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MAPPING CROWDFUNDING IN CULTURAL AND CREATIVE INDUSTRIES: A CONCEPTUAL AND EMPIRICAL OVERVIEW di Antonella Cicchiello, Serena Gallo, Stefano Monferrà

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ORIGINAL ARTICLE

EMR European Management Re

Mapping crowdfunding in cultural and creative industries: A conceptual and empirical overview

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The landscape of cultural and creative industries (CCIs) has been changing strongly because of new players who have entered the arena by reshaping financing strategies. This work represents a first attempt to describe and compare the European population of crowdfunding platforms used by firms and creatives to launch cultural and creative projects. Specifically, we provide an assessment of how and where cultural crowdfunding platforms emerge. We also explore the extent to which government expenditures on cultural services in the EU affect crowdfunding platform origin and development, finding evidence that cultural crowdfunding is more developed when public engagement in promoting CCIs is high. In contrast, we find evidence of a strong substitution effect when the attractiveness of a country for other alternative funding sources is low. The results reveal that the number of successfully funded projects is higher when the platform is not dedicated exclusively to cultural and creative projects. Finally, higher information transparency and the use of social networks foster the platform's operational performance.

KEYWORDS

crowdfunding, cultural and creative industries, entrepreneurial finance, European countries, FinTech

INTRODUCTION

The way in which both creators and organizations operating in cultural and creative industries (henceforth CCIs)¹ interact with relevant stakeholders to obtain the necessary resources (economic, political, symbolic, etc.) for creative production represents one of the main tensions that pose complicated challenges to CCI management (Montanari et al., 2021). In times of decreasing public funding and increasing competition, CCI actors should extend their stakeholder network to find additional economic resources and generate, in addition to direct material value, other types of organizational value (Ebbers et al., 2021). The availability of adequate resources helps CCI actors to give tangible form to their creative ideas, contributing to the practical challenges of managing creativity in creative settings/industries (Cirella, 2021). Often, the attempts of the company's top managers to foster and promote creativity fail to reach the expectations and intended outcomes (Linder &

Sperber, 2017). The trend towards digitalization and technological innovation has reshaped CCIs, changing the existing arts funding models and structures (Tosatto et al., 2019). The emergence of crowdfunding platforms-a novel form of financial intermediation providing funding in a digital environment-has helped promote access to credit for micro-firms and small- to medium-sized enterprises (SMEs) in the CCIs. However, as noted by Nucciarelli et al. (2017, p. 347), "the crowdfunding impact is not limited to funding but also has overarching effects across the entire value chain, and it modifies the relationships between industry stakeholders." According to the authors, crowdfunding transforms the value creation process, enabling customers to create value at the industry level. Crowdfunding also helps artists, especially those who create small-scale projects and struggle to reach new audiences, to cross the symbolic boundaries between amateur and professional realms and increase reputation for their careers (Dalla Chiesa & Dekker, 2021).

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The use of crowdfunding in CCIs has grown rapidly in recent years, in parallel to creatives becoming more aware of crowdfunding as a method of fundraising and community building.² As the number of cultural and creative campaigns has increased across Europe, so has the number of platforms on which these campaigns are launched. By facilitating the interaction between creatives seeking funding and a 'crowd' of nonprofessional small investors, crowdfunding (notably in the reward-based form) manages to democratize capital access (Mollick & Robb, 2016). According to Mollick and Nanda (2016), creatives have more funding opportunities when they turn to crowdfunding, especially in industries where crowds are end-users such as the theatre and film industry. Due to the unique nature of CCIs, the impact of crowdfunding on them seems to be more significant than on other industries (Rykkja et al., 2020). Organizations and creative professionals experience large challenges in renewing their creative ideas and sustaining their competitiveness (Stang Våland et al., 2021). The ability of crowdfunding platforms to launch successful campaigns in CCIs is, therefore, influenced by "the presence of 'unconventional' features and processes that guide cultural enterprises towards different developmental journeys", as well as by the collective nature of cultural initiatives, which are "usually supported by large informal communities of passionate contributors providing technical and knowledge resources, competencies, professional services, as well as network contacts and relationships" (Bocconcelli et al., 2020, p. 116). The fact that cultural crowdfunding is a growing subset of the online alternative finance market together with the important contribution it is making in reducing the funding gap for cultural and creative firms in Europe (De Voldere & Zeqo, 2017) confers a particular interest in studying the level of development and the boundaries of this market.

This study is the first to offer cross-platform evidence on cultural crowdfunding by providing an assessment of how and where cultural crowdfunding platforms emerge across Europe. To this end, we explore the economic forces and the platform design that can influence the number of CCI campaigns that are successfully funded by these platforms. In particular, we examine the role of government expenditure on cultural services in the European Union in cultural crowdfunding success, controlling for many platform- and country-specific characteristics. To develop a better understanding of cultural crowdfunding success, we employ Poisson regression on a comprehensive database of 70 crowdfunding platforms that finance cultural and creative projects or treatments across 22 European countries.³

As discussed in detail below, we find evidence that cultural crowdfunding is more developed when public engagement in promoting and supporting CCIs is high. In contrast, a strong substitution effect exists when the attractiveness of a country for other alternative funding sources (i.e., venture capitalists and private equity investors) is low. Moreover, our findings support the evidence that the number of successfully funded cultural and creative projects is higher when the platform is not dedicated exclusively to cultural and creative projects. Finally, the results reveal that higher information transparency and the creation of a community on social networks foster the platform's operational performance.

The remainder of the article proceeds as follows. Section 2 provides the theoretical background. Section 3 describes the research design. Section 4 reports the empirical results. Section 5 discusses the research results. Section 6 concludes the paper.

LITERATURE REVIEW

Despite growing interest, the literature on cultural crowdfunding is still in its infancy. The limited research conducted thus far is mainly focused on the determinants of campaigns' success (e.g., Tosatto et al., 2019) and on the motivation to use crowdfunding (e.g., Huang, 2020). Boeuf, Darveau, and Legoux (2014), for example, investigate the success factors of projects in the theatre industry by using data from the UK-based platform Kickstarter. The authors show that symbolic rewards positively influence campaign success, increasing the amount of capital raised at the end of the campaign. Using data from the Polish platform MegaTotal, which specializes in music projects, Galuszka and Bystrov (2014) find that project success depends on the number of backers who repeatedly contribute to a project, the offer of bonuses and the commitment in communication. By investigating creative projects from Kickstarter, Hobbs et al. (2016) show that successful campaigns are mainly driven by the quality of the pitch and network management and the update frequency. Analysing crowdfunding in the art and entertainment sector, Bi et al. (2017) find that the length of the text used to describe the project as well as the number of likes, comments and shares positively influence investment decisions by signalling the quality of the project. In one of the first studies, Gerber et al. (2012) investigate creators' and funders' motivations for using crowdfunding. The authors find that creators are driven by the possibility of being funded, obtaining feedback on their ideas and building a network of contacts, while funders are motivated by the opportunity to be rewarded and be part of a community. In his study, Marchegiani (2018) reveals that one of the main reasons to participate in crowdfunding is the opportunity to contribute to a creative process. Huang (2020) finds similar results on film crowdfunding platforms. Rykkja et al. (2020) reveal the presence of a relationship between cultural production type and crowdfunding platform choice. Therefore, cultural production campaign promoters with a high degree of cultural affinity may choose to use a local platform, while promoters of projects with a higher degree of complexity in production or with composite motives are more likely to use an international platform. According to Dalla Chiesa and Dekker (2021), artists mainly use crowdfunding to reach new audiences and cross the symbolic boundaries between amateur and professional realms. Finally, Bürger and Kleinert (2021) explore backers' motivations to support cultural entrepreneurs through the largest German reward-based crowdfunding platform, Startnext. The authors find that cultural project backers are motivated by the opportunity to support capital-constrained cultural entrepreneurs and connect with like-minded individuals. Surprisingly, however, the authors reveal that cultural backers are not altruistic; they are interested in rewards that engage them with their community. Despite the studies described above, academic contributions to crowdfunding in the cultural and creative context are still rare. This paper represents a first attempt to describe and compare the European population of crowdfunding platforms used by firms and creatives to launch cultural and creative projects. Specifically, the study addresses the following research questions:

RQ1: How and where do cultural crowdfunding platforms emerge?

