

Use of crowdfunding in Chile: an exploratory approach**

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Abstract: The FinTech industry includes crowdfunding companies, which consist of collaborative financing platforms. The potential use of crowdfunding among Chilean undergraduate students is empirically analyzed. An ordered probit model is used to test the determinants of the probability that a student will use a crowdfunding platform in the future. Also, a qualitative analysis containing arguments by which students would or would not use crowdfunding in the future is presented. The results indicate that trust in financial institutions and prior crowdfunding knowledge have a positive and significant effect on the probability of using these platforms. This paper constitutes one of the first to explore the growing crowdfunding market in Chile from the demand perspective.

Keywords: crowdfunding; finance; financial inclusion; fintech; funding; entrepreneurial intention; innovation; regulatory framework; young people

**This paper received financial support from the Office of Research and Development at Universidad de Concepción, Chile (219.124.001-INI and 2020000141MUL VRID Projects).

Submitted: January 26th, 2021 / Approved: May 3rd, 2022

1. Introduction

In most cases, individuals who decide to carry out an initiative or project need additional financing apart from their own resources. Part of this comes from banks and financial institutions via debt, which have not been absent of constraints in many cases; others are associated with raising capital through partners; while another alternative corresponds to the public subsidies related to the project.

Over recent years, the rise of the FinTech industry has been observed. Compared to traditional financial firms, the FinTech industry is comprised of companies providing innovative financial services based on digital tools (Heredia, Geldes, Flores & Heredia, 2020). Some of them facilitate the search for projects funded through virtual platforms and are known as crowdfunding. Crowdfunding or collective financing is a way of raising money through donations or investments from multiple people, who establish contact with potential fundraisers through digital platforms such as websites, electronic applications, etc. (Gleasure & Feller, 2016; Abarca, 2018). For this reason, crowdfunding has relevant advantages such as a lower cost of financing than traditional services, and an ease of access that promotes financial inclusion in the population (because individuals can take advantage of investment opportunities that previously required significant capital), innovation and economic development. Despite advances in crowdfunding literature, many questions have not been answered on this matter, mainly in emerging markets like Latin America.

In the Latin American and Caribbean (LAC) market, the number of crowdfunding platforms has increased significantly. The same has occurred with the projects' overall aggregate negotiated amounts. Brazil, Chile and Mexico stand out as the countries where people have shown

the most interest in this way of funding (Rentería, 2016). The entrepreneurship environment has promoted regional crowdfunding development. The 2018 Global Entrepreneurship Index (GEI) shows that entrepreneurship faces two bottlenecks in the LAC region: process innovation and risk capital (Ács, Szerb, & Lloyd, 2018). According to the 2018 GEI, Chile is the leader in the LAC region and ranks 19th worldwide. However, in Chile there is also a problem in accessing financing alternatives. In the Radiography of Entrepreneurship in Chile 2019 cited by Directorio Empresas Chile (2019), 44.5% of entrepreneurs say that accessing financing is the most difficult (80.2% of entrepreneurs mainly use resources from themselves, their friends or their family). The difficulty in accessing financing can be seen in the interest rates spread between companies. According to the OECD (2020), Small and Medium-Sized Enterprises (SME) paid 4.5 percentage points more than large companies in 2018, and Chile was the fifth country with the highest interest rate spread (behind Peru, Brazil, Mexico and Colombia). In this context, the use of crowdfunding can expand financing alternatives and improve conditions for entrepreneurs.

In Chile, crowdfunding represented a traded amount equivalent to US\$ 180 million towards the end of 2016, mainly focused on loans to companies (Abarca, 2018). Chile has also presented a more accelerated evolution of searching for the crowdfunding concept on the web in comparison to other Latin American countries (Rentería, 2016). Despite the advances in the empirical literature of crowdfunding around the world and mainly in emerging economies as Chile, many questions remain to be answered in this matter. In Chile, extant studies are mainly focused on the perspective of the supply of interaction platforms between fundraisers and contributors. Nevertheless, the perceptions and characteristics of people seeking funds for their projects through these platforms have not been studied.

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The present article covers this empirical gap, analyzing the potential use of crowdfunding platforms in Chile and its applications to finance business, social and cultural projects. This article provides empirical evidence from an exploratory nature, focusing on analyzing the youth population segment represented by university students from regions. Chile offers an interesting study space, since an important segment of the young population cannot access bank loans to finance their ventures or other types of projects (Ziegler *et al.*, 2018). This segment has also been chosen because young people tend to be more familiar with the use of digital technologies, implying that they would be a potential market for crowdfunding. A sample of undergraduate students from Universidad de Concepción, Campus Chillán, Chile, was analyzed. This institution shows high student socioeconomic background diversity, favoring sample representativeness. More specifically, this study focuses on responding to three aspects. First, what are the crowdfunding knowledge levels among Chilean university undergraduate? Second, what is the average probability of potential use for this financing alternative? Finally, what are the possible factors that would explain the probability or propensity that a Chilean university student will use a crowdfunding platform in the future? For the last question, entrepreneurial intention, confidence level in financial institutions, degree of use of Information and Communication Technologies (ICT) and prior knowledge in crowdfunding are considered, controlling for other sociodemographic factors. According to BID (2015), we pose that these four variables would positively affect the probability of using collaborative financing platforms.

