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THE EFFECTS OF FUTURE TENSE ON CROWDFUNDING INVESTMENTS.

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I. INTRODUCTION

For this thesis I investigate the correlation between the use of future tense in crowdfunding campaigns, and the amount of money raised by the entrepreneurial teams of such campaigns. More specifically, I calculate the frequency of future words of thirty-one randomly chosen equity crowdfunding campaigns serving multiple sectors in relation to the amount of money raised and the success of the campaign; taking into consideration, for the reliability of my calculations, different influential variables. Finally, I test what the effect of the Future Tense on crowdfunding investments is.

1. THE CROWDFUNDING PHENOMENON

According to today's fundraising trends, the concept of crowdfunding has been progressively catching attention. Nowadays, entrepreneurs with innovative ideas for a business are struggling to actualize their visions due to the difficulties in raising funds and achieving a loan from a bank. The introduction of crowdfunding might be the ultimate solution to this problem, as defined by the Oxford living Dictionary Crowdfunding is "*the practice of funding a project or venture by raising money from a large number of people who each contribute a relatively small amount, typically via the Internet."*[1] With such a market innovation entrepreneurs have an additional chance to the realization of their project.

There are four types of crowdfunding models: The donation based model, in which investors don't receive any kind of compensation in turn of their donation; the lending-based model, for which funders get periodical amounts of money as a refund of their investment; the Reward-based model, which offers a discount or reward in change of an investment; and finally the Equity-based model, for which funders receive an equity based revenue or some percentage profit share in turn of their investment. Of the four main types of crowdfunding models, I have decided to focus on the most recent one, Equity Crowdfunding, for the purpose of my research.

There are various platforms for crowdfunding donation on the web, such as Kickstarter, Seedr, Indiegogo, Gofundme, Crowdcube and many others, that give the

[1] English, Oxford Dictionaries, en.oxforddictionaries.com/definition/crowdfunding.

possibility to anyone around the globe, who has access to a computer, to invest in the projects he believes interesting and worth of being created. The presentation of a project or start-up is set up as a campaign, containing some text with the explanation of the idea, the achieved accomplishments, some relevant economic background and a presentation of the team members as well as of the surrounding market. In addition, to enhance the aspects of the offered project, the entrepreneurial team has the possibility to insert advertising videos and capturing images. Each signed up member of the platform can then scroll through the many different variety of projects and choose if and which amount of money to invest in a project in exchange of some equity percentage.

While researching and investigating for which elements must be included in a crowdfunding campaign in order to be successful, in terms of what to write to catch a potential investor's attention and convince him to invest in your idea, I found that there are numerous common characteristics that each entrepreneur should adopt in its campaign, which result in a positive outcome and a prosperous funding. The most common and fundamental characteristics are: writing a short, sweet and to the point presentation to avoid boring readers; being passionate about what you are exposing; tell what your supporters/investors benefits are if they invest in your company; define clearly what the scope of you project is; show off and enhance what achievements you were already able to pursue; and finally set milestones for what you intend to do in the future and always keeping funders informed about all future implications and news.

In addition to the previous characteristics, another important trait to which entrepreneurs should pay attention are the words and phrases used throughout the presentation of the idea. This campaign element turns out to be of decisive importance for the success and the funding of a new possible Start-up. In the research paper "The Language that Gets People to give: Phrases that Predict Success on Kickstrarter" Tanushree Mitra and Eric Gilbert conduct a study on a list of 45,810 projects either funded or not funded, in order to find out which phrases lead a campaign to success (funded) and which to failure (not funded). The outcome of their investigation results in two distinct sets of 100 top phrases: one that contains phrases signalling that the project will be funded; and the other that contains those phrases signalling that the project will not be funded (Appendix Tables one and two). Also, Mitra and Gilbert provide a set of principles and attitudes transmitted to the reader that are found repeatedly in some of the top-100

phrases, with their consequent effect on the prediction of the success of the campaign: either positive or negative. Amongst the most important phrases indicative of a positive prediction of the campaign, there are phrases that present or transmit: a positive tone and give assurance to the reader, as well as social proof, social identity, liking, authority, reciprocity and scarcity.

The part of the text of the crowdfunding presentative campaigns on which instead I focus, for the purpose of my investigation, is specifically: the use of the future tense by entrepreneurs in the pitch of the camapaign. I test how influential the usage of a future oriented language in the crowdfunding campaign affects the amount of money raised by the companies. In other words, I test how successful the perspective of future actions results in the eyes of potential investors of the company. To my knowledge as of today, there are no articles on this matter, to achieve truthful results, I considered many different influential factors. The extent by which investors are affected or influenced by the use of future projections when taking into account investing on possible start-ups and projects is subject to different circumstances; as a consequence, the amount of money they decide to invest in a project (or just the simple decision of investing) depends on a variety of other factors later on explained.

2. LANGUAGE FUTUTRE TIME REFERENCE (FTR)

A fundamentally crucial variable I take into account for the calculations of if, and to what extent the use of Future tense affects a potential investor, is the Future Time Reference (FTR) of the mother tongue language of the investor, as well as that of the entrepreneur. The Future Time Reference variable of a language takes two characteristics: it is either strong, or weak. If a language has a strong future time reference, it means that it requires for the nature of the language to grammatically mark future events when making predictions (an example is English or Portuguese). On the other hand, weak FTR languages (like German) don't necessarily need to grammatically mark future predictions.