RQ2: What are the economic forces and platform designs that can influence the number of cultural and creative campaigns successfully funded by these platforms?

RESEARCH DESIGN

Data and sample

This paper explores to what extent crowdfunding has been developing in CCIs in Europe. To deliver an indepth analysis of the European crowdfunding market, we have started to carry out a detailed mapping of cultural crowdfunding platforms. The platform list is built from the crowdfunding4culture website,⁴ a European information portal on crowdfunding in CCIs. The website includes information for each platform having a primary or general focus on CCIs, such as the following:

- the business models used (donation, reward, equity, P2P lending or mixed);
- fundraising model (all-or-nothing or take it all);
- cost of services and case studies, news and tools related to crowdfunding in this context.

As we want to provide a comprehensive overview of the European cultural crowdfunding markets, we include portals issuing cultural and creative projects. The initial population comprises 154 crowdfunding platforms. Moreover, only native crowdfunding platforms (i.e., those based in Europe) are considered. We exclude from our analysis all foreign platforms that operate in Europe but are based in other countries, such as the American platform, Kickstarter. To ensure that only cultural crowdfunding platforms are included in this list, we also use a broad internet search. We searched all platform websites to find official information about their activity, and we ran a comprehensive search for news articles about crowdfunding and cultural and creative sectors. Our platform mapping contains portals related to CCI, as well as general platforms that include one of the following subcategories⁵: architecture, libraries and museums, artistic crafts, audio-visual (including film, television, video games and multimedia), tangible and intangible cultural heritage, design, festivals, music, literature, performing arts, publishing, radio and visual arts. From the initial population of 154 platforms, we exclude 32 cultural platforms without a correctly working website and 10 platforms related to cultural crowdfunding only in a broad sense or not enabling any investors to fund a project. We do not consider 42 crowdfunding platforms as data, such as the projects supported and the amount collected, is not available on their website. In these cases, we contacted their offices directly to obtain some information, unfortunately, to no avail. Therefore, our final dataset consists of 70 crowdfunding platforms that host cultural and creative campaigns. Table 1 reports the list of platforms by country, foundation year and principal activity (CCIs/general).

Our sample includes different crowdfunding types and models. In line with the literature (see Ahlers et al., 2015; Mollick, 2014), the chosen platforms operate under the reward-based crowdfunding model, donationbased model and investment-based model (e.g., equity or P2P lending). Some platforms also adopt a mixed model (e.g., reward and donation, investment and reward, or investment and donation). To identify the model used, we create a dummy variable for the platforms that use just one model (reward, donation and investment) to distinguish from those using a mixed model (i.e., donation and reward, donation and investment, and reward and investment). To achieve our aim, we gather the number of projects and the number raised at the platform level from their website. Unlike others that deliver less transparent information, some portals clearly display successful projects and the amount collected since their inception. The platforms selected differ according to the funding model (i.e., all-or-nothing and keep-it-all).⁶ Because most of these operate under the all-or-nothing model, we only consider successful campaigns that raise at least the initial target money. A comprehensive overview of the sample can be seen in Table 2.

In December 2020, out of 70 platforms, 53 are dedicated to reward-based crowdfunding. Most of them (28) are general crowdfunding platforms. Only two platforms, in our sample, are donation based: One is pure cultural crowdfunding, and the other is a general platform. Concerning the number of projects, reward-based crowdfunding presents the highest successful campaigns,

TABLE 1 List of platforms

Platform	Country	Foundation year	Model	Focus
Adrifund	Slovenia	2016	Mixed	Cultural and creative sectors
BeCrowdy	Italy	2013	Reward	Cultural and creative sector
Fund it	Ireland	2011	Reward	Cultural and creative sector
HitHit	Slovakia	2012	Reward	Cultural and creative sector
Hooandja	Estonia	2011	Reward	Cultural and creative sector
Karolina Fund	Iceland	2012	Reward	Cultural and creative sector
Megatotal	Poland	2007	Reward	Cultural and creative sector
Multifinantare	Romania	2012	Mixed	Cultural and creative sector
My Major Company	France	2007	Reward	Cultural and creative sector
Startlab	Slovakia	2017	Reward	Cultural and creative sector
Tilburgvoorcultuur	Netherlands	2013	Reward	Cultural and creative sector
Wspieramkulture	Poland	2012	Reward	Cultural and creative sector
100-days.net	Switzerland	2012	Mixed	General
Buona Causa	Italy	2010	Mixed	General
CoopFunding	Spain	2016	Mixed	General
Culture Time	France	2014	Mixed	General
Proarti	France	2009	Mixed	General
Spacehive	UK	2011	Donation	General
VersPers Crowdpress	Netherlands	2014	Mixed	General
Booomerang	Denmark	2011	Reward	General
Crowd'in	Belgium	2014	Reward	General
CrowdPatch	UK	2016	Reward	General
Crowdfunder	UK	2010	Reward	General
Eppela	Italy	2011	Reward	General
Fundsurfer	UK	2014	Reward	General
Ginger	Italy	2013	Reward	General
Goteo	Spain	2012	Reward	General
Kiss Kiss Bank	France	2013	Reward	General
Lanzanos	Spain	2011	Reward	General
Mesenaatti.me	Finland	2012	Reward	General
Nordstarter	Germany	2010	Reward	General
Polak Potrafi	Poland	2013	Reward	General
PPL	Portugal	2011	Reward	General
Produzioni dal Basso	Italy	2005	Mixed	General
Projektu Banka	Latvia	2015	Reward	General
Startovac	Czech Republic	2013	Reward	General
Ulule	France	2010	Reward	General
Verkami	Spain	2010	Reward	General
VoordeKunst	Netherlands	2011	Reward	General
Wemakeit	Switzerland	2011	Reward	General
Wspieram	Poland	2010	Reward	General
Vision Bakery	Germany	2010	Reward	General
Zaar	Malta	2015	Reward	General
Raizers	France	2014	Mixed	General
Socrowd	UK	2005	P2P lending	General
Totsuma	Spain	2013	Mixed	General
Boekensteun	Belgium	2013	Donation	General

(Continues)

TABLE 1 (Continued)

Platform	Country	Foundation year	Model	Focus
100Fans	Germany	2013	Reward	General
BookaBook	Italy	2011	Reward	General
Crowdbooks	Italy	2011	Reward	General
Libros	Spain	2011	Reward	General
Unbound	UK	2011	Reward	General
Art Happens	UK	2012	Reward	General
CineCrowd	Netherlands	2011	Reward	General
Touscoprod	France	2009	Reward	General
Global Rockstar	Austria	2014	Mixed	General
Musicstarter	Germany	2014	Reward	General
Spieleschmiede	Germany	2015	Reward	General
DigVentures	UK	2012	Reward	General
Dartagnans	France	2014	Reward	Cultural and creative sectors
Show4Me	UK	2014	Reward	Cultural and creative sectors
Bidra	Norway	2014	Reward	General
Derev	Italy	2013	Mixed	General
Growfunding	Belgium	2013	Reward	Cultural and creative sectors
Youcan2	Spain	2012	Mixed	General
Crowd Thinking	Spain	2012	Reward	General
Artfund	UK	2012	Reward	General

Abbreviation: P2P, peer-to-peer.

