Home region orientation, international intensity, and funding performance of international crowdfunding projects

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ABSTRACT

This paper investigates whether international reward crowdfunding campaigns effectively attract global backers by testing the global market penetration level and explores the impact of home region orientation and international intensity on crowdfunding performance. Utilising 24,100 Kickstarter reward crowdfunding campaigns in the technology sector across the triad from 2009 to 2019, we find that home-region-specific advantages are important determinants of fundraising success. Our evidence also indicates that home region orientation positively moderates the multi-nationality-crowdfunding performance relationship. Lastly, cross-sectional tests reveal heterogeneous impacts of home-region advantages across backers' home-country levels of financial inclusion and investor protection.

1. Introduction

Crowdfunding, as a novel method for helping entrepreneurs bypass traditional financial intermediaries to directly raise financial resources for entrepreneurial, cultural, and social projects, has become a global phenomenon and popular financing channel in recent years (Mollick, 2014; Agrawal et al., 2015; Yu et al., 2017). Thus, crowdfunding provides entrepreneurs a means to approach and leverage networks across countries and regions to raise funds to support a particular business idea (Mollick, 2014; Agrawal et al., 2015). However, despite the benefits of using internet technology to bridge geographical boundaries and facilitate resource mobility (Lin and Viswanathan, 2016), project supporters prefer undertaking online transactions in the same geographical area because of distance-related frictions such as information asymmetry (Agrawal et al., 2015; Dejean, 2019). Yet prior studies have focused and examined the direct characteristics and quality of the campaigns (Mollick, 2014), investment features of peer investors (Cordova et al., 2015), funding dynamics, and pledgers' motivation (Crosetto and Regner, 2018), crowdfunding covenant as potential contracts to implement efficient and profit maximising allocation (Strausz, 2017), and the effects of language used by the founder on the behaviour of funders (Chan et al., 2021). Relatively little systematic attention has been given

to the effects of home-region advantages and international intensity on crowdfunding performance (Agrawal et al., 2015; Miller et al., 2016). One study which is close to the current study is that of Mollick (2014) who provided some exploratory insights into how personal network, underlying project quality and geography influence successful crowdfunding efforts. However, while Mollick (2014) found social capital, preparedness and geography to be linked to the nature and success rate of crowdfunding projects, it is pertinent to point out that the impact of international and home region-based dimensions of crowdfunding campaigns was not examined.

The above is against the backdrop that, it has been documented that certain regions raise more funds in crowdfunding campaigns than others. According to Ziegler et al. (2020), Europe's total regional volume of crowdfunding grew at an average rate of 69% between 2013 and 2018. In contrast, crowdfunding volume across the Asia-Pacific region grew at an average rate of 127% over 2013–2018. Regarding the North and Latin America region, the United States market accounts for about 96% of the overall regional activity. Thus, the heterogeneous distribution and unequal attraction of global crowdfunding resources across regions beg the question of whether home regional orientation and the level of international intensity influence crowdfunding campaigns and fundraising success. Addressing the above issue is important given that

crowdfunding platforms solely utilising the internet are expected to reach funders internationally by determining their geographic scope and impact, a critical concern for international business research (see Banalieva and Dhanaraj, 2013).

Drawing on regionalisation theory and building on the study of Mollick (2014), this paper explores how home region orientation and international intensity influence international reward crowdfunding platform campaigns and fundraising success. We contend that home region orientation has a substantial impact on crowdfunding success. Thus, home country/regional advantages enable firms operating within a region to enjoy economies of interdependence, reduced transaction costs, and information asymmetry and therefore influence customers' purchasing behaviours (Qian et al., 2008; Gerber et al., 2013; Crossetto and Reyner, 2018; Nordas, 2010). Our empirical investigation is based on 24,100 worldwide reward crowdfunding campaigns in the technology industry funded on Kickstarter from 2009 to 2019. Kickstarter is one of the most popular and successful crowdfunding platforms that provides publicly available data. The all-or-nothing rule on Kickstarter guarantees that the money can only reach the founders when the pledged amount meets the funding goal set, which primarily motivates the founders' enthusiasm. The pioneering role of the platform, the massive campaigns on the platform, and the innovative features of the campaigns make Kickstarter an ideal data sample for analysing the regional nature of international reward crowdfunding. We focus on Kickstarter's technology sector - one of the most popular categories on crowdfunding platforms (Zhang and Chen, 2019), to enable us to capture a significant portion of the crowdfunding market, and thereby facilitating meaningful conclusions to be drawn about the broader crowdfunding landscape. In addition, focusing on technology projects allows for data consistency and comparability with previous studies (Duan et al., 2020; Zhang and Chen, 2019). Thus, this enables us to build on existing literature and contribute to a cumulative body of knowledge on international crowdfunding projects how they affect fundraising performance. We collected a comprehensive project-level data set that contained project/characteristics and rich information on project backers.

We provide evidence consistent with our hypotheses and identify the positive role of home region orientation campaigns in determining fundraising success. Home region orientation is found to increase the money pledged by funders and facilitate the achievement of campaign goals. To control for the country-specific effects, we also employ the US subsample to test the impact of home region orientation on crowdfunding success, and the results are consistent. We further examine the interaction between the home triad and international intensity on fundraising success. Similar to the pattern identified in Li (2005), the horizontal S curve of international intensity-financing performance of crowdfunding projects is predicted and tested. Lastly, home region orientation positively moderates the horizontal S-shaped international intensity-performance relationship, particularly in the United States. Attempting to enhance the home triad region orientation and choosing to stay in the efficient operational area of international intensity generally benefit campaign creators with more funding opportunities.

The rest of the paper is organised as follows. Section 2 reviews the existing literature and formulate the research hypotheses. Section 3 describes the data and methodology. The empirical results are presented in Section 4. Section 5 discusses cross-sectional heterogeneity based on customers' home country financial inclusion and investor protection levels and presents the robustness check. We summarise the contributions, implications, and conclusions in Section 6.

2. Literature review and hypothesis development

2.1. Home country/regional-based advantages and crowdfunding

Crowdfunding, which is defined as an open call, essentially through the Internet, to provide financial resources for specific purposes, has become a viable source of entrepreneurial seed capital (Schwienbacher and Larralde, 2010). Unlike the traditional form of venture financing, crowdfunding has various goals and uses. These range from raising a small amount of capital for a one-time project (e.g., an event) and creating interest in new projects at the conceptual stage of development to a reward-based approach that allows funders to receive rewards for backing a project. In international reward crowdfunding platforms such as Kickstarter, backers of the projects simultaneously play the roles of investors and customers (Strausz, 2017). Thus, fundraising involves not only fundraising from investors but also selling products and services to customers worldwide, similar to multinational enterprises (Buckley, 2017).