A qualitative analysis based on the statements of the students in the sample is also presented, who indicated the reasons why they would or would not use a crowdfunding platform in the future, with the purpose of starting a campaign through a project. These reasons were categorized into three groups of concepts: arguments in favour of the use, arguments against the use of these platforms, and condition arguments. It is expected this research can contribute to the discussion of the demand factors in this market as a starting point to study other socio-demographic segments, not only in Chile, but also in other emerging economies.

This article is structured as follows. After this introduction, section 2 presents the literature review about crowdfunding and its use in emerging economies and young students. Section 3 presents the methodology, data processing, and the econometric analysis on the determinants of the potential use of crowdfunding. Section 4 presents the details of the qualitative analysis. Finally, section 5 discloses the conclusions of this research and its implications for economic policy and the private sector.

2. Literature review

2.1 General crowdfunding background

Crowdfunding is a fast-growing technology-enabled process with the potential to alter the capital market space (Veuger, 2015). In addition, this industry creates new forms of interaction between the creators of projects and companies, with investors and contributors (Mollick & Robb, 2016). Crowdfunding companies can be classified into four categories: loans, equity, sponsorship (reward), and donation

(Gleasure & Feller, 2016). This last distinction follows the criterion of capital goals and the type of retribution. Equity crowdfunding is used for projects with high amounts of money, in addition to generating high expected returns. This is followed by debt crowdfunding. Finally, projects that follow a donation or reward modality tend to have low amounts to request, and a low contribution.

Crowdfunding can become part of the solution for financial market inefficiencies, first, for the finance and profitability challenges of SMEs and savers, and second, as a new tool for public-private promotion for projects with positive externalities (Roig & Soriano, 2015). For these reasons, there are diverse motivations when people decide to contribute to any project through these platforms. If people want to make a financial gain, they might be interested in crowdfunding investments and loans. However, others can be motivated to participate due to the social interactions that take place through them, such as strengthening commitment and feedback around an idea (Gerber, Hui, & Kuo 2012). From the entrepreneurs' perspective, crowdfunding platforms are interesting because they allow entrepreneurs to obtain funds not only from their friends and family, but also from many strangers from near and far (Agrawal, Catalini, & Goldfarb, 2014). These facts show the growing relevance of crowdfunding as an instrument of financing or investment, even to promote social and business networks.

2.2 Crowdfunding in emerging economies

This business model is significantly higher in developed economies than in emerging ones. Nevertheless, crowdfunding has recently seen significant growth in emerging countries, as crowdfunding has promoted financial inclusion and stimulated job creation (Arner, Buckley, Zetzsche, & Veidt, 2020). However, market penetration of crowdfunding into social networks and online platforms requires a regulatory framework mitigating the risk related to this business (Lowies, Viljoen, & McGreal, 2017).

Alternative finance has continued its development at an increasing rate in North America (US and Canada). Regulators, policymakers and academics have developed an increasing interest on this subject due to their practical implications for financial development and business entrepreneurship. The figures about crowdfunding indicate that the online alternative finance market grew 42.8% to reach \$61.14 billion in 2018. Furthermore, LAC registered an average annual growth rate of 147% between 2013 and 2018 (CCAF, 2020a). However, only 2% of the alternative finance market in the American continent corresponds to LAC. Brazil, Chile and Mexico are the three highest market volumes in LAC (together they made up 66% of the regional total in 2018). In Chile, the volume of alternative business financing was recorded at 16% of the entire LAC market. In addition, Chile had 128.3% growth between 2017 (\$126.7 million) and 2018 (\$289.3 million) for alternative financing (CCAF, 2020a). Some factors that have helped this growth are GDP spreads, adoption of online and mobile platforms, investment climates, consumer demand and unbanked businesses. Chilean borrowers are predominantly unbanked (56%). This is above the LAC average, even more than Brazil and Mexico. Regarding income status, 80% of these services' users in Chile have been high-income, while only 2% are low-income. Most of these platforms' customers consider the

implementation of a specific regulation important (Ziegler *et al.*, 2018). Given the key role that FinTech initiatives can play in supporting developmental objectives such as financial inclusion, policymakers should understand the regulatory and governmental needs of FinTech companies (CCAF, 2020b).

Abarca (2018) recognizes the existence of a limitation in data availability on crowdfunding in the Chilean case. The author mentions that Chile has a regulatory challenge compared to developed countries and others in the region, especially due to loan-crowdfunding companies' predominance both in terms of quantity and amounts traded. Diehl & Lava (2020) argue that Brazil, Mexico and Uruguay have established minimum capital levels or guarantees to constitute collective financing platforms; and Brazil, Colombia, Mexico and Uruguay have established limits on amounts that contributors can invest. Chile does not have a regulation, but the Financial Market Commission (CMF) published a White Paper in February 2019. This document contains the general guidelines to regulate crowdfunding (equity and lending) and related services (FMC, 2019; Diehl & Lava, 2020).