TABLE 2 Sample overview

	Number of plat	forms		Number of proj		
	General	Cultural	Total	General	Cultural	Total
Donation	1	1	2	1,500	35	1,535
Mixed	11	3	14	878	35	913
Investment	1	0	1	145	0	145
Reward	28	25	53	5186	417	5,603
Total	41	29	70	7,709	487	8,196

Note: This table reports the number of platforms by type and number of projects. The sample is built on cultural crowdfunding platforms that include both platforms related to campaigns in cultural and creative sectors (CCIs) and general platforms that host one of the subcategories of CCIs. The number of projects is calculated by considering all successful campaigns from each platform's inception to 31 December 2020.

Abbreviations: CCI, cultural and creative industry.

followed by donation-based crowdfunding. The largest platform in terms of the number of projects is French Ulule, which has hosted 34,444 cultural and creative campaigns. Figure 1 shows the number of successful creative and cultural projects by the European country.

Countries in the sample are very heterogeneous, with a robust variance related to the number of offerings. France reports the highest number of projects, followed by Norway, Italy and Spain. In our sample, the United Kingdom presents only 10,731, which may be caused by the exclusion of Kickstarter from the sample as not a native platform, which is intensively active in the United Kingdom.

Variables

Table 3 provides the definition of the variables used in this study. To assess the extent to which the European cultural crowdfunding market is being developed, we adopt the dependent variable 'crowdfunding success', measured by the total number of successful campaigns created in each platform's cultural and creative listings from inception to 31 December 2020. This measure has been commonly adopted to explore crowdfunding development in the literature as an alternative source of funds (e.g., Bassani et al., 2019; Vismara, 2018).

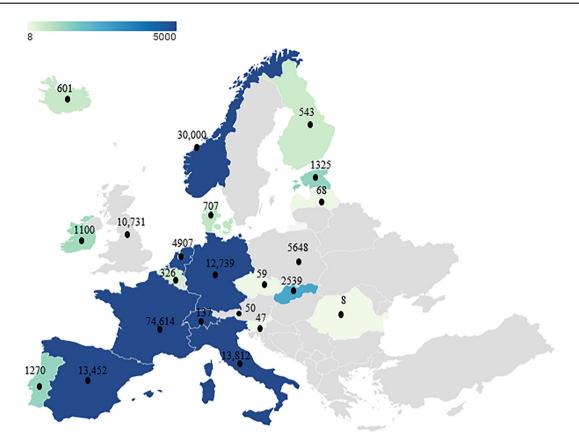


FIGURE 1 Number of cultural and creative projects by country. This figure shows the number of cultural and creative crowdfunding projects by EU countries. The highest number of projects is in France (74,614), instead of the lowest is in Luxembourg (eight projects)

The independent variables of interest are collected at the platform and country levels. To identify the type of crowdfunding mechanism (i.e., donation, reward, investment and mixed), we create a dummy variable taking a value of 1 for each model. Then, we distinguish platforms dedicated exclusively to cultural and creative campaigns from others by means of a dummy variable 'cultural platform'. We consider the platform foundation year measured as the difference in months between the establishment of platforms and 31 December 2020. Furthermore, we create a categorical variable, 'transparent community', to identify portals in which information about the platform, such as the number of projects, number of investors and amount collected, is displayed and made easily available to the potential campaigns' creator. In line with the literature on information asymmetry (Belleflamme et al., 2015; Morse, 2015), this variable captures the degree to which crowdfunding platforms attempt to increase crowdfunding reliability and quality by boosting information disclosure. In addition to capturing the structural dimension of social capital in the crowdfunding platform, following Zheng et al. (2014), we consider several features concerning third-party social network websites. In line with previous studies (Rhee & Ji, 2011; Wang & Wang, 2018), social capital's structural dimension is measured as the number of a platform's

social network ties. We create a count variable 'social network ties' by summing the number of Facebook, Twitter, Instagram and LinkedIn followers. Given that connections are not immediately available on the platforms, we obtain them by searching the platform names on these social networks. Additionally, we construct a dummy variable, 'social network engagement', as an attempt to capture the platform presence on the whole universe of social networks (i.e., Facebook, Twitter, Instagram and LinkedIn). Moreover, we collect data on explanatory variables at the country level. We extract the gross domestic product (GDP) per capita variable, which measures the GDP per capita in 2019, provided by Eurostat. We also control countries' attractiveness in our sample for investors in venture capital and private equity through the index created by Groh et al. (2018), namely, 'VC/PE'. We consider the general government expenditure on cultural services 'COFOG' to control for state engagement in promoting and supporting CCIs. We also consider individuals' and households' expenditure on cultural goods and services 'private expenditure', measured in purchasing power standards (PPS), to proxy the level of cultural participation in a country. In addition, we included in the regression model the variable 'cultural enterprises' measured as the number of cultural enterprises engaged in cultural activities in a country, another

TABLE 3 Note on variable and data sources

Variable	Description	Data sources
Dependent variable		
Successful	Number of successful cultural and creative projects financed on the platform since inception to December 2020.	Platforms
Explanatory variables		
Platform age	The platform age as the months between establishment of the platform and December 2020.	Platforms
Cultural platform	Binary variable equals to 1 whether the platform is dedicated exclusively to cultural and creative campaigns, and 0 otherwise.	Platforms
Donation	Binary variable equals to 1 whether the platform is donation-based crowdfunding, and 0 otherwise.	Platforms
Reward	Binary variable equals to 1 whether the platform is reward-based crowdfunding, and 0 otherwise.	Platforms
Investment	Binary variable equals to 1 whether the platform is investment-based (equity or lending) crowdfunding, and 0 otherwise.	Platforms
Hybrid	Binary variable equals to 1 whether the platform includes different model of crowdfunding (donation, reward, investment) crowdfunding, and 0 otherwise.	Platforms
COFOG	Government expenditure on culture services, broadcasting and publishing services in the European Union.	Eurostat
Private expenditures	Households expenditures on cultural goods and services.	Eurostat
Cultural enterprises	The number of cultural enterprises engaged in cultural activities by NACE Rev.2 activity.	Eurostat
GDP per capita	Country gross domestic product per capita in € (year: 2019).	Eurostat
VC/PE index	The 2018 VC/PE country attractiveness index ranking.	Groh et al. (2018)
Transparent community	Dummy variable equal to 1 for platforms that include a brief outline about the number of financed projects and the amount collected until now, and 0 otherwise.	Platforms
Social_network_ties	The number of platforms' followers on Facebook, Instagram, Twitter and LinkedIn.	Social networks
Social_network_index	Dummy variable equal to 1 if the platform has an account all over social media (Instagram, Facebook, Twitter and LinkedIn), 0 otherwise.	Social networks

Abbreviations: GDP, gross domestic product; PE, private equity; VC, venture capital.

proxy of the level of cultural participation in EU countries. Table 4 reports the summary statistics, Table 5 shows the frequencies of dummy variables, and Table 6 reports the correlation matrix. Our dataset contains information for 70 crowdfunding platforms hosting creative and cultural campaigns across European countries. The average number of successful projects per platform is 2,386, with high volatility. The largest number of

TABLE 4 Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Successful projects	70	2,386.714	6,214.726	7	34,444
Donation	70	0.029	0.168	0	1
Reward	70	0.757	0.432	0	1
Hybrid	70	0.2	0.403	0	1
Cultural platform	70	0.414	0.496	0	1
COFOG	70	44.07	5.908	25	56
Age	70	109.08	28.23	48	192.09
Private expenditure on culture	67	27,731	5,450	11,422	37,330
GDP per capita	70	31,404	11,623	9,120	69,560
VC/PE index	70	77.291	12.2	41	94.4
Social network index	70	0.557	0.5	0	1
Social network ties	66	9.317	1.835	2.944	13.575
Transparent community	70	0.5	0.504	0	1

Abbreviations: GDP, gross domestic product; PE, private equity; VC, venture capital.