Given the international nature of reward crowdfunding with technology as a medium to reach funders globally, how founders determine the geographic scope and its impact on crowdfunding is a central concern to researchers in international business (Banalieva and Dhanaraj, 2013). Rugman and Verbeke (2004) contend that most firms are global but focus closely on their home country and region. Kong et al. (2020) examine the environmental effect of the home country on firms' outward foreign direct investment decisions. The home country- and regional-based advantages engender feelings of community, which is important for a firm's competitive advantage and performance (Ghemawat, 2005).

Regionalisation theory argues that because countries within a region are well integrated, firms can enact regional strategies that take advantage of the interdependence between countries within a region (Rugman and Verbeke, 2004; Ghemawat, 2005; Kim et al., 2020). Countries that are relatively close to one another are likely to share similarities in terms of culture, governance systems, and economic proximity (Ghemawat, 2005), which may reduce the cost of coordination and operation and improve the success of crowdfunding campaigns and fundraising success (see Gerber et al., 2013).

Evidence also suggests that commonalities have intensified in the past few decades through free trade agreements, tax treaties, and regional economic integration, bringing many opportunities for investors and entrepreneurs (Ghemawat, 2005; Flores and Aguilera, 2007). Entrepreneurs and investors can leverage their resources across a collection of well-integrated countries within the region to obtain significant synergistic benefits from interdependence (Qian et al., 2010; Banalieva and Dhanaraj, 2013; Kim et al., 2020). Firms, therefore, enjoy economies of interdependence when operating within the region due to low information asymmetry, cultural distance, and lower coordination costs.

International crowdfunding campaigns are designed to sell products through crowdsourcing in online social communities and share the information on the web page. Therefore, the impact of location on financing in the traditional financing channel should be eliminated in the context of crowdfunding (Agrawal et al., 2015). One factor that influences the crowd to pledge funds is the feeling of identity/community. Regional-based advantages such as language, geographic proximity, and culture may foster community and trust, which are important for fundraising campaigns. Thus, regionalising economic activity reflects the importance of geographic proximity and cultural, economic, and administrative proximity (Ghemawat, 2005).

Mollick (2014) suggests that the distribution of projects posted on Kickstarter is uneven across the U.S., reflecting the cultural characteristics of the city located by founders, and a feeling of shared community is positively related to funding success. It also suggests that home region characteristics are vital in successful fundraising in international reward crowdfunding. This key finding is consistent with the view in international business literature that staying in one's home region can lead to significant synergistic benefits from interdependence (Banalieva and Dhanaraj, 2013; Kim et al., 2020).

Taken together, scholars argue that the benefits of staying in one's home region allow firms and entrepreneurs to enjoy exclusive access to resources from home and economies of interdependence, which are

important to the competitive advantage and success of firms (Banalieva and Eddleston, 2011; Banalieva and Dhanaraj, 2013; Kim et al., 2020). Grounded in the above arguments, we argue that home country and regional advantages such as cultural proximity and ease of coordination are important for successful crowdfunding campaigns. Regional crowdfunding platforms achieve greater economies of scale in design, procurement, and coordination, leading to low information asymmetry and successful fundraising campaigns. Thus, we put forward the following hypothesis.

H1. Technology campaigns oriented in the home region or state are better able to utilize the home-bound advantages and have a higher rate of funding success.

2.2. International intensity

International intensity is an important facet of internationalisation, which captures the firm's commitment to serving customers in foreign markets (Li, 2005; Miller et al., 2016). It is argued that a firm can enhance its international intensity by increasing the proportion of its sales to customers in foreign countries other than its home country (Li, 2005; Miller et al., 2016). Previous studies examining the relationship between a firm's international intensity and funding performance have found mixed and inconclusive results. While Denis et al. (2002) documented a negative effect, Tsao and Chen (2012) found a positive association, and Dau (2013) reported an insignificant association. The nonmonotonic relationship includes U-shaped, inverted U-shaped, S-shaped, and N-shaped relationships. Li et al. (2012) support the inverted U-shaped curve, while Lu and Beamish (2004) find a U-shaped relationship. The horizontal S curve has been found by Chen and Tan (2012) and Xiao et al. (2013). They argue that multinationalism has costs as well as benefits. The firm performance decreases when international intensity is in the lower and higher ranges and increases when international intensity is within the middle range. Conversely, Powell (2014) suggests the N shape regarding the multinational-performance relationship.

As a new form of international business, similar to multinational enterprises, we conjecture that the international intensity-performance relationship in the technology reward crowdfunding is horizontally S-shaped, consistent with the model constructed by Li (2005). This model was demonstrated using a longitudinal sample of manufacturing firms in China for the 2001–2007 period. The moderating effects of a firm's governance structure and the degree of centralised government control on the relationship were also discovered (Xiao et al., 2013). At a lower degree of international intensity, campaigns are associated with the costs of setting up appropriate organisational structures and communication channels, and such increased costs are likely to affect crowdfunding performance negatively (Miller et al., 2016). Miller et al. (2016) state that consumer ethnocentrism and organisational impediments contribute to the negative relationship at the first stage of the multinational-performance relationship. In addition, campaigns may need to work through a phase of experiential learning for startups to access more resources (Li, 2005). Such a process leads to campaign challenges at a lower international intensity, where campaigns may encounter low interactions with customers and network resources. This supports the findings of Li et al. (2018), which reveal that domestic market-focused SMEs experience better financial resource growth than international SMEs in the short run.

In the middle stage, it is argued that the campaigns strengthen the capabilities of dealing with consumer ethnocentrism and organisational impediments. Firms enjoy economies of scale and scope; hence, a positive relationship between international intensity and crowdfunding performance is expected (Eden and Miller, 2004). Firm decision-makers may also learn to find a flexible way to operate business among different locations at the middle stage of development, and there is an increase in knowledge seeking by campaigns (Rugman and Verbeke, 2003), which

allows the campaigns to fit their products into the current situation better. At the last stage, high international intensity, the campaigns encounter information overload, additional processing costs, and conflicts in dealing with two sets of organisational routines both domestically and internationally (Rosenzweig and Singh, 1991). When the international intensity continues to expand, the operation of the campaigns and the organisational structures will become more complex, thereby limiting this upward trend (Li, 2005). Therefore, we hypothesise that.

H2. The international intensity of campaigns is negatively associated with the fundraising performance of US technology reward crowdfunding campaigns in the low and high ranges of internationalisation but positively associated in the middle range.

2.3. Interaction between home region orientation and international intensity

Several studies, such as Rugman and Verbeke (2004), Ghemawat (2005), and Collinson and Rugman (2008), have documented that world-leading international firms have strong regional preferences in their international investment strategies as regional strategies affect performance (Oh and Rugman, 2007; Qian et al., 2008). This is because firms operating within their home country/region enjoy advantages streaming from cultural, administrative, geographic, and economic proximity (Ghemawat, 2005). For example, Ghemawat (2001) reported that trade for a region with the same culture would be three times greater than for regions without a common culture. This is because cultural distance and political and administrative factors affect the whole categories of products in different regions and, consequently, the performance of projects (Verbeke and Asmussen, 2016).