The reason for which I retained that the Future Time Reference variable of a language was so compelling, came to me after reading M.Keith Chen paper of 2013 "The Effect of Language on Economic Behaviour: Evidence from Saving Rates, Health Behaviours, and Retirement Assets." published in 2013. This paper's empirical evidence came out with a significant correlation between savings and future oriented languages.

Languages that grammatically have necessity of the future tense lead "*speakers to engage in less future oriented behaviour*." (Effect of language on Economic Behaviour, p. 31) In other words, people that speak languages that have a strong FTR, tend to not take actions dealing with the future.

The tested mechanisms proven to be truthful by the empirical evidence of the articale, for which the above assumptions stand, according to M. Keith Chen's article, are two: The first mechanism tested, is the assumption that language affects choices concerning the future because it has the possibility to change how distant future events feel to the listener of that language. This means that weak FTR languages would have the possibility to speak about a future event in the present tense, making it appear less distant than it actually is. In the second mechanism, there is the assumption that language affects future actions *" by leading speakers to have more, or less precise beliefs about the timing of future rewards."* (Effect of language on Economic Behavior, p. 6). More precisely, languages with a high FTR lead those speakers to hold a higher precise belief about the timing of events in the case in which marking time leads a big amount of attention to "time"; and vice versa.

The final, important outcomes of this paper, relevant to my research are that there is numerous evidence of the strong correlation between FTR language and future oriented monetary behaviour. According to Chen's published results, Weak Future Time Reference speakers turned out to being 31% more likely to have saved their money as well as 39% more wealthy after retirement. These are a clear demonstration of the importance of the future time reference variable in investigating an individual propensity in investing his savings and money in a crowdfunding project depending on the presence of future tense reference in its campaign.

3. THE FUTURE TENSE PROJECTION IN EQUITY CROWDFUNDING CAMPAIGNS.

With the knowledge acquired from the articles and research explained in the first sub-chapter of the introduction, for this paper I test the how the frequency of future words such as "will", "shall", and "going to" is related to the amount of money raised by the entrepreneurial team of the crowdfunding campaigns that uses such words. I expect to find a positive correlation between future oriented campaigns, and the successfulness of

the project. As stressed above, most successful crowdfunding campaigns contain a language and flow of positivism. This means that the elements that drive any person to become a potential investor of an idea, is reading a campaign that transmits him assurance. In the specific case of equity crowdfunding, where funders receive compensation in the form of shares of the profit or equity based revenue (also becoming shareholders of a small percentage of the company), the assurance that investors want to receive is a safe perception and a positive forecast of the position of the company on a distant date.

Following the end results of the article "The Language that Gets People to Give: Phrases that predict Success on Kickstarter" ,by Tanushree Mitra and Eric Gilbert, about the phrases and words that provide cues for funded or not funded projects, it happens quite often that the use of future oriented phrases as well as that of future tense words exhibit hints of successful persuasion motivating people to donate in many of the categories exposed by the two authors of the article. Among the top 100 positive predictors phrases the use of future tense stands out: in the Reciprocity category with phrases like "pledgers **will** have", "pledgers **will** get"; in the Authority category with "the project **will be"**; in the liking category with "this project **will** be"; and also in generally used phrases such as "project **will** allow" and just "project **will**". On the contrary, phrases that convey a time reference in the past for example "I **have not been** able" or "**left** my" are negative predictors of the future fundament of the project[2]. These results are the first reason that strengthen my expectation for which future tense positively affects the amount of money raised by entrepreneurs in crowdfunding projects.

Indubitably, it is important to mention, that while collecting data from different crowdfunding campaigns I took into consideration the nationality of both the entrepreneur, and the top investor of the company, because of the Future Time Reference of their mother tongue spoken languages. As explained in the antecedent sub-chapter, certain languages grammatically require future events to be marked when making prediction more than others do. Consequently, weak FTR language speaking entrepreneurs have an advantage in using the future tense by changing how distant future events feel, while writing their campaign. They can make a future forecast of the position and strength of the company appear closer to the present than it actually is. Of course, on

[2] Phrases derived form tables one and two in the appendix.

the other hand, strong FTR language speaking entrepreneurs, having less language flexibility, find themselves in a more difficult position when trying to persuade the reader by projecting future actions less distant than they are. In a similar way, potential investor's speaking language Future Time Reference also affects their perception of the campaign while they are reading it.

The second theoretical reason in support of my assumption comes from the concepts aroused from the article by M. Keith Chen "The Effect of Language on Economic Behavior: Evidence from Saving Rates, Health Behaviors, and Retirement Assets." The regressions resulting from their empirical model shows a positive correlation between weak future time reference speakers and future oriented monetary behaviours such as savings and wealth after retirement. First of all, the fact that weak FTR speakers are more likely to have saved in any given year, and hence have accumulated more wealth by retirement makes a weak FTR speaking person a more ideal investor due to the fact that he is probably "more wealthy" than a strong FTR speaker. Further on, the fact that weak FTR speakers appear to make more future oriented decisions is an additional confirmation that having a language that naturally uses the possibility to include and shape future tense and future perception, brings him to make an action (in this case the investment of money in a future-to-be project) that will lead to an outcome to have in the future (monetary return from the creation of the company and the payment of shares).

