross-border equity crowdfunding. The effect size of international investor attention is significant, and our causal mediation analyses demonstrate that economically significant increases in cross-border investments can be achieved even with relatively modest international marketing efforts that drive international investor attention.

The paper makes two main contributions to the equity crowdfunding literature. First, we theorize and empirically demonstrate the effects of international investor attention on investment choices in cross-border equity crowdfunding.³ We extend the application of attention-based research to the equity crowdfunding context and develop a new approach to measure asymmetric investor attention in a cross-border setting. Through several complementary research designs, leveraging the asymmetric distribution of campaign attention across investor countries, we are able to demonstrate the effects of international investor attention on cross-border equity crowdfunding investments. These findings also have implications for the broader literature on investor attention, given that prior research has focused on domestic settings (Cziraki et al., 2021). Second, this article makes an empirical contribution to the equity crowdfunding literature, being the first to empirically examine the drivers of cross-border investments. Given the increased digitalization and role of platforms in international entrepreneurship, these findings on equity crowdfunding also have broader implications for research on the internationalization of ventures.

From a practical perspective, our findings demonstrate the value of ventures' international marketing and international investor attention in attracting cross-border investments on equity crowdfunding platforms. These insights concerning the importance of capturing international investors' attention are relevant for fundraising ventures, equity crowdfunding platforms, and policymakers in their efforts to facilitate cross-border investments through the digitalized processes of equity crowdfunding platforms.

2 | LITERATURE REVIEW, THEORETICAL BACKGROUND, AND HYPOTHESES

2.1 | Cross-border equity crowdfunding

Equity crowdfunding is a rapidly growing form of entrepreneurial finance that complements business angels, VC investors, and other traditional forms of entrepreneurial finance (Block, Colombo, et al., 2018; Drover et al., 2017; Hornuf & Schwienbacher, 2016; Vulkan, Åstebro, & Sierra, 2016). Following the growth of the industry, scholarly research on equity crowdfunding has rapidly developed, seeking to understand the antecedents (e.g., Ahlers, Cumming, Günther, & Schweizer, 2015; Bapna, 2019; Lukkariinen et al., 2016; Piva & Rossi-Lamastra, 2018; Vismara, 2018; Walthoff-Born, Schwienbacher, & Vanacker, 2018), outcomes (e.g., Blaseg, Cumming, & Koetter, 2021; Hornuf, Schmitt, & Stenzhorn, 2018; Signori & Vismara, 2016, 2018; Walthoff-Born, Vanacker, & Collewaert, 2018), and contextual determinants (e.g., Estrin, Gozman, & Khavul, 2018; Hornuf, Schmitt, & Stenzhorn, 2020; Hornuf & Schwienbacher, 2017; Kshetri, 2018) of equity crowdfunding investments.

Similar to early research on business angels and VC investments (for reviews, see, e.g., Harrison, 2017; Maula, 2010; White & Dumay, 2017; Wright, Pruthi, & Lockett, 2005), most equity crowdfunding research to date has focused on one country only without considering issues related to the internationalization of equity crowdfunding (for a recent systematic review of equity crowdfunding literature, see, e.g., Mochkabadi & Volkmann, 2020). Meanwhile, practitioners and policymakers have shown increasing interest in enabling equity crowdfunding investments across national borders. While cross-border equity crowdfunding remains a new phenomenon (Delivorias, 2017; European Commission, 2016; Schwienbacher, 2019), activity is growing (Ziegler et al., 2019,

2020), with recent policy initiatives in Europe aiming to facilitate the internationalization of the equity crowdfunding market (European Commission, 2017, 2018). Many platforms have actively sought to internationalize by, for example, acquiring a MiFID license to operate throughout Europe, establishing a presence in multiple countries organically or through mergers, and/or localizing their websites in terms of language and currency for different target countries (European Commission, 2017; Ziegler et al., 2020). Although a few recent studies and reports have started to consider some antecedents of cross-border equity crowdfunding, such as regulation (Delivorias, 2017; European Commission, 2017; Zetzsche & Preiner, 2018; Ziegler et al., 2020), the lack of theoretical understanding and empirical research on the drivers of cross-border equity crowdfunding investments remains an important gap in the existing research. This article posits that asymmetric investor attention offers a valuable theoretical perspective to understand investment activity in cross-border equity crowdfunding.

2.2 | The importance of investor attention for cross-border investments

Given the limited cognitive capacity of humans, we do not incorporate all available information into our decision-making. Instead, we make decisions based on information within our limited attention (Kahneman, 1973). As observed by Simon (1957, p. 167), in our world, “...the scarce factor is attention.” Consequently, attention is a major antecedent of choices and other outcomes in many theories that predict the behavior of individuals and firms. In finance research, a growing stream of literature demonstrates that when more choices are available than what investors can fully analyze, attention is a key factor in investment choices (Barber & Odean, 2008; Cziraki et al., 2021; Da et al., 2011; Que & Zhang, 2021; Ungeheuer, 2017). The importance of attention to investment decisions has received strong empirical support in the context of public stock markets (e.g., Barber & Odean, 2008; Chemmanur & Yan, 2019; Cziraki et al., 2021; Da et al., 2011; Madsen & Niessner, 2019), where investors are more likely to buy stocks that have attracted their attention (Barber & Odean, 2008; Grullon, Kanatas, & Weston, 2004). For instance, differences in the visibility of particular company events in the local media of different geographical areas have been shown to have causal effects on differences in stock market investor reactions (Engelberg & Parsons, 2011). Similarly, media attention before an initial public offering (IPO) has been shown to affect investor behavior and valuation (Liu, Sherman, & Zhang, 2014).

The role of attention on behavior has also been identified in other domains of research. In marketing research, attention has been shown to explain consumer choices (Treisman & Gregg, 1979; Zhang et al., 2009), and in organizational research, the attention of key decision-makers has been found to drive firms' choices (Ocasio, 1997, 2011). As information becomes increasingly available through electronic channels, the scarcity of attention rather than the scarcity of information begins to become a bottleneck in decision-making (Haas et al., 2015; Hansen & Haas, 2001; van Knippenberg et al., 2015). As noted by Simon (1971, p. 40), “...a wealth of information creates a poverty of attention.”

As the scope of potential opportunities broadens from domestic to international, the number of opportunities increases, and the constraining role of individuals' limited attention in choosing between opportunities also increases. However, with a few exceptions—such as Bouquet and Birkinshaw (2008), who examine headquarters managers' attention to foreign subsidiaries, and Mondria et al. (2010) and Chen (2017), who examine the effects of international investor attention on public stock markets—prior research has not considered the role of attention in cross-border settings. However, the implications of asymmetric attention (i.e., the differences in the attention a focal company receives across geographical areas) have recently started to receive scholarly attention (Cziraki et al., 2021), paving the way for research on the effects of asymmetric international attention.

Thus, building on the attention research in finance and management, we consider the attention of prospective cross-border investors and theorize that international investor attention is an important mechanism that facilitates cross-border investments in equity crowdfunding. In the following section, we formulate two testable hypotheses on the effects of international investor attention on cross-border equity crowdfunding investments.

2.3 | International investor attention and cross-border equity crowdfunding investments

Investor attention affects the identification of investment opportunities, as substantiated by previous firm-level studies on public stock markets (Cziraki et al., 2021; Engelberg & Parsons, 2011; Liu et al., 2014). We posit that investor attention is particularly important in the context of private entrepreneurial firms, as it is more difficult for prospective investors to identify investment opportunities in private firms than in publicly listed companies. For instance, Petkova et al. (2013) found that the media attention of startups in industry media increased their level of VC funding. Additionally, Jin et al. (2017) found evidence of the benefits of startups' social media visibility for attracting equity investments. Most recently, Que and Zhang (2021) found that investor attention on a particular industry increased venture capital valuations in that sector. We posit that in the crowdfunding setting, prospective contributors' attention to campaign evaluation is limited (Gafni, Marom, & Sade, 2019). As noted by Cummings et al. (2020) on the role of investor attention in equity crowdfunding, "*Communication between issuers and different investors is likely to scale faster than the attention of investors, creating a surplus of information for crowdfunding participants to sift through.*" Investors' limited attention thus presents an important constraint in equity crowdfunding.

In equity crowdfunding in general (Cummings et al., 2020) and in a cross-border setting in particular, it can be difficult for a campaign to stand out, making the attention it receives especially important for attracting investments. Early studies on the role of attention in crowdfunding show that investor attention, as measured by campaigns' document distinctiveness (Chan, Park, Huang, & Parhankangas, 2020), information content (Thapa, 2020), and social media visibility (Liu, Cheng, & Wang, 2020; Ren, Raghupathi, & Raghupathi, 2020), is an important determinant of campaign success.

We argue that international investor attention can be expected to play a particularly important role in cross-border equity crowdfunding, as equity crowdfunding platforms bring together investors and ventures with few geographical limitations⁴; thus, they offer ventures abundant opportunities to gather international investments, provided they can attract the attention of potential international investors to their specific campaign. Although the role of international investor attention in cross-border equity crowdfunding has not yet been examined, the attention mechanism was highlighted by many of our interviewees, who stated that a key factor hindering them from making (more) cross-border equity crowdfunding investments were that attractive opportunities had not entered their field of attention: "There are so many options" and "I don't have enough time and interest to familiarize myself with all of them." Furthermore, the first studies on international stock market investing, although conducted at an aggregate level of analysis, provide support for the effect of investors' attention on international investments (Chen, 2017; Mondria et al., 2010).

We consequently argue that international investor attention is an important mechanism driving cross-border equity crowdfunding investments. This mechanism should lead international asymmetry in investor attention (i.e., investor attention abroad when controlling for domestic attention) to be reflected in the cross-border investments received by equity crowdfunding campaigns. Therefore, we hypothesize that international investor attention, as reflected in visits to the campaign page from abroad, positively affects cross-border investments in an equity crowdfunding campaign. Hence,

Hypothesis 1 (H1). *International investor attention has a positive effect on the likelihood of an equity crowdfunding campaign receiving investments from abroad.*

Although investor attention research has generally considered only the overall attention received by the focal units of analysis (e.g., overall investor attention to a particular firm), it also matters who pays attention (Chi & Shanthikumar, 2017; Cziraki et al., 2021). Investor attention is usually not distributed homogeneously across the globe; there can be important geographic asymmetries in the distribution of attention. In the context of cross-border equity crowdfunding, we posit that asymmetric distribution of international investor attention across countries

affects the likelihood of investment by different potential international crowdfunding investors, thereby affecting the resulting ownership structure and any related value-added support investors from different countries could provide (Dushnitsky & Zunino, 2019; Mäkelä & Maula, 2005).

Therefore, switching our focus from a campaign-level analysis of international versus domestic investor attention (H1) to a dyadic investor-campaign level analysis, we next consider why a cross-border investment is made in a campaign by one cross-border investor and not by others. That is, whereas H1 predicts the effects of international (vs. domestic) attention on the likelihood of a campaign receiving cross-border investment(s), we next consider, conditional on the campaign receiving cross-border investment(s), the effects of asymmetric international attention (i.e., attention distribution across foreign countries) on the matching between equity crowdfunding campaigns and cross-border equity crowdfunding investors (i.e., which cross-border investors invest in which campaigns).⁵

Based on the arguments concerning the limited attention of individual investors (Barber & Odean, 2008; Kahneman, 1973) and the uneven geographic distribution of investor attention (Cziraki et al., 2021) that underlie the posited international investor attention mechanism, we hypothesize at the dyadic level that international investor attention from a particular country, as reflected in the visits on the focal equity crowdfunding campaign page from that focal country, positively affects investment tie formation⁶ between potential investors from that country and the focal campaign. For instance, when a Finnish equity crowdfunding campaign has received greater investor attention in the UK than in Germany, this argued international investor attention mechanism would increase the likelihood of potential UK cross-border investors making an investment in comparison to potential German cross-border equity crowdfunding investors.

Thus, focusing on the distribution of international investor attention across different investor countries and its effect on investment likelihood, we hypothesize that the attention attracted by a campaign in a foreign country increases the likelihood of investments in the focal campaign by potential investors residing in that foreign country. Hence,

Hypothesis 2 (H2). *International investor attention to an equity crowdfunding campaign in the country of a cross-border equity crowdfunding investor has a positive effect on the likelihood of an investment in the campaign by that investor.*

This dyadic hypothesis allows us to separately examine the attention the campaign received in different countries and how it affects investments from investors in those particular countries, and it helps us more cleanly disentangle the overall international attention and attractiveness of a campaign from the attention received in investors' respective countries. The dyadic hypothesis on the effect of international investor attention in different countries on the likelihood of campaign investments by cross-border investors residing in those countries enables the full control of campaign-level quality factors and serves as a more granular and stricter test of the international investor attention mechanism, thereby complementing the campaign-level hypothesis (H1) that focused on the effect of foreign versus domestic attention on the likelihood of the campaign receiving cross-border investments.

3 | METHODS

3.1 | Data

In testing our hypotheses, we leverage unique cross-border equity crowdfunding data made available to us by a large European equity crowdfunding platform: Invesdor. This empirical setting is particularly favorable for analyzing cross-border equity crowdfunding investments for several reasons. First, Invesdor was the first recipient of the MiFID license enabling Europe-wide cross-border equity crowdfunding (European Commission, 2017). Second, the focal platform has been marketing its campaigns in several countries, thus facilitating awareness among prospective

international investors. Third, the focal platform does not filter the campaigns shown on its landing page based on the viewer's country (as is done by some platforms), enabling viewers from different countries to see the same campaigns (on the focal platform's landing page, all the recent campaigns are visible independent of the viewer country). Fourth, the focal platform is located in a country (Finland) that allows crowdfunding campaigns to be translated into different languages, which is not the case in all countries (European Commission, 2017; Hervé, Manthé, Sannajust, & Schvienbacher, 2019). The platform has utilized this opportunity by offering campaigns in multiple languages. Finally, the platform has collected systematic and detailed data and has allowed us to access data that have not previously been used in equity crowdfunding research, such as Google Analytics statistics for each campaign in each country and social media marketing data.

Our dataset consists of campaign-, investor-, and investment-level data. Leveraging all the data available from the platform by the end of our sample period in September 2017, our analyses are based on a sample of 1,469 cross-border and 15,722 domestic equity crowdfunding investments made in ventures located in all six countries covered by the platform during the sample period (Denmark, Estonia, Finland, Norway, Sweden, and the United Kingdom) by investors from 64 countries worldwide during the 2012–2017 period. The 1,469 cross-border investments represent 8.5% of the 17,191 equity crowdfunding investments in our dataset. These 1,469 cross-border investments are made in 135 equity crowdfunding campaigns that received at least one cross-border investment (of 187 equity crowdfunding campaigns in the dataset). In campaigns receiving cross-border investments, the number of cross-border investments varies between 1 and 197 (mean 10.9 and median 6 per campaign). Table 1 lists the sources and destinations of the investments in our sample based on investment counts. In our sample, the most common destination countries (i.e., venture countries) are Finland, the United Kingdom, and Norway. The most common cross-border investor source countries are Germany, Finland, Sweden, and the United Kingdom. The platform-sourced data are combined with other sources of data, including Google Analytics, to measure the attention the campaigns have received in each investor country.

3.2 | Variables

The main variables for our campaign-level analysis (H1) are described in what follows.

Dependent variable: Cross-border investments. To explain the drivers of cross-border investments at the campaign level, we use a dependent variable that takes a value of 1 for campaigns that received investments from abroad and 0 for campaigns that only received investments from the venture country. In robustness tests, we also use alternative measures, including the count of cross-border investments made in the campaign, the volume of cross-border investments (a natural logarithm of Euros +1), the share of cross-border investors, and the share of cross-border investment volume.