From the above perspectives, it is argued that firms tend to operate in geographically close regions. Vedula and Matusik (2017) find that cues from geographically proximal peers are important in driving strategic decision-making under uncertainty in the context of US Venture Capital (VC) firms' first internationalisation decisions. VC firms will imitate their peers when faced with uncertain decisions. Similarly, firms will prefer to operate in markets like their geographically proximal peers. Geographically close regions offer firms with economic proximity. Kim et al. (2019) discovered that fast-mover CMNEs' technological and marketing resources are valuable in intra-regional host countries but vulnerable in other regions. As a result, faster intra-regional internationalisation leads to better financial performance for the firm, while internationalisation in other regions leads to poorer financial performance.

Grounded in the above argument, we expect the regional strategy to positively moderate the international intensity-crowdfunding performance relationship. Thus, home country advantages may mitigate the potential costs and maximise economies of scale and scope (Rugman and Verbeke, 2004; Li, 2005). We, therefore, hypothesise that.

H3. The interaction between home region orientation and international intensity is positively associated with the fundraising performance of technology reward crowdfunding campaigns.

3. Data and methodology

3.1. Data source and sample selection

Kickstarter is an international fundraising website located in the U.S., one of the world's largest reward crowdfunding platforms. This research employs a dataset of technology campaigns extracted from the Kickstarter platform. The campaign's fundraising period ranges from 2009, when Kickstarter took off, to 2019. The official statistics published by Kickstarter show that approximately 40,000 technology projects were launched during this period. A web-crawling algorithm based on Python programming language was developed to scrape data from

Kickstarter on project characteristics, such as the names of creators, project updates and comments, geographic location, initiation and deadline dates, pledged goals, number of backers, the total amount pledged, project textual descriptions, and video numbers. Our algorithm finally extracts 24,100 Kickstarter projects with relatively complete available information in the technology category.

Table 1 shows the categories covered and year distribution in the sample. It shows that the subindustries of apps, web, and hardware comprised most of the technology industry on Kickstarter between 2009 and 2019. All three subindustries are characterised by innovation and high tech. The technology projects launched on the platform peaked yearly at 6346 in 2015. Then, they decreased to 2600 in 2019, probably because the participants became more rational, and the crowdfunding market has recently become less attractive for innovative entrepreneurs.

3.2. Measurement of variables

Our dependent variable is constructed following the method of Duan et al. (2020), which depicts campaign fundraising success, i.e., *Successrate*. *Successrate* denominates the ratio of funding goals reached during the period, calculated as the total money generated from the backers divided by the goal set up front.

Our key explanatory variables include two sets of variables, which can be considered proxies of home region orientation and international intensity. The regional strategy is proxied by the triad that contains three regions: North America, the European Union, and Asia-Pacific. *The home region orientation dummy* (*HRO*) is a dummy variable that takes 1 if the project is oriented in its home region and 0 otherwise. *The home state orientation dummy* (*HSO*) is a dummy variable that takes 1 if the project is oriented in its home state and 0 otherwise. *Home triad-region orientation* (*HTriad*) calculates the ratio of sales in North America (excluding the US) to total foreign sales. The second set is the proxy of international

intensity, namely, *Intintens*, which is calculated as the ratio of foreign to total sales, also known as international intensity (Li, 2005; Miller et al., 2016).

Following Mollick (2014) and Dai and Zhang (2019), we controlled for a set of variables, including *Updates*, *Video*, *Returningbacker*, etc. First, the updates provided by Kickstarter provide one means of connection between creators and backers. According to Dai and Zhang (2019), backers' support has a positive relationship with the projects' updates, and creators are more likely to renew their updates once the goal is achieved. We control for updates to address the following concerns: the performance of the project may be motivated by the founders who advertise their projects actively as they get close to the goals and reduce the connection with possible backers before achieving the goal. Second, we control for *Video*. The visibility of the crowdfunding project could bring benefits to the project, such as the ability to share videos of the project through social networks, such as Facebook (Mollick, 2014).

Next, *returning backers are backers who have invested in other projects on Kickstarter before; they* have experience in interacting with the creators before. Research has shown that the extent of interaction between creators and backers on a campaign is positively correlated with backers' contribution behaviour (Kromidha and Robson, 2016). Thus, we also controlled for *Returningbackers*. We also controlled the goal of the project since an unachievable project may make the project less likely to succeed (Johnson et al., 2018). We winsorized all the variables at the 1% and 99% levels except the dummy variables. All the variables are defined in Appendix A.

3.3. Descriptive statistics

Table 2 presents the descriptive statistics of all the variables, including the number of observations, mean, maximum, minimum, and standard deviation. The main pooled sample consists of 24,100 projects from 2009 to 2019. The average percentage of funding goals reached during the duration, calculated as the total money generated from the backers divided by the goal set upfront, is approximately 120%.

International reward crowdfunding is a new fintech approach to raising money across national borders and distributing products and services globally to campaigns' backers. However, the ability of campaign initiators to sell standardized products and services worldwide may be very limited and even worse than that of multinational enterprises. The existing research on the regional strategies of multinational enterprises mainly focuses on how to adapt to the local context and change the management process to enjoy the benefits of globalization. However, it is argued that multinational enterprises distribute their businesses unevenly across the world and highly lie on location-bound firm-specific advantages (Rugman and Verbeke, 2004). As a new form of international business, the fundraising process and selling strategy of international reward crowdfunding is also regionalized in most cases to utilize home-region-bound campaign-specific advantages.

For creators of 6810 technology projects that were successfully funded in our sample between 2009 and 2019, very few of them managed to sell their products and services globally. Among 5151 campaigns that operate their businesses mainly in triad regions with geographic sales data available, we find that there are approximately 82 projects that do business mainly within the home region. The market coverage of campaigns in terms of breadth and depth across the triad, i.e., North America, the European Union, and Asia-Pacific, are analysed to reveal the nature of international reward crowdfunding.

The classification of international reward crowdfunding campaign orientation is based on the grouping of multinational enterprises established by Rugman and Verbeke (2004). Home region-oriented campaigns are defined as having no less than 50% of the sales in their home region of the triad. Bi-regional campaigns have over 20% of the sales in two triad regions and less than 50% in any region. Host region-oriented campaigns have more than 50% of the sales in any region of the triad market other than the home region. Global campaigns

Table 1
Sample Characteristics.

Panel A: Campaign Category distribution of the sample.

Campaign category	Observations
Apps	4947
Web	3517
Hardware	3410
Gadgets	3146
Software	2818
Wearables	1194
DIY Electronics	984
Software	724
3D Printing	675
Robots	584
Technology	463
Camera Equipment	452
Flight	365
Space Exploration	327
Fabrication Tools	258
Makerspaces	233
Aplicaciones	3
Total	24100

Panel B: Yearly distribution of the sample.