2.3 Crowdfunding among young people

There are several studies from different countries analyzing university students' knowledge and perceptions about crowdfunding. Song, Chen, & Yi (2016) stated that university students face many problems to take entrepreneurship decisions such as funding constraints, lack of experience managing entrepreneurship projects and controlling entrepreneurial risk. For those reasons, crowdfunding platforms are necessary for them because they can present their projects and receive funding and feedback from various channels or mentors.

Al Shobaki, Abu Naser, Abu Amuna, & El Talla (2018) analyzed awareness levels about the crowdfunding concept in Palestinian university students. Their results indicated a high awareness among those students, regardless of gender. The authors also stated that universities should conduct training workshops to increase student awareness of crowdfunding platforms. They recommend having consultants and experts in the field of these platforms aid students in transforming their project ideas into reality.

Kaplanoglu, Capraz, & Kocamaz (2019) analyzed crowdfunding perception and awareness among vocational and undergraduate students from a Turkish university. The authors mentioned that this population group is relevant because they are considered future investors and financiers of crowdfunding, and new ideas and projects emerged predominantly from the young population. Their results showed that crowdfunding recognition was low among the students analyzed. The method of those who knew the concept of crowdfunding was mainly the internet. In addition, the donation and reward models were preferred for crowdfunding projects. Bernardino & Santos (2020) analyzed potential young Portuguese entrepreneurs and concluded that they have moderate knowledge about these platforms and therefore were not able to explore all available business models. However, they perceive several benefits of crowdfunding use that go beyond the financial advantages, such as communicating the project to a wider audience and the additional feedback from potential customers.

Latin American markets have seen little research, but the studies developed show interesting results. Andrade (2014) found that undergraduate students in an Ecuadorean university had poor crowdfunding knowledge and use. Despite this, when students learned about these types of funding, many of them expressed motivation to use it in the future. Jiménez-Cercado & Acosta-Véliz (2018) support a similar conclusion, although they warned that the main obstacle faced by students to start a business is the lack of financial resources. It can also be inferred that this phenomenon applies to the remaining Latin American countries. The authors propose the implementation of information campaigns to socialize the benefits of crowdfunding. Along these lines, Virrueta (2020) analyzed a sample of students from a Peruvian university. The results indicated that 61% of the surveyed people had not heard of crowdfunding before. Nevertheless, many of them believe that crowdfunding is a beneficial alternative for young entrepreneurs and that it provides growth options to micro-businesses. Positive perceptions of crowdfunding are more often based on students who have entrepreneurship ideas. There are also positive expectations about increased trust in crowdfunding platforms over time.

3. Materials and quantitative analysis

3.1 Data collection

This research follows a mainly quantitative methodology, while also including some qualitative aspects to a lesser extent. First, data for a sample of 240 students from Universidad de Concepción, Campus Chillán, Chile, were collected. This size was calculated using the simple random sampling technique, whose representativeness is associated with a 90% confidence level and a margin of error of 5.04%. The population corresponded to 2368 regular students at the beginning of the 2018 academic year. Additionally, it is assumed the most conservative heterogeneity scenario.

The selected students responded to a face-to-face semi-structured survey. To ensure the reliability of the responses, they were handwritten. The content of the survey is found in Appendix 1. The survey has three parts. The first part has students' sociodemographic and academic data. The second part consists of three questions that measure the degree of entrepreneurial intention, trust in financial institutions, and the use of ICT. These items were quantified through five-point Likert scales (from 0 to 4). Finally, the third part collects data about the knowledge and potential use of crowdfunding platforms. As expected, students indicate they have no knowledge about them. For that reason, a short text briefly describing the concept of crowdfunding is provided. Each student is then asked to indicate their possibility to use these platforms in the future. They select a cell from a five-point scale, ordered according to its probability degree. In addition, two open questions were added to lead the surveyed students to explain what they know about crowdfunding, and the reasons why they selected a specific option for its potential use. The survey was validated by a group of experts belonging to the School of Administration and Business (Escuela de Administración y Negocios – EAN, in Spanish) of the university under study. The content of this survey can be useful to future researchers in this area.

After applying the surveys, the data were processed. The main brief results from this are shown in Table 1. The sample is characterized by 21-year-old undergraduate students on average. Almost 60% are women, and 16% were studying a major related to business and management. The general sample includes students from all different years of study, and almost all of them were full-time students. Furthermore, more than 90% of them were located in the lowest personal income ranges. However, with regard to the household income range, the distribution tends to be more uniform.

Statistics on the mean of the variables that it is expected will affect the likelihood of potential crowdfunding use by students are provided.

Three indices whose limits are zero and one are created. These variables are entrepreneurial intention, trust in financial institutions and the degree of ICT use. The indices were calculated by means of the quotient between the sum of the scores in each one of the items and the product of the maximum score, and the number of items. It is observed that indices of entrepreneurial intention and ICT use have an average of 0.68, which highlights that the sample of students presents high levels in these aspects. In contrast, the index of trust in financial institutions barely shows an average level of 0.51. Additionally, all indices have at least an acceptable level of Cronbach's alpha, which confirms the internal consistency of the applied instrument.