TABLE 5 Summary statistics of dummy variables

Hybrid	Freq.	Reward	Freq.	Donation	Freq.	Cultural platform	Freq.	Social network	Freq.	Transparent community	Freq.
0	56	0	17	0	68	0	41	0	31	0	35
1	14	1	53	1	2	1	29	1	39	1	35

Note: This table reports the frequencies of dummy variables involved in our analysis.

successfully funded cultural and creative projects is 34,444 related to Ulule, a French crowdfunding platform. The majority of the sampled platforms are noninvestment based (80%), and the reward-based mechanism is the most common (76%). In our dataset, only 29 platforms (41%) are specialized in cultural and creative campaigns, signalling a European crowdfunding market still underdeveloped for these types of initiatives. The average platform is relatively young with a timespan since the inception of approximately 9 years (109 months). Related to platforms' social network power, the average number of followers per platform is approximately 46,331, and 56% of them have a profile on the whole universe of social media, suggesting how important it is for them to develop a third-party social network. Concerning the macroeconomic characteristics of the countries where crowdfunding platforms are based, the average GDP per capita (in euros) is approximately 31,404. The VC/PE index, on average, is 77.4 out of 100, signalling high potential in attracting investors' funds. In terms of government expenditures, on average, the cultural investment per capita is 44,069 euros.

Methodology

We employ Poisson regression to investigate to what extent crowdfunding is being used in CCIs across European countries and which factors may boost or deter its spreading, with the following model specification:

$Y_i = \beta_0 + \beta x_i + \epsilon_i.$

In this model, βx_i is a coefficient for each variable used. In the above equation, X is an explanatory variable, Y is a response variable, and \in_i represents the error term. We use Poisson regression⁷ because of the dependent variable's general characteristics in this study (i.e., count variable). Poisson probabilities are used to model the number of event occurrences (Cameron & Trivedi, 2013; Greene, 2003) and are widely used in entrepreneurship research (Haeussler et al., 2012). We first present a set of analyses where we associate the number of successful projects of a platform, as a measure of its operational performance, with the level of national cultural expenditure (i.e., government and households' expenditures on cultural goods and services). Then, we add the control variables such as GDP per capita and the VC/PE attractiveness index to test whether the relationship still holds. Moreover, we consider the types of crowdfunding (donation, reward and mixed), year of the platform's foundation, and other platform-specific control variables to understand the factors affecting the project success in cultural crowdfunding platforms. In a subsequent analysis, we include factors related to the external communication of information (transparent

Success projects													
Donation	-0.048	1.000											
Reward	0.159	-0.303^{**}	1.000										
Hybrid	-0.136	-0.086	-0.883^{***}	1.000									
Cultural platform	-0.295^{**}	0.030	0.206*	0.203*	1.000								
Soc. net. ties	0.190	-0.065	-0.063	0.110	0.096	1.000							
Age	0.105	-0.011	0.068	-0.118	-0.167	0.179	1.000						
GDP per capita	0.256*	0.044	-0.021	-0.001	-0.092	0.068	0.024	1.000					
VC/PE	0.067	0.137	0.031	-0.141	-0.105	0.127	0.225*	0.525***	1.000				
Soc. net. index	0.266**	-0.020	0.233*	-0.201	0.049	0.324***	0.170	0.062	0.132	1.000			
COFOG	0.235*	0.025	-0.055	0.073	-0.002	0.110	-0.030	0.067	0.147	0.123	1.000		
Private expend.	0.190	0.077	-0.100	0.091	-0.081	0.139	-0.067	0.759***	0.324^{**}	0.017	0.455***	1.000	
Transp. nom.	0.096	0.171	-0.100	0.071	-0.203*	-0.162	-0.149	-0.068	-0.135	-0.086	0.137	0.051	1.000

TABLE 6 Correlation matrix

community) and the role of platforms' social networks (social network index and social network ties) to examine whether higher information transparency and the creation of a community on social networks may foster the platform's operational performance. We first regress models without country-specific controls and then include country-level variables.

RESULTS

Table 7 reports the first econometric analysis results, with the dependent variable 'successful projects' measuring the operational performance of a crowdfunding platform by using Poisson regression. In Models 1-4, we include the type of crowdfunding individually, using the 'investment' mechanism as a reference category, to understand the single contribution of each typology to the number of successful projects. The results indicate that donationbased platforms are positively and significantly related to the number of successful cultural and creative campaigns (p < 0.01). The reward-based mechanism's coefficient is positively and significantly correlated with the number of successful projects (p < 0.01). According to Bassani et al. (2019), our results show that reward- and donationbased platforms are more likely to attract funders who feel inspired by intangible incentives or personal motives in supporting cultural and creative firms. Converting the estimate of the coefficients for the type of crowdfunding from the Poisson regression into more specific terms, we observe that reward and donation mechanisms, compared with investment while holding the other variable constant, are expected to have rates 16.6 and 9.5 greater for the number of successful projects, respectively. The coefficient of the cultural platform is always negative and strongly significant (p < 0.01). This result suggests that general platforms are more able to attract investors. The platform age is always negative and statistically related to the response variable by highlighting the younger platforms' greater ability to attract campaign creators. Concerning general government expenditure on culture, the coefficient is positive and strongly significant (p < 0.01), increasing by a factor of 1.15 the rate of funded projects if the cultural expense at the state level increases by one point. These results suggest that crowdfunding in CCIs is more successful in countries where financial resources allocated to cultural and creative activities are high. In Model 2, we substitute public expenditure (COFOG) with household expenses on cultural goods and services. The coefficient shows that private expenditure positively affects the number of funded projects (p < 0.01). The evidence is confirmed even after controlling for countrylevel variables. This suggests that in countries where household expenditures are larger, as a proxy of cultural participation, crowdfunding will be more developed as well. The VC and PE attractiveness index is significant and negative in Models 3 and 4 (p < 0.01), denoting a

	(1)	(2)	(3)	(4)
Donation	2.247*** (0.0869)	2.073*** (0.0869)	2.258*** (0.0869)	2.167*** (0.0869)
Reward	2.811*** (0.0832)	3.117*** (0.0832)	2.552*** (0.0833)	3.241*** (0.0832)
Hybrid	0.653*** (0.0838)	1.196*** (0.0837)	0.501*** (0.0840)	1.548*** (0.0839)
Cultural platform	-2.706*** (0.0101)	-2.617*** (0.0104)	-2.555*** (0.0102)	-2.545*** (0.0104)
COFOG	0.138*** (0.000407)		0.132*** (0.000431)	
Age	-0.00105*** (2.90e-05)	-0.000987*** (2.42e-05)	-0.000609*** (2.60e-05)	-0.000939*** (2.24e-05)
GDP per capita			3.02e-05*** (1.89e-07)	3.85e-05*** (2.97e-07)
VC/PE Index			-0.0135*** (0.000314)	-0.0106*** (0.000259)
Private expenditure on culture		0.000121***		2.37e-05***
Cultural enterprises		(6.27e-07)		(9.34e-07) 0.000*** (0.000)
Constant	$-0.455^{***}(0.0850)$	2.091*** (0.0848)	-0.0131 (0.0886)	4.291*** (0.0890)
AIC	207,204.1	269,557.7	173,770.7	241,076.7
BIC	207,219.8	269,573	173,790.8	241,096.4
Pseudo- R^2	0.58	0.45	0.65	0.51
Observation	70	67	70	67

Note: This table reports the results of Poisson regressions using a sample of 70 crowdfunding platforms. The dependent variable is the number of successful cultural and creative projects financed on the platforms since their inception to 31 December 2020.