In pursuance of my goal I collected multiple data from thirty different crowdfunding campaigns from Seedr and Crowcube and created an empirical model to test my hypothesis that future time tense positively affects the money raised in crowdfunding campaigns. After an exposition of the literature review form which I obtained my theoretical knowledge, in the successive chapter, there will be an in-depth explanation of how I obtained my data, of all the variables, of the econometric model and of all of my calculations, with the subsequent results, their interpretation and appliance in the real world.

II. METHODOLOGY AND PROCEDURES

1. CAMPAIGN SOURCES

A. SEEDRS

The majority of sample campaigns included in the dataset for my research come from Seedrs, a crowdfunding platform, which gives access not only to the descriptive information about the project; but it also gives real time information about other investors and funders of the company. Launched in 2012, seedrs is nowadays as the platform itself states "*Europe's largest equity crowdfunding platform*" that "*allows investors from a variety of backgrounds to invest with ease into innovative startups and other growth-focused businesses*." … "*whilst receiving the same world-class shareholder protection of professional investors*"[3]; and it is available to all European Union, European Economic Area and Switzerland residents over the age of 18, and institutional investors. It's 2016 published stats of the platform reveal over £85 millions of total investments, 159 funded companies, more than 45,000 investments made by members, an average investment of £1,902 and 203 investors per deal on average[4]. Seedrs also has a dedicated team that cures the administrative burden of raising capital, and operates in line with the Financial Conduct Authority (FCA) rules and best practices.

In order for the entrepreneurial team to get a campaign live on the Seedrs platform, they have to be answering a building pitch questionnaire as a template for the creation of the campaign. Subsequently the campaign is subject to the Seedrs team's review, and if it is accepted it goes live for a maximum of 60 days. Within this period of time each startup is assisted by the platform's team of experts and exposed to all the archive of investor's base. Just when the project raises the full amount of money sought, and all the legal paperwork is been completed the entrepreneurial team receives the funds in order actually fund the business, in addition entrepreneurs have the possibility of keeping in touch with investors for mentorship, outreach and networking purposes through the personal investor relations portal of each campaign. Entrepreneurs can choose among three types of campaigns to publish on the platform: Equity Campaigns, the most common as well as the only ones included in my data collection, which grants funders to become

[3] Cited from "What is Seedrs?" https://www.seedrs.com/learn/help/what-is-seedrs
[4] Source of data: "2016 Year in Review" http://stats2016.seedrs.com

shareholders of a business starting from an investment of £10; Fund Campaigns, which gives the investor the possibility to invest in more than one startup at the same time becoming a shareholder of every single one of them with a minimum investment of £100; and Convertible Campaigns, of which the investments of these funders convert into equity just in the future, these kinds of investors are offered a discount that then result in a major quantity of shares than those of new investors who invest the same amount in a forthcoming funding round.

On the side of the investors, members of the platforms must become authorized by completing an Investment Authorization Questionnaire after reading some informative investment material provided by Seedrs in order to be self-certified either as a "sophisticated investor" or a "high net worth individual or institution". Once Seedrs is ensured that each member is aware of all the risks and responsibilities that come with investing on crowdfunding platforms, then investors are granted access to the full information about online campaigns. This are inclusive of the full pitch of the explanation of the idea to be funded, the surrounding market, the entrepreneurial team, all updates and most importantly: of the discussions between investors, and amounts invested by all the funders of the company. The latter, alongside with the reliability of the information given by the campaigns (of whom compliance with the law is scrutinized by Seedrs professional team), and the statistical results that show the success and value of the platform are the main reasons for which I decided to collect the data for my research from this platform.

B. CROWDCUBE

For a variety of reasons, I decided to include in my data set a few samples of campaigns from an additional platform: Crowdcube, authorized and regulated by the Financial Conduct Authority (FCA). First of all, this platform was the first equity crowdfunding platform opened in the United Kingdom, and nowadays it is the world's largest equity crowdfunding platform that exists. With an overall amount of £344,239,101 invested in pitches, 432,795 registered members and 576 successful raises (funded companies), it characterizes as one of the world's leading equity crowdfunding platforms. It is important to include a platform that presents results that are so successful, as it can be a relevant index of what works and what doesn't. Crowdcube operates an "all or

nothing" method, which means that investors have to actually contribute with their pledged fund just in the case that the campaign reaches the full amount of money sought. Pitches on the platform are firstly allowed to be online for up to 60 days, then if they are successfully and fully funded the entrepreneurial team has the possibility to either keep the campaign open for overfunding, or close it at the target amount. Instead, if the company doesn't reach the target amount and turns out unsuccessful, the pitch gets closed and the investor's pledges become void.

It is mandatory for the company to be registered as a United Kingdom company, after that, the process to submit a pitch application that the entrepreneurial team must go through is the following: The first things to upload that the business shall provide are a financial forecast and the business plan of the project. After that the company is subject to due diligence by the platform's team, whom also fully reviews all financials provided by the entrepreneurial team. Once examination of all documents is done, the pitch is allowed to go live. Each pitch includes financial projections, a video, and an in detail exposition of the project. These security checks additionally support my choice to include data from this platform, because of the reliability investors justifiably have in the platform. Initially Crowdcube requires the company to set a fixed amount of funds and shares for the pitched ideas, but later on it gives the entrepreneurial team the chance to adjust such information in order to adapt to investors needs and responses. Finally, it is important to mention that there are two kind of equity rewards offered to the investors in change of their contribution on Crowdcube, the first kind (A shares) include pre-emption and voting rights, while the second provide no rights (B shares).