Independent variable: Campaign views abroad is a Google Analytics-based measure of the number of unique page views received by the equity crowdfunding campaign main page outside the fundraising company's home country. Campaign views abroad are a novel measure of the number of potential investors who have become aware of and paid attention to the focal campaign abroad. Although Google Analytics provides useful measures of attention (Ledford, Teixeira, & Tyler, 2010), its use in attention research has thus far been limited to very few papers (e.g., Courtney, Dutta, & Li, 2017). A logarithmic transformation is applied.

Control variables. Given our focus on the effects of international investor attention on cross-border investments, to disentangle the effects of international investor attention from campaign quality signals, we control for *campaign domestic views*. Furthermore, based on prior literature on equity crowdfunding investment drivers (e.g., Block, Hornuf, & Moritz, 2018; Guenther, Johan, & Schweizer, 2018; Lukkarinen et al., 2016; Mochkabadi & Volkmann, 2020; Piva & Rossi-Lamastra, 2018; Vismara, 2016, 2018), we add several other campaign and venture-level control variables. These include variables for *campaign updates* and *posts* (Block, Hornuf, & Moritz, 2018; Kleinert & Volkmann, 2019). We use the *venture team size* to control for human capital signals (Ralcheva &

TABLE 1 Source and destination countries of equity crowdfunding investments in the sample

Investor country	Venture country						Cross-border	Domestic	Total
	Finland	United Kingdom	Norway	Sweden	Denmark	Estonia			
Germany	197	5	11	0	1	0	214	0	214
Finland	15,336	51	95	18	6	7	177	15,336	15,513
Sweden	120	1	10	40	0	0	131	40	171
United Kingdom	86	122	3	0	0	1	90	122	212
Estonia	74	0	2	1	0	0	77	0	77
Norway	43	29	215	3	1	0	76	215	291
Netherlands	61	3	5	1	1	0	71	0	71
Denmark	54	2	7	0	9	0	63	9	72
Switzerland	45	6	0	0	0	0	51	0	51
United States	41	4	1	0	0	0	46	0	46
Italy	29	7	1	0	0	0	37	0	37
Gibraltar	0	33	0	0	0	0	33	0	33
Belgium	30	0	0	0	0	0	30	0	30
Austria	24	4	1	0	0	0	29	0	29
Singapore	23	4	0	0	0	0	27	0	27
France	22	4	0	0	0	0	26	0	26
Australia	22	3	0	0	0	0	25	0	25
Spain	20	2	2	0	0	0	24	0	24
United Arab Emirates	16	0	2	1	0	0	19	0	19
Slovakia	14	4	0	0	0	0	18	0	18
Israel	15	0	0	0	0	0	15	0	15
Portugal	14	0	0	0	0	0	14	0	14
Saudi Arabia	11	2	1	0	0	0	14	0	14
Hong Kong	11	1	0	0	0	0	12	0	12
Poland	11	0	0	0	0	0	11	0	11
Canada	9	1	0	0	0	0	10	0	10
Russia	10	0	0	0	0	0	10	0	10
Cyprus	8	0	1	0	0	0	9	0	9
Czech Republic	8	0	1	0	0	0	9	0	9
Luxembourg	9	0	0	0	0	0	9	0	9
India	7	1	0	0	0	0	8	0	8
Ireland	3	4	1	0	0	0	8	0	8
Malta	7	0	0	0	0	0	7	0	7
Brazil	5	0	0	0	0	0	5	0	5
Hungary	5	0	0	0	0	0	5	0	5
Japan	5	0	0	0	0	0	5	0	5
Turkey	5	0	0	0	0	0	5	0	5
Other countries	38	8	2	1	0	0	49	0	49
Cross-border	1,102	179	146	25	9	8			1,469
Domestic	15,336	122	215	40	9	0			15,722
Total	16,438	301	361	65	18	8	1,469	15,722	17,191

Note: Investor countries with a minimum of five equity crowdfunding investments in the sample are listed in the table.

Roosenboom, 2020; Vismara, 2016, 2018). Regarding other signaling factors, we control for the *existence of professional investors* (VC funds or business angels; Kleinert, Volkmann, & Grünhagen, 2020; Wang, Mahmood, Sismeiro, & Vulkan, 2019), the *share of equity invested by external investors* (Ralcheva & Roosenboom, 2020), the *campaign's minimum funding target*, and the *minimum investment size* accepted in the campaign (Lukkarinen et al., 2016). We also control for *foreign team members* and *campaign translations*. Finally, we include the *venture stage* (the growth stage vs. the seed or early stage) and dummies for the *venture industry* and *campaign year*. The full list of variables and their definitions are provided in Table 2.

The variables for our investment-level dyadic analysis (i.e., which cross-border investor invests in which campaign, H2) are described as follows.

Dependent variable: Cross-border investment tie. To explain the formation of investment ties in the dyadic analysis, we create a dependent variable that takes a value of 1 when a cross-border investment tie between a particular investor and a particular equity crowdfunding campaign is realized. As in other related tie formation studies using dyadic research designs (e.g., Guenther et al., 2018; Gulati & Gargiulo, 1999; Lin & Viswanathan, 2016; Meuleman et al., 2017; Podolny, 1994; Sorenson & Stuart, 2001, 2008), the dependent variable takes a value of 0 for unrealized ties (i.e., potential cross-border equity crowdfunding investments that did not materialize).

Independent variable: Campaign views in investor country is a Google Analytics-based measure of the number of unique page views received by the campaign main page in the home country of the potential investor. In the absence of investor-level measures of attention, previous research on investor attention has used proxy measures based on web searches or website traffic (e.g., Da et al., 2011; Jin et al., 2017), which could not distinguish investor attention from different countries. Our approach is unique and valuable because it allows the measurement of investor attention separately for each equity crowdfunding campaign in each country.⁷ A logarithmic transformation is applied.

The control variable for the co-nationality of venture team member(s) with investors was measured as a dummy variable taking a value of 1 if one or more of the venture team members are nationals of the potential investor and 0 otherwise.⁸ Investors' nationalities were sourced from the user database of the focal platform. Team members' nationalities were sourced primarily from the campaign websites.⁹

Control variables for distance. We include four variables to control for the possible effects of distance on cross-border investment tie formation. *Geographic distance* was measured as a natural logarithm of the geographic distance in kilometers between the town of the venture headquarters and the investor's home town (e.g., Guenther et al., 2018; Malhotra & Gaur, 2014; Ragazzino, 2009). *Institutional distance* was measured using differences in the regulatory institutions of the venture's home country and that of the potential investor (Berkowitz et al., 2003; Cumming et al., 2010; Tykvová & Schertler, 2014), with alternative operationalizations tested in the robustness analyses (Appendix). *Cultural distance* was measured using a symmetric approach described in Yeganeh (2014) based on Hofstede's measures (Hofstede, 2001; Kogut & Singh, 1988).¹⁰ An alternative asymmetric measure operationalized by Yeganeh (2014) was tested in the robustness analyses (Appendix). *Linguistic distance* was measured using the linguistic distance index developed by Melitz and Toubal (2014). We tested alternatives in the robustness analyses (Appendix).

Other control variables. We include a number of other control variables to control for the characteristics of the potential investors, including investor type (investing as a private person or through a legal entity, which we use as an indicator of investors' level of professionalism) (Lin, Sias, & Wei, 2017), gender (Hervé et al., 2019; Mohammadi & Shafi, 2018), age (Hervé et al., 2019), and the number of investments the investor has made via the focal equity crowdfunding platform (Hervé et al., 2019) before the investment at hand. Importantly, the conditional (fixed effects) logit model we use in our dyadic analyses (described below) includes fixed effects for each investment, thereby effectively controlling for all investment-, campaign-, venture country-, and year-level unobserved heterogeneity, including the experience, capabilities, and social capital of the venture team (Ahlers et al., 2015; Bapna, 2019; Block, Hornuf, & Moritz, 2018; Lukkarinen et al., 2016; Ralcheva & Roosenboom, 2020; Vismara, 2016, 2018), financial information and the riskiness of the venture (Ahlers et al., 2015; Lukkarinen et al., 2016), campaign characteristics (Åstebro, Fernández Sierra, Lovo, & Vulkan, 2017; Block, Hornuf, & Moritz, 2018; Hornuf & Schwiendbacher, 2018;

TABLE 2 Variable descriptions

Variable	Description
Campaign level analysis	
<i>Dependent variable</i>	
Cross-border investments	Main measure: Dummy valued 1 if cross-border investments made in the campaign; 0 otherwise Alternative measures in Table 5, Model 3: A count of cross-border investments made in the campaign; Model 4: the volume of cross-border investments (a natural logarithm of Euros +1); Model 5: the share of cross-border investors; and Model 6: the share of cross-border investment volume
<i>Independent variable</i>	
H1: Campaign views abroad	Natural logarithm of the total number of unique page views +1 received by the campaign main page outside the venture country
<i>Control variables</i>	
Campaign domestic views	Natural logarithm of the total number of unique page views +1 received by the campaign main page in the venture country
Campaign updates	Natural logarithm of the number of times updates (e.g., mention of venture in the news) were posted under the "Updates" title of the campaign page during the campaign +1
Campaign posts	Natural logarithm of the number of items (questions, answers, or comments) posted on the discussion forum of the campaign +1
Campaign team size	Natural logarithm of the number of venture team members shown on the campaign front page +1
Campaign existing professional investors	Dummy valued 1 if the campaign page indicates that a VC fund or a business angel has invested or is investing in the venture; 0 otherwise
Campaign external investments	External investment's share of the total amount invested in the campaign; reflects the level of participation of the entrepreneur's close network or professional investors
Campaign funding target	Natural logarithm of the minimum amount of investments in Euros required for the campaign to become successful +1
Campaign minimum investment	Natural logarithm of the minimum investment in Euros accepted in the campaign +1
Campaign growth stage	Dummy valued 1 if the venture's revenues for the fiscal year preceding the campaign exceeded 500 thousand Euros; 0 otherwise
Campaign industry dummies	Venture's industry using an eight-industry categorization developed based on the focal platform's own categorization
Campaign year dummies	Year when the campaign closed; 2012–2013 as the base category; dummies for 2014, 2015, 2016, and 2017
Campaign team foreign nationals	Dummy valued 0 if all venture team members are nationals of the venture country; 1 otherwise
Campaign foreign language translations	Dummy valued 0 if the campaign page is only available in the official language(s) of the venture country; 1 otherwise
Campaign foreign marketing	Sum of focal platform campaign marketing spending in countries other than the venture country via Facebook ads; excludes retargeting marketing to people who have already visited the campaign page (a natural logarithm +1)
Dyadic analysis	
<i>Dependent variable</i>	
Cross-border investment tie	Dummy valued 1 if a cross-border investment tie between a particular investor and a particular equity crowdfunding campaign is realized; 0 otherwise

(Continues)

TABLE 2 (Continued)

Variable	Description
<i>Independent variable</i>	
H2: Campaign views in investor country	Natural logarithm of the number of unique page views +1 received by the campaign main page in the investor's country of residence
<i>Control variables</i>	
Investor-team co-nationality	Dummy valued 1 if at least one venture team member has the same nationality as the investor; 0 otherwise
Geographic distance	Natural logarithm of distance in kilometers between venture headquarters town and investor town of residence +1
Institutional distance	Main measure: differences in the regulatory institutions of venture country and investor country using an absolute value of the differences in the legality indices of the target and source countries (Berkowitz, Pistor, & Richard, 2003; Cumming, Schmidt, & Walz, 2010; Tykvová & Schertler, 2014) Alternative asymmetric measure in Table A1, Model 2: investor country legality index—venture country legality index (Berkowitz et al., 2003; Cumming et al., 2010) Alternative measure in Table A1, Model 3: a broad measure of institutional distances developed and reported in Witt et al. (2018)
Cultural distance	Main measure: symmetric cultural distance (Hofstede, 2001; Yeganeh, 2014) Alternative measure in Table A1, Model 2: asymmetric cultural distance (Hofstede, 2001, Yeganeh, 2014)
Linguistic distance	Main measure: linguistic distance index developed and reported in Melitz and Toubal (2014) Alternative measure in Table A1, Model 4: linguistic distance index (Melitz & Toubal, 2014) with lexicon-based language similarity replaced by grammatical proximity (Eronen, Lukkarinen, & Seppälä, 2017)
Investor type	Dummy valued 1 if investor invests as a company or other organization; 0 if as a private person
Investor gender	Dummy valued 1 if investor's likely gender based on first name is female; 0 if male
Investor age	Investor's age in years at the time of the investment opportunity
Investor prior investments	Natural logarithm of the number of investments the investor has made via the focal platform before the focal cross-border investment +1
Inverse Mills ratio	Calculated based on Table 5, Model 1, which is a campaign-level probit model explaining the presence of cross-border investors in a campaign
Campaign marketing in investor country	Sum of focal platform marketing spending in the investor country via Facebook ads; excludes retargeting marketing to people who have already visited the campaign page (a natural logarithm +1).

Kleinert et al., 2020; Kleinert & Volkmann, 2019; Mahmood, Luffarelli, & Mukesh, 2019; Vismara, 2018; Wang et al., 2019), market attractiveness (Lukkarinen et al., 2016; Shafi, 2021), and the venture country's legal institutions (Hornuf & Schwienbacher, 2017). Table 2 provides a comprehensive list of variables and their descriptions.

3.3 | Model specification

In our campaign-level analyses explaining the likelihood of cross-border investments, we employ a probit model and a linear probability model (LPM). In the robustness analyses explaining the count of cross-border investments, we employ Poisson regression with robust standard errors. For the supplementary analyses on the volume and share of

cross-border investments, we use OLS and fractional response regression. Finally, to pinpoint the international attention mechanism, we employ mediation analysis using generalized structural equation modeling (Aguinis, Edwards, & Bradley, 2017; Stata, 2021c) and causal mediation analysis (e.g., Hicks & Tingley, 2011; Imai et al., 2010).

In our main dyadic analyses of the formation of cross-border equity crowdfunding investment ties, we employ conditional logit regression (equivalent to fixed-effects logistic regression, see “clogit” in Stata (2021a)), which has been found to suit the analysis of tie formation in social networks using research designs that contrast realized ties with counterfactual potential ties (i.e., a case-control design; e.g., Collet & Hedström, 2013; Sorenson & Stuart, 2008). Conditional logit regression has been used similarly in studies of tie formation in other forms of entrepreneurial finance (e.g., Meuleman et al., 2017; Sorenson & Stuart, 2001, 2008; Tykiová & Schertler, 2014; Zhelyazkov, 2018; Zhelyazkov & Tatarynowicz, 2021) as well as in studies of location choice in international business (e.g., Buckley, Chen, Clegg, & Voss, 2018; Zaheer, Lamin, & Subramani, 2009). Given the very large number of potential investment ties among the 1,055 cross-border investors and the 1,469 cross-border investments in our sample, for each realized tie (cross-border equity crowdfunding investment), we randomly sample 10 controls in the main analyses (Sorenson & Stuart, 2008; Zhelyazkov & Tatarynowicz, 2021), that is, potential cross-border equity crowdfunding investments that were not made. We sampled these counterfactuals from among potential ties between campaigns that raised cross-border equity crowdfunding and investors who made cross-border equity crowdfunding investments during the year of the campaign. Alternative approaches were tested in the robustness analyses (Appendix). In addition to avoiding problems stemming from sampling the same equity crowdfunding campaigns many times (for each potential campaign-investor dyad in which they are involved), this investment-level case-control research design (with standard errors clustered at the campaign level) has several other advantages (Zhelyazkov & Tatarynowicz, 2021), including fixed effects that control for investment-, campaign-, venture country-, and year-level unobserved heterogeneity.