Abbreviations: AIC, Akaike information criteria; BIC, Bayesian information criteria; GDP, gross domestic product; PE, private equity; VC, venture capital.

***Significant at 1% (0.01).

**Significant at 5% (0.05).

*Significant at 10% (0.1).

strong substitution effect between the crowdfunding growth in CCIs and other alternative funding sources. Specifically, if the VC/PE index increases by one point, the number of funded campaigns is expected to decrease by a factor of 0.98 (2%). This result widens the stream of research that has argued for the substitution or complement effect of new funding channels as alternatives to traditional sources (Kim & Hann, 2013; Navaretti et al., 2018).

Table 8 presents the regression results testing the effect of specific platform variables related to the information described on platform websites and social networks' role in crowdfunding development in CCIs. In Models 1-4, the coefficient of social network ties, denoting the structural dimensions of social capital, is always positively and significantly correlated with successful creative and cultural campaigns. Specifically, if the number of platform followers in the whole social network universe increases by one point, the number of successful projects will be expected to increase by a factor of 1.31 (31%). The documented evidence suggests that platforms with a prominent role in social networks are more able to attract investors, emphasizing the importance of social networks in supporting the growth and development of crowdfunding. In Model 2, we substitute the variable social network ties with the social network index, denoting whether a platform presents an official account on all social networks

considered in our analysis. The results show a positive and significant relationship between the social network index and the number of funded projects. In other words, if a crowdfunding platform has an official profile on all social networks, the number of successful campaigns is expected to be 4.4 times greater. In Model 3, we test the transparency of platform websites in allowing clear information to users. The transparent community's coefficient is positively and significantly related to the response variable, suggesting that platforms with a website providing better information quality, such as the number of projects hosted and the amount collected, are more able to obtain support from investors. Our findings confirm previous studies on the effects of information communication on crowdfunding success because effective information communication among parties can help reduce uncertainty and information asymmetry (Ahlers et al., 2015; Liang et al., 2020). Moreover, this evidence reflects the importance of signalling theory (Ross, 1977), according to which economic agents' behaviour is affected by some signals that entrepreneurs use to induce investors to commit financial resources. Our results are in line with those previous studies that have proven that successful crowdfunding is affected by higher Facebook likes or friends, acting as valuable signals (Belleflamme et al., 2014; Konrad, 2013; Mollick, 2014). These findings likewise hold even after controlling for country-level variables. The VC/PE

TABLE 8	Results of Poisson	regression by	adding	variables related	l to inforn	nation and	d social network	κs
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	(1)	(2)	(3)	(4)
Donation	1.034*** (0.0877)	0.272*** (0.0873)	1.856*** (0.0871)	0.469*** (0.0881)
Reward	1.982*** (0.0843)	2.002*** (0.0834)	3.335*** (0.0832)	0.679*** (0.0850)
Hybrid	0.554*** (0.0847)	0.486*** (0.0840)	1.462*** (0.0838)	-0.724*** (0.0855)
Cultural platform	-2.586*** (0.0101)	$-2.676^{***}(0.0101)$	-2.540*** (0.0101)	-2.507*** (0.0102)
Age	-0.00186*** (0.000132)	-0.00190*** (2.75e-05)	-0.00130*** (2.60e-05)	$-0.000344^{**}(0.000141)$
Social network index		1.940*** (0.00821)		0.520*** (0.00996)
Social network ties	0.515*** (0.00207)			0.582*** (0.00267)
GDP per capita				5.44e-05*** (2.11e-07)
VC/PE index				-0.0405*** (0.000401)
Transparent community			0.332*** (0.00517)	
Constant	1.633*** (0.0867)	5.342*** (0.0832)	5.227*** (0.0832)	2.893*** (0.0934)
AIC	219,549.8	240,716.5	314,479.4	140,660.2
BIC	219,565	240,732.2	314,495	140,679.8
Pseudo- R^2	0.55	0.52	0.37	0.71
Observation	66	70	70	66

Note: This table reports the results of Poisson regressions using a sample of 70 crowdfunding platforms. The dependent variable is the number of successful cultural and creative projects financed on the platforms since their inception to 31 December 2020.

Abbreviations: AIC, Akaike information criteria; BIC, Bayesian information criteria; GDP, gross domestic product; PE, private equity; VC, venture capital.

***Significant at 1% (0.01).

**Significant at 5% (0.05).

*Significant at 10% (0.1).

attractiveness index is still a significant and negative predictor of the funded projects, emphasizing that the crowdfunding in CCIs can behave like a substitute rather than a complement to other alternative funding channels.

To test the robustness of our results, we applied the same models by using heteroscedasticity robust standard errors. The regression results are reported in Tables 9 and 10. The documented results likewise hold, even if the evidence for some predictors is weaker either in significance or in magnitude.

Finally, to improve the interpretation of the results, we provide in Tables 11 and 12 the coefficients of count model regression tables shown as incidence rate ratios (IRRs).

DISCUSSION

In this paper, we provide a first assessment of how and where cultural crowdfunding platforms emerge in Europe. We also explore the extent to which government expenditures on cultural services in the European Union influence the emergence and development of crowdfunding platforms used by firms and creatives to launch cultural and creative projects.

Overall, we document that by December 2020, 70 cultural crowdfunding platforms were operating in Europe, financing 8,196 cultural and creative projects. France is the country with the highest number of successfully funded CCI projects. Most of the platforms in the sample are reward-based. Our findings reveal that cultural crowdfunding is more developed when public engagement in promoting and supporting CCIs is

strong, suggesting a complementary effect between cultural crowdfunding and public spending. Indeed, platforms operating in countries where the government expenditure on culture services, broadcasting and publishing services is high show a greater number of successfully funded cultural and creative projects. In contrast, we find evidence of a strong substitution effect between cultural crowdfunding and the attractiveness of countries for investors in the VC and PE asset classes. The number of successful campaigns is higher in countries where the VC and OE attractiveness index is low. Moreover, our findings support the evidence that the number of successfully funded cultural and creative projects is higher when the platform is not dedicated exclusively to cultural and creative projects. This may be due to the lack of scalability, reproducibility or the intrinsic nature of creative products that are often less reproducible and locally restricted in comparison with technology, video games and other types of products. Finally, in line with the signalling and social network theories in crowdfunding (see Ahlers et al., 2015; Vismara, 2016), our results reveal that higher information transparency and the creation of a community on social networks foster the platform's operational performance. Our findings provide several implications to the major stakeholders (i.e., cultural and creative actors, crowdfunding platforms, investors) driving the crowdfunding market to scale up the CCIs to cover the required level of financing needs. First, our results provide practical insights for artists as well as cultural and creative entrepreneurs that use crowdfunding to finance their

Variables	(1)	(2)	(3)	(4)
	Model 1	Model 2	Model 3	Model 4
Donation	2.247*** (0.0752)	2.069*** (0.282)	2.258*** (0.0818)	2.167*** (0.155)
Reward	2.811*** (0.257)	3.081*** (0.395)	2.552*** (0.484)	3.241*** (0.434)
Hybrid	0.653 (0.691)	1.203* (0.641)	0.501 (0.749)	1.548** (0.640)
Cultural_platform	-2.706*** (0.402)	-2.575*** (0.413)	-2.555*** (0.400)	-2.545*** (0.394)
COFOG	0.138*** (0.0261)		0.132*** (0.0324)	
Age	-0.00105 (0.00100)	-0.000960 (0.000837)	-0.000609 (0.000841)	-0.000939 (0.000836)
GDP per capita			3.02e-05** (1.22e-05)	3.85e-05* (1.97e-05)
VC/PE			-0.0135 (0.0209)	-0.0106 (0.0180)
Private expenditure on culture		0.000120**		2.37e-05
Cultural enterprises		(5.79e-05)		(5.94e-05) 1.000*** (0.000)
Constant	-0.455 (1.111)	2.115 (1.484)	-0.0131 (2.046)	4.291** (2.089)
AIC	207,202.1	269,555.7	173,768.7	241,074.7
BIC	207,215.5	269,568.8	173,786.6	241,092.2
Pseudo- R^2	0.59	0.45	0.65	0.51

Note: This table reports the results of Poisson regressions replicating the same models of Table 7 by using robust standard errors. The dependent variable is the number of successful cultural and creative projects financed on the platforms since their inception to 31 December 2020.