Table 1: Sample description.

Characteristics	%	Characteristics	%
Age (average year)	21.3	Total per capita household income range	
Gender		First quintile (%)	8.3
Male (%)	40.8	Second quintile (%)	23.3
Female (%)	59.2	Third quintile (%)	21.3
Undergraduate (%)	100.0	Fourth quintile (%)	20.0
		Fifth quintile** (%)	27.1
Major			
Business major (%)	15.8	Entrepreneurial intention index (CA=0.869)	0.68
...Other majors (%)	84.2	Trust in financial institutions index (CA=0.856)	0.51
Years of study in the current major		Use of ICT index (CA=0.742)	0.68
One year (%)	24.2	He/she knew about crowdfunding (%)	13.8
Two years (%)	15.4	Knowledge of crowdfunding degree (%)	7.1
Three years (%)	33.3	Potential use of crowdfunding index	
Four years (%)	16.3	0	16.6
Five years or more (%)	10.8	1	15.0
Full-time student (%)	90.8	2	33.8
Exchange student (%)	0.0	3	27.5
Paid worker (%)	8.8	4	7.1
Total monthly personal income range			
US\$0 - US\$74.69 (%)	69.6		
US\$74.70 - US\$224.07 (%)	22.9		
US\$224.08 - US\$373.45 (%)	3.8		
US\$373.46* or more (%)	3.8		

Notes: * Values in US dollars correspond to Chilean pesos conversions. The exchange rate used is CLP\$669.43, obtained from data from the Central Bank of Chile, as of November 30, 2018. ** Upper and lower limits of income quintiles are those indicated by the Ministry of Education of Chile. CA refers to Cronbach's alpha values. Source: Authors' elaboration.

Finally, only 14% of those surveyed indicate that they know about crowdfunding platforms. The five-point scale is also transformed into a percentage between zero and 100%, regarding the question about the degree of knowledge of crowdfunding. It is found that the mean of this degree is only 7.1%, which again confirms the aforementioned results. Furthermore, the distribution of responses on potential crowdfunding usage probability is quite heterogeneous. Just over a third of those surveyed said they were undecided. Almost 17% indicate that they would not use those platforms, and barely 7% express the opposite definitively.

3.2 Hypotheses formulation and variables

In this section, the hypotheses associated to factors affecting the probability regarding the different degree of using crowdfunding platforms in Chilean undergraduate students are presented. If people

want to carry out an entrepreneurship idea, they would naturally evaluate funding alternatives unless they have their own funds to make the investment. Also, their link with innovation could make them more likely to seek non-conventional ways of financing (Krauss, Bonomo & Volfovicz, 2018). Along these lines, when people intend to set out on this path, they could consider crowdfunding as a feasible option (Bruton, Khavul, Siegel, & Wright, 2014). In consequence, the following hypothesis is proposed:

H1: Entrepreneurial intention has a positive effect on the potential degree of crowdfunding use in young Chilean students.

Some studies indicate that distrust in some financial system products and platforms affects its intention of use. This evidence has

been analyzed for online banking services (Benamati, Serva, & Fuller, 2006) and even from investors' point of view about crowdfunding platforms (Strohmaier, Zeng, & Hafeez, 2019). As this type of company uses technology to generate interactions between investors and fundraisers, general trust in the financial system could affect not only how much people participate in acquiring and using products and services in banks and other related institutions, but also in services related to the FinTech industry. Future entrepreneurs or people who want to conduct a non-profit project evaluate many funding options, and trust in the financial system is a factor that they could consider. Therefore, the following hypothesis is stated:

H2: Trust in financial institutions has a positive effect on the potential degree of crowdfunding use in young Chilean students.

People that use ICT more frequently could better understand the process of seeking a crowdfunding platform and how it must be used to post and promote a project to raise funds (Afawubo & Noglo, 2022). Moreover, although people initially have no intentions to carrying on

entrepreneurship, the more they use ICT, the greater the chance to know a crowdfunding platform and understand its use (BID, 2015). For these reasons it is proposed:

H3: The degree of ICT use has a positive effect on the potential degree of crowdfunding use among young Chilean students.

When people learn about a new electronic device or platform on a website, they may be more open to using it because the perception of uncertainty is reduced. Therefore, if people have more knowledge about crowdfunding platforms' existence and operation, they could be more likely to use them (BID, 2015). Consequently, it is stated:

H4: The degree of knowledge of crowdfunding has a positive effect on potential crowdfunding use in young Chilean students.

To testing the hypothesis, a set of variables is created, which were incorporated in an econometric specification. Table 2 shows the details of these variables.

Table 2: Variable descriptions and coding.