2. DATA COLLECTION AND ANALYSIS

The relevant information collected to investigate the effect of future tense on a crowdfunding campaign comes from a total of thirty different, randomly chosen, equity crowdfunding campaigns from Seedrs and Crowdcube[5]. As mentioned before, Seedrs platform granted much more access than Crowdcube to some relevant information for the purpose of my research such as information about investors, and the nationality of both investors and entrepreneurs of each project; which is the reason for which I chose many

[5] Data Collected last updated 10 September 2017.

more campaigns from that platform rather than from the other. From each campaign I collected the following data: the Campaign Name; the website of provenance; the sector of interest of the products or services rendered by the idea of the project; the amount sought by the entrepreneurial team; the actual amount of money raised by each campaign; the equity percentage offered to the funders; the valuation (pre-money) that the entrepreneur forecasted the company to be worth; the number of people who invested in the idea; the nationality of the entrepreneur or entrepreneurial team; the team size; the total word count of each campaign; the total number of future tense words present in each of the campaigns; if the campaign was successful (funded or not funded); the mean of the top five investments; the amount of the top investment; the nationality of the top investor; and the total number of future words used throughout the campaign. Successively I calculated the frequency of future tense and checked on the Future Time Reference table if the FTR of the language of the nationality of the top investor was either strong or weak. Afterwards, I calculated and selected variables retained appropriate for my investigation and built up an appropriate statistical model that could efficiently test my assumptions.

In pursuance of my goal, I constructed two multiple linear regression models because such model is the most common form of linear regression analysis, as well as because it is one of the most reliable statistical model for predictive analysis. Further on, this kind of regression is used to illustrate not only the relationship between one continuous dependent variable and two or more independent variables, but also how and to what extent. Lastly, there can be two types of independent variables in the multiple linear regression: continuous variables as well as binary variables (also known as dummy variables), both used in the regression for the calculations of my research. Subsequent to the construction of the linear regression, I used the program R: The R Project for Statistical Computing which is, as described on their own website, "*a free software language environment for statistical computing and graphics*" (What is R? main page), to run the regression and obtain the statistical results. In the following sub-chapter, I provide a more in depth explanation of the relevant selected variables, the reasons for which they were chosen, their relevance and purpose for my investigation, as well as their role, position and nomenclature in the final regression.

3. EXPLANATION OF VARIABLES

In the following paragraphs, there is an illustration of all the variables included in my first final regression. In addition, the descriptive statistics have been included as a short descriptive summary of the concerning variable. I obtained the descriptive statistics of each variable by inserting all my data in the Rstudio program, and by running the following formula on the software: summary(Dataset).

A. DEPENDENT VARIABLE: EFFECTIVE AMOUNT RAISED (EAR)

As already mentioned throughout the paper, in my thesis I test the effect of the usage of future tense, in crowdfunding campaigns, on the amount of money raised by the entrepreneurial team, during the campaign, taking into consideration various influential factors. Hence, the dependent variable, Y, of the multiple linear regressions constructed for the sake of this examination is the Effective Amount of money (currency in pounds £) raised, by the company, denoted **EAR**, (descriptive statistics in figure 1).

This variable is derived from the interaction of two former collected variables: the total amount raised (**AR**) by each crowdfunding campaign and the dummy variable of the success (**Ds**) achieved by the company: which holds on value 1, if the amount sought was reached and so the company was funded; on value 0, if the amount sought wasn't reached and the company wasn't founded. The reason for which I took this choice because it is of crucial importance to consider that, for the case in which the campaign is unsuccessful (and the amount sought is not reached), in reality, investors are not pledged to pay their contribution and receive their money back; henceforth the company receives no money at all. The interaction is given by: $EAR = AR \times Ds$; In words, by multiplying the values of the amount raised, with the dummy variable of success, this causes the amount raised to be, zero if the campaign didn't have success (as it is in reality).

```
      EAR
 Min.   :      0
 1st Qu.:      0
 Median : 169397
 Mean   : 321478
 3rd Qu.: 455896
 Max.   :1839764
```

Fig. 1 - Descriptive Statistics EAR

```
       AR
 Min.   :  23070
 1st Qu.: 106023
 Median : 227834
 Mean   : 618856
 3rd Qu.: 500735
 Max.   :8000007
```

Fig. 2 - Descriptive Statistics AR

```
       Ds
 Min.   :0.0000
 1st Qu.:0.0000
 Median :1.0000
 Mean   :0.6667
 3rd Qu.:1.0000
 Max.   :1.0000
```

Fig. 3 - Descriptive Statistics Ds

B. INDEPENDENT CONTINUOUS VARIABLE: EQUITY OFFERED (EO)

Of crucial importance for an investor, when presented with the decision of investing in a company, is the economic return he will raise once the latter is going to start paying off the dividends. Obviously, the amount of money earned, once the company starts making profits, depends on the percentage of the company that each shareholder possesses. As a deduction, each potential investor probably gives this number a particular attention when deciding whether or not to invest in a project, which means that the amount of equity that the entrepreneurial team decides to offer in turn of an investment could also be an aspect that affects the decision of an individual in making a potential investment in a project.