Abbreviations: AIC, Akaike information criteria; BIC, Bayesian information criteria; GDP, gross domestic product; PE, private equity; VC, venture capital. ***Significant at 1% (0.01).

**Significant at 5% (0.05).

*Significant at 10% (0.1).

TABLE 10	Results of Poisson regression with robu	st standard errors by adding variables related to information and social networks

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	(1)	(2)	(3)	(4)
Donation	1.034 (0.690)	0.272 (0.432)	1.856*** (0.690)	0.535 (0.426)
Reward	1.982** (0.848)	2.002*** (0.319)	3.335*** (0.605)	1.731*** (0.474)
Mixed	0.554 (1.084)	0.486 (0.636)	1.462** (0.712)	0.334 (0.637)
Cultural platform	-2.586*** (0.409)	-2.676*** (0.385)	-2.540*** (0.440)	-2.487*** (0.381)
Age	-0.00186 (0.0121)	-0.00190* (0.00106)	-0.00130 (0.000945)	
Social network ties	0.515** (0.261)			
Social network index		1.940*** (0.416)		1.804*** (0.438)
Transparent community			0.332 (0.653)	
GDP per capita				3.37e-05*** (1.17e-05)
VC/PE index				-0.0225 (0.0153)
Constant	1.633 (3.797)	5.342*** (0.204)	5.227*** (0.181)	5.995*** (1.323)
AIC	219,547.8	240,714.5	140,658.2	199,096.8
BIC	219,560.9	240,727.9	140,675.6	199,114.7
Pseudo- R^2	0.55	0.52	0.71	0.60

Note: This table reports the results of Poisson regressions replicating the same models of Table 8 by using robust standard errors. The dependent variable is the number of successful cultural and creative projects financed on the platforms since their inception to 31 December 2020.

Abbreviations: AIC, Akaike information criteria; BIC, Bayesian information criteria; GDP, gross domestic product; PE, private equity; VC, venture capital.

***Significant at 1% (0.01).

**Significant at 5% (0.05).

*Significant at 10% (0.1).

projects. As stated above, our findings reveal that the number of successfully funded projects is higher when the platform is not dedicated exclusively to cultural and creative projects. Therefore, artists and entrepreneurs

should turn to generalist platforms to reach a broader public that highly values novel and functional products instead of a particular audience of 'cultural funders' (i.e., art connoisseurs or collectors, enthusiasts or

TABLE 11 Res	sults of Poisson re	egression with i	incidence rate ratio
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	(1)	(2)	(3)	(4)
	Odds ratio	Odds ratio	Odds ratio	Odds ratio
Donation	7.869*** (0.684)	7.919*** (0.688)	7.167*** (0.623)	8.736*** (0.759)
Reward	16.80*** (1.398)	21.78*** (1.812)	10.47*** (0.873)	25.55*** (2.126)
Hybrid	1.981*** (0.166)	3.330*** (0.279)	1.379*** (0.116)	4.704*** (0.394)
Cultural platform	0.0662*** (0.000669)	0.0761*** (0.000790)	0.0758*** (0.000774)	0.0785*** (0.000814)
COFOG	1.118*** (0.000480)		1.117*** (0.000520)	
Age	0.999*** (3.05e-05)	0.999*** (2.42e-05)	1.000*** (2.54e-05)	0.999*** (2.24e-05)
GDP per capita			1.000*** (1.88e-07)	1.000*** (2.97e-07)
VC/PE			0.975*** (0.000285)	0.989*** (0.000257)
Private expenditure on culture		1.000*** (6.59e-07)		1.000*** (9.34e-07)
Observations	69	66	69	66

Note: This table reports the results of Poisson regressions replicating the same models of Table 7 by using Incidence rate ratio (IRR). The dependent variable is the number of successful cultural and creative projects financed on the platforms since their inception to 31 December 2020.

Abbreviations: GDP, gross domestic product; PE, private equity; VC, venture capital.

***Significant at 1% (0.01).

**Significant at 5% (0.05).

*Significant at 10% (0.1).

TABLE 12	Results of Poisson regression	on with incidence rate ratio	by adding variables relate	d to information and social networks

	(1)	(2)	(3)	(4) Odds ratio	
	Odds ratio	Odds ratio	Odds ratio		
Donation	7.657*** (0.665)	1.312*** (0.115)	6.396*** (0.557)	1.932*** (0.169)	
Reward	21.62*** (1.797)	7.401*** (0.618)	28.09*** (2.336)	4.321*** (0.362)	
Hybrid	1.907*** (0.161)	1.626*** (0.137)	4.313*** (0.361)	0.530*** (0.0449)	
Cultural platform	0.0341*** (0.000449)	0.0689*** (0.000693)	0.0789*** (0.000799)	0.0403*** (0.000520)	
Age	0.997*** (2.74e-05)	0.998*** (2.75e-05)	0.999*** (2.60e-05)	0.998*** (2.73e-05)	
Social network index		6.961*** (0.0571)		4.224*** (0.0391)	
Social network ties	1.000*** (2.38e-08)			1.000*** (2.53e-08)	
GDP per capita				1.000*** (1.76e-07)	
VC/PE				0.971*** (0.000308)	
Transparent community			1.393*** (0.00720)		
Observations	68	69	69	68	

Note: This table reports the results of Poisson regressions replicating the same models of Table 8 by using Incidence rate ratio (IRR). The dependent variable is the number of successful cultural and creative projects financed on the platforms since their inception to 31 December 2020.

Abbreviations: GDP, gross domestic product; PE, private equity; VC, venture capital.

***Significant at 1% (0.01).

**Significant at 5% (0.05).

*Significant at 10% (0.1).

patrons who are consumers of the arts), which needs to establish a connection with entrepreneurs and become an active part of the cultural value creation process (Bürger & Kleinert, 2021). Second, our research has important implications for crowdfunding platform managers. Our results suggest that higher information transparency and the use of social networks increase platforms' performance. Thus, from a practical standpoint, it is important that platform managers ensure high levels of information transparency and build strong online communities on social media using Instagram, Facebook, Twitter and LinkedIn to reach large numbers of potential funders and, in turn, increase platform performance. Third, we provide implications for European policymakers. Our analysis reveals that cultural crowdfunding is more developed in countries where public engagement in promoting CCIs is high. Therefore, policymakers should support the development of cultural crowdfunding by increasing government expenditure on cultural services across the European Union. Finally, we also stress the need for policymakers to support the CCI growth by institutionalizing crowdfunding as part of the financing ecosystem of cultural and creative actors in Europe.