Year	Observations
2009	24
2010	128
2011	199
2012	394
2013	976
2014	3493
2015	6346
2016	4608
2017	2601
2018	2731
2019	2600
Total	24100

Table 2
Descriptive statistics.

Variables	No. of Obs.	Mean	Std. Dev	Min	Max
1. Success	24100	0.28	0.45	0.00	1.00
2. Successrate	24100	1.20	3.43	0.00	24.82
3. HRO	24100	0.37	0.48	0.00	1.00
4. HRO%	24100	0.32	0.38	0.00	1.00
5. HSO	15903	0.07	0.26	0	1
6. HSO%	15903	0.03	0.13	0	0.75
7. Intintens	24100	0.20	0.29	0.00	1.00
8. HTriad	24100	0.12	0.20	0.00	1.00
9. Goal	24100	49228.13	108000.00	141.85	800000.00
10. Pledged	24100	22840.00	74878.04	0.00	552000.00
11. Updates	24100	5.16	8.92	0.00	44.00
12. Rewards	24100	6.66	4.46	1.00	22.00
13. Returningbacker	24100	117.65	369.29	0.00	2579.00
14. Newbacker	24100	42.30	127.19	0.00	899.00
15. Collaborator	24100	0.25	0.80	0.00	5.00
16. Backed	24100	2.65	7.16	0.00	48.00
17. Video	24100	0.58	0.49	0.00	1.00
18. Created	24100	1.50	1.27	1.00	9.00
19. Websites	24100	1.45	1.41	0.00	6.00
20. FAQ	24100	1.67	3.96	0.00	22.00

have over 20% and less than 50% in any triad region. The classification of the 6810 campaigns is presented in Table 3.

Table 3 shows that only 37 global campaigns have balanced the geographic dispersion of sales across the North American Free Trade Area (NAFTA), the European Union, and Asia-Pacific. The percentage of intraregional sales within global campaigns is averaged at 32.3%. A total of 343 projects are classified as bi-regional, with average home region triad sales of 38.3%. The host region-oriented category includes 560 campaigns, within which the percentage of intraregional sales is averaged at 16.1%. Approximately 4211 projects (61.8%) of the total sample are classified as home region-oriented. The average percentage of intraregional sales within this category is 78.3%.

3.4. Model specification

Four regression equations are generated based on the hypotheses. For H1, this paper adopts Tobit regression analysis of home region orientation on technology crowdfunding performance. The first regression model is specified as follows.

$$Successrate_i = \beta_0 + \beta_1 HRO_i + \beta_2 Controls_i + \beta_3 Year_i + \beta_4 Industry_i + \varepsilon_i \quad (1)$$

Where our dependent variable is *Successrate*, representing the measure of crowdfunding performance. The key independent variable is *HRO*. ε is the error term. All regressions include yearly and industry fixed effects. The main sample comprises 24,100 campaign observations initiated during 2009 and 2019.

For H1, Logit and Tobit regressions of state orientation on technology crowdfunding performance are also robustly analysed. The

Table 3
Classification of the 6810 international reward crowdfunding campaigns.

Type of campaign	No. of campaigns	Percentage of 6810 (%)	Percentage of 6493 (%)	Percentage intra-regional sales (%)
Global	74	1.1	1.1	31.4
Bi-regional	589	8.6	9.8	37.5
Host region oriented	462	6.8	7.1	23.1
Home region oriented	5368	78.8	82.7	77.3
Other regions and insufficient data	317	4.7	N/A	N/A
Total	6810	100.0	100.0	66.7

regression model is specified similarly,

$$Successrate_i = \beta_0 + \beta_1 HSO_i + \beta_2 Controls_i + \beta_3 Year_i + \beta_4 Industry_i + \varepsilon_i \quad (2)$$

The key independent variable is *HSO*. *HSO* is a dummy variable that takes the value of 1 if the project is oriented in its home state. This sample comprises 15,903 campaigns located in the United States.

To test H2, we carry out Tobit regression analyses to examine the moderating effect of a regional strategy on the relationship between multi-nationality and the fundraising performance of technology crowdfunding. The third regression model is specified as follows. *Successrate$_i$* is employed to show the fundraising performance of technology crowdfunding.

$$Successrate_i = \beta_0 + \beta_1 Intintens_i + \beta_2 (Intintens_i)^2 + \beta_3 (Intintens_i)^3 + \beta_4 HTriad_i + \beta_5 Controls_i + \beta_6 Year_i + \beta_7 Industry_i + \varepsilon_i \quad (3)$$

Regarding H3, we test the interaction effect between the home triad and international intensity. Consequently, we include in our model interaction term, i.e., *HTriad$_i$* Intintens$_i$*, in the regression model. This regression model is conducted based on the 15,903 campaigns in the United States. The sample is narrowed down to US campaigns because different country environment specifications affect the multinational-performance relationship (Nielsen, 2010; Kim et al., 2015). All regressions include yearly and industry fixed effects.

$$Successrate_i = \beta_0 + \beta_1 Intintens_i + \beta_2 (Intintens_i)^2 + \beta_3 (Intintens_i)^3 + \beta_4 HTriad_i + \beta_5 HTriad_i * Intintens_i + \beta_6 Controls_i + \beta_7 Year_i + \beta_8 Industry_i + \varepsilon_i \quad (4)$$

3.5. Propensity score matching (PSM)

Table 4 demonstrates that there are differences in observable characteristics between the bi-regional group (campaigns operating mainly in two triad regions) and non-bi-regional group in our research. Relative to non-bi-regional campaigns, campaigns operating mainly in two triad regions have more website links presented, more project operating experience, more collaborators in the team, and more project investment experience. To help reduce concerns that our results may be confounded by these systematic differences, we perform a matching exercise where we match campaigns on these characteristics.

Our matching exercise begins with a logit regression at the campaign level. The propensity score matching model is thus specified as follows:

Table 4
Summary statistics of treatment and control sample.

Panel A: Average treatment effect				
Variables	Treated firms	Control firms	Differences	t-stat
	ATT	ATT		
Success	0.600	0.441	0.160[a]	9.110

Panel B: Before matching				
Variables	Treated firms	Control firms	Differences	t-stat
	Mean	Mean		
Websites	1.722	1.433	0.289[a]	6.360
Created	1.919	1.481	0.438[a]	10.650
Collaborator	0.571	0.236	0.336[a]	12.900
Backed	0.775	0.579	0.176[a]	6.400
Year	YES	YES		
Industry	YES	YES		

Panel C: After matching				
Variables	Treated firms	Control firms	Differences	t-stat
	Mean	Mean		
Websites	1.722	1.770	0.022	−0.730
Created	1.919	1.887	0.032	0.410
Collaborator	0.571	0.558	0.013	0.240
Backed	0.775	0.717	0.058	1.280
Year	YES	YES		
Industry	YES	YES		