Variable	Description	Code
<i>Dependent</i>		
Potential crowdfunding use	Ordinal variable that takes 5 categories.	UCF
<i>Independent</i>		
Entrepreneurial intention index	Continuous value between 0 and 1.	EI
Trust in financial institutions index	Continuous value between 0 and 1.	TFI
ICT usage index	Continuous value between 0 and 1.	ICT
Knowledge about crowdfunding	Continuous value between 0 and 1.	KCF
Student age	Nature logarithm of the age, measured in years.	AGE
Student gender	Dummy that takes value of 1 if the student is male, and 0 otherwise.	SEX
Business major	Dummy that takes value of 1 if the student is doing a major related to business and management, and 0 otherwise.	BM
Lowest family income	Dummy that takes value of 1 if the family of the student is in the first quintile of income, and 0 otherwise.	LFI
Highest family income	Dummy that takes value of 1 if the family of the student is in the fifth quintile of income, and 0 otherwise.	HFI
Lowest personal income	Dummy that takes value of 1 if the student is in the lowest range of personal income, and 0 otherwise.	LPI
Highest personal income	Dummy that takes value of 1 if the student is in the highest range of personal income, and 0 otherwise.	HPI

Source: Authors' elaboration.

3.3 Econometric strategy

It is sought to explain the probability of using a crowdfunding platform in different degrees of probability by specifying an ordered Probit regression econometric model. This is due to the potential use of these platforms being measured through an ordinal and discrete variable that indicates the degree of potential crowdfunding use (Becker & Kennedy, 1992; Daykin & Moffatt, 2002). The empirical model is:

$$P(y_i = j) = \Phi(\alpha_{j+1} - \beta'x_i) - \Phi(\alpha_j - \beta'x_i) \quad (1)$$

Where $P(y_i = j)$ is the probability to choose the ordered alternative j by individual i . It is noted $\Phi(\cdot)$ is the normal standard probability function and α_{j+1} is the distribution cut-off of the alternative $j + 1$. The linear model corresponds to this specification:

$$\beta'x_i = UCF^* = \beta_0 + \beta_1 EI_i + \beta_2 TFI_i + \beta_3 ICT_i + \beta_4 KCF_i + \sum_{k=1}^K \gamma_k x_k + \varepsilon_i \quad (2)$$

where UCF^* with an asterisk represents the latent variable quantifying the degree of potential future crowdfunding use. In this case, the observable variable is a set of five discrete and ordinal categories. Furthermore, EI_i corresponds to the entrepreneurial intention index, is the degree of trust in financial institutions, and TFI_i is an index expressing the degree of ICT use. UCF_i is a dummy variable that takes value 1 if the individual i states to know about crowdfunding before being surveyed, and zero otherwise. x_k is the k -th control variables based on other characteristics of the individual i , and γ_k is its respective parameter. Finally, $\varepsilon_i \sim \mathcal{N}(0,1)$ represents the estimation error. The marginal effect of the regressor x_i on the probability to choose the ordered alternative j is computed as:

$$\frac{\partial P(y_i=j)}{\partial x_i} = [\phi(\alpha_j - \beta'x_i) - \phi(\alpha_{j+1} - \beta'x_i)]\beta \quad (3)$$

Where $\phi(\cdot)$ is the normal standard density function.

3.4 Quantitative results

Two regressions with this specification were estimated. The difference between those equations is that in the first the variables related to family income are added, while in the other, variables related to personal income are added as control variables. The results are shown in Table 3. All regressions were estimated with robust standard errors, and also present global significance through the Wald test.

It is found that entrepreneurial intention has no significant impacts with the probability of a student choosing some of the categories related to the degree of potential crowdfunding use. The same occurs with the measurement of ICT use. Therefore, this fact indicates that if a student had intentions for a project, they will not necessarily opt for a crowdfunding campaign to obtain funds. The student may consider traditional financing options. Furthermore, in this study, it is found a positive and strongly significant effect of the index of trust in financial institutions on the probability that a student considers categories 3 and 4, both the nearest to the statement that the student definitely would use these platforms in the future. The effect is negative and significant to the categories 0 and 1, the nearest to the affirmation that the student definitely would not use crowdfunding in the future. It is inferred that if students do not feel safe when using a financial product in the mainstream market, it is possible that they also have the same perceptions for FinTech industry products. Moreover, the same pattern of results in the level of crowdfunding knowledge is appreciated. Therefore, the lack of knowledge generates uncertainty and consequently prevents or postpones potential use. This result coincides, in part, with studies carried out for other emerging countries (Andrade, 2014; Jiménez-Cercado & Acosta-Véliz, 2018; Kaplanoğlu, Çapraz, & Kocamaz, 2019; Bernardino & Santos, 2020; Virrueta, 2020). In summary, for the sample of students, H2 and H4 are validated.

Regarding control variables, it is found that the degree of potential use is affected by the age of the student, but the effect is not significant. As all students are undergraduates, there is little variability in the data. Nonetheless, there is a significant effect of the gender variable. It is observed a higher marginal effect in female students than in males for the categories 0 and 1, and this result is opposite to the categories 3 and 4. Considering the payoff of crowdfunding, Marom, Robb, & Sade (2016) have concluded that female founders are more likely to raise capital than males. This fact could be explained by the fact that women tend to be guided by communal goals and give more importance to the development of interpersonal relationships.