4 | RESULTS

4.1 | Descriptive statistics and correlations

Table 3 reports descriptive statistics and correlations for the sample used in the campaign-level regression analyses of 187 equity crowdfunding campaigns, of which 135 received cross-border investments. Cross-border investments were relevant, as our additional descriptive analysis of the 187 campaigns shows that only 57 campaigns (30.5%) became successful without cross-border funding, with 130 of the campaigns (69.5%) needing additional funding to reach the minimum fundraising target. Of the 95 successful campaigns, 38 (40.0%) would not have reached their funding target without receiving cross-border funding.

Table 4 reports the descriptive statistics for the dyadic analyses of cross-border tie formation. This sample initially includes all 1,469 cross-border equity crowdfunding investments available in our dataset of 135 campaigns that received cross-border investments, as well as ten controls (unrealized potential investment ties) for each case (realized investment ties), resulting in 16,159 $(=(1 + 10) * 1,469)$ observations of potential cross-border equity crowdfunding ties. Given some missing data, the final sample used in the main dyadic analyses consists of 978 cross-border investments and 8,035 observations with complete information. The correlations are generally low, which suggests that multicollinearity should not cause problems in our analyses. Low multicollinearity is also indicated by low variance inflation factor (VIF) values.

4.2 | Campaign-level analysis of cross-border investments

Table 5 presents the results of the campaign-level analysis. Model 1 reports the results of the probit analysis on the likelihood of an equity crowdfunding campaign receiving cross-border investments. Hypothesis 1 received strong

TABLE 3 Campaign-level analysis: Descriptive statistics and correlations

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
1 Cross-border investment(s)	0.72	0.45												
2 H1: Campaign views abroad	1,311.89	1769.09	0.35											
3 Campaign domestic views	4,380.91	7,601.44	0.26	0.42										
4 Campaign updates	1.61	2.14	0.12	0.02	0.04									
5 Campaign posts	12.81	16.66	0.33	0.45	0.28	0.03								
6 Campaign team size	5.45	2.78	0.20	0.16	0.15	0.03	0.19							
7 Campaign existing professional investors	0.07	0.26	0.13	0.02	0.04	0.09	0.18	0.11						
8 Campaign external investments	0.11	0.27	0.10	0.09	0.01	0.05	-0.01	0.13	0.03					
9 Campaign funding target (k€)	194.42	214.99	0.11	0.27	0.17	-0.03	0.32	0.24	0.01	0.26				
10 Campaign minimum investment	365.11	393.78	-0.21	-0.06	-0.12	-0.03	-0.02	-0.00	0.02	0.02	0.01			
11 Campaign growth stage	0.16	0.37	0.17	0.20	0.48	-0.06	0.43	0.13	0.10	0.01	0.37	-0.04		
12 Campaign team foreign nationals	0.43	0.50	0.08	0.08	-0.11	-0.03	0.06	0.16	0.08	0.03	0.15	-0.02	-0.12	
13 Campaign foreign language translations	0.81	0.39	0.07	0.06	-0.11	-0.07	0.18	0.11	0.14	-0.16	-0.07	-0.03	0.02	0.14

Note: $N = 187$. Raw variables reported (not logged). Correlations with absolute values equal to or greater than 0.15 are significant at the $p < .05$ level.

TABLE 4 Dyadic analysis: Descriptive statistics and correlations

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10
1 Cross-border investment tie	0.12	0.33										
2 H2: Campaign views in investor country	331.82	694.42	0.14									
3 H3: Investor-team co-nationality	0.22	0.42	0.04	0.03								
4 Geographic distance	2,628.67	3,142.85	−0.04	−0.14	0.07							
5 Institutional distance	1.40	1.91	−0.04	−0.13	−0.00	0.31						
6 Cultural distance	2.25	0.79	−0.07	−0.13	0.08	0.31	0.36					
7 Linguistic distance	0.86	0.17	0.05	0.06	0.09	0.00	0.18	0.11				
8 Investor type	0.06	0.24	−0.01	0.03	−0.06	−0.06	−0.07	−0.08	−0.04			
9 Investor gender	0.17	0.38	−0.04	−0.07	0.08	−0.01	0.06	0.06	0.01	−0.08		
10 Investor age	41.62	10.91	−0.01	−0.02	−0.03	0.04	−0.04	−0.05	−0.07	0.07	−0.05	
11 Investor prior investments	0.87	3.70	0.06	0.11	−0.08	−0.06	−0.07	−0.08	0.07	−0.00	0.01	0.06

Note: N = 8,035, maximum of 10 controls for each case. Raw variables reported (not logged). Correlations with absolute values equal to or greater than 0.03 are significant at the $p < .05$ level.

TABLE 5 Campaign-level analysis of cross-border equity crowdfunding investments

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
	Probit (cross-border investment(s))	LPM (cross-border investment(s))	Poisson (cross-border investment count)	OLS (cross-border investment volume)	Fractional regression (cross-border investment share)	Fractional regression (cross-border investment share)	GSEM (cross-border investment(s))	GSEM (cross-border investment count)	Causal mediation analysis cross-border investment(s)	Causal mediation analysis (cross- border investor count)
H1: Campaign views abroad	0.47 [0.01] (0.18)	0.12 [0.00] (0.03)	0.73 [0.00] (0.03)	1.13 [0.00] (0.26)	0.36 [0.00] (0.08)	0.39 [0.00] (0.09)	0.46 [0.01] (0.18)	0.72 [0.00] (0.13)	0.46 [0.01] (0.18)	2.20 [0.05] (1.13)
Campaign domestic views	0.14 [0.48] (0.20)	-0.01 [0.77] (0.03)	0.12 [0.23] (0.10)	-0.16 [0.58] (0.28)	-0.35 [0.00] (0.08)	-0.47 [0.00] (0.09)	0.15 [0.45] (0.20)	0.12 [0.23] (0.10)	0.15 [0.45] (0.20)	1.58 [0.13] (1.04)
Campaign updates	0.22 [0.31] (0.21)	0.05 [0.29] (0.05)	-0.02 [0.82] (0.09)	0.25 [0.50] (0.37)	0.09 [0.28] (0.09)	0.07 [0.49] (0.10)	0.18 [0.40] (0.21)	-0.02 [0.82] (0.10)	0.18 [0.40] (0.21)	-2.19 [0.30] (2.10)
Campaign posts	0.34 [0.02] (0.14)	0.09 [0.01] (0.03)	0.36 [0.00] (0.08)	1.04 [0.00] (0.27)	0.12 [0.13] (0.08)	0.18 [0.07] (0.10)	0.31 [0.03] (0.14)	0.36 [0.00] (0.08)	0.31 [0.03] (0.14)	4.42 [0.12] (2.82)
Campaign team size	0.66 [0.07] (0.36)	0.13 [0.10] (0.08)	0.26 [0.11] (0.16)	1.28 [0.05] (0.66)	0.01 [0.91] (0.14)	0.01 [0.97] (0.19)	0.68 [0.06] (0.36)	0.27 [0.11] (0.17)	0.68 [0.06] (0.36)	-0.17 [0.96] (3.76)
Campaign existing professional investors	0.63 [0.19] (0.48)	0.03 [0.71] (0.07)	0.38 [0.05] (0.19)	0.48 [0.49] (0.69)	-0.06 [0.73] (0.17)	-0.18 [0.41] (0.21)	0.69 [0.16] (0.49)	0.38 [0.05] (0.19)	0.69 [0.16] (0.49)	2.43 [0.48] (3.44)
Campaign external investments	-0.62 [0.15] (0.43)	-0.11 [0.25] (0.10)	-0.67 [0.01] (0.26)	-2.09 [0.01] (0.82)	0.01 [0.95] (0.17)	0.25 [0.34] (0.26)	-0.76 [0.09] (0.45)	-0.67 [0.01] (0.26)	-0.76 [0.09] (0.45)	-7.28 [0.00] (2.56)
Campaign funding target	-0.25 [0.12] (0.16)	-0.06 [0.14] (0.04)	0.08 [0.38] (0.09)	-0.21 [0.51] (0.31)	-0.02 [0.83] (0.07)	-0.06 [0.51] (0.09)	-0.24 [0.12] (0.16)	0.08 [0.39] (0.09)	-0.24 [0.12] (0.16)	1.31 [0.17] (0.95)
Campaign minimum investment	-0.30 [0.07] (0.17)	-0.06 [0.18] (0.05)	-0.23 [0.05] (0.12)	-0.29 [0.41] (0.35)	0.03 [0.66] (0.07)	0.03 [0.75] (0.10)	-0.31 [0.06] (0.17)	-0.23 [0.05] (0.12)	-0.31 [0.06] (0.17)	0.78 [0.49] (1.12)
Campaign growth stage	0.33 [0.38] (0.38)	0.04 [0.61] (0.07)	-0.21 [0.26] (0.19)	0.54 [0.40] (0.64)	-0.09 [0.62] (0.18)	0.06 [0.80] (0.23)	0.30 [0.46] (0.40)	-0.21 [0.27] (0.19)	0.30 [0.46] (0.40)	-4.39 [0.39] (5.10)
Campaign team foreign nationals	0.03 [0.90] (0.27)	-0.01 [0.89] (0.06)	-0.14 [0.37] (0.16)	0.13 [0.80] (0.51)	0.26 [0.01] (0.10)	0.25 [0.10] (0.15)	0.00 [1.00] (0.27)	-0.15 [0.35] (0.16)	0.00 [1.00] (0.27)	-1.55 [0.51] (2.33)
Campaign foreign language translations	0.25 [0.57] (0.43)	0.00 [0.99] (0.10)	0.14 [0.55] (0.24)	0.13 [0.88] (0.82)	0.24 [0.35] (0.26)	-0.03 [0.91] (0.27)	0.23 [0.59] (0.43)	0.14 [0.55] (0.24)	0.23 [0.59] (0.43)	1.71 [0.53] (2.73)
Campaign foreign marketing							0.54 [0.06] (0.29)	0.00 [0.94] (0.05)	0.54 [0.06] (0.29)	0.25 [0.74] (0.75)
Campaign country dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Campaign industry dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Campaign year dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	2.13 [0.34] (2.21)	0.82 [0.09] (0.49)	-3.55 [0.01] (1.29)	2.62 [0.51] (4.00)	-0.86 [0.36] (0.95)	-0.25 [0.85] (1.36)	2.22 [0.33] (2.29)	-3.55 [0.01] (1.27)	2.22 [0.33] (2.29)	-30.26 [0.05] (15.65)

TABLE 5 (Continued)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
	Probit (cross-border investment(s))	LPM (cross-border investment(s))	Poisson (cross-border investment count)	OLS (cross-border investment volume)	Fractional regression (cross-border investment share)	Fractional regression (cross-border investment share)	GSEM (cross-border investment(s))	GSEM (cross-border investment count)	Causal mediation analysis cross-border investment(s)	Causal mediation analysis (cross- border investor count)
Campaign foreign marketing → Campaign views abroad							0.45 [0.00] (0.06)	0.45 [0.00] (0.06)	0.45 [0.00] (0.06)	0.45 [0.00] (0.06)
Constant							6.09 [0.00] (0.14)	6.09 [0.00] (0.14)	6.09 [0.00] (0.14)	6.09 [0.00] (0.14)
Log-likelihood	−61.69	−64.60	−578.0	−463.0	−61.70	−60.98	−417.4	−934.5	−60.90	−759.4
N	187	187	187	187	187	187	187	187	187	187

Note: Model 1 is a probit model explaining the presence of cross-border investors in a campaign. Model 2 is an LPM model explaining the presence of cross-border investors in a campaign. Model 3 is a Poisson regression model explaining the number of cross-border investments in the campaign. Model 4 is an OLS regression model explaining the volume of cross-border investments. Models 5 and 6 are fractional regression models explaining the share of cross-border investment count and volume, respectively. Models 7 and 8 replicate Models 1 and 3 using a generalized structural equation model (GSEM) with campaign views abroad explained by campaign foreign marketing. Models 9 and 10 replicate Models 1 and 3 using causal mediation analysis (Hicks & Tingley, 2011) with campaign views abroad explained by campaign foreign marketing. Robust standard errors in parentheses; two-tailed *p* values in brackets.

support ($p = .01$). Model 2 replicates the analysis using a linear probability model (LPM) approach with consistent results. As a supplementary analysis, we explain the count of cross-border investments using Poisson regression with robust standard errors (Model 3). Furthermore, as additional robustness analyses, we explain the volume (i.e., total monetary value) of cross-border investments using OLS regression (Model 4) and the share of cross-border investors (Model 5), and the share of cross-border investment volume (Model 6) using fractional response regression.

Finally, to pinpoint the hypothesized international attention mechanism, in Models 7 and 8, we estimate mediation models (Aguinis et al., 2017), in which campaign foreign marketing spending explains the campaign views abroad, which subsequently influence cross-border investments.¹¹ The mediation effect in which campaign views abroad mediates the effect of foreign marketing on cross-border investments provides additional evidence of the proposed international attention mechanism and helps distinguish it from other potential mechanisms.¹² Given the binary and count-dependent variables in these models, they were estimated using generalized structural equation models (GSEM), with cross-border marketing being a strong predictor of campaign cross-border views. Although we predicted full mediation (i.e., foreign marketing was predicted to have an effect only through campaign views), the direct effect of foreign marketing on cross-border investments was included in the reported models to enable the analysis of the magnitude of the mediation effect. In all the models we tested, the direct effect was nonsignificant, and the share of indirect effects (i.e., mediation effect) estimated with and without bootstrapping was 28% or more for Model 7 and 99% or more for Model 8, suggesting that the effects of foreign marketing are largely mediated through international attention. In addition, in Models 9 and 10, causal mediation analyses (Imai et al., 2010) implemented using the mediation module for Stata by Hicks and Tingley (2011) produced similar results of significant mediation of the effect of foreign marketing on cross-border investments by campaign views abroad (28.5% mediation for the likelihood of cross-border investments and 74.8% for the count of cross-border investments), thus supporting the predicted international investor attention mechanism.

Overall, H1 (international campaign attention) receives strong support in Models 1–10 and in numerous unreported robustness tests we conducted. In addition to high statistical significance ($p < .01$ in two-tailed tests), the effect sizes are quite significant in practice. In the main model (Model 1 in Table 5), the coefficient of 0.47 (with the number of campaign views abroad measured as a natural logarithm) means that the effect on the odds of cross-border investment tie formation is $\exp(0.47) = 1.60$ multiplier for the base rate, meaning that tripling the absolute number of page views abroad (mean 1,312 views) increases the odds of cross-border investment(s) by more than 60%. Alternatively (e.g., Greene, 2012; Hoetker, 2007), the average marginal effect of 0.087 (based on Model 1 in Table 5 with $N = 187$ and 135 campaigns with cross-border investments) suggests a 12% increase in the base rate of 0.72% in this model ($0.087/(135/187) = 12\%$) for an increase of $\exp(1) = 2.718$ times the campaign page views in the country of a potential cross-border investor. Alternatively, a linear probability model (LPM) approach (e.g., Angrist & Pischke, 2009; Wooldridge, 2015, p. 227; Zhelyazkov & Tatarynowicz, 2021) with the resulting coefficient of 0.12 in Model 2 in Table 5 (with 135 campaigns with realized cross-border ties of 187 campaigns) suggests that a one-unit increase in the logged number of views (or approximately tripling the number of absolute views) increases the probability of cross-border investments on average by 17% relative to the base rate in the model (i.e., $0.12/(135/187) = 17\%$ improvement relative to the base rate). Overall, when examining the effect of the absolute values of campaign views abroad using Stata's `marginscontplot2` module (Royston, 2018), the average marginal effects estimated based on Model 1 in Table 5 suggest that moving from 0 views to the sample maximum of 13,265 views could increase the probability of cross-border investment(s) in this sample from close to 0% to approximately 100% (Figure 1 below), with a relatively small number of page views abroad leading to a very high likelihood of international investment(s). In addition, the average marginal effect of 5.70 (based on Model 3 in Table 5) of foreign campaign views on the count of cross-border investments suggests a 73% increase in the mean 7.85 cross-border investments per campaign in this model ($5.70/(7.85) = 73\%$) for an increase of $\exp(1) = 2.718$ times the campaign page views abroad. Figure 1 below illustrates the effect of the absolute number of campaign views abroad on the count of cross-border investments.