CONCLUSIONS

The use of crowdfunding in CCIs has increased significantly in Europe in recent years, becoming a popular funding channel for both private and public cultural and creative actors. Drawing its inspiration from one of the main studies that investigated crowdfunding in the health care industry (Bassani et al., 2019), this study presents new analyses and results on crowdfunding in CCIs. For the first time, cross-platform evidence on crowdfunding in CCIs in Europe is provided. The success of cultural crowdfunding platforms (measured by the number of successful cultural and creative projects financed on a given platform since its inception to December 2020) is discussed in relation to government spending on cultural services in European Union countries.

This study makes several contributions to the literature. First, it contributes to the growing literature on cultural and creative entrepreneurship (CCE) by extending the understanding of cultural crowdfunding in Europe and helping cultural and creative entrepreneurs and professionals seeking finance to unlock the full potential of this new phenomenon. Second, European countries differ in terms of crowdfunding volumes and platform numbers (Ziegler et al., 2019). Thus, this study contributes to the literature on crowdfunding by analysing how nationallevel characteristics, such as national cultural expenditures, the GDP per capita and the VC/PE attractiveness index influence cultural crowdfunding supply and demand across different European countries. Third, this study contributes to the literature on cultural economics and cultural policy by analysing the relationship between cultural dimensions, cultural policies and crowdfunding activity in CCIs.

This experimental study has some limitations that pave the way for future research. First, due to a lack of data, we could only examine the number of successful campaigns, excluding from the analysis all failed campaigns. Comparing the number of successful campaigns with the number of those that failed to reach the set goal would allow to provide a better analysis of the success rate of the analysed platforms. Furthermore, because we use data on the European population of crowdfunding platforms, going forwards, future studies can expand the experimental setting of our study and investigate whether our results continue to hold in different contexts. Looking at recent events, CCIs were among those most negatively affected by the COVID-19 pandemic. Future researchers can investigate how the coronavirus crisis and the subsequent lockdown measures impacted CCIs and what role cultural crowdfunding platforms can play in recovery from the existing crisis and in building stronger CCIs.

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ENDNOTES

¹According to the 'Creative Europe Programme' established by Article 2 (Point 1) of Regulation (EU) n. 1295/2013 of the European Parliament and of the Council of 11 December 2013, the cultural and creative industries (recently also termed 'cultural and creative sectors') can be defined as: "all sectors whose activities are based on cultural values and/or artistic and other creative expressions, whether those activities are market- or non-market-oriented, whatever the type of structure that carries them out, and irrespective of how that structure is financed."

²Depending on how investors are recompensed, four main crowdfunding models can be identified (Cicchiello, 2019, 2020). Donation-based crowdfunding is used for social or charitable causes. Investors are mainly philanthropists who donate money without expecting anything in return (Mollick, 2014). As the name suggests, in reward-based crowdfunding, funders receive a nonmonetary reward based on the amount of money they invest into the project. This model is primarily used for creative projects. In lending-based crowdfunding (P2P, peer-to-peer, or P2B, peer-to-business), funders (lenders) lend money to consumers or entrepreneurs (borrowers) in return for a certain rate of interest (Morse, 2015). Finally, in the equity-based model, investors become shareholders of the funded company through the purchase of a small equity stake, sharing the potential profits and risks of the company (Cicchiello et al., 2021; Cicchiello & Leone, 2020; Del Sarto & Magni, 2018).

³That is, Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Iceland, Italy, Latvia, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Switzerland and the United Kingdom.

⁴See https://www.crowdfunding4culture.eu/

⁵The CCIs definition is provided by the regulation (EU) No 1295/2013 of the European Parliament and of the council of 11th December 2013 establishing the Creative Europe Programme (2014–2020) and repealing decisions no 1718/2006/ec, no 1855/2006/ec and no 1041/2009/ec.

 6 In the 'all-or-nothing' model, a project is considered funded only if 100% of the funding target or more is reached within the specified time-frame, which is typically 60–180 days. In the 'keep-it-all' model, a project is considered funded at the end of the campaign regardless of whether the funding target is reached or not.

⁷We adopted the Poisson regression rather than negative binomial regression because the response variable does not show an overdispersion concern. Indeed, negative binomial regression is a generalization of Poisson regression and has the same mean structure. The difference between negative binomial and Poisson regression consists of an extra parameter that the first model has to deal with the problem of overdispersion presenting in count data.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are openly available in the Eurostat repository online (https://ec.europa.eu/eurostat/data/database) and on the websites of the individual platforms analysed.

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REFERENCES

- Ahlers, G.K., Cumming, D., Günther, C. & Schweizer, D. (2015) Signaling in equity crowdfunding. *Entrepreneurship Theory and Practice*, 39(4), 955–980. Available from: https://doi.org/10.1111/etap. 12157
- Bassani, G., Marinelli, N. & Vismara, S. (2019) Crowdfunding in healthcare. *The Journal of Technology Transfer*, 44(4), 1290–1310. Available from: https://doi.org/10.1007/s10961-018-9663-7
- Belleflamme, P., Lambert, T. & Schwienbacher, A. (2014) Crowdfunding: tapping the right crowd. *Journal of Business Venturing*, 29(5), 585–609.
- Belleflamme, P., Omrani, N. & Peitz, M. (2015) The economics of crowdfunding platforms. *Information Economics and Policy*, 33, 11– 28. Available from: https://doi.org/10.1016/j.infoecopol.2015.08.003
- Bi, S., Liu, Z. & Usman, K. (2017) The influence of online information on investing decisions of reward-based crowdfunding. *Journal of Business Research*, 71, 10–18.
- Bocconcelli, R., Fortezza, F., Petrucci, F. & Pagano, A. (2020) The role of crowdfunding in cultural entrepreneurship: A business network perspective. In: Piber, M. (Ed.) *Management, participation and entrepreneurship in the cultural and creative sector*. Cham: Springer, pp. 115–137. https://doi.org/10.1007/978-3-030-46796-8_7
- Boeuf, B., Darveau, J. & Legoux, R. (2014) Financing creativity: Crowdfunding as a new approach for theatre projects. *International Journal of Arts Management*, 16(3), 33–48.
- Bürger, T. & Kleinert, S. (2021) Crowdfunding cultural and commercial entrepreneurs: An empirical study on motivation in distinct backer communities. *Small Business Economics*, 57(2), 667–683. Available from: https://doi.org/10.1007/s11187-020-00419-8
- Cameron, A.C. & Trivedi, P.K. (2013) Regression analysis of count data. New York, NY: Cambridge University Press, p. 53. https://doi. org/10.1017/CBO9781139013567
- Cicchiello, A.F. (2019) Building an entrepreneurial ecosystem based on crowdfunding in Europe: The role of public policy. *Journal of Entrepreneurship and Public Policy*, 8(3), 297–318. Available from: https://doi.org/10.1108/JEPP-05-2019-0037
- Cicchiello, A.F. (2020) Harmonizing the crowdfunding regulation in Europe: Need, challenges, and risks. *Journal of Small Business and Entrepreneurship*, 32(6), 585–606. Available from: https://doi.org/ 10.1080/08276331.2019.1603945
- Cicchiello, A.F. & Leone, D. (2020) Encouraging investment in S.M.E.s through equity-based crowdfunding. *International Journal of Globalisation and Small Business*, 11(3), 258–278. Available from: https://doi.org/10.1504/IJGSB.2020.109553
- Cicchiello, A.F., Pietronudo, M.C., Leone, D. & Caporuscio, A. (2021) Entrepreneurial dynamics and investor-oriented approaches for regulating the equity-based crowdfunding. *Journal of Entrepreneurship and Public Policy*, 10(2), 235–260. Available from: https:// doi.org/10.1108/JEPP-03-2019-0010
- Cirella, S. (2021) Managing collective creativity: Organizational variables to support creative teamwork. *European Management Review*, 18(4), 404–417. Available from: https://doi.org/10.1111/emre.12475
- Dalla Chiesa, C. & Dekker, E. (2021) Crowdfunding artists: Beyond match-making on platforms. *Socio-Economic Review*, 19(4), 1265–1290. Available from: https://doi.org/10.1093/ser/mwab006