Another interesting result is found with the variable indicating whether the student is in a business career. The effect is not only significant, but it is also contrary to what it is expected (i.e., negative marginal effect to the categories 3 and 4, and positive for the categories 0 and 1). This has three possible explanations: First, the fact that a student is learning about management and business does not necessarily allows to infer that they intend to carry out a project or entrepreneurship in the future and, therefore, seek funding. Second, even if a student had intentions to undertake in any aspect, since they are expected to know about different funding sources, they could choose a source that is not related to the FinTech industry, i.e. a traditional way of raising money. Third, there are other majors that prepare students for a more specific field of work, such as agronomy, veterinary medicine, environmental engineering, and many others. In conclusion, students could be more likely to identify an opportunity to carry out a project in their respective fields of knowledge, and therefore consider crowdfunding as an alternative that they do not rule out.

Table 3: Ordered probit regressions. Marginal effects.

<i>Panel A: Estimation 1</i>					
Variables	UCF=0	UCF=1	UCF=2	UCF=3	UCF=4
EI	-0.1480 (0.0929)	-0.0591 (0.0372)	-0.0019 (0.0124)	0.1280 (0.0801)	0.0810 (0.0512)
TFI	-0.2720*** (0.0918)	-0.1090*** (0.0403)	-0.0034 (0.0227)	0.2350*** (0.0784)	0.1490*** (0.0571)
ICT	-0.1200 (0.1150)	-0.0481 (0.0473)	-0.0015 (0.0104)	0.1040 (0.1010)	0.0658 (0.0649)
KCF	-0.2880*** (0.0780)	-0.1150*** (0.0343)	-0.0036 (0.0238)	0.2490*** (0.0671)	0.1580*** (0.0438)
<i>Control variables</i>					
AGE	-0.0615 (0.1880)	-0.0246 (0.0753)	-0.0008 (0.0058)	0.0532 (0.1630)	0.0337 (0.1030)
SEX	0.0734** (0.0359)	0.0281* (0.0146)	-0.0018 (0.0064)	-0.0625** (0.0305)	-0.0373** (0.0183)
BM	0.1100* (0.0671)	0.0340** (0.0158)	-0.0139 (0.0179)	-0.0857* (0.0467)	-0.0449** (0.0207)
LFI	-0.0438 (0.0691)	-0.0198 (0.0358)	-0.0048 (0.0160)	0.0397 (0.0648)	0.0288 (0.0556)
HFI	-0.0502 (0.0352)	-0.0219 (0.0167)	-0.0034 (0.0061)	0.0453 (0.0329)	0.0303 (0.0235)
Cut-off at $\alpha_1 - \beta'x$	1.0908				
Cut-off at $\alpha_2 - \beta'x$	1.6210				
Cut-off at $\alpha_3 - \beta'x$	2.5346				
Cut-off at $\alpha_4 - \beta'x$	3.6587				
Observations	225				
Wald X^2	(35.47)***				
Pseudo R^2	0.0500				
<i>Panel B: Estimation 2</i>					
Variables	UCF=0	UCF=1	UCF=2	UCF=3	UCF=4
EI	-0.1320 (0.0910)	-0.0527 (0.0364)	-0.0013 (0.0110)	0.1140 (0.0791)	0.0717 (0.0494)
TFI	-0.3160*** (0.0918)	-0.1260*** (0.0414)	-0.0031 (0.0264)	0.2730*** (0.0781)	0.1720*** (0.0592)
ICT	-0.1140 (0.1170)	-0.0457 (0.0478)	-0.0011 (0.0098)	0.0990 (0.1030)	0.0622 (0.0650)
KCF	-0.2720*** (0.0746)	-0.1090*** (0.0320)	-0.0026 (0.0226)	0.2360*** (0.0644)	0.1480*** (0.0399)
<i>Control variables</i>					
AGE	-0.0144 (0.1760)	-0.0058 (0.0703)	-0.0001 (0.0021)	0.0125 (0.1530)	0.0079 (0.0957)
SEX	0.0690* (0.0360)	0.0265* (0.0147)	-0.0017 (0.0060)	-0.0589* (0.0307)	-0.0349* (0.0184)
BM	0.1060 (0.0677)	0.0329** (0.0163)	-0.0129 (0.0175)	-0.0827* (0.0478)	-0.0434** (0.0210)
LPI	0.0134 (0.0431)	0.0054 (0.0181)	0.0003 (0.0020)	-0.0117 (0.0382)	-0.0074 (0.0247)
HPI	-0.1280*** (0.0436)	-0.0804* (0.0411)	-0.0659 (0.0605)	0.1250*** (0.0403)	0.1490 (0.1060)
Cut-off at $\alpha_1 - \beta'x$	0.4412				
Cut-off at $\alpha_2 - \beta'x$	0.9825				
Cut-off at $\alpha_3 - \beta'x$	1.8912				
Cut-off at $\alpha_4 - \beta'x$	3.0248				
Observations	225				
Wald X^2	(35.72)***				
Pseudo R^2	0.0536				

Notes: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Source: Authors' elaboration.

Variables related to students' family income were added. Although there is a direct effect (in relation to categories' order) depending on

income level, it is not significant. Nonetheless, if it were considered the effect of students' personal income variables, it is appreciated a significant effect only in the dummy variable related to belonging to the highest income range, in most of the ordinal categories of potential crowdfunding use. Students may not consider their family situation to undertake a project, but only their own economic situation. Some students with higher income levels may have a part-time job and want to search for ideas to generate money. They might consider crowdfunding as a supporting alternative.