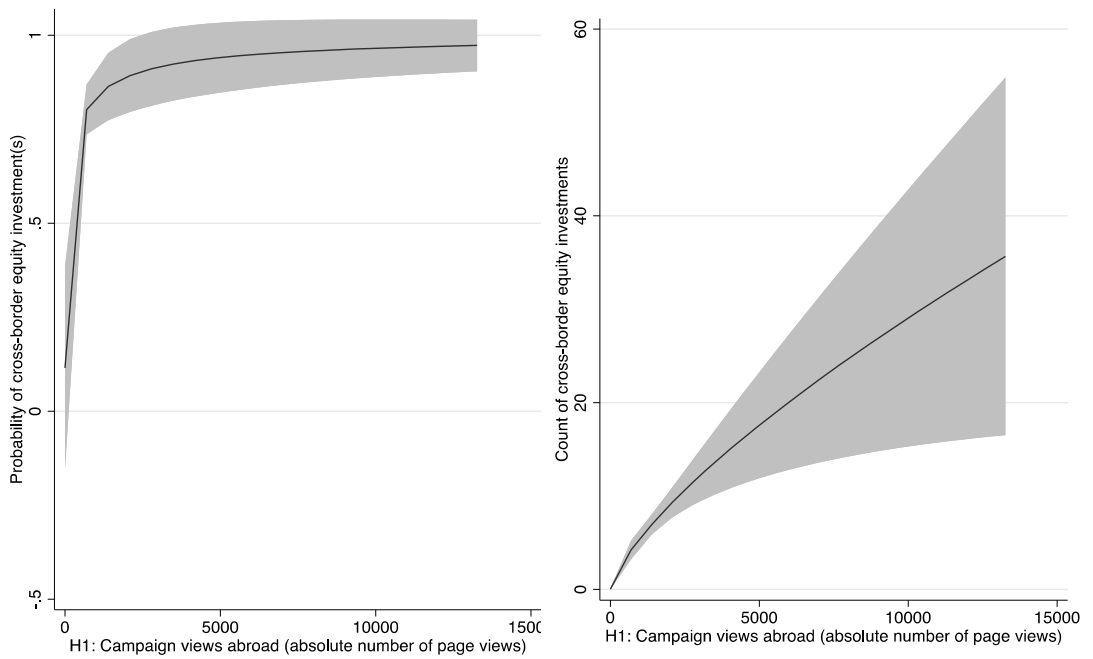


FIGURE 1 Predictive margins with 95% confidence intervals for H1 on international investor attention on cross-border investment(s) in campaign

4.3 | Dyadic analysis of cross-border equity crowdfunding investment tie formation

Table 6 reports the results of the dyadic investment level analysis of the effects of international investor attention in the investor country on cross-border investment tie formation predicted in H2. The main Models 1–2 employ conditional logit regression. First, Model 1 reports the results of the baseline model with control variables only. Model 2 adds investor attention in the investor country to test H2, which receives strong support. In addition to high statistical significance ($p < .01$ in two-tailed tests for both H2), the effect size is quite significant in practice. We interpret the effect size using the odds ratios, the average marginal effects from a traditional logit model, and the linear probability model (LPM) approach (e.g., Angrist & Pischke, 2009; Wooldridge, 2015, p. 227) after reporting these and other robustness tests. Regarding the control variables, it is worth noting that the co-nationality of venture team members with an investor has a consistently strong positive effect and that none of the distance variables are statistically significant.

Regarding the robustness analyses, Model 3 replicates the main dyadic model (Model 2) using standard logit regression with additional campaign-level control variables that are constant within the investment-level groups and therefore purged from the conditional logit (i.e., fixed effects logit) models. The substantive findings remain the same: H2 is significant and positive with quite similar coefficients as in the main dyadic model. Model 4 repeats Model 3 using all potential controls for each case, with the findings and coefficients remaining almost identical.

Model 5 is a linear probability model (LPM), which results in consistent hypothesis test results but different coefficients due to the additive linear model and a small base rate of tie formation (based on a closer inspection of our effect size interpretation below, the effect sizes are comparable to other interpretation approaches).

In Model 6, we consider the fact that the dyadic analyses of cross-border tie formation focus on campaigns that raise at least one cross-border investment. Although any campaign-level sample selection bias (unobserved heterogeneity) would be constant across cases and controls, and therefore controlled for by the investment-level conditional logit (i.e., fixed effects logit) specification, we also ran an analysis as a two-step Heckman-type analysis. In this

TABLE 6 Dyadic analysis of investment tie formation in cross-border equity crowdfunding

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
	Conditional logit with 10 controls	Conditional logit with 10 controls	Logit with 10 controls	Logit with all controls	LPM with all controls	Second stage logit with 10 controls	epobit with 10 controls	GSEM with 10 controls	Causal mediation, 10 controls
H2: Campaign views in investor country		0.38 [0.00] [0.05]	0.33 [0.00] [0.05]	0.33 [0.00] [0.05]	0.00 [0.00] [0.00]	0.33 [0.00] [0.05]	0.25 [0.00] [0.04]	0.32 [0.00] [0.05]	0.16 [0.00] [0.01]
Investor-team-co-nationality	0.55 [0.00] [0.15]	0.41 [0.00] [0.13]	0.45 [0.00] [0.13]	0.42 [0.00] [0.14]	0.00 [0.01] [0.00]	0.45 [0.00] [0.13]	0.23 [0.00] [0.07]	0.45 [0.00] [0.13]	0.23 [0.00] [0.04]
Geographic distance	-0.08 [0.33] [0.08]	0.00 [0.99] [0.08]	0.00 [0.99] [0.08]	0.01 [0.91] [0.07]	0.00 [0.46] [0.00]	0.00 [0.99] [0.08]	0.01 [0.83] [0.04]	0.01 [0.92] [0.08]	0.01 [0.74] [0.03]
Institutional distance	-0.00 [0.90] [0.03]	0.07 [0.06] [0.04]	0.06 [0.14] [0.04]	0.07 [0.08] [0.04]	0.00 [0.07] [0.00]	0.06 [0.14] [0.04]	0.03 [0.14] [0.02]	0.06 [0.13] [0.04]	0.03 [0.03] [0.01]
Cultural distance	-0.24 [0.01] [0.09]	-0.06 [0.47] [0.09]	-0.09 [0.28] [0.09]	-0.10 [0.21] [0.08]	-0.00 [0.32] [0.00]	-0.09 [0.29] [0.09]	-0.05 [0.26] [0.04]	-0.10 [0.27] [0.09]	-0.05 [0.12] [0.03]
Linguistic distance	0.99 [0.03] [0.46]	-0.05 [0.90] [0.37]	0.10 [0.79] [0.36]	0.08 [0.81] [0.34]	0.00 [0.41] [0.00]	0.09 [0.80] [0.36]	0.04 [0.83] [0.18]	0.06 [0.87] [0.36]	0.04 [0.80] [0.15]
Investor type	-0.19 [0.27] [0.17]	-0.23 [0.15] [0.16]	-0.20 [0.23] [0.17]	-0.18 [0.25] [0.16]	-0.00 [0.43] [0.00]	-0.20 [0.23] [0.17]	-0.11 [0.20] [0.08]	-0.20 [0.24] [0.17]	-0.11 [0.15] [0.07]
Investor gender	-0.31 [0.03] [0.14]	-0.36 [0.02] [0.15]	-0.31 [0.03] [0.14]	-0.29 [0.04] [0.14]	-0.00 [0.04] [0.00]	-0.31 [0.03] [0.14]	-0.16 [0.01] [0.07]	-0.31 [0.03] [0.14]	-0.16 [0.00] [0.05]
Investor age	-0.00 [0.95] [0.00]	-0.00 [0.88] [0.00]	-0.00 [0.77] [0.00]	-0.00 [0.93] [0.00]	-0.00 [0.64] [0.00]	-0.00 [0.77] [0.00]	-0.00 [0.78] [0.00]	-0.00 [0.72] [0.00]	-0.00 [0.75] [0.00]
Investor prior investments	0.36 [0.00] [0.08]	0.29 [0.00] [0.08]	0.29 [0.00] [0.08]	0.28 [0.00] [0.07]	0.00 [0.01] [0.00]	0.29 [0.00] [0.08]	0.16 [0.00] [0.04]	0.28 [0.00] [0.08]	0.16 [0.00] [0.03]
Investment level fixed effects (clogit)	Yes	Yes	No	No	No	No	No	No	No
Campaign domestic views			-0.30 [0.00] [0.05]	-0.30 [0.00] [0.05]	-0.00 [0.00] [0.00]	-0.29 [0.00] [0.05]	-0.15 [0.00] [0.02]	-0.30 [0.00] [0.04]	-0.15 [0.00] [0.02]
Campaign updates			0.06 [0.30] [0.06]	0.03 [0.58] [0.06]	0.00 [0.59] [0.00]	0.06 [0.30] [0.06]	0.03 [0.37] [0.03]	0.06 [0.30] [0.06]	0.03 [0.46] [0.04]
Campaign posts			-0.12 [0.00] [0.04]	-0.11 [0.00] [0.04]	-0.00 [0.02] [0.00]	-0.11 [0.02] [0.05]	-0.06 [0.01] [0.02]	-0.12 [0.00] [0.04]	-0.06 [0.02] [0.03]
Campaign team size			0.44 [0.00] [0.10]	0.43 [0.00] [0.10]	0.00 [0.00] [0.00]	0.44 [0.00] [0.10]	0.21 [0.00] [0.05]	0.44 [0.00] [0.10]	0.21 [0.00] [0.06]
Campaign existing professional investors			-0.06 [0.50] [0.09]	-0.06 [0.50] [0.09]	-0.07 [0.41] [0.09]	-0.00 [0.22] [0.00]	-0.06 [0.51] [0.09]	-0.02 [0.70] [0.04]	-0.04 [0.67] [0.09]
Campaign external investments			0.02 [0.91] [0.13]	0.11 [0.37] [0.12]	-0.00 [0.98] [0.00]	0.01 [0.92] [0.13]	-0.02 [0.76] [0.07]	-0.00 [0.97] [0.13]	-0.02 [0.81] [0.09]
Campaign funding target			-0.13 [0.02] [0.06]	-0.13 [0.01] [0.05]	-0.00 [0.03] [0.00]	-0.13 [0.02] [0.06]	-0.05 [0.08] [0.03]	-0.12 [0.04] [0.06]	-0.05 [0.07] [0.03]
Campaign minimum investment			-0.18 [0.00] [0.05]	-0.19 [0.00] [0.05]	-0.00 [0.00] [0.00]	-0.18 [0.00] [0.05]	-0.09 [0.00] [0.03]	-0.18 [0.00] [0.06]	-0.09 [0.06] [0.05]
Campaign growth stage			0.47 [0.00] [0.10]	0.45 [0.00] [0.10]	0.00 [0.00] [0.00]	0.46 [0.00] [0.10]	0.21 [0.00] [0.05]	0.45 [0.00] [0.10]	0.22 [0.00] [0.06]
Campaign country dummies		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Campaign industry dummies		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Campaign year dummies		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Inverse Mills ratio						0.06 [0.80] [0.24]			
Investor country marketing			0.12 [0.90] [0.96]	-1.26 [0.14] [0.84]	0.07 [0.00] [0.01]	0.09 [0.92] [0.97]	-0.60 [0.27] [0.55]	0.07 [0.06] [0.04]	0.04 [0.09] [0.02]
Constant								0.02 [0.99] [0.98]	-0.19 [0.70] [0.49]

TABLE 6 (Continued)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
	Conditional logit with 10 controls	Conditional logit with 10 controls	Logit with 10 controls	Logit with all controls	LPM with all controls	Second stage logit with 10 controls	eprobit with 10 controls	GSEM with 10 controls	Causal mediation, 10 controls
H2 < -- Investor country marketing									
Constant	−1935.0	−1853.1	−3091.7	−6214.6	346.061.1	−3091.7	4.41 [0.00] (0.19)	4.15 [0.00] (0.35)	4.41 [0.00] (0.19)
Log-likelihood	8.035	8.035	10.465	254.275	254.275	10.465	−23.884.4	−37.229.2	−3090.8
N							10.465	16.159	10.465

Note: Models 1–2 are conditional logit estimates (logit, i.e., fixed effects logit) of cross-border tie formation with ten controls for each case grouped by investment. The conditional logit model controls for all investment-, campaign-, venture country-, and year-level unobserved heterogeneity. Models 3–4 employ the standard logit model with investor- and campaign-level control variables. Model 5 employs a linear probability model (LPM) with all potential controls. Model 6 is a two-stage model with the first stage explaining the presence of cross-border investors in a campaign estimated based on Model 1 in Table 5. The second stage model includes an inverse Mills ratio from this model. Model 7 treats H2 (campaign views in the investor country) as endogenous and explains it by campaign Facebook marketing in the investor country using eprobit regression. Model 8 does the same using a structural equation model. Model 9 reports causal mediation analysis. Robust standard errors in parentheses; two-tailed *p* values in brackets.

analysis, we used the probit model of the campaign-level analysis (Table 5, Model 1) to calculate the inverse Mills ratio, which was included in the second-stage model (Table 6, Model 6), which is otherwise equivalent to Model 3 in Table 6. The inclusion of the inverse Mill's ratio does not affect the coefficient or significance for H2. In this two-stage model, all the hypotheses are tested simultaneously, with the first stage explaining the effects of attention on the likelihood of a campaign receiving cross-border investment(s) (H1) and the second stage, conditional on the campaign receiving cross-border investment(s), explaining the effect of asymmetric international attention on which investor invests in which campaign (H2).

Finally, we assess the role of campaign marketing and consider the possibility that campaign attention in the investor country could be endogenous. In Model 7, we estimate an extended probit regression (eprobit in Stata 17; Stata, 2021b), in which we use the campaign's Facebook marketing spending in the investor country to predict campaign views there. This effect is positive and significant: country-focused crowdfunding campaign marketing affects investor attention in the country ($p < .01$ in Model 7). However, the finding concerning H2 remains statistically significant: attention still affects tie formation. In Model 8, we replicate this model using structural equation modeling estimated with Stata's *gsem* command (generalized SEM) that allows binary dependent variables. The findings remain unchanged and practically identical to those of Model 4. Furthermore, the effect of campaign marketing in the investor country on cross-border investment is nearly fully mediated (70.0%) by campaign views in that country, providing additional evidence for the international attention mechanism. In a bootstrap analysis with 1,000 iterations, the mediation effect remained positive at the 95% confidence interval. In Model 9, we implemented causal mediation analysis (Imai et al., 2010) using the mediation module for Stata by Hicks and Tingley (2011). This analysis resulted in similar conclusions of near full mediation (59.6%) of the effect of foreign campaign marketing in the investor country on cross-border investment tie formation by campaign views abroad, thus supporting the predicted international investor attention mechanism.¹³

Overall, the robustness tests resulted in consistent robust evidence supporting H2, showing the positive effects of investor attention in the investor country and on investment tie formation in cross-border equity crowdfunding.