Notes: This table reports the characteristics of treatment and control campaigns. The difference of ATT between the two groups equals 0.160, and the t-value is 9.11 after propensity score matching. Panel B and C present the comparison between treatment and control campaigns using a pooled and a propensity score-matched sample, respectively. Variables are defined in Appendix A.
*p < 0.05.
**p < 0.01.
[a] p < 0.001.

$$Success_i = \beta_0 + \beta_1 Biregion_i + \beta_2 Websites_i + \beta_3 Created_i + \beta_4 Backed_i$$
$$+ \beta_5 Collaborator_i + \beta_6 Year_i + \beta_7 Industry_i + \varepsilon_i \qquad (5)$$

Where *Bi-region* is the treatment variable, a dummy variable is adopted to denominate the consumer distribution, taking a value of 1 if it is a bi-regional campaign and zero otherwise. *Success* is the dependent variable of the PSM model, which is the campaign survival dummy taking a value of 1 if the initiator successfully reached its goal during the period and zero otherwise. Variables of *Websites*, *Created*, *Collaborator*, and *Backed* are included in the propensity score matching model. Both the year effect and industry effect have been controlled. For each bi-region campaign, we identify the non-bi-regional campaign that is closest to the bi-regional campaign in terms of propensity score. The match is implemented using a nearest-neighbour propensity score match without replacement. This specification produces estimates on bi-region that capture the average treatment effects by comparing observations operating mainly in two triad regions against non-bi-regional observations with comparable propensity scores, holding other factors constant.

Table 4 reports the characteristics of the treatment and control campaigns. Panel A shows that there is a significant difference in *Success* after PSM. After PSM, the probability of the initiator successfully reaching the funding goal is 0.600 in the treatment group, compared with 0.441 for the control group. The difference in ATT (Average Treatment Effect of Treated) between the treatment and control groups equals 0.16, and the t value is 9.11 after propensity score matching. We find no selection bias between the two groups. Panel B shows that before PSM, the mean values of the variables of the treated campaigns significantly differ from those of the controlled campaigns. Panel C shows the results of t-tests that compare the attributes of Websites, Created, Collaborator, and Backed across the treatment sample (bi-regional campaigns) and control sample (non-bi-regional campaigns) after PSM.

As expected, after PSM, the difference in the mean values of the variables between the two groups was eliminated (Panel C). All the Logit and Tobit regressions included in this paper are performed after propensity score matching, thereby reducing selection bias.

4. Empirical results

4.1. Impact of home region/state orientation

Table 5 shows the Tobit regression results from regressing home region orientation on financing performance on the Kickstarter crowdfunding platform. Our dependent variable (*Successrate*) is the ratio of funding goals reached during the time duration, calculated as the total money generated from the backers divided by the goal set up front. All regressions include yearly and industry fixed effects.

Models (1) in Table 5 report the baseline results, which include all control variables and *HRO*. As shown in the table, the home-region-oriented campaigns (*HRO*) appear to be 0.511 times more likely to be successfully funded than the other projects, providing evidence of increased and significant effects on fundraising success when the percentage of intraregional sales increases. As a result, Hypothesis 1 is supported. These results suggest that the customers take into consideration the effects of the home region-bound advantages when making investment decisions.

We also employ a subsample of 15,903 U.S. campaign observations to see whether the country's environment may affect the internationalisation strategy, as shown in Model (2) in Table 5. As US campaigns comprise over half of the total sample, we examine the effect of the country's environment based on US campaigns. The results provide strong evidence that home region-oriented technology campaigns on reward crowdfunding platforms are better able to utilize the home region-bound advantages and are preferred by investors or consumers. These results show that, in the US where numerous creative campaigns are put online, customers effectively distinguish familiar campaigns from uprooted ones.

Table 5
Effects of home region orientation on crowdfunding performance.

Variables	Tobit DV= Successrate	Variables	Tobit DV= Successrate
	Model (1)		Model (2)
HRO	0.511***	*HRO*	1.251***
	(6.13)		(17.52)
Yearduration	7.029***	*Rewards*	0.767***
	(6.18)		(13.73)
Created	0.446***	*Goal*	−0.395***
	(13.56)		(−21.44)
Reviews	3.683***	*Created*	0.300***
	(12.06)		(13.23)
Goal	−0.404***	*Websites*	0.046**
	(−17.30)		(2.15)
Rewards	1.299***	*Video*	1.319***
	(19.75)		(17.43)
Websites	0.129***	*Backed*	
	(3.89)		
Intercepts	−2.437	*Intercepts*	0.090
	(−1.03)		(0.11)
Year	YES	*Year*	YES
Section	YES	*Industry*	YES
N	24100	N	15903
p-VALUE	0.000	p-VALUE	0.000
Pseudo R-Squared	0.054	Pseudo R-Squared	0.053

Notes: (1) The table reports Tobit regression of home region orientation on technology crowdfunding performance.
(2) Model (1) and Model (3) report the key variable of HRO, Model (2) and Model (4) report the key variable HRO%.
(3) All equations include Year and Section fixed effect. (4) ***, **, and * indicate the level of significant of 1%, 5%, and 10%, respectively.

In addition, the results might lead to endogeneity concerns. For example, funding success/performance could influence the degree of internationalisation decisions or a firm's poor performance might affect its internationalisation policy due to the cost implications of multi-nationalism. We, therefore, use an instrumental variable (IV) strategy to address such concerns. Specifically, we initially use *Backer openness* as our instrumental variable, which is calculated by taking the natural logarithm of the weighted mean of trade openness and then dividing by 100. This variable is weighted by the percentage of backers of each country. Investors from nations with greater *Backer openness* are subject to more intense competition within their domestic markets (Ang and Kumar, 2014; Damoah, 2021), our instrumental variable should be negatively correlated with the key independent variable. Furthermore, the success of a crowdfunding project is an individual behaviour, there is no current evidence showing that the openness of the country will have a direct influence on the success of a crowdfunding project. The results of the IV strategy are presented in the first two columns of Table 6. Second, we add a new instrumental variable, *backer terrorism*, to further address the endogeneity problem. Wang and Young (2020) state that terrorist activity increases investor risk aversion. When there are more terrorist activities, investors would be more conservative and avoid potential risks. Therefore, these investors will be more hesitant to invest in their home country with a higher-level risk of terrorism, since this will be more likely to cause systematic risk. We therefore expect a negative relationship between *backer terrorism* and our independent variable. Moreover, there is no current evidence showing that the terrorism of the country will have a direct influence on the performance of a crowdfunding project. We also use Cragg-Donald F-statistic and Stock-Yogo tests to check the validity and relevance of the instrument. The result also shows that there is no weak instrumental variable in our test. The empirical results of the IV strategy are presented in the last two columns of Table 6.

4.2. Dynamic effect of international intensity

Table 7 reports the Tobit regression results regarding the effect of international intensity, home region orientation and their interaction on the financing performance of US technology campaigns on the Kickstarter crowdfunding platform. The sample employed to test Models comprises 15,903 US campaign observations from 2009 to 2019 to control the country's environmental impact.