4. Qualitative analysis

An analysis on the reasons why the young students in the sample justify their response of using or not using a crowdfunding platform in

the future is conducted. Complementing the econometric results of the previous section, the students revealed the reasons that can be derived from factors categorized into advantages or disadvantages of using these platforms. Each student wrote an open answer in the survey. An inductive technique based on the construction of data-based categories is applied. In that process, the categories are divided in three types: arguments for, arguments against, and conditional arguments. The first type refers to categories indicating reasons that encourage future crowdfunding platform use to obtain funds for any project. The second type groups the categories explaining the reasons why students will not use these platforms in the future. The last type consists of categories that indicate conditions favouring potential crowdfunding use if it occurs.

Table 4: Qualitative categorization of "arguments in favor".

Arguments in favor	Description	Frequency		
		Abs.	AIF	TA
Good and beneficial	People consider that it is a good platform and method to raise money.	39	34.2	15.4
Financial support for projects	A necessary way to obtain initial capital, which helps people afford part of a project.	13	11.4	5.1
Innovation and opportunity	People can catch up with social evolution and tech advances. Such platforms offer entrepreneurship opportunities.	10	8.8	4.0
Contact source	It helps to generate new contact sources, such as customers, investors and audiences beyond the usual.	9	7.9	3.6
Easy and accessible	The platforms are accessible and easier to use than other alternatives.	8	7.0	3.2
Useful for financing problems	It helps to overcome entrepreneurs' financing problems, and is useful in hurried moments.	8	7.0	3.2
Economical	It is a low-cost way to raise financing, in terms of credit interest.	7	6.1	2.8
Safe	The system is safe and reliable, with few risks for the industry. People have high trust in web platforms.	6	5.3	2.4
Independence	Entrepreneurs do not need to depend on financial institutions or other people of their immediate circle.	4	3.5	1.6
Incentive to donate	It generates awareness to do charitable actions (supporting to people and institutions).	3	2.6	1.2
Donation comfort	It is considered more comfortable and easier than asking for donations face to face.	2	1.8	0.8
Promotion	The project is released through the platform.	2	1.8	0.8
Ideas	Entrepreneurs can receive new ideas for their projects through online interactions.	2	1.8	0.8
Time efficiency	The collective character of such platforms aids time efficiency for obtaining financing.	1	0.9	0.4
Total		114	100.0	45.1

Notes: Abbreviations "Abs.," "AIF" and "TA" refer to absolute frequency, relative frequency respect to the number of arguments in favor, and relative frequency respect to the total arguments, respectively. The figures in the last two columns were approximated to the tenths. Source: Authors' elaboration.

More than one student indicated two or more arguments based on their response about the selected alternative on the question about the probability of using a crowdfunding platform in the future to obtain funds. Details about the categories, descriptions and frequencies are shown in Tables 4, 5 and 6. It is shown that 45.1% of the arguments favored using those platforms, 38.7% consists of arguments against its future use, and 16.2% fall into the condition arguments group.

Concerning the first group of categories mentioned in Table 4, the students have expressed 14 types of arguments. 34.2% of total arguments in favor consist of the perception that crowdfunding platforms are a good and beneficial way to raise funds for any project. Although this argument has the highest relative frequency among all those with favorable perception, it is still general compared to the other categories that are more concrete and specific. This fact presents indirect

evidence of insufficient knowledge about the role that these platforms have in the market and their peculiar way of facilitating project funding. 11.4% of favorable arguments highlight the role of financial support, and 8.8% value that crowdfunding generates innovation and new opportunities through the technology. The rest of the arguments indicate positive crowdfunding usage attributes differentiating it from conventional money-raising alternatives. These are the ease of obtaining contact sources, better accessibility compared to other alternatives, support if entrepreneurs had financial constraints and the fact that these platforms are cheaper and safer. Furthermore, these platforms are considered to allow them to be independent from other financial institutions. Other perceptions include the following: these platforms would generate incentives to donate comfortably; ideas can be promoted through them; entrepreneurs can receive feedback on their ideas and learn about new ones; and time efficiency.

Table 5: Qualitative categorization of “arguments against”.

Arguments against	Description	Frequency		
		Abs.	AA	TA
Risk	Perception of the existence of significant risk levels.	24	24.5	9.5
No interest	People state that they are not interested in using a crowdfunding platform. Some reasons are the lack of knowledge, and that people do not plan to undertake a project.	23	23.5	9.1
Lack of confidence	Feeling of distrust towards those platforms. More specifically, in digital technologies and in dealing with unknown people.	17	17.3	6.7
Weak cybersecurity	People would not feel completely secure with using those platforms. This is related to possible information leaks, internet vulnerability, existence of hackers and concerns of return guarantees.	17	17.3	6.7
Preference for other financing methods	Individuals would prefer traditional sources of financing, such as banks, and entities with physical presence.	7	7.1	2.8
Default	Perception that the system would be easily corruptible, through breach by holders and showing false results by entrepreneurs.	4	4.1	1.6
Preference by few investors	Individuals would not like to involve many people as investors. They would rely more on smaller and personal flows.	2	2.0	0.8
Others	People have doubts about earnings and regulations. Another reason is the perception that the crowdfunding model does not coincide with personal principles of an individual.	4	4.1	1.6
Total		98	100.0	38.7

Notes: Abbreviations “Abs.,” “AA” and “TA” refer to absolute frequency, relative frequency respect to the number of arguments against, and relative frequency respect to the total arguments, respectively. The figures in the last two columns were approximated to the tenths. Source: Authors’ elaboration.