In the final multiple linear regression model, this is a continuous independent variable denominated **EO** that takes a value between 0 and 1 ($0 < \boldsymbol{EO} < 1$) depending what percentage of equity is offered in each campaign (for example 1 if the equity offered 100% or 0.5 if equity offered if 50%).

```
       EO
Min.   :0.02900
1st Qu.:0.07000
Median :0.08570
Mean   :0.08221
3rd Qu.:0.10000
Max.   :0.16610
```

Fig. 4 - Descriptive Statistics EO

C. INDEPENDENT CONTINUOUS VARIABLE: FREQUENCY OF FUTURE TENSE (FFT)

What I counted as an indicator of future tense expressions in the crowdfunding campaigns are the number of times I encountered the words “will”, “shall” and “going to” throughout the pitches of each campaign. Every time I came across one of the latter expressions I counted it as one, finally deriving the total number of words in the future tense that were included in the pitch of each campaign. After that, I collected data on the total number of words of every single campaign by copy and pasting the whole pitch (Idea and Market tabs both included) onto a Microsoft Word document, checking the word

count calculated by the program at the bottom of the page, inserting its value in my data sheet.

The Frequency of Future Tense variable describes the percentage of the words in the pitch that are indicators of a future time projection, consequently, just like the variable of Equity Offered it takes on a value between 0 and 1 ($0 < \boldsymbol{FFT} < 1$). The value of this variable is obtained by the following formula: $FFT = \frac{\#\ \text{of}\ future\ indicators}{total\ words} \times 100$. It is interesting to observe that this ratio is quite low for all campaigns, as we can see from the descriptive statistics in figure five, the average of all campaign's FFT is just (almost) 0.5%, which I didn't expect.

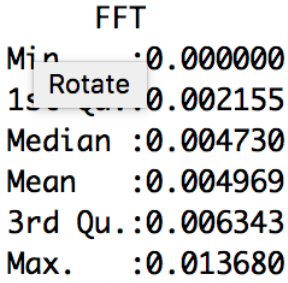

Fig. 5 - Descriptive Statistics FFT

D. INDEPENDENT DUMMY VARIABLES: SECTORS OF INTEREST (Dfb, Dfp, Dhp).

The campaigns I encountered regarded ideas and projects offering products or services which targeted different sectors of interest. The most common start-ups that seek funds nowadays are those regarding products and services of the Food & Beverage, Finance & Payments, and Home & Personal sectors; other popular sectors were Transportation and Automotive, Entertainment as well as Travel, leisure & Sports. This particular variable is determined by some external factors such as personal interests of potential investors, which would benefit being a customer of the offered product or service, or by a supposition of the latter on which are the contemporary trends that funders might retain relevant to the current market, and thus assure economic returns. A visual representation of the data on sectors of interest present in my dataset is shown in figure six.

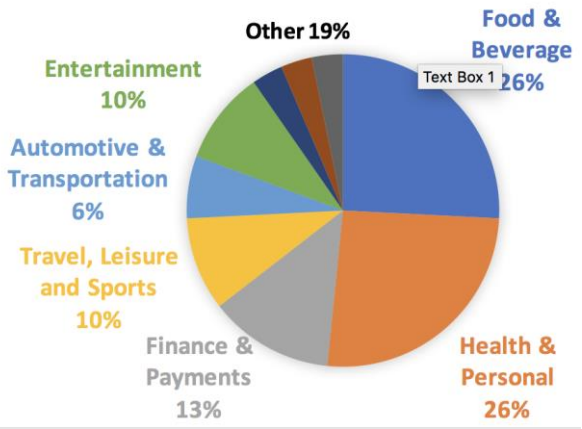

Fig. 6 – Graphical representation of sectors of interest.

As anticipated, when a person must decide on which crowdfunding project he should invest, it is very probable that he will invest on a project, about a good or a service, of which he would be likely to become a customer. The target customers of a particular project, are probably also the most likely potential investors, due to the fact that they might be compelled to invest in the company because they could benefit by the concrete realization of the product or service that the company is offering to the public. Given the former explanations, my assumption is that the target sector of competence of a crowdfunding campaign is another independent variable that might affect the amount of money raised from the entrepreneurial team.

To include these independent variables in my multiple linear regression model, I transformed in three distinct interchangeable binary (dummy) variables standing for the three most common sectors of my data set. All the other sectors are jointly represented by the intercept of the regression in order to avoid the dummy variable trap, which happens if you include in the regression all dummies for a specific variable. Obviously, being binary variables for the same specific data, the presence of each variable excludes that of another. Following are the three binary variables included in my regression, their nomenclature and descriptive statistic parameters (Figures 7, 8 and 9).

i. Dummy variable for Food & Beverage sector, denominated **Dfb** – which takes value 1 if the campaign products and services concern this market sector, 0 if otherwise.

ii. Dummy variable for Finance & Payments sector, denominated **Dfp** – which takes value 1 if the campaign products and services concern this market sector, 0 if otherwise.