Regarding the effect size of international investor attention in the country of a potential investor (H2), in the main model (Model 2 in Table 6), the coefficient of 0.38 (with the number of campaign views in a country measured as a natural logarithm) indicates the effect on the odds of cross-border investment tie formation is $\exp(0.38) = 1.46$ multiplier for the base rate, indicating that tripling the absolute number of page views in the country of a potential cross-border investor increases the odds of investment by nearly 50%.

The interpretation of the effect sizes based on average marginal effects and the LPM approach point to similar conclusions. First, considering the average marginal effects (e.g., Greene, 2012; Hoetker, 2007), the average marginal effect of 0.0013 (based on Model 4 in Table 6 with $N = 254,275$ and 985 realized cross-border deals) suggests a greater than 30% increase in the base rate of 0.39% in this model ($0.0013/(985/254,275) = 34\%$) for an increase of $\exp(1) = 2.718$ times the campaign page views in the country of a potential cross-border investor. Alternatively, a linear probability model (LPM) approach (e.g., Angrist & Pischke, 2009; Wooldridge, 2015, p. 227; Zhelyazkov & Tatarynowicz, 2021) with the resulting coefficient of 0.001129 in Model 5 in Table 6 (with 985 realized cross-border ties of 254,275 potential ties) suggests that a unit increase in the logged number of views (or approximately tripling the number of absolute views) increases the probability of cross-border tie formation on average by almost 30% relative to the base rate in the model (i.e., $0.0011/(985/254,275) = 29\%$ improvement relative to the base rate). Overall, when examining the effect of the absolute values of campaign views in the investor country using Stata's *marginscontplot2* module (Royston, 2018), the average marginal effects estimated based on Model 4 in Table 6 suggest that moving from 0 views to the sample maximum of 4,970 views could increase the probability of cross-border tie formation for any campaign-investor dyad in this sample from close to 0% to approximately 1.4% (Figure 2).

With all three interpretation approaches, the effects appear economically quite significant for reasonable changes in the values of the independent variable for H2. However, given the nature of this dyadic analysis to explain the effects of international investor attention on matching with one potential cross-border investor instead

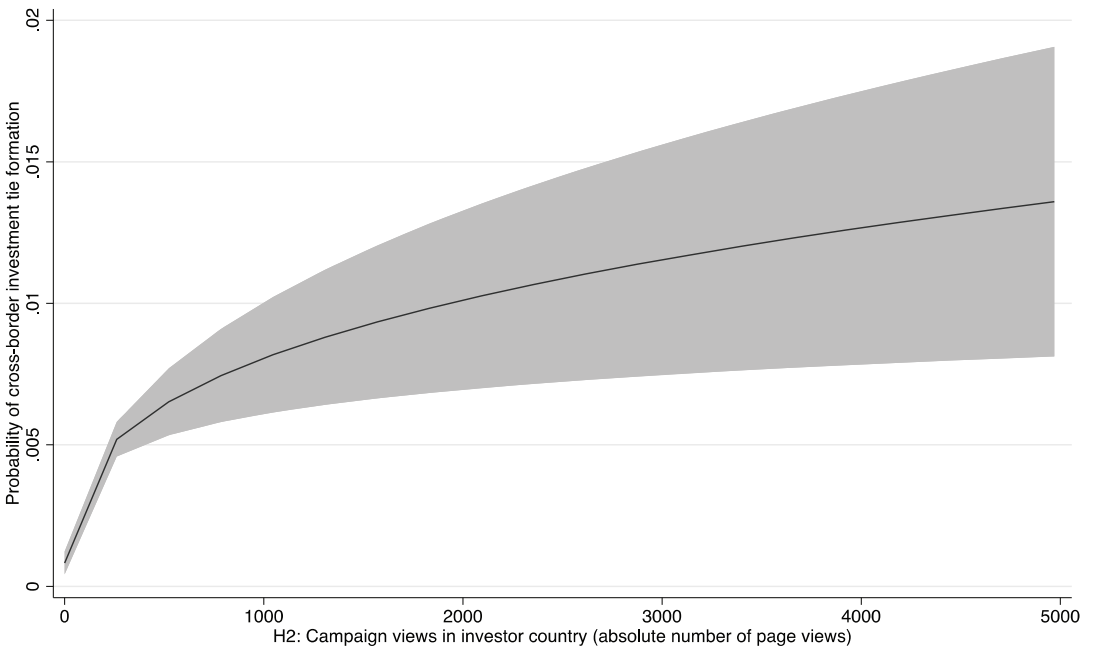


FIGURE 2 Predictive margins with 95% confidence intervals for Hypothesis 2 on international investor attention in investor countries and cross-border investment tie formation

of others, we believe the most meaningful interpretation is based on the odds values (i.e., the multiplier effects on the base rates).

5 | DISCUSSION AND CONCLUSIONS

In this article, we set out to examine the role of international investor attention as a driver of cross-border equity crowdfunding investments. Cross-border equity crowdfunding is a novel phenomenon at the intersection of entrepreneurial finance and international entrepreneurship, rendered particularly interesting by the central role of digital platforms that help connect geographically dispersed entrepreneurs and investors (Nambisan et al., 2019). Despite its nascent stage, cross-border equity crowdfunding is important; 40% of the successful campaigns in our sample would not have made it without cross-border funding. In this first empirical study examining the drivers of cross-border equity crowdfunding, we focused on the role of international investor attention as a key constraining factor when individuals are facing large volumes of information about a vast number of international investment opportunities through digital platforms (Haas et al., 2015; Hansen & Haas, 2001; van Knippenberg et al., 2015). As noted by Cummings et al. (2020), “*Equity crowdfunding provides a context to develop theories for a world in which the scarce factor is attention.*”

In testing our hypotheses on the effect of international investor attention on cross-border equity crowdfunding, we leveraged unique data made available to us by a forerunner in international equity crowdfunding. Using complementary research designs, we first found in our campaign-level analysis that international investor attention had a significant positive effect on cross-border investments in equity crowdfunding campaigns. Second, in our dyadic investment-level analyses of cross-border investments, we found that investor attention in any particular foreign investor country has a strong positive effect on cross-border investment tie formation between campaigns and cross-border investors from that country. These findings concerning the effects of international investor attention

are novel both in the equity crowdfunding context broader literature on investor attention (Cziraki et al., 2021). In addition, the mediation analyses that we designed ex-post to further disentangle the international investor attention mechanism from alternative mechanisms (and which we therefore did not ex-ante hypothesize) show that international investor attention largely mediates the effects of foreign campaign marketing on cross-border investments. In addition to providing additional evidence of the predicted international investor attention mechanism, these findings are also consistent with prior research on positive short-term effects of marketing on investor attention (Focke et al., 2020; Madsen & Niessner, 2019) and are novel in the context of cross-border equity crowdfunding.

The results concerning our control variables suggest that entrepreneur–investor co-nationality (Iriyama, Li, & Madhavan, 2010; Zhang et al., 2016) is also an important driver of cross-border equity crowdfunding investments. Interestingly, national distance dimensions (geographic, institutional, cultural, and linguistic distance) had very limited effects on cross-border equity investors' investment choices. These results are in line with similar findings by Guenther et al. (2018) and Hornuf et al. (2020) concerning geographic distance and extend their findings by also incorporating institutional, cultural, and linguistic distance.

The present study contributes to the equity crowdfunding literature, with implications for the broader literature on investor attention and international entrepreneurial finance and entrepreneurship. Our findings on the effects of international investor attention on cross-border equity crowdfunding are novel because, to the best of our knowledge, the attention received by target ventures in investor countries has not been previously studied in the context of international entrepreneurial finance. Existing research on the effects of investor attention has largely focused on public stock markets and domestic settings (e.g., Barber & Odean, 2008; Chi & Shanthikumar, 2017; Cziraki et al., 2021; Da et al., 2011; Jin et al., 2017; Petkova et al., 2013) or has been conducted as an aggregated country-level analysis (Mondria et al., 2010) or focusing on a limited number of stock indices (Chen, 2017). Using country-level Google Analytics data collected separately for each crowdfunding campaign, we developed a crowdfunding campaign-level international investor attention measure for all potential countries, which was found to be an important determinant of tie formation in cross-border equity crowdfunding. Such international attention measures based on Google Analytics data could also have potential in many other contexts of international entrepreneurship research, given the theoretical foundations and our strong and robust results.

The findings on the drivers of cross-border equity crowdfunding investments also have important practical implications. First, they lend support to the recent actions of policymakers to facilitate cross-border equity crowdfunding in the European Union (e.g., European Commission, 2018). Second, the findings on the importance of international investor attention in explaining cross-border investment tie formation offer practical suggestions for fundraising ventures and equity crowdfunding platforms for attracting investments from cross-border investors by increasing international investor attention through, for instance, social media (Jin et al., 2017; Paniagua, Korzynski, & Mastur, 2017). Although investment ties in equity crowdfunding are qualitatively different compared to investment ties in venture capital (e.g., in VC, one or a few investors typically invest millions of euros or dollars, whereas, in equity crowdfunding, a large number of investors invest smaller sums; Block, Colombo, et al., 2018; Dushnitsky & Zunino, 2019), equity crowdfunding investors can nonetheless affect the development of the portfolio companies. For instance, while the role of an individual crowdfunding investor is weaker than that of a typical venture capital investor, collectively they may have significant effects, for example, through contacts, feedback, market validation, and word-of-mouth (Dushnitsky & Zunino, 2019; Stanko & Henard, 2017; Wald, Holmesland, & Efrat, 2019; Walthoff-Borm, Vanacker, & Collewaert, 2018). Although not yet studied, and therefore a topic for future research, in the cross-border context, foreign equity crowdfunding investors could potentially improve market understanding, open doors, improve visibility, and create market demand in their home markets, and thereby facilitate the international expansion to their home markets, to some extent similarly as their cross-border VC counterparts (e.g., Fernhaber & McDougall-Covin, 2009; Jääskeläinen & Maula, 2014; Mäkelä & Maula, 2005). Additionally, for equity crowdfunding platforms, our findings imply that international crowdfunding platforms could improve their roles as active intermediaries (Cumming & Johan, 2017; Cumming & Zhang, 2018; Rossi & Vismara, 2018) and increase attention from international investors by actively promoting campaigns internationally.

This study has some natural limitations that lead to opportunities for further research. First, while our study employed several complementary approaches to examine the effect of investor attention on investment choices in equity crowdfunding, leveraging the cross-border setting to demonstrate asymmetric attention across international investors located in different countries, additional research is needed to better understand the antecedents of asymmetric attention distribution of investors. In our study, we found that regionally targeted online marketing is one mechanism causing such attention asymmetry, but recent research in finance has suggested that also other types of marketing (Focke et al., 2020) and private news (Cziraki et al., 2021) could influence attention distribution. Furthermore, information manipulation, which can cause information cascades and affect investor attention and has been shown to play a role in equity crowdfunding (Meoli & Vismara, 2021), could be examined in future research as a potential antecedent of attention distribution. Overall, although the geographic asymmetries in attention and investments in our setting help establish the relevance of the attention mechanism as a driver of investment choices in equity crowdfunding, future research focusing on dynamic processes of social influence could help disentangle the role of information cascades (e.g., prominent public early investors) as a driver of investor attention (Pollock, Rindova, & Maggitti, 2008; Vismara, 2018).

Furthermore, in our sample, we cannot observe prior social relationships between cross-border investors and ventures. Given the importance of existing direct and indirect social ties on further tie formation in related settings (e.g., Agrawal, Catalini, & Goldfarb, 2015; Meuleman et al., 2017; Shane & Cable, 2002), future research could explore novel ways to access such data and examine the effects of friendships and other social relationships on equity crowdfunding investments. The effects of network ties on attention deserve further study (Maula, Keil, & Zahra, 2013).

Finally, despite benefiting from access to unique data on one of the leading European equity crowdfunding platforms with the first European-wide MiFID license and operations in multiple countries, our sample was limited to campaigns in six developed countries, which all have well-developed institutions, including investor protection regulations. Future research could consider the generalizability of investor attention effects across different types of countries and crowdfunding platforms (Dushnitsky, Piva, & Rossi-Lamastra, 2022).

Despite the limitations, the findings collectively point to the importance of asymmetric investor attention as an important mechanism affecting investment choices in equity crowdfunding and cross-border equity crowdfunding in particular. This is an important and timely contribution; although attention has been found to affect investments in stock markets (Barber & Odean, 2008; Chemmanur & Yan, 2019; Cziraki et al., 2021; Da et al., 2011; Madsen & Niessner, 2019), the role of attention has thus far been neglected in crowdfunding research (Cummings et al., 2020; Pollack, Maula, Allison, Renko, & Günther, 2021). Furthermore, the role of international investor attention in attracting cross-border investments has not been considered in any context.

To conclude, this article contributes to the literature at the intersection of investor attention, entrepreneurial finance, and international entrepreneurship by improving the understanding of the role of international investor attention in cross-border investments in entrepreneurial ventures. This first empirical analysis of cross-border equity crowdfunding investments also contributes to the existing research, which has thus far treated equity crowdfunding largely as a domestic phenomenon. Additionally, this study has important practical implications regarding the importance of international marketing and team diversity for entrepreneurs who seek to raise equity crowdfunding, the importance of gaining international investor attention for managers of equity crowdfunding platforms, and the limited relevance of national distances in cross-border investing for policymakers who aim to create conditions to stimulate cross-border equity crowdfunding (Delivorias, 2017; European Commission, 2017, 2018; Hornuf & Schwienbacher, 2017; Zetzsche & Preiner, 2018).

ACKNOWLEDGEMENTS

We would like to thank the editor, Gary Dushnitsky, and two anonymous reviewers for their thoughtful and developmental comments. We also acknowledge valuable feedback on the previous versions of the paper by Mikko Jääskeläinen, Klaus Meyer, Lasse Mäkelä, Alessia Pedrazzoli, Mikko Savolainen, Armin Schwienbacher, Andrew

Shipilov, Kaisa Snellman, Roxana Turturea, Timo Vuori, and Dave Williams. The paper has also benefited from feedback received at the Annual Conference of the Strategic Management Society in 2018 and at the Academy of Management Meetings in 2019. The research has been supported by a research grant from Jenny and Antti Wihuri Foundation.