There are seven main categories that fall into the item “arguments against,” detailed in Table 5. Here, unlike the favorable arguments, the relative weight of each of the first four categories is between 17% and 25%, approximately. This fact means that students have more than unique reason to justify the lack of future crowdfunding platform use, or that they have a low probability of using them. The main reasons are that people perceive those platforms have a significant level of risk; that people do not seem to be interested in using them, pro-

bably because they have no entrepreneurial intention; and the lack of trust and perception of weakness in their internet security. These results are consistent with those presented in the econometric regressions. Other reasons with less weight in the set of responses are the preference toward other financing methods, such as banking, among others that fall into the traditional funding alternatives; the perception that crowdfunding platforms are easily corruptible, linked to safety; and the preference to deal with few investors rather than many people contributing in small amounts.

Table 6: Qualitative categorization of “condition arguments”.

Condition arguments	Description	Frequency		
		Abs.	CA	TA
Knowledge	Knowing more information about the platforms and the analysis of others’ experiences and trials.	15	36.6	5.9
Security and confidence	The platforms are better now or in the future in reducing the risks. More specifically, it is associated with transparency, secure platforms and personal data.	14	34.1	5.5
Personal circumstances	Personal situations in the future, and the need or desire to undertake a specific project.	12	29.3	4.7
Total		41	100.0	16.2

Notes: Abbreviations “Abs.,” “CA” and “TA” refer to absolute frequency, relative frequency respect to the number of condition arguments, and relative frequency respect to the total arguments, respectively. The figures in the last two columns were approximated to the tenths. Source: Authors’ elaboration.

Finally, there are three categories detailed in Table 6 that state the reasons for the necessary conditions to use crowdfunding. Their relative weight is similar enough to each other. First, people would use these platforms when they had more knowledge about them, not only descriptive, but also experiences generated by trying for themselves.

Second, improved security and more trust in crowdfunding platforms is another condition argument, related to risk reduction and transparency guarantees. Finally, personal circumstances condition the use of crowdfunding, i.e., people would have to be an entrepreneur or perform some projects. These results confirm those mentioned in the quantitative analysis.

5. Conclusions

This article presents an exploratory analysis of the factors influencing potential crowdfunding platform use in a sample of young university students, in the context of an emerging economy such as Chile. The main findings can be summarized into the following points. First, there is limited knowledge about crowdfunding platforms in Chile, which prevents access to cheaper financing sources. Second, four variables that would affect future crowdfunding usage levels were tested: entrepreneurial intention, trust in financial institutions, degree of ICT use and crowdfunding knowledge. The quantitative results show a positive and significant effect on the variables of confidence and prior knowledge. Third, the qualitative analysis presents the main reasons and perceptions about potential crowdfunding use. The use of these platforms would be conditioned by the knowledge about them, security and safety perceptions and personal circumstances.

The limitations of this research are associated with the population selected for the analysis. A sample of undergraduate students of a Chilean city was selected. Furthermore, people in the youth age segment were considered. Therefore, a future research line in this matter is to extend these questions to a wider sample of people, e.g., considering more universities in Chile, and including other demographic segments. Knowing and contrasting new perceptions and intentions would be a useful contribution to crowdfunding literature. From another perspective, this study only analyzes people who seek funds through these platforms, but not the viewpoint of potential investors or contributors to the different initiatives promoted by crowdfunding in Chile. The combination of studying the behavior of both fundraisers and contributors helps understand different phenomena in this market.

Trust in financial institutions is a factor that can be managed to some extent to foster financial inclusion in the use of FinTech industry services. Crowdfunding companies currently lack regulation in Chile, leading people to have incentives not to depend on them to request collaborative financing. This generates implications for policymakers: define and implement a regulatory framework that allows users to trust these platforms (Lowies, Viljoen, & McGreal, 2017), and which also promotes stability in the FinTech world. It is also suggested that institutions promoting public faith in society should strive to transmit information about the benefits and characteristics of crowdfunding platforms, as another alternative that entrepreneurs and people with nonprofit ideas can consider when seeking funds.

This research has further implications for crowdfunding companies, as it provides insights and statements of intent in the use of these platforms to raise funds. Although all of them correspond to a sample of young students, it is possible to begin a discussion framework to design management strategies for crowdfunding enterprises.

Acknowledgments

We appreciate the valuable contribution of Mr. Braulio Andrés Mora Segura and Mr. Juan José Fritz Troncoso, both Bachelors in Business Administration at Universidad de Concepción, Chile, in taking surveys and tabulating the data of this research.

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