iii. Dummy variable for Health & Personal sector, denominated **Dhp** – which, like the other two variables, takes value 1 if the campaign products and services concern this market sector, 0 if otherwise.

```
      Dfb
 Min.   :0.0000
 1st Qu.:0.0000
 Median :0.0000
 Mean   :0.2667
 3rd Qu.:0.7500
 Max.   :1.0000
```

Fig. 7 - Descriptive Statistics Dfb

```
      Dfp
 Min.   :0.0000
 1st Qu.:0.0000
 Median :0.0000
 Mean   :0.1333
 3rd Qu.:0.0000
 Max.   :1.0000
```

Fig. 8 - Descriptive Statistics Dfp

```
      Dhp
 Min.   :0.0
 1st Qu.:0.0
 Median :0.0
 Mean   :0.2
 3rd Qu.:0.0
 Max.   :1.0
```

Fig. 9 - Descriptive Statistics Dhp

E. INDEPENDENT DUMMY VARIABLE: FUTURE TIME REFERENCE (Dw)

Considering the fact that the main assumption of this paper is based on the idea that: the most important factor affecting the relationship between the amount of money raised and the projection of future tense in the crowdfunding campaigns is the Future Time Reference (FTR) of the language speaker; we can deduct that the most important independent variable from which I expect a correlation affecting the outcome of my research is the Future Time Reference variable. During the collection of data for my sample set of thirty campaigns, to assess relevant parameters for the FTR language speakers of the campaign I performed two steps: First of all, for every single campaign I verified the nationality of the top investor as well as that of the entrepreneurial team, in order to verify which would be their mother tongue language. Consequently, I verified on the Future Time Reference table, which top investors were weak FTR language speakers, and which were strong FTR language speakers, then I did the same thing verifying that of the entrepreneurial team. It came out that for all the 100% of my campaigns, the FTR of the language of the entrepreneurial team and of the top investor where aligned.

My assumption is, that this is an independent variable (as it depends solely on the language of the potential funders or entrepreneurs of the company), influences the amount of money raised in crowdfunding campaigns because it can differently alter the perception of time from strong FTR speakers to weak FTR ones. More precisely, weak FTR speakers, due to the fact that the nature of their language permits a more flexible modification of the time tense, are able to transmit (in the case of entrepreneurs writing the pitch) or perceive (in the case of potential investor reading the pitch) future positive forecasts in the campaign closer than they actually are, giving the potential funder more confidence in investing in the project of the latter campaign; and giving the entrepreneur more tools for the persuasion the reader. Assumption furthermore, theoretically, enforced by the results of M.Keith Chen article “The Effect of Language on Economic Behavior: Evidence from Saving Rates, Health Behaviors, and Retirement Assets.” about monetary behaviours aroused by weak FTR speakers that I described in chapter one.

The FTR language variable is included in my multiple linear regression model as a binary variable: Dummy Weak, denoted **Dw**. As the the Future Time Reference language variable can only be either Strong or Weak, this kind of variable was the most appropriate to include in the regression. Due to the fact that my expectation is that Weak FTR speakers are the ones positively correlated with the amount of money invested the dummy variable **Dw** takes value 1 if the nationality of the top investor is that of a Weak Future Time Reference language, and takes value 0 if it the top investor language has a Strong Future Time Reference.

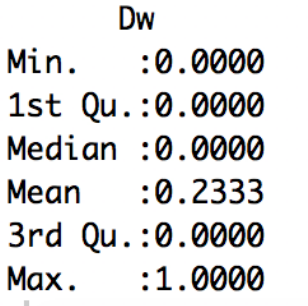

Fig. 10 - Descriptive Statistics Dw

4. STUDY PROCEDURES

The primary objective of this thesis is to find out whether there is a connection between the success of a crowdfunding campaign, measured as the quantity of the effective amount of money raised in the course of time in which the campaigns are live, and the usage of the future time tense in the presentative pitch of these campaigns. After conducting an in depth research and examination of all the relevant material (illustrated in Chapter I) beneficial to achievement of the maximum accuracy possible for my target, I gathered all the significant information in pursuance of valid theoretical assumptions that could be later on tested, with a collection of a sample dataset, for the purpose of this paper. Succeeding to the research of already existing material, the creation of a theoretical assumption, the collection of a descriptive sample dataset, and the analytical selection of relevant statistical variables, I came up with two statistical econometric multiple linear regressions, that numerically represent the data I collected and give me the possibility to conduct statistical tests to investigate the accuracy and truthfulness of my assumptions.

More specifically, after finding out the existence and importance of the Future Time Reference (FTR) of a language as well as the already examined different monetary

behaviours that the individual speakers of weak FTR and strong FTR presented I came up with these two final assumptions:

1. Weak FTR speakers are more prone to investing in a crowdfunding campaign for three main reasons. The first being the evidence from M. Keith Chen article, about the effect of language on economic behaviour, for the fact that speakers of languages that don't grammatically have the necessity of the future tense are lead to engage in more future oriented behaviour; hence, more prone to investing in a start-up that will generate revenue in the future. The second reason are the quite outstanding results about the saving habits of Weak-FTR speakers in respect to Strong-FTR speakers (31% more likely to have saved and 39% more wealthy after retirement), because I believe that people with a higher economic possibility are more likely to use their money to invest. The last reason is that Weak FTR potential funders can be more easily persuaded to invest in a project with the use of future tense, because the nature of their language gives the possibility to make distant events, like positive forecasts of project, appear closer in time than they actually are.
2. If the spoken language of an entrepreneurial team has a Weak FTR, the crowdfunding campaign is likely to gain more and higher donations. This is due to the fact that Entrepreneurs, when writing their pitch have more "time tense flexibility", ergo they have an additional tool when trying to persuade their readers: making distant events feel closer than they actually are.