ORCID

Markku V. J. Maula  <https://orcid.org/0000-0002-7030-5059>

Anna Lukkarinen  <https://orcid.org/0000-0002-6853-6106>

ENDNOTES

- ¹ A particular strength of our Google Analytics based operationalizations relative to the recent search index based operationalizations (e.g., Cziraki et al., 2021) is that our measure is not limited to investors using a particular search engine to find information about the company but includes also campaign site visits that originate from other sources, including links on the platform homepage, the platform's newsletter, advertising, and social media. Another advantage is that it is available for private companies, for which search indices do not work appropriately at the company-level (Que & Zhang, 2021).
- ² It might first seem evident that campaigns that receive more attention attract more investments. However, as we know from marketing, the extent to which attention converts to transactions depends on several conditions (Zhang, Wedel, & Pieters, 2009). For instance, if cross-border investments were driven primarily by entrepreneurs' private networks (Lukkarinen, Teich, Wallenius, & Wallenius, 2016), international investor attention would play a very limited role in driving cross-border investments. Furthermore, who pays attention also matters (Chi & Shanthikumar, 2017; Cziraki et al., 2021). Attention is often allocated asymmetrically across investors leading to differences in investment behavior (Cziraki et al., 2021). It is therefore necessary to explicitly assess the role of international investor attention in cross-border equity crowdfunding as well as the magnitude of its effect on campaign outcomes.
- ³ Whereas Cziraki et al. (2021, p. 54) define asymmetric investor attention as the difference between local and national attention in their domestic analysis of the effects of asymmetric investor attention on stock returns in the United States, in our analysis of the effects of asymmetric international investor attention, we contrast the international attention relative to domestic attention (H1), and attention in each foreign investor country relative to the others (H2).
- ⁴ Although equity crowdfunding offers opportunities for highly international investment flows, country-specific securities regulations hinder investment activity between certain countries (Delivorias, 2017; European Commission, 2017; Hornuf & Schwienbacher, 2017; Vismara, 2016; Zetzsche & Preiner, 2018).
- ⁵ Although the campaign-level hypothesis (H1) and the dyadic hypothesis (H2) are primarily tested using separate analyses, we also test them simultaneously in a two-stage model in Model 6 in Table 6.
- ⁶ In contrast to H1, which predicts the likelihood of a campaign receiving cross-border investment(s) from any foreign country, Hypothesis 2 focuses on which investor invests in which campaign and is therefore a dyadic analysis. In line with prior research examining the matching between actors using actor dyad-level analysis, we use the term "tie formation," which is a common term in this line of research that focus on the antecedents of ties between actors irrespective of whether the ties are relatively strong as in VC investments (Hallen & Eisenhardt, 2012; Meuleman et al., 2017; Zhelyazkov & Tatarynowicz, 2021), alliances (e.g., Gulati, 1995; Katila, Piezunka, Reineke, & Eisenhardt, 2021), or research collaborations (Dahlander & McFarland, 2013)] or weak [as in reward-based crowdfunding (Butticè, Colombo, & Wright, 2017) and social media following patterns (Malik & Lee, 2020)].
- ⁷ Prior research in other contexts has used other measures of investor attention, such as Google search volume (based on Google Trends), website traffic ranks, or companies' Wikipedia page views (Cziraki et al., 2021; Da et al., 2011; Focke, Ruenzi, & Ungeheuer, 2020; Jin et al., 2017; Que & Zhang, 2021). These measures are generally available only as a total for all countries or separately for a limited number of countries and as an overall measure for the focal company. In contrast, Google Analytics data enable separate attention measures for all countries and can focus on a particular aspect of the focal company, such as the equity crowdfunding campaign page in our study. Furthermore, as opposed to Google Search Volume Index (SVI) data, which is available only for search queries with a significant amount of search volume, such as S&P 500 firms (Cziraki et al., 2021), Google Analytics enables the analysis of attention to less searched objects such as startups' equity crowdfunding campaigns.
- ⁸ Given our cross-border setting and focus on international teams, we measured co-nationality based on individuals' nationalities, as opposed to measures of ethnic background based on surnames of individuals used in related prior single-

country studies focusing on VC investments within the United States (e.g., Bengtsson & Hsu, 2015; Hegde & Tumlinson, 2014).

- ⁹ Although nationality was explicitly stated for only a minority of team members, most team member descriptions include each team member's name, educational background, work history, and a photograph, which most often allowed us to infer the team member's nationality. This approach is an extended version of the method used by Zhang, Wong, and Ho (2016), who inferred venture team member ethnicity from each team member's name and the location of the institution from which they had received their educational degree. For approximately 15% of the team members, the information provided on the campaign website was either not sufficient to infer nationality, or the different attributes of the description pointed to multiple nationalities. In these situations, we turned to LinkedIn, which is commonly used to assess entrepreneurs (Smith, Smith, & Shaw, 2017) and has been used as a source in prior academic research (Carpentier & Suret, 2015). We assessed the team members' profile pages on LinkedIn, which were usually linked directly to the campaign website. In a few challenging instances, the geographic, educational, work, and linguistic background depicted in LinkedIn pointed to a different nationality than the most likely nationality based on the name and visual appearance of the person. In such instances, we used the former to determine nationality because second-generation immigrants are no longer as closely associated with their original ethnic groups (Rusinovic, 2008). In this procedure, we follow (Ortu et al., 2017), who used the location rather than name to infer nationality in such cases.
- ¹⁰ These are significantly more comprehensively available for the countries in our sample than the alternative GLOBE measures (House, Hanges, Javidan, Dorfman, & Gupta, 2004).
- ¹¹ During the sample period 2012–2017, small amounts of campaign marketing were occasionally implemented using Facebook ads, mostly without country targeting, but occasionally targeted to foreign countries (in 25% of the campaigns, typically less than one hundred euros and a maximum of less than one thousand euros) in a rather experimental manner based on our interviews with platform managers. Since then, the volumes have increased and foreign marketing has become more systematic and strategic. However, during the sample period, the use of foreign Facebook marketing campaigns can be considered quite random and exogenous.
- ¹² In marketing research, mediation analyses have been employed to test the attention mechanism by examining how advertisements influence attention, which consequently affects product sales (e.g., Zhang et al., 2009).
- ¹³ As recommended for causal mediation analysis, we ran a sensitivity analysis considering potential omitted confounders of the mediator and outcome variables (Hicks & Tingley, 2011). Based on the sensitivity analysis, a potential omitted confounder should explain for instance 20% of the remaining variance in the mediator and 20% of the remaining variance the outcome ($0.2 \times 0.2 = 0.04$) for the mediation effect to be reduced to zero. Such an omitted confounder seems unlikely, which further increases our confidence in the robustness of the mediation effect.
- ¹⁴ Regarding linguistic distance, we also tested the effect of measurement by using the existence of a common official language (Melitz & Toubal, 2014) as an alternative measure or as an additional control measure but did not find significant effects for language.

REFERENCES

- Agrawal, A., Catalini, C., & Goldfarb, A. (2015). Crowdfunding: Geography, social networks, and the timing of investment decisions. *Journal of Economics and Management Strategy*, 24(2), 253–274.
- Aguinis, H., Edwards, J. R., & Bradley, K. J. (2017). Improving our understanding of moderation and mediation in strategic management research. *Organizational Research Methods*, 20(4), 665–685.
- Ahlers, G. K. C., Cumming, D., Günther, C., & Schweizer, D. (2015). Signaling in equity crowdfunding. *Entrepreneurship Theory and Practice*, 39(4), 955–980.
- Ambos, B., & Håkanson, L. (2014). The concept of distance in international management research. *Journal of International Management*, 20(1), 1–7.
- Angrist, J. D., & Pischke, J.-S. (2009). *Mostly harmless econometrics: An empiricist's companion*. Princeton, NJ: Princeton University Press.
- Åstebro, T., Fernández Sierra, M., Lovo, S., & Vulkan, N. (2017). Herding in equity crowdfunding. HEC Paris Research Paper No. ECO/SCD-2017-1245.
- Balachandran, S., & Hernandez, E. (2021). Mi casa es tu casa: Immigrant entrepreneurs as pathways to foreign venture capital investments. *Strategic Management Journal*, 42(11), 2047–2083.
- Bapna, S. (2019). Complementarity of signals in early-stage equity investment decisions: Evidence from a randomized field experiment. *Management Science*, 65(2), 933–952.
- Barber, B. M., & Odean, T. (2008). All that glitters: The effect of attention and news on the buying behavior of individual and institutional investors. *Review of Financial Studies*, 21(2), 785–818.

- Bengtsson, O., & Hsu, D. H. (2015). Ethnic matching in the U.S. Venture capital market. *Journal of Business Venturing*, 30(2), 338–354.
- Berkowitz, D., Pistor, K., & Richard, J.-F. (2003). Economic development, legality, and the transplant effect. *European Economic Review*, 47(1), 165–195.
- Beugelsdijk, S., Ambos, B., & Nell, P. C. (2018). Conceptualizing and measuring distance in international business research: Recurring questions and best practice guidelines. *Journal of International Business Studies*, 49(9), 1113–1137.
- Beugelsdijk, S., Kostova, T., Kunst, V. E., Spadafora, E., & van Essen, M. (2018). Cultural distance and firm internationalization: A meta-analytical review and theoretical implications. *Journal of Management*, 44(1), 89–130.
- Blaseg, D., Cumming, D., & Koetter, M. (2021). Equity crowdfunding: High-quality or low-quality entrepreneurs? *Entrepreneurship Theory and Practice*, 45(3), 505–530.
- Block, J., Hornuf, L., & Moritz, A. (2018). Which updates during an equity crowdfunding campaign increase crowd participation? *Small Business Economics*, 50(1), 3–27.
- Block, J. H., Colombo, M. G., Cumming, D. J., & Vismara, S. (2018). New players in entrepreneurial finance and why they are there. *Small Business Economics*, 50(2), 239–250.
- Bouquet, C., & Birkinshaw, J. (2008). Weight versus voice: How foreign subsidiaries gain attention from corporate headquarters. *Academy of Management Journal*, 51(3), 577–601.
- Bouquet, C., Morrison, A., & Birkinshaw, J. (2009). International attention and multinational enterprise performance. *Journal of International Business Studies*, 40(1), 108–131.
- Brouthers, L. E., Marshall, V. B., & Keig, D. L. (2016). Solving the single-country sample problem in cultural distance studies. *Journal of International Business Studies*, 47(4), 471–479.
- Buckley, P. J., Chen, L., Clegg, L. J., & Voss, H. (2018). Risk propensity in the foreign direct investment location decision of emerging multinationals. *Journal of International Business Studies*, 49(2), 153–171.
- Butticè, V., Colombo, M. G., & Wright, M. (2017). Serial crowdfunding, social capital, and project success. *Entrepreneurship Theory and Practice*, 41(2), 183–207.
- Carpentier, C., & Suret, J.-M. (2015). Angel group members' decision process and rejection criteria: A longitudinal analysis. *Journal of Business Venturing*, 30(6), 808–821.
- Chan, C. S. R., Park, H. D., Huang, J. Y., & Parhankangas, A. (2020). Less is more? Evidence for a curvilinear relationship between readability and screening evaluations across pitch competition and crowdfunding contexts. *Journal of Business Venturing Insights*, 14, e00176.
- Chemmanur, T. J., & Yan, A. (2019). Advertising, attention, and stock returns. *Quarterly Journal of Finance*, 09(03), 1950009.
- Chen, T. (2017). Investor attention and global stock returns. *Journal of Behavioral Finance*, 18(3), 358–372.
- Chi, S. S., & Shanthikumar, D. M. (2017). Local bias in Google search and the market response around earnings announcements. *The Accounting Review*, 92(4), 115–143.
- Collet, F., & Hedström, P. (2013). Old friends and new acquaintances: Tie formation mechanisms in an interorganizational network generated by employee mobility. *Social Networks*, 35(3), 288–299.
- Courtney, C., Dutta, S., & Li, Y. (2017). Resolving information asymmetry: Signaling, endorsement, and crowdfunding success. *Entrepreneurship Theory and Practice*, 41(2), 265–290.
- Coveney, J. (2015). *Firthlogit: Stata module to calculate bias reduction in logistic regression*. MA: Chestnut Hill.
- Cumming, D., & Johan, S. (2017). Crowdfunding and entrepreneurial internationalization. In N. Dai & D. Siegel (Eds.), *The world scientific reference on entrepreneurship: Vol. 2: Entrepreneurial finance—Managerial and policy implications* (pp. 109–126). Singapore: World Scientific Publishers.
- Cumming, D., Knill, A., & Syvrud, K. (2016). Do international investors enhance private firm value? Evidence from venture capital. *Journal of International Business Studies*, 47(3), 347–373.
- Cumming, D., Schmidt, D., & Walz, U. (2010). Legality and venture capital governance around the world. *Journal of Business Venturing*, 25(1), 54–72.
- Cumming, D. J. & Zhang, Y. (2018). Are crowdfunding platforms active and effective intermediaries? SSRN working paper 2882026.
- Cummings, M. E., Rawhouser, H., Vismara, S., & Hamilton, E. L. (2020). An equity crowdfunding research agenda: Evidence from stakeholder participation in the rulemaking process. *Small Business Economics*, 54(4), 907–932.
- Cziraki, P., Mondria, J., & Wu, T. (2021). Asymmetric attention and stock returns. *Management Science*, 67(1), 48–71.
- Da, Z., Engelberg, J., & Gao, P. (2011). In search of attention. *Journal of Finance*, 66(5), 1461–1499.
- Dahlander, L., & McFarland, D. A. (2013). Ties that last: Tie formation and persistence in research collaborations over time. *Administrative Science Quarterly*, 58(1), 69–110.
- Dai, N., & Nahata, R. (2016). Cultural differences and cross-border venture capital syndication. *Journal of International Business Studies*, 47(2), 140–169.
- Delivorias, A. (2017). Crowdfunding in Europe: Introduction and state of play. Briefing, January 2017.

- Devigne, D., Manigart, S., Vanacker, T., & Mulier, K. (2018). Venture capital internationalization: Synthesis and future research directions. *Journal of Economic Surveys*, 32(5), 1414–1445.
- Drover, W., Busenitz, L., Matusik, S., Townsend, D., Anglin, A., & Dushnitsky, G. (2017). A review and road map of entrepreneurial equity financing research: Venture capital, corporate venture capital, angel investment, crowdfunding, and accelerators. *Journal of Management*, 43(6), 1820–1853.
- Dushnitsky, G., Piva, E., & Rossi-Lamastra, C. (2022). Investigating the mix of strategic choices and performance of transaction platforms: Evidence from the crowdfunding setting. *Strategic Management Journal*, 43(3), 563–598.
- Dushnitsky, G., & Zunino, D. (2019). Handbook of research on crowdfunding. In H. Landström, A. Parhankangas, & C. Mason (Eds.), *The role of crowdfunding in entrepreneurial finance*. Cheltenham, UK: Edward Elgar Publishing.
- Engelberg, J. E., & Parsons, C. A. (2011). The causal impact of media in financial markets. *Journal of Finance*, 66(1), 67–97.
- Eronen, J., Lukkarinen, A., & Seppälä, T. (2017). Explaining cross-country variation in student achievement: The influence of language structure. Working paper, Helsinki, Finland.
- Estrin, S., Gozman, D., & Khavul, S. (2018). The evolution and adoption of equity crowdfunding: Entrepreneur and investor entry into a new market. *Small Business Economics*, 51(2), 425–439.
- European Commission. (2016). *Crowdfunding in the EU capital markets union. Commission Staff Working Document SWD (2016) final*. Brussels: European Commission.
- European Commission. (2017). *Identifying market and regulatory obstacles to crossborder development of crowdfunding in the EU. Final report, December 2017*. Brussels: European Commission.
- European Commission. (2018). *Proposal for a regulation of the European Parliament and of the council on European crowdfunding service providers (ECSP) for business. COM/2018/0113*. Brussels: European Commission.
- Fernhaber, S. A., & McDougall-Covin, P. P. (2009). Venture capitalists as catalysts to new venture internationalization: The impact of their knowledge and reputation resources. *Entrepreneurship Theory and Practice*, 33(1), 277–295.
- Focke, F., Ruenzi, S., & Ungeheuer, M. (2020). Advertising, attention, and financial markets. *The Review of Financial Studies*, 33(10), 4676–4720.
- Gafni, H., Marom, D., & Sade, O. (2019). Are the life and death of an early-stage venture indeed in the power of the tongue? Lessons from online crowdfunding pitches. *Strategic Entrepreneurship Journal*, 13(1), 3–23.
- Greene, W. H. (2012). *Econometric analysis* (International ed.). Harlow, Essex: Pearson Education Limited.
- Grullon, G., Kanatas, G., & Weston, J. P. (2004). Advertising, breadth of ownership, and liquidity. *Review of Financial Studies*, 17(2), 439–461.
- Guenther, C., Johan, S., & Schweizer, D. (2018). Is the crowd sensitive to distance?—How investment decisions differ by investor type. *Small Business Economics*, 50(2), 289–305.
- Gulati, R. (1995). Social structure and alliance formation patterns: A longitudinal analysis. *Administrative Science Quarterly*, 40(4), 619–652.
- Gulati, R., & Gargiulo, M. (1999). Where do interorganizational networks come from? *American Journal of Sociology*, 104(5), 1439–1493.
- Guler, I., & Guillén, M. F. (2010). Institutions and the internationalization of U.S. Venture capital firms. *Journal of International Business Studies*, 41(2), 185–205.
- Haas, M. R., Criscuolo, P., & George, G. (2015). Which problems to solve? Online knowledge sharing and attention allocation in organizations. *Academy of Management Journal*, 58(3), 680–711.
- Hallen, B. L., & Eisenhardt, K. M. (2012). Catalyzing strategies and efficient tie formation: How entrepreneurial firms obtain investment ties. *Academy of Management Journal*, 55(1), 35–70.
- Hansen, M. T., & Haas, M. R. (2001). Competing for attention in knowledge markets: Electronic document dissemination in a management consulting company. *Administrative Science Quarterly*, 46(1), 1–28.
- Harrison, R. T. (2017). The internationalisation of business angel investment activity: A review and research agenda. *Venture Capital*, 19(1–2), 119–127.
- Harzing, A.-W., & Pudelko, M. (2016). Do we need to distance ourselves from the distance concept? Why home and host country context might matter more than (cultural) distance. *Management International Review*, 56(1), 1–34.
- Hegde, D., & Tumlinson, J. (2014). Does social proximity enhance business partnerships? Theory and evidence from ethnicity's role in US venture capital. *Management Science*, 60(9), 2355–2380.
- Hervé, F., Manthé, E., Sannajust, A., & Schwienbacher, A. (2019). Determinants of individual investment decisions in investment-based crowdfunding. *Journal of Business Finance & Accounting*, 46(5–6), 762–783.
- Hicks, R., & Tingley, D. (2011). Causal mediation analysis. *The Stata Journal*, 11(4), 605–619.
- Hoetker, G. (2007). The use of logit and probit models in strategic management research: Critical issues. *Strategic Management Journal*, 28(4), 331–343.
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations* (2nd ed.). Thousand Oaks, CA: Sage Publications.