Model (2) reports the regression results without considering the moderation effect of regional strategy. The coefficients of the linear term and the cubic term of international intensity are significantly negative,

Table 6
Addressing endogeneity concerns: IV method.

Variables	First step regression	Second step regression	First step regression	Second step regression
	HRO	*Successrate*	*HRO*	*Successrate*
	(1)	(2)	(3)	(4)
Backer openness	−0.0003*** (0.0001)			
Backer terrorism			−0.0003*** (0.0001)	
HRO		1.309** (0.635)		0.892** (0.363)
Control	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes
N	22889	22889	22895	22895

Notes: The table shows the regression result. The estimation results show that after considering the endogenous problem, the relationship between the *HRO* and the performance of the crowdfunding projects is still significant. The *standard errors* are reported in brackets. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

Table 7
Effect of international intensity and home region orientation interaction on crowdfunding performance.

Variables	Tobit DV=Successrate	
	Model (1)	Model (2)
Intintens	−29.82*** (−27.24)	−31.35*** (−29.61)
(Intintens)²	98.80*** (24.33)	108.5*** (28.14)
(Intintens)³	−88.11*** (−22.09)	−97.49*** (−25.61)
Htriad	−2.259*** (−7.55)	
*Htriad*Intintens*	8.374*** (7.23)	
Goal	−0.498*** (−31.63)	−0.497*** (−31.49)
Updates	0.165*** (4.50)	0.163*** (4.43)
Newbacker	0.275*** (7.99)	0.256*** (7.45)
Video	0.374*** (5.77)	0.364*** (5.60)
Returningbacker	0.985*** (25.60)	0.968*** (25.21)
Intercept	2.857*** (3.96)	2.896*** (4.00)
Year	Yes	Yes
Industry	Yes	Yes
N	15903	15903
p-Value	0.000	0.000
Pseudo R-Squared	0.104	0.103

Notes: (1) The table reports Tobit regression of the effect of international intensity, home region orientation and their interaction on crowdfunding performance of US technology campaigns.
(2) All equations include Year and Section fixed effect. (3) ***, **, and * indicate the level of significant of 1%, 5%, and 10%, respectively.

and that of the squared term remains significantly positive. The international technology crowdfunding platform documented the horizontal S-shaped international intensity-fundraising performance relationship. At a low level of international intensity, the increase in multi-nationality has a negative effect on financing performance, perhaps due to an increase in communication costs and the absence of economies of scale. At the medium level of international intensity, the average communication costs decrease, and the campaign begins to enjoy economies of scale, thereby exerting a positive and significant effect. At a high level of international intensity, managerial costs and information overload tend to reduce the operational efficiency of the campaign. Thus, international intensity is negatively associated with financial performance. Hypothesis 2 is therefore supported. The combined evidence supports the findings that document the changes in fundraising performance following the increase in international intensity.

4.3. Moderation effect of home triad-region orientation

Table 7 presents the regression results for Hypothesis 3: the international intensity of crowdfunding campaign sales will positively impact crowdfunding performance for campaigns with a higher proportion of home triad-region sales than others. We find that the coefficient of the interaction term (*HTriad * Intintens*) is significantly positive, indicating that, compared to campaigns having fewer sales within North America (excluding the US), the international intensity has more positive effects on the fundraising success of campaigns with more home triad-region sales.

Lastly, we consider all variables and the interaction term in Model (1) of Table 7. The interaction term *HTriad*Intintens* is included to test the effect of home region orientation on international intensity. The results of the linear, squared, and cubic terms of international intensity

show that the coefficients have the same sign and are significant at the 1% level. Hypothesis 3 is strongly supported. The interaction term is significant and positively associated with financing success in Model (1). In summary, the home region orientation of US technology reward crowdfunding campaigns tends to intensify the positive relationship between international intensity and customers' strategic choice of supporting campaigns located within the home region. They demonstrate that consistent with our interpretation, improved funding performance is associated with increases in home triad-region sales.

5. Cross-sectional heterogeneity

5.1. Financial inclusion

First, we examine heterogeneity concerning the backers' home country's financial inclusion level. Financial inclusion is defined by the World Bank (2017) as the various financial services, such as payments, savings, loans, and insurance, that both businesses and individuals should be able to access responsibly and sustainably. We use the Global Financial Inclusion Index from the World Bank Data Bank. The Global Financial Inclusion Index measures how governments, employers, and financial systems promote financial inclusion in more than 40 markets. Project investors face different institutional environments from countries with low or high financial inclusion levels, grouped by the median. In our sample, the total number of successful project implementations is different, with 3632 of the higher financial inclusion countries, which is significantly higher than that in lower financial inclusion countries, 2986.

We are interested in how these kinds of differences in the two ranges of financial inclusion levels may influence fundraising success and project implementation. On the one hand, with a high level of financial inclusion, the home country has a better-developed financial market. We assume that backers from countries with a high level of financial inclusion are more willing to invest in the projects of their home countries. On the other hand, high inclusion in the financial market benefits the wealth accumulation of backers, which makes them more likely to raise capital and implement projects. The information on the better-developed financial market may explain why projects supported by backers from countries with a high level of financial inclusion are much easier to obtain successful funding. Therefore, we conjecture that the home region-based advantage is weaker for the crowdfunding success of investors located in countries with lower financial inclusion.

Table 8 reports the results of regressing the differential effects of home region-based advantages in technology reward crowdfunding based on financial inclusion. The dependent variable in Models 1 and 2 is *Successrate*. Model 1 uses the Tobit regression model, and Model 2 adds different control variables. Both in models (1) and (2), the *HRO* variable in the group of low financial inclusion is positive but not significant, while in the group of high financial inclusion, the *HRO* variable is positive and statistically significant, indicating that in the higher financial inclusion area, *HRO* is positively associated with success rate of crowdfunding campaigns. The magnitude is large. Specifically, the coefficient for *HRO* in Model 1 is 0.709 for the high financial inclusion sample, and the result is not robust for the low financial inclusion sample. The result suggests that *HRO* is more likely to have a positive influence on the success rate of crowdfunding campaigns in the area of high financial inclusion.

5.2. Investor protection

We also examine heterogeneous responses based on investor protection. As trade liberalisation in a developing country generally leads to a greater current account surplus (Ju et al., 2021), investors in crowdfunding projects make different decisions when investors' rights are protected differently. The investor protection index is obtained from the World Bank Doing Business database. It represents a ranking

Table 8
HRO and crowdfunding performance based on financial inclusion.