- De Voldere, I. & Zeqo, K. (2017) Crowdfunding: reshaping the crowd's engagement in culture. Publications Office of the European Union.
- Del Sarto, N. & Magni, D. (2018) How dynamic capabilities matter for the implementation of a successful equity crowdfunding campaign. In: Barile, S., Espejo, R., Perko, I., Saviano, M. & Caputo, F. (Eds.) *Cybernetics and Systems*. London: Routledge, pp. 96–100. https://doi.org/10.4324/9780429486982-22
- Ebbers, J.J., Leenders, M.A.A.M. & Augustijn, J.J.E. (2021) Relationship value benefits of membership programs, heterogeneous stakeholders and museum impact beyond fees. *European Management Review*, 18(4), 418–432. Available from: https://doi.org/10.1111/ emre.12465
- Galuszka, P. & Bystrov, V. (2014) Crowdfunding: a case study of a new model of financing music production. *Journal of Internet Commerce*, 13(3-4), 233–252.
- Gerber, E. M., Hui, J. S. & Kuo, P.-Y. (2012) Crowdfunding: why people are motivated to post and fund projects on crowdfunding platforms. In *Proceedings of the international workshop on design, influence, and social technologies: techniques, impacts and ethics*, Vol. 2, No. 11, New York, NY: ACM.
- Greene, W.H. (2003) Econometric analysis. Upper Saddle River, New Jersey: Pearson Education India.
- Groh, A., Liechtenstein, H., Lieser, K. & Biesinger, M. (2018) The venture capital and private equity country attractiveness index 2018. IEESE Business School, Univesity of Navarra.
- Haeussler, C., Patzelt, H. & Zahra, S.A. (2012) Strategic alliances and product development in high technology new firms: The moderating effect of technological capabilities. *Journal of Business Venturing*, 27(2), 217–233. Available from: https://doi.org/10.1016/j. jbusvent.2010.10.002
- Hobbs, J., Grigore, G. & Molesworth, M. (2016) Success in the management of crowdfunding projects in the creative industries. *Internet Research*, 26(1), 146–166.
- Huang, W. (2020) The study on the relationships among film fans' willingness to pay by film crowdfunding and their influencing factors. *Economic Research-Ekonomska Istraživanja*, 33(1), 804–827.
- Kim, K. & Hann, I.H. (2013) Does crowdfunding democratize access to capital? A geographical analysis. SSRN Electronic Journal, 1–35. Available from: https://doi.org/10.2139/ssrn.2334590
- Konrad, E.D. (2013) Cultural entrepreneurship: The impact of social networking on success. *Creativity and Innovation Management*, 22(3), 307–319. Available from: https://doi.org/10.1111/caim. 12032
- Liang, X., Hu, X. & Jiang, J. (2020) Research on the effects of information description on crowdfunding success within a sustainable economy—The perspective of information communication. Sustainability, 12(2), 650. Available from: https://doi.org/10.3390/ su12020650
- Linder, C. & Sperber, S. (2017) If what you want is not what you get: A communication-based approach to top managers' intended firm creativity and employees' failure to deliver. *European Management Review*, 14(3), 227–246. Available from: https://doi.org/10.1111/ emre.12104
- Mollick, E. (2014) The dynamics of crowdfunding: an exploratory study. *Journal of Business Venturing*, 29(1), 1–16. Available from: https://doi.org/10.1016/j.jbusvent.2013.06.005
- Mollick, E. & Nanda, R. (2016) Wisdom or madness? Comparing crowds with expert evaluation in funding the arts. *Management Science*, 62(6), 1533–1553.
- Mollick, E. & Robb, A. (2016) Democratizing innovation and capital access: the role of crowdfunding. *California Management Review*, 58(2), 72–87.
- Montanari, F., Della Torre, E. & Sikora, D.M. (2021) Bohemian like you? Managing people and organizations in creative industries. *European Management Review*, 18(4), 385–388. Available from: https://doi.org/10.1111/emre.12471
- Morse, A. (2015) Peer-to-peer crowdfunding: Information and the potential for disruption in consumer lending. *Annual Review of*

Financial Economics, 7(1), 463–482. Available from: https://doi. org/10.1146/annurev-financial-111914-041939

- Navaretti, G.B., Calzolari, G., Mansilla-Fernandez, J.M. & Pozzolo, A. F. (2018) Fintech and Banking. Friends or Foes?. Available at SSRN: https://ssrn.com/abstract=3099337 or https://doi.org/10. 2139/ssrn.3099337
- Nucciarelli, A., Li, F., Fernandes, K.J., Goumagias, N., Cabras, I., Devlin, S., Kudenko, D. & Cowling, P. (2017) From value chains to technological platforms: The effects of crowdfunding in the digital game industry. *Journal of Business Research*, 78, 341–352. Available from: https://doi.org/10.1016/j.jbusres.2016.12.030
- Rhee, J.H. & Ji, H. (2011) How to further exploit social capital: An empirical investigation of three dimensions of social capital and their contributions to individual performance. *Asian Business & Management*, 10(4), 485–507. Available from: https://doi.org/10. 1057/abm.2011.19
- Ross, S.A. (1977) The determination of financial structure: the incentive-signalling approach. *The Bell Journal of Economics*, 8(1), 23–40. Available from: https://doi.org/10.2307/3003485
- Rykkja, A., Munim, Z.H. & Bonet, L. (2020) Varieties of cultural crowdfunding: The relationship between cultural production types and platform choice. *Baltic Journal of Management*, 15(2), 261–280. Available from: https://doi.org/10.1108/BJM-03-2019-0091
- Stang Våland, M., Svejenova, S. & Clausen, R.T.J. (2021) Renewing creative work for business innovation: Architectural practice in the trading zone. *European Management Review*, 18(4), 389–403.
- Tosatto, J., Cox, J. & Nguyen, T. (2019) An overview of crowdfunding in the creative and cultural industries. In: Landström, H., Parhankangs, A. & Mason, C. (Eds.) *Handbook of research on crowdfunding*, Research Handbooks in Business and Management series. Cheltenham: Edgar Elgar Publishing, pp. 269–302.

- Vismara, S. (2016) Equity retention and social network theory in equity crowdfunding. *Small Business Economics*, 46(4), 579–590. Available from: https://doi.org/10.1007/s11187-016-9710-4
- Vismara, S. (2018) Signaling to overcome inefficiencies in crowdfunding markets. In: Cumming, D. & Hornuf, L. (Eds.) *The economics of crowdfunding*. Cham: Palgrave Macmillan, pp. 29–56. https://doi. org/10.1007/978-3-319-66119-3_3
- Wang, X. & Wang, L. (2018) What makes charitable crowdfunding projects successful: A research based on data mining and social capital theory. In: Park, J.H., Shen, H., Sung, Y. & Tian, H. (Eds.) International conference on parallel and distributed computing: Applications and technologies. Singapore: Springer, pp. 250–260.
- Zheng, H., Li, D., Wu, J. & Xu, Y. (2014) The role of multidimensional social capital in crowdfunding: A comparative study in China and U.S. *Information & Management*, 51(4), 488–496. Available from: https://doi.org/10.1016/j.im.2014.03.003
- Ziegler, T., Shneor, R., Wenzlaff, K., Odorović, A., Johanson, D., Hao, R. & Ryll, L. (2019) *The 4th European alternative finance benchmarking report*. Cambridge Center for Alternative Finance, Cambridge

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