The latter two assumptions led me to the development of my first null hypothesis. In other words, I expect the effect of the use of future tense in the pitch crowdfunding campaigns to be incisive on the amount of money raised by the company, if the Future Time Reference language spoken by the entrepreneur or the potential investor is Weak. The best approach in order to test my claims is to conduct a hypothesis testing empirical model with the use of a multiple linear regression able to accept or reject my null hypothesis that reflects my assumptions. In the following paragraphs there will be an explanation of all the empirical models I created and the procedures I went through for the experimentation of my assumptions.

A. NULL HYPOTHESIS AND STATISTICAL DESIGN ONE

Hypothesis$_1$: Being a "weak-FTR" language speaking investor or entrepreneur, increases the amount of money raised during the crowdfunding campaign.

Multiple Linear Regression Descriptive Model Estimated to test Ho$_1$:

$$EAR_i = \beta_0 + \beta_1 EO_i + \beta_2 Dfb_i + \beta_3 Dfp_i + \beta_4 Dhp_i + \beta_5 FFT_i + \beta_6 Dw_i + e$$

Where:

- β_0 is the intercept of the linear model, hence it represents the mean response when all independent variables are equal to zero.
- Each β_x coefficient represents the change in the mean response per unit increase in an associated predictor independent variable when all other terms are held constant.
- the dependent variable **EAR**, which stands for Effective Amount of money Raised by the campaign, is measured in £.
- The continuous independent variable EO is Equity Offered and takes value $0 < EO < 1$ and is measured as a percentage.
- **Dfb** is the independent dummy variable that takes on value 1 if the campaign sector is Food & Beverage, and 0 otherwise. *
- **Dfp** is the independent dummy variable that takes on value 1 if the campaign sector is Finance & Payments, and 0 otherwise. *
- **Dhp** is the independent dummy variable that takes on value 1 if the campaign sector is Home & Personal, and 0 otherwise. *
- The continuous independent variable **FFT** stands for the Frequency of Future Tense of the pitch of each campaign, takes value $0 < FFT < 1$ and stands for a percentage.
- **Dw** is the independent dummy variable that takes on value 1 if the language of the entrepreneur and top investor of a campaign has a weak Future Time Reference, 0 if the Future Time Reference is strong.

---

* These three dummy variables are mutually exclusive.

- ***e*** represents the error coefficient.

The statistical hypothesis that describes my assumption, that has to be proven in order to determine if the null hypothesis Ho_1 is correct or must be rejected is the following:

$$Ho: \beta_6 > 0$$

$$H_1: \beta_6 \leq 0$$

In words, in order to accept the null hypothesis, and confirm my assumptions, we want it to be significant and positive. As B6 is the coefficient which represents the change in the mean response per unit increase if the language of the top investor or entrepreneur is grammatically characterized by weak future time reference, its coefficient needs to necessarily be greater than zero in order for it to have a significant, numerical, impact on the final amount of money raised by the campaign.

B. NULL HYPOTHESIS AND STATISTICAL DESIGN TWO

The first null hypothesis' purpose, is to find out whether being a weak-FTR language speaking investor or entrepreneur, increases the amount of money raised during the crowdfunding campaign, hence it's success. However, it doesn't answer the dominant inquiry of this thesis: Does the amount of usage of future tense affect the total money raised and the success of the crowdfunding campaign? Strictly speaking, to really understand if there is a correlation between future oriented campaigns and their success the relationship between the Frequency of Future Tense of each single campaign and the amount of money raised as funds by the entrepreneurial team (while the crowdfunding campaign is live on a platform) must be analysed as well. As stressed in the former paragraphs, different languages naturally have different grammatical restrictions regarding the usage of the future tense. Strong Future time reference speakers are required to grammatically mark future events when making prediction, while on the other hand weak FTR language speakers don't have this requirement. This means that, the presence of future projections in the pitch of a campaign becomes a persuasive tool, as well as an incisive component of the pitch to the extent of the successfulness of the crowdfunding campaign, just in the case in which the reader (potential investor) and the writer (entrepreneurial team) languages are defined as weak Future Time Reference speakers.

As a result of the exposed argumentation I came up with a second hypothesis to test:

Hypothesis$_2$: The effect of the future tense on a crowdfunding campaign has a positive impact on the amount of money raised when the FTR of the entrepreneur or potential investors language is Weak.

The most effective and relevant way to test this hypothesis is to insert a new coefficient in the original multiple linear regression model used to test the first hypothesis. The new coefficient must be an interaction coefficient that correlates the continuous variable of the frequency of future time (FFT), with the dummy variable of weak future time reference (Dw). To create this new variable the FFT numerical values must be multiplied with the Dummy values about future time referece of each campaign: this results in a variable that shows the impact of the future tense on crowdfunding campaigns just when the language FTR is weak; differently from the sole variable FFT that shows its impact under both circumstances.