Variables	Successrate	
	Model (1)	Model (2)
	Low Financial Inclusion	
HRO	0.110	0.130
	(0.57)	(0.67)
Control	Yes	Yes
Year	Yes	Yes
Industry	Yes	Yes
Observations	1779	1779
R2	0.032	0.030
	High Financial Inclusion	
HRO	0.709***	0.710***
	(6.62)	(6.64)
Control	Yes	Yes
Year	Yes	Yes
Industry	Yes	Yes
Observations	7286	7286
R2	0.074	0.074

Notes: (1) This table uses Tobit regressions to examine the differential effects of home region-based advantages (measured by *HRO*) on technology reward crowdfunding based on financial inclusion. The dependent variable is *Successrate*. (2) *HRO* is a dummy variable that takes 1 if the project is oriented in its home region and 0 otherwise. (3) The sample is split based on median financial inclusion. (4) All equations include Year and Section fixed effect. (5) ***, **, and * indicate the level of significant of 1%, 5%, and 10%, respectively.

incorporating three dimensions of investor protection: the extent of the disclosure index, the extent of the director liability index, and the ease of shareholder suits index. We grouped the sample by the median investors' protection level. The average success rate of a project is also different, with the average success rate in high investor protection countries of 9.39 being significantly higher than that in lower investor protection countries (5.46).

Next, we examined why these kinds of differences exist in two groups of countries with different investor protection levels and how they may influence the fundraising success of a project. On the one hand, we assume that a country with a high investor protection level and better protection of investor rights provides a campaign with a more developed financial market (Min and Bowman, 2015). On the other hand, investors in countries with poor protection are more hesitant to invest, making it more likely for countries with a high level of investor protection to have a better success rate. The information delivered about the generally better-developed financial market may explain why projects backed by backers from countries with a high level of investor protection have a higher success rate. Therefore, the different characteristics of the financial market development of the location of the investors deliver more precise information about the investors' investment decisions. We conjecture that the home region-based advantages are weaker for the crowdfunding success of investors located in lower investor protection countries.

Table 9 reports our findings of differential effects of home region-based advantages in technology reward crowdfunding based on investor protection. Similar to other cross-sectional tests, we split the sample based on the median of investor protection. The top half of the table includes campaigns with below-median data, and the bottom half includes campaigns with above-median investor protection. The dependent variable in Models 1 and 2 is *Successrate*. Model 1 uses the Tobit regression model, and Model 2 adds different control variables. The coefficient of *HRO* in Model 1 is 0.857 for the high investor protection sample, but it is negative for the low investor protection sample. If the country has a higher level of investor protection, investors have the incentive to invest and result in a higher success rate. Consistent with this expectation, the estimated coefficient for the variable *HRO* in the higher investor group is 0.857, which is positive and significant at

Table 9
HRO and crowdfunding performance based on investor protection.

Variables	Successrate	
	Model (1)	Model (2)
	Low Investor protection	
HRO	−0.276	−0.291
	(-1.51)	(-1.62)
Control	Yes	Yes
Year	Yes	Yes
Industry	Yes	Yes
Observations	2689	2689
R2	0.030	0.034
	High Investor protection	
HRO	0.857***	0.770***
	(11.22)	(10.15)
Control	Yes	Yes
Year	Yes	Yes
Industry	Yes	Yes
Observations	6376	6376
R2	0.073	0.078

Notes: (1) This table uses Tobit regressions to examine the differential effects of home region-based advantages (measured by *HRO*) on technology reward crowdfunding based on investor protection. The dependent variable is *Successrate*. (2) *HRO* is a dummy variable that takes 1 if the project is oriented in its home region and 0 otherwise. (3) The sample is split based on median financial inclusion. (4) All equations include Year and Section fixed effect. (5) ***, **, and * indicate the level of significant of 1%, 5%, and 10%, respectively.

the 1% level. Meanwhile, in the low investor protection group, the co-efficient is negative. The results shown in Models (1) and (2) support our expectations. The result suggests that home advantages are higher for crowdfunding success for investors located in countries with higher investor protection.

5.3. Robustness check

We use alternative measures of funding success to test whether the findings are sensitive to the specific measures chosen for the dependent and explanatory variables. We re-run the Logit and Tobit regression analyses on different dependent variables and key explanatory variables based on different samples and summarise the results in Table 10.

In the upper panel of Table 10 of the Logistic regression of home region orientation on technology crowdfunding performance, the dependent variable in this table is *Success*, which is the campaign survival dummy, and it takes a value of 1 when the initiator successfully reaches its goal during the time duration, 0 if otherwise. Models (3) and (4) use different control variables. The middle panel of Table 10 reports Logistic regression results of home region orientation on crowdfunding performance of US technology campaigns; the dependent variable in this table is Success, and the sample size is 15,602. The lower panel of Table 10 uses alternative explanatory variables, which are *HSO* and *HSO %*, to re-run the logistic regression of home state orientation on crowdfunding campaigns. The regressions include yearly and industry-fixed effects. Similar regression results are found. The results are consistent with the arguments that technology campaigns in the home region or state have a higher rate of funding success.

In the upper panel of Table 10, we re-estimate the regression by using the alternative dependent variable (*Success*) to eliminate the concern that the success rate may not fully explain the outcome of the crowd-funding campaign. The result suggests that the *HRO* is positively related to the new dependent variable, which provides evidence that our result is consistently significant. Specifically, the coefficient of *HRO* in models (1) and (3) are 1.124 and 1.328, respectively. The results confirm the findings reported in previous sections.

In the middle panel of Table 10, we restricted our sample to U.S. data only. Given that using global data may have an unobservable

Table 10
Robustness check: Home region orientation and crowdfunding performance.

A. Whole sample	Logit DV=Success			
Variables	Model (1)	Model (2)	Model (3)	Model (4)
HRO	1.124***		1.328***	
	(14.11)		(17.13)	
HRO%		2.348***		2.590***
		(20.83)		(24.24)
B. U.S sample	Logit DV=Success			
Variables	Model (5)	Model (6)	Model (7)	Model (8)
HRO	2.421***		2.506***	
	(34.05)		(35.51)	
HRO%		3.077***		3.192***
		(39.31)		(41.72)
C. HSO/HSO%	Logit DV=Success			
Variables	Model (9)	Model (10)	Model (11)	Model (12)
HSO	1.091***		1.018***	
	(17.03)		(15.46)	
HSO%		0.787***		0.728***
		(8.04)		(7.38)
D. HRO%	Togit DV=Successrate			
Variables	Model (13)	Model (14)		
HRO%	0.895***	1.097***		
	(7.74)	(12.52)		
Controls	YES	YES	YES	YES
Year	YES	YES	YES	YES
Industry	YES	YES	YES	YES

Notes: (1) The table reports robustness check of our main findings. (2) Panel A reports the main regression with an alternative dependent variable. Panel B uses U.S data to support our result. Panel C uses HSO/HSO% as our key explanatory variable. Panel D uses HRO% as our key explanatory variable.
(3) All equations include Year and Section fixed effect. (4) ***, **, and * indicate the level of significance of 1%, 5%, and 10%, respectively.

heterogeneity problem and may be affected by endogeneity, we re-examine this issue by re-estimating the main regression over a restricted data set, which includes the U.S. data. As a result, the esti-mated coefficients of the key independent variable remain statistically significant and consistent with the previous results. *HRO/HRO%* re-mains statistically significant at the 1% level and positively related to the dependent variable. The result supports the main findings.