- Hornuf, L., Schmitt, M., & Stenzhorn, E. (2018). Equity crowdfunding in Germany and the United Kingdom: Follow-up funding and firm failure. *Corporate Governance: An International Review*, 26(5), 331–354.
- Hornuf, L., Schmitt, M. & Stenzhorn, E. (2022). The local bias in equity crowdfunding: Behavioral anomaly or rational preference? *Journal of Economics & Management Strategy*, Forthcoming.
- Hornuf, L., & Schwienbacher, A. (2016). Crowdfunding: Angel investing for the masses? In H. Landström & C. Mason (Eds.), *Handbook of research on business angels* (pp. 381–398). Cheltenham, UK: Edward Elgar Publishing.
- Hornuf, L., & Schwienbacher, A. (2017). Should securities regulation promote equity crowdfunding? *Small Business Economics*, 49(3), 579–593.
- Hornuf, L., & Schwienbacher, A. (2018). Internet-based entrepreneurial finance: Lessons from Germany. *California Management Review*, 60(2), 150–175.
- House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (Eds.). (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies*. Thousand Oaks, CA: SAGE Publications.
- Imai, K., Keele, L., & Tingley, D. (2010). A general approach to causal mediation analysis. *Psychological Methods*, 15(4), 309–334.
- Iriyama, A., Li, Y., & Madhavan, R. (2010). Spiky globalization of venture capital investments: The influence of prior human networks. *Strategic Entrepreneurship Journal*, 4(2), 128–145.
- Jääskeläinen, M., & Maula, M. V. J. (2014). Do networks of financial intermediaries help reduce local bias? Evidence from cross-border venture capital exits. *Journal of Business Venturing*, 29(5), 704–721.
- Jin, F., Wu, A., & Hitt, L. (2017). Social is the new financial: How startup social media activity influences funding outcomes. *Academy of Management Proceedings*, 2017(1), 13329.
- Kahneman, D. (1973). *Attention and effort*. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Katila, R., Piezunka, H., Reineke, P., & Eisenhardt, K. M. (2021). Big fish vs. Big pond? Entrepreneurs, established firms, and antecedents of tie formation. *Academy of Management Journal*, 58(3), 856–880.
- King, G., & Zeng, L. (2001). Logistic regression in rare events data. *Political Analysis*, 9(2), 137–163.
- Kleinert, S., & Volkmann, C. (2019). Equity crowdfunding and the role of investor discussion boards. *Venture Capital*, 21, 1–26.
- Kleinert, S., Volkmann, C., & Grünhagen, M. (2020). Third-party signals in equity crowdfunding: The role of prior financing. *Small Business Economics*, 54, 341–365.
- Kogut, B., & Singh, H. (1988). The effect of national culture on the choice of entry mode. *Journal of International Business Studies*, 19(3), 411–432.
- Kossinets, G., & Watts, D. J. (2009). Origins of homophily in an evolving social network. *American Journal of Sociology*, 115(2), 405–450.
- Kshetri, N. (2018). Informal institutions and Internet-based equity crowdfunding. *Journal of International Management*, 24(1), 33–51.
- Ledford, J. L., Teixeira, J., & Tyler, M. E. (2010). *Google analytics*. Indianapolis, IN: John Wiley & Sons.
- Lin, M., Sias, R., & Wei, Z. (2017). Institutional investors in online crowdfunding. Working paper.
- Lin, M., & Viswanathan, S. (2016). Home bias in online investments: An empirical study of an online crowdfunding market. *Management Science*, 62(5), 1393–1414.
- Liu, L. X., Sherman, A. E., & Zhang, Y. (2014). The long-run role of the media: Evidence from initial public offerings. *Management Science*, 60(8), 1945–1964.
- Liu, S., Cheng, T., & Wang, H. (2020). Effects of attention and reliability on the performance of online medical crowdfunding projects: The moderating role of target amount. *Journal of Management Science and Engineering*, 5(3), 162–171.
- Liu, Y., & Maula, M. (2016). Local partnering in foreign ventures: Uncertainty, experiential learning, and syndication in cross-border venture capital investments. *Academy of Management Journal*, 59(4), 1407–1429.
- Lukkarinen, A., Teich, J. E., Wallenius, H., & Wallenius, J. (2016). Success drivers of online equity crowdfunding campaigns. *Decision Support Systems*, 87, 26–38.
- Madhavan, R., & Iriyama, A. (2009). Understanding global flows of venture capital: Human networks as the “carrier wave” of globalization. *Journal of International Business Studies*, 40(8), 1241–1259.
- Madsen, J., & Niessner, M. (2019). Is investor attention for sale? The role of advertising in financial markets. *Journal of Accounting Research*, 57(3), 763–795.
- Mahmood, A., Luffarelli, J., & Mukesh, M. (2019). What's in a logo? The impact of complex visual cues in equity crowdfunding. *Journal of Business Venturing*, 34(1), 41–62.
- Mäkelä, M. M., & Maula, M. V. J. (2005). Cross-border venture capital and new venture internationalization: An isomorphism perspective. *Venture Capital: An International Journal of Entrepreneurial Finance*, 7(3), 227–257.
- Malhotra, S., & Gaur, A. S. (2014). Spatial geography and control in foreign acquisitions. *Journal of International Business Studies*, 45(2), 191–210.

- Malik, P., & Lee, S. (2020). Follow me too: Determinants of transitive tie formation on Twitter. *Social Media + Society*, 6(3), 2056305120939248.
- Maula, M. V. J. (2010). Cross-border venture capital and private equity. In D. J. Cumming (Ed.), *Venture capital: Investment strategies, structures, and policies* (pp. 473–499). Hoboken, NJ: John Wiley & Sons, Inc.
- Maula, M. V. J., Keil, T., & Zahra, S. A. (2013). Top management's attention to discontinuous technological change: Corporate venture capital as an alert mechanism. *Organization Science*, 24(3), 926–947.
- Melitz, J., & Toubal, F. (2014). Native language, spoken language, translation and trade. *Journal of International Economics*, 93(2), 351–363.
- Meoli, M., & Vismara, S. (2021). Information manipulation in equity crowdfunding markets. *Journal of Corporate Finance*, 67, 101866.
- Merton, R. C. (1987). A simple model of capital market equilibrium with incomplete information. *The Journal of Finance*, 42(3), 483–510.
- Meuleman, M., Jääskeläinen, M., Maula, M. V. J., & Wright, M. (2017). Venturing into the unknown with strangers: Substitutes of relational embeddedness in cross-border partner selection in venture capital syndicates. *Journal of Business Venturing*, 32(2), 131–144.
- Mochkabadi, K., & Volkmann, C. K. (2020). Equity crowdfunding: A systematic review of the literature. *Small Business Economics*, 54, 75–118.
- Mohammadi, A., & Shafi, K. (2018). Gender differences in the contribution patterns of equity-crowdfunding investors. *Small Business Economics*, 50(2), 275–287.
- Mondria, J., Wu, T., & Zhang, Y. (2010). The determinants of international investment and attention allocation: Using internet search query data. *Journal of International Economics*, 82(1), 85–95.
- Monteiro, L. F. (2015). Selective attention and the initiation of the global knowledge-sourcing process in multinational corporations. *Journal of International Business Studies*, 46(5), 505–527.
- Nambisan, S., Zahra, S. A., & Luo, Y. (2019). Global platforms and ecosystems: Implications for international business theories. *Journal of International Business Studies*, 50, 1464–1486.
- Ocasio, W. (1997). Towards an attention-based view of the firm. *Strategic Management Journal*, 18, 187–206.
- Ocasio, W. (2011). Attention to attention. *Organization Science*, 22(5), 1286–1296.
- Ortu, M., Destefanis, G., Counsell, S., Swift, S., Tonelli, R., & Marchesi, M. (2017). How diverse is your team? Investigating gender and nationality diversity in GitHub teams. *Journal of Software Engineering Research Development*, 5(1), 9.
- Paniagua, J., Korzynski, P., & Mas-Tur, A. (2017). Crossing borders with social media: Online social networks and FDI. *European Management Journal*, 35(3), 314–326.
- Petkova, A. P., Rindova, V. P., & Gupta, A. K. (2013). No news is bad news: Sensegiving activities, media attention, and venture capital funding of new technology organizations. *Organization Science*, 24(3), 865–888.
- Piva, E., & Rossi-Lamastra, C. (2018). Human capital signals and entrepreneurs' success in equity crowdfunding. *Small Business Economics*, 51(3), 667–686.
- Podolny, J. M. (1994). Market uncertainty and the social character of economic exchange. *Administrative Science Quarterly*, 39(3), 458–483.
- Pollack, J. M., Maula, M., Allison, T. H., Renko, M., & Günther, C. C. (2021). Making a contribution to entrepreneurship research by studying crowd-funded entrepreneurial opportunities. *Entrepreneurship Theory and Practice*, 45(2), 247–262.
- Pollock, T. G., Rindova, V. P., & Maggitti, P. G. (2008). Market watch: Information and availability cascades among the media and investors in the U.S. IPO market. *Academy of Management Journal*, 51(2), 335–358.
- Que, J., & Zhang, X. (2021). Money chasing hot industries? Investor attention and valuation of venture capital backed firms. *Journal of Corporate Finance*, 68, 101949.
- Ragozzino, R. (2009). The effects of geographic distance on the foreign acquisition activity of U.S. Firms. *Management International Review*, 49(4), 509–535.
- Ralcheva, A., & Roosenboom, P. (2020). Forecasting success in equity crowdfunding. *Small Business Economics*, 55(1), 39–56.
- Ren, J., Raghupathi, V., & Raghupathi, W. (2020). Determinants of startup funding: The interaction between web attention and culture. *Journal of International Technology and Information Management*, 29(1), 1–24.
- Rossi, A., & Vismara, S. (2018). What do crowdfunding platforms do? A comparison between investment-based platforms in Europe. *Eurasian Business Review*, 8(1), 93–118.
- Royston, P. (2018). Marginscontplot2: Stata module to graph margins for continuous predictors. Retrieved from <https://EconPapers.repec.org/RePEc:boc:bocode:s458335>.
- Rusinovic, K. (2008). Transnational embeddedness: Transnational activities and networks among first- and second-generation immigrant entrepreneurs in the Netherlands. *Journal of Ethnic and Migration Studies*, 34(3), 431–451.
- Schwienbacher, A. (2019). Equity crowdfunding: Anything to celebrate? *Venture Capital*, 21(1), 65–74.
- Shafi, K. (2021). Investors' evaluation criteria in equity crowdfunding. *Small Business Economics*, 56(1), 3–37.

- Shane, S., & Cable, D. (2002). Network ties, reputation, and the financing of new ventures. *Management Science*, 48(3), 364–381.
- Shenkar, O. (2012). Cultural distance revisited: Towards a more rigorous conceptualization and measurement of cultural differences. *Journal of International Business Studies*, 43(1), 1–11.
- Shenkar, O., Luo, Y., & Yehekel, O. (2008). From "distance" to "friction": Substituting metaphors and redirecting inter-cultural research. *Academy of Management Review*, 33(4), 905–923.
- Signori, A., & Vismara, S. (2016). Returns on investments in equity crowdfunding. SSRN Working Paper 2765488.
- Signori, A., & Vismara, S. (2018). Does success bring success? The post-offering lives of equity-crowdfunded firms. *Journal of Corporate Finance*, 50, 575–591.
- Simon, H. A. (1957). *Models of man: Social and rational*. New York, NY: Wiley.
- Simon, H. A. (1971). Designing organizations for an information-rich world. In M. Greenberger (Ed.), *Computers, communications, and the public interest*. Baltimore, MD: The Johns Hopkins Press.
- Smith, C., Smith, J. B., & Shaw, E. (2017). Embracing digital networks: Entrepreneurs' social capital online. *Journal of Business Venturing*, 32(1), 18–34.
- Sorenson, O., & Stuart, T. E. (2001). Syndication networks and the spatial distribution of venture capital investments. *American Journal of Sociology*, 106(6), 1546–1588.
- Sorenson, O., & Stuart, T. E. (2008). Bringing the context back in: Settings and the search for syndicate partners in venture capital investment networks. *Administrative Science Quarterly*, 53(2), 266–294.
- Stanko, M. A., & Henard, D. H. (2017). Toward a better understanding of crowdfunding, openness and the consequences for innovation. *Research Policy*, 46(4), 784–798.
- Stata. (2021a). *Stata base reference manual release 17*. College Station, TX: Stata Press.
- Stata. (2021b). *Stata extended regression models reference manual release 17*. College Station, TX: Stata Press.
- Stata. (2021c). *Stata structural equation modeling reference manual release 17*. College Station, TX: Stata Press.
- Thapa, N. (2020). Being cognizant of the amount of information: Curvilinear relationship between total-information and funding-success of crowdfunding campaigns. *Journal of Business Venturing Insights*, 14, e00195.
- Treistman, J., & Gregg, J. P. (1979). Visual, verbal, and sales responses to print ads. *Journal of Advertising Research*, 19(4), 41–47.
- Tykvová, T., & Schertler, A. (2014). Does syndication with local venture capitalists moderate the effects of geographical and institutional distance? *Journal of International Management*, 20(4), 406–420.
- Ungeheuer, M. (2017). Stock returns and the cross-section of investor attention. SSRN Working Paper No. 2931547.
- van Knippenberg, D., Dahlander, L., Haas, M. R., & George, G. (2015). Information, attention, and decision making. *Academy of Management Journal*, 58(3), 649–657.
- Vismara, S. (2016). Equity retention and social network theory in equity crowdfunding. *Small Business Economics*, 46(4), 579–590.
- Vismara, S. (2018). Information cascades among investors in equity crowdfunding. *Entrepreneurship Theory and Practice*, 42(3), 467–497.
- Vulkan, N., Åstebro, T., & Sierra, M. F. (2016). Equity crowdfunding: A new phenomena. *Journal of Business Venturing Insights*, 5, 37–49.
- Wald, A., Holmesland, M., & Efrat, K. (2019). It is not all about money: Obtaining additional benefits through equity crowdfunding. *The Journal of Entrepreneurship*, 28(2), 270–294.
- Walthoff-Borm, X., Schwienbacher, A., & Vanacker, T. (2018). Equity crowdfunding: First resort or last resort? *Journal of Business Venturing*, 33(4), 513–533.
- Walthoff-Borm, X., Vanacker, T., & Collewaert, V. (2018). Equity crowdfunding, shareholder structures, and firm performance. *Corporate Governance: An International Review*, 26(5), 314–330.
- Wang, W., Mahmood, A., Sismeiro, C., & Vulkan, N. (2019). The evolution of equity crowdfunding: Insights from co-investments of angels and the crowd. *Research Policy*, 48(8), 103727.
- White, B. A., & Dumay, J. (2017). Business angels: A research review and new agenda. *Venture Capital*, 19(3), 183–216.
- Witt, M. A., Kabbach de Castro, L. R., Amaeshi, K., Mahroum, S., Bohle, D., & Saez, L. (2018). Mapping the business systems of 61 major economies: A taxonomy and implications for varieties of capitalism and business systems research. *Socio-Economic Review*, 16(1), 5–38.
- Wooldridge, J. M. (2015). *Introductory econometrics: A modern approach*. Boston, MA: Cengage Education.
- Wright, M., Pruthi, S., & Lockett, A. (2005). International venture capital research: From cross-country comparisons to cross-ing borders. *International Journal of Management Reviews*, 7(3), 135–165.
- Yeganeh, H. (2014). A weighted, mahalanobian, and asymmetrical approach to calculating national cultural distance. *Journal of International Management*, 20(4), 436–463.
- Zaheer, S., Lamin, A., & Subramani, M. (2009). Cluster capabilities or ethnic ties? Location choice by foreign and domestic entrants in the services offshoring industry in India. *Journal of International Business Studies*, 40(6), 944–968.

- Zaheer, S., Schomaker, M. S., & Nachum, L. (2012). Distance without direction: Restoring credibility to a much-loved construct. *Journal of International Business Studies*, 43(1), 18–27.
- Zetzsche, D. A., & Preiner, C. D. (2018). Cross-border crowdfunding: Towards a single crowdlending and crowdinvesting market for Europe. *European Business Organization Law Review*, 19(2), 217–251.
- Zhang, J., Wedel, M., & Pieters, R. (2009). Sales effects of attention to feature advertisements: A Bayesian mediation analysis. *Journal of Marketing Research*, 46(5), 669–681.
- Zhang, J., Wong, P. K., & Ho, Y. P. (2016). Ethnic enclave and entrepreneurial financing: Asian venture capitalists in Silicon Valley. *Strategic Entrepreneurship Journal*, 10(3), 318–335.
- Zhelyazkov, P. I. (2018). Interactions and interests: Collaboration outcomes, competitive concerns, and the limits to triadic closure. *Administrative Science Quarterly*, 63(1), 210–247.
- Zhelyazkov, P. I., & Tatarynowicz, A. (2021). Marriage of unequals? Investment quality heterogeneity, market heat, and the formation of status-asymmetric ties in the venture capital industry. *Academy of Management Journal*, 64(2), 509–536.
- Ziegler, T., Shneor, R., Wenzlaff, K., Odorović, A., Johanson, D., Hao, R., & Ryll, L. (2019). *Shifting paradigms: The 4th European alternative finance benchmarking report*. Cambridge, UK: Cambridge Centre for Alternative Finance.
- Ziegler, T., Shneor, R., Wenzlaff, K., Wang, W. B., Kim, J., Odorović, A., ... Luo, D. (2020). *The global alternative finance market benchmarking report*. Cambridge, UK: Cambridge Centre for Alternative Finance.

How to cite this article: Maula, M. V. J., & Lukkarinen, A. (2022). Attention across borders: Investor attention as a driver of cross-border equity crowdfunding investments. *Strategic Entrepreneurship Journal*, 1–36.
<https://doi.org/10.1002/sej.1424>

APPENDIX

Robustness tests and supplementary analyses of investor-venture dyads

We ran several robustness tests, as reported in Table A1, to ensure the robustness of the dyadic analysis. First, Model 1 in Table A1 repeats the main model (Model 2 in Table 6) for comparison. Models 2–4 replicate the main model by using alternative numbers of controls (counterfactuals, i.e., potential ties that were not realized) in the case-control design (e.g., Meuleman et al., 2017; Sorenson & Stuart, 2001, 2008). While the main model uses 10 controls, Model 2 uses five, Model 3 uses 15, and Model 4 uses all possible controls for each realized tie. The results remain consistent across these models.

Our aim and empirical contribution are to test the hypotheses using a sample that includes both multiple venture host countries and multiple investor countries (e.g., Brouthers, Marshall, & Keig, 2016; Harzing & Pudelko, 2016) while controlling for venture host-country differences using our conditional logit (i.e., fixed effects logit) research design (Zhelyazkov & Tatarynowicz, 2021). However, we also examine the robustness of the results by estimating the model separately in the largest individual host countries. In Models 5–7, we estimate the models separately for the three most prominent venture countries in our sample: Finland, the United Kingdom, and Norway. Although these subsamples are very small in comparison to the sample used in the main model, the main results concerning H2 appear rather robust. H2 is significant, at least at the $p = .01$ level, in all three subsamples.

Model 8 tests the effects of the operationalization of distance control variables by using asymmetric measures of institutional distance and cultural distance. This test is important in light of recent debates about the potential asymmetric properties and directionalities of these dimensions (Ambos & Håkanson, 2014; Beugelsdijk, Ambos, & Nell, 2018; Beugelsdijk, Kostova, Kunst, Spadafora, & van Essen, 2018; Shenkar, 2012; Shenkar, Luo, & Yeheskel, 2008; Zaheer, Schomaker, & Nachum, 2012). For institutional distance, we calculated a directional measure based on differences in the legality index (Berkowitz et al., 2003; Cumming et al., 2010), subtracting the investor country measure from the target country measure. For cultural distance, we applied the asymmetric cultural distance measure developed by Yeganeh (2014). Model 9 uses the institutional distance measure by Witt et al. (2018) while otherwise replicating the main model. Model 10 replaces the lexicon-based language similarity measure with grammatical proximity (Eronen, Lukkari, & Seppälä, 2017) in the aggregate measure of linguistic distance used by Melitz and Toubal (2014), while otherwise replicating the main model.¹⁴ The results for Models 8–10 are consistent with the main model. The coefficients of certain distance variables change signs but remain insignificant.

In Model 11, we explore the possibility that co-nationality might have different effects, depending on whether it is based on expatriates investing in ventures in their countries of origin or foreigners investing in ventures that have their co-nationals as team members. In Model 11, instead of the co-nationality variable, we use separate measures for investor nationality equaling the venture country (i.e., expatriates investing in their country of origin) and co-nationality between the investor and team member(s) who come from outside the venture country. Both variables are positive. The variable for expatriates investing in their home countries is significant at $p = .09$, and the co-nationality between the investor and team member(s) from outside the country is significant at $p < .01$. These results indicate that the observed co-nationality effect is not solely due to expatriates investing back in their home countries.

We also conducted several other robustness tests, such as testing H2 using Firth's logit regression models (Coveney, 2015) with a campaign- and investment-level control variables (instead of investment-level fixed effects). In tie formation studies, a common empirical concern is that the realized tie may be a rare event when compared with the number of potential unrealized ties. To address this concern, some related prior tie formation studies (e.g., Haas et al., 2015; Sorenson & Stuart, 2001) have used the rare event logistic regression by King and Zeng (2001). Firth's logistic regression is a more recent alternative method for modeling rare events (Coveney, 2015). These tests are not reported but produced very similar results compared with the corresponding Models 3 and 4 in Table 6 which are estimated using normal logit regression and are otherwise similar. H2 continued to receive strong support, with $p = .001$ and $p = .001$, respectively.

Finally, because our tie formation model focuses on ventures that attract capital from cross-border investors (counterfactuals being alternative investors), we also considered the potential effects of this choice on our main findings. We, therefore, created an alternative research design by sampling alternative campaigns as counterfactuals for each realized investment and rerunning the analyses (i.e., fixed effects for the investor and not for the investment), and the results remained robust. These conditional logit results, corresponding largely to the main results, are not reported but are available upon request. Furthermore, when estimating these alternative models using a normal logistic regression with all potential counterfactuals, as has been done in a few prior studies on tie formation (e.g., Guenther, Johan, & Schweizer, 2018; Lin & Viswanathan, 2016; Podolny, 1994), the two alternative perspectives lead to identical research designs (a logit model explaining which of all the potential ties were realized). We confirmed this empirically, with identical results as those of Model 4 in Table 6; therefore, they are not reported separately.

Overall, the robustness tests resulted in consistent robust evidence supporting H2, showing the positive effects of investor attention in the investor country on investment tie formation in cross-border equity crowdfunding.

TABLE A1 Robustness analyses of investment tie formation in cross-border equity crowdfunding

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11
	Main model	5 controls per case	15 controls per case	All controls per case	Campaigns in Finland	Campaigns in the UK	Campaigns in Norway	Asymmetric distances	Alternative institutional d.	Alternative linguistic d.	Expatriates versus other co-nationals
H2: Campaign views in investor country	0.38 [0.00] (0.05)	0.40 [0.00] (0.05)	0.32 [0.00] (0.04)	0.36 [0.00] (0.05)	0.38 [0.00] (0.05)	0.38 [0.00] (0.05)	0.38 [0.00] (0.06)	0.32 [0.00] (0.06)	0.44 [0.00] (0.10)	0.46 [0.01] (0.17)	0.36 [0.00] (0.05)
Investor-team co-nationality	0.40 [0.00] (0.13)	0.39 [0.00] (0.13)	0.38 [0.00] (0.13)	0.40 [0.00] (0.14)	0.37 [0.01] (0.14)	0.38 [0.00] (0.14)	0.39 [0.01] (0.14)	0.27 [0.05] (0.14)	0.81 [0.12] (0.52)	1.08 [0.02] (0.46)	
Geographic distance	-0.00 [1.00] (0.08)	-0.03 [0.72] (0.08)	0.05 [0.51] (0.08)	-0.01 [0.93] (0.09)	-0.01 [0.87] (0.08)	0.00 [0.99] (0.08)	0.01 [0.94] (0.07)	0.10 [0.37] (0.11)	-0.04 [0.92] (0.43)	-0.50 [0.05] (0.26)	0.01 [0.87] (0.08)
Institutional distance	0.07 [0.07] (0.04)	0.06 [0.09] (0.04)	-0.06 [0.84] (0.32)	0.05 [0.18] (0.04)	0.05 [0.21] (0.04)	0.07 [0.06] (0.04)	0.08 [0.05] (0.04)	0.04 [0.28] (0.04)	0.21 [0.24] (0.18)	0.09 [0.55] (0.15)	0.06 [0.09] (0.03)
				(0.04)							
Cultural distance	-0.06 [0.48] (0.09)	0.02 [0.45] (0.03)	-0.03 [0.75] (0.08)	-0.05 [0.52] (0.08)	0.01 [0.93] (0.09)	-0.07 [0.42] (0.09)	-0.08 [0.33] (0.08)	0.15 [0.13] (0.10)	-0.22 [0.46] (0.31)	-0.21 [0.32] (0.21)	-0.09 [0.30] (0.09)
Linguistic distance	-0.03 [0.93] (0.37)	-0.08 [0.80] (0.31)	0.18 [0.63] (0.38)	0.06 [0.86] (0.35)	-0.10 [0.79] (0.36)	0.04 [0.90] (0.37)	0.04 [0.91] (0.33)	-1.91 [0.20] (1.50)	0.47 [0.49] (0.68)	0.49 [0.71] (1.30)	0.12 [0.77] (0.39)
Investor type	-0.23 [0.15] (0.16)	-0.23 [0.16] (0.16)	-0.24 [0.14] (0.16)	-0.26 [0.12] (0.17)	-0.30 [0.10] (0.18)	-0.21 [0.19] (0.16)	-0.19 [0.23] (0.16)	-0.42 [0.02] (0.18)	0.22 [0.64] (0.47)	-0.23 [0.66] (0.52)	-0.26 [0.10] (0.16)
Investor gender	-0.36 [0.01] (0.15)	-0.37 [0.01] (0.15)	-0.35 [0.02] (0.15)	-0.36 [0.02] (0.15)	-0.31 [0.03] (0.14)	-0.34 [0.02] (0.14)	-0.30 [0.03] (0.14)	-0.36 [0.06] (0.19)	-0.05 [0.81] (0.20)	-0.14 [0.69] (0.35)	-0.37 [0.01] (0.15)
Investor age	-0.00 [0.89] (0.00)	-0.00 [0.88] (0.00)	-0.00 [0.51] (0.00)	-0.00 [0.97] (0.00)	-0.00 [0.98] (0.00)	0.00 [0.97] (0.00)	-0.00 [0.98] (0.00)	0.00 [0.88] (0.00)	0.00 [0.75] (0.01)	-0.01 [0.56] (0.01)	-0.00 [0.84] (0.00)
Investor prior investments	0.28 [0.00] (0.08)	0.28 [0.00] (0.08)	0.28 [0.00] (0.08)	0.27 [0.00] (0.08)	0.30 [0.00] (0.08)	0.27 [0.00] (0.07)	0.26 [0.00] (0.07)	0.39 [0.00] (0.11)	0.04 [0.86] (0.20)	0.21 [0.05] (0.11)	0.28 [0.00] (0.08)
Investor-campaign country national											
Investor-team co-nationality in other than home countries											
Investment level fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Log-likelihood	-1854.1	-1852.6	-2087.2	-1774.3	-1303.1	-2,212.6	-4,911.2	-1,296.6	-253.0	-237.7	-1849.1
N	8,035	8,035	9,300	7,455	4,471	11,591	194,255	5,311	1,234	1,283	8,035

Note: Conditional logit estimates (logit, i.e., fixed effects logit) of cross-border tie formation (case-control design grouped by investment). Model 1 replicates the main dyadic model (Model 2 in Table 6), and Models 2–4 employ alternative numbers of controls for each case.

Model 5 includes only cross-border investments made in companies located in Finland. Model 6 includes only cross-border investments made in companies located in the United Kingdom. Model 7 includes only cross-border investments made in companies located in Norway. Models 8–10 employ alternative operationalizations of distance variables. In Model 11, instead of the co-nationality variable, we use separate measures for investor nationality equaling campaign country (expatriates investing in their home countries) and co-nationality between investor and team member(s) in other countries. Robust standard errors (clustered by campaign) in parentheses; two-tailed *p* values in brackets.