In the lower panel of Table 10, we further change our key explana-tory variables. Instead of using *HRO* and *HRO%*, we use *HSO* and *HSO%*. The analysis so far focuses on the *HRO/HRO%*, which may lose infor-mation when we use smaller dimensions to estimate. Hence, we re-examine our main regression by using *HSO/HSO%* as our key explana-tory variables. Panel D uses *HRO%* as our key explanatory variable and tests its impact on *Successrate*. The results shown in Table 10 are consistent with the results of the main regression.

After re-running our regressions using alternative, dependent vari-ables, key explanatory variables and samples, the estimated coefficients and statistical significance of the key home region orientation variables remain consistent and robust. The positive and significant relationship between the main variables and the fundraising success of crowdfunding has been confirmed. Hypotheses 1 to 3 are all supported by both alter-native dependent and key explanatory variables.

6. Contributions and conclusions

This study examines the effects of a three-region or triad encom-passing North America, Europe, and Asia-Pacific and international in-tensity on international reward crowdfunding platform campaigns and fundraising success. Utilising a sample of the 17,305 technology crowdfunding campaigns started on Kickstarter from April 2009 to December 2019, we report a number of interesting findings. First, our

results suggest that home-region-specific advantages are important determinants of successful reward crowdfunding campaigns and fundraising success (performance). More specifically, we find that most of the successful international crowdfunding campaigns concentrate their sales in their home region and promote regionalisation rather than globalisation. This result implies that the projects which leverage the home-region-bound campaign-specific advantages and pursue a regional strategy are more likely to succeed in selling products and services as well as raising funds. Another implication of our findings is that financial institutions and international reward crowdfunding platforms should encourage project initiators to design and deliver products and services that meet the needs of the local customers and benefit from advantages in the home region. The backers or investors may pay more attention to the projects within which more than half of the total backers are from the home region, as they appear more likely to succeed and meet the goals of funders. Second, we find home region orientation to moderate the multinationality-crowdfunding performance relationship. Lastly, cross-sectional tests also show heterogeneous impacts of home-region advantages across backers' home-country levels of financial inclusion and investor protection. The effect of home-region advantages on crowdfunding performance is stronger for countries with high levels of financial inclusion and strong protection of investors.

This paper contributes to the literature in several ways. First, we extend regionalisation theory, which has been predominantly used to explain multinational performance to international reward crowdfunding campaigns and fundraising success. Thus, we document that the crowdfunding sales distribution is regional by nature and home region orientation influences crowdfunding success. Second, identifying the fundraising performance of international reward crowdfunding campaigns follows a pattern where more backers from the home region are important for campaign and fundraising success. Thirdly, we show that the multinational-performance relationship of crowdfunding is moderated by home region orientation, suggesting that crowdfunding founders tend to pursue regional strategy. Lastly, this paper is one of the first attempts to extend regionalisation theory to alternative finance market research by employing a relatively large data set of crowdfunding campaigns to examine how newly emerging financial technologies (hereafter, Fintech) are influenced by home region advantages and an important facet of internationalisation namely, international intensity.

Despite the contributions outlined above, further studies appear warranted. Future research should explore other sub-industries of the crowdfunding platforms in a comparative study to shed light on the industry's effect on crowdfunding campaigns and performance.

CRediT authorship contribution statement

Jianwei Hu: Writing – original draft, Formal analysis, Data curation, Conceptualization. **Xiuping Hua:** Writing – review & editing, Writing – original draft, Validation, Supervision, Funding acquisition, Formal analysis, Conceptualization. **Haolin Li:** Writing – review & editing, Writing – original draft, Methodology, Formal analysis, Data curation. **Agyenim Boateng:** Writing – review & editing, Writing – original draft, Validation, Supervision.

Declaration of Generative AI and AI-assisted technologies in the writing process

None.

Declaration of conflict of interest

None.

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Appendix A. Variable definitions

Variable	Definition
Dependent variable: Measures of fundraising success	
Success	Campaign survival dummy. It takes a value of 1 when the initiator successfully reached its goal during the time duration, 0 if otherwise.
Successrate	The ratio of funding goal reached during the time duration, calculated as the total money generated from the backers divided by the goal set up front. We winsorize the variable at 1% and 99% level.
Key explanatory variables:	
Home region orientation dummy (HRO)	A dummy variable which takes value of 1 if the project is oriented in its home region, 0 otherwise. Home region orientated campaigns are defined as having no less than 50% of the sales in their home region of the triad. The triad contains three regions, which is North America, the European Union and Asia-Pacific (Rugman and Verbeke, 2004).
HRO%	The percentage of intra-regional sales within total sales. Winsorized at 1% and 99% level.
Home state orientation dummy (HSO)	A dummy variable which takes value of 1 if the project is oriented in its home state, 0 if otherwise. Home state orientated campaigns are defined as having no less than 50% of the sales in their home state.
HSO%	The percentage of intra-state sales within total sales. Winsorized at 1% and 99% level.
International intensity (Intintens)	The ratio of foreign to total sales, which is also known as international intensity (Li, 2005; Miller et al., 2016). Winsorized at 1% and 99% level.
Home triad-region orientation (HTriad)	The ratio of sales in the North America (excluding US) to total foreign sales. Winsorized at 1% and 99% level.
Control variables	
Goal	The natural logarithm of the amount of the money set in advance that the creator should reach to start this project. Winsorized at level 1% and 99%.
Updates	The natural logarithm of the number of updates provided by the creator on the campaign page. Winsorized at level 1% and 99%.
Rewards	The natural logarithm of the number of the reward levels the backers could choose from. Winsorized at level 1% and 99%.
Created	The number of campaigns that the initiator had created before. Winsorized at level 1% and 99%.
Backed	The natural logarithm of the number of campaigns that the creator has backed before. Winsorized at level 1% and 99%.
Websites	The number of website links the creator has provided. Winsorized at level 1% and 99%.
Video	A dummy variable which takes a value of one when there is a video presented on the platform, zero otherwise. Winsorized at level 1% and 99%.

(*continued*)

Variable	Definition
Pledged	The natural logarithm of the amount of the money raised at end of the duration of this project. Winsorized at level 1% and 99%.
Collaborator	The number of the collaborators in the team who have been introduced on the webpage. Winsorized at level 1% and 99%.
Retuningbacker	The natural logarithm of the number of returning backers of this campaign who has invested in other projects on Kickstarter before. Winsorized at level 1% and 99%.
Newbacker	The natural logarithm of the number of new backers of this campaign who has never invested in other projects on Kickstarter before. Winsorized at level 1% and 99%.
FAQ	The natural logarithm of the number of frequently asked questions on the campaign page. Winsorized at level 1% and 99%.

Data availability

The authors do not have permission to share data.

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