New Multiple Linear Regression Descriptive Model Estimated to test Ho$_2$:

$$EAR_i = \beta_0 + \beta_1 EO_i + \beta_2 Dfb_i + \beta_3 Dfp_i + \beta_4 Dhp_i + \beta_5 FFT_i + \beta_6 Dw_i + \beta_7 FFT_i Dw_1 + e$$

Where:

- β_0 is the intercept of the linear model, hence it represents the mean response when all independent variables are equal to zero.
- Each β_x coefficient represents the change in the mean response per unit increase in an associated predictor independent variable when all other terms are held constant.
- the dependent variable **EAR**, which stands for Effective Amount of money Raised by the campaign, is measured in £.
- The continuous independent variable EO is Equity Offered and takes value $0 < EO < 1$ and is measured as a percentage.
- **Dfb** is the independent dummy variable that takes on value 1 if the campaign sector is Food & Beverage, and 0 otherwise.

- **Dfp** is the independent dummy variable that takes on value 1 if the campaign sector is Finance & Payments, and 0 otherwise.
- **Dhp** is the independent dummy variable that takes on value 1 if the campaign sector is Home & Personal, and 0 otherwise.
- The continuous independent variable **FFT** stands for the Frequency of Future Tense of the pitch of each campaign, takes value $0 < \boldsymbol{FFT} < 1$ and stands for a percentage.
- **Dw** is the independent dummy variable that takes on value 1 if the language of the entrepreneur and top investor of a campaign has a weak Future Time Reference, 0 if the Future Time Reference is strong.
- $\boldsymbol{FFT_i Dw_1}$ represents the interaction between the frequency of future tense under the circumstance in which the Future Time Reference of the language is Weak.
- $\boldsymbol{e}$ represents the error coefficient.

With this new regression we are now able to test, when the future time reference of a language is weak, whether the use of future tense throughout the campaign pitch is a useful tool in predicting higher returns in crowdfunding campaigns. In fact, by creating the interaction we provide ourselves with an understanding of the specific marginal effect of just weak FTR. The construction of the statistical hypothesis for this investigation must be:

$$Ho: \beta_7 = 0$$

$$H_1: \beta_7 \neq 0$$

In this case, to obtain confirmation to my assumption, hence to prove that my hypothesis is correct we must reject the null hypothesis and accept the alternative one; because having a value for β_7 that is zero would mean that there is no correlation between the two variables tested.

3. CALCULATIONS

At this point, I had to run the two regressions and obtain the estimates for each of the coefficients that had to be analysed in order to accept or reject my hypothesis. For the statistical calculations of both regressions for my analysis I performed the required steps of the program Rstudio: The first step to be performed was to create an excel datasheet containing all the collected data, then all Dummy variables had to be created on Microsoft Excel by setting a new column with a formula setting zero or one for the purpose of each dummy. Successively, I created a new excel file which encompassed the data for just the six final selected variables to include in the first regression. Further on, the latter file had to be imported into Rstudio by using the "Read.csu" function in the program. I followed the same procedure for the second regression, creating an excel file that included the six former final variables, in addition to the seventh interaction variable. Finally, in order to run the regression, I had to use the specific linear model formula "lm" for both regression by plugging in the program the illustrated parameters in figure 11.

```
lm(formula, data, subset, weights, na.action,
   method = "qr", model = TRUE, x = FALSE, y = FALSE, qr = TRUE,
   singular.ok = TRUE, contrasts = NULL, offset, ...)
```

Fig. 11 – lm formula

Further on, in order to see all the summarized results I also had to plug in the summary function for the each one of the regressions. More specifically, the formula for regression one turned out to be:

```
> summary(lm(Data$EAR~ Data$Dfb+Data$Dfp+Data$Dhp+Data$FFT+Data$Dw+Data$EO))
```

And, below, the plugged in parameters for the formula of regression two:

```
> summary(lm(Data$EAR~ Data$Dfb+Data$Dfp+Data$Dhp+Data$FFT+Data$Dw+Data$EO+Data$FFT*Data$Dw))
```

In the succeeding chapter are the results of the former final regressions once they have been run, their explanation and in depth analysis.

III. OUTCOMES AND ANALYSIS OF RESULTS

1. RESULTS OF MULTIPLE LINEAR REGRESSION ONE

$$EAR_i = \beta_0 + \beta_1 EO_i + \beta_2 Dfb_i + \beta_3 Dfp_i + \beta_4 Dhp_i + \beta_5 FFT_i + \beta_6 Dw_i + e$$

After plugging in the appropriate formula on Rstudio program as described in the second chapter, I ran the first regression, and it revealed the following results:

```
Call:
lm(formula = Data$EAR ~ Data$Dfb + Data$Dfp + Data$Dhp + Data$FFT +
    Data$Dw + Data$EO)

Residuals:
    Min      1Q  Median      3Q     Max
-640629 -222202 -121682  226899 1126245

Coefficients:
             Estimate Std. Error t value Pr(>|t|)
(Intercept)    553086     274452   2.015   0.0557 .
Data$Dfb       -93090     200514  -0.464   0.6468
Data$Dfp       300167     264626   1.134   0.2684
Data$Dhp        75851     231474   0.328   0.7461
Data$FFT    -11637670   26089889  -0.446   0.6597
Data$Dw        388196     206438   1.880   0.0728 .
Data$EO      -3585060    2724958  -1.316   0.2013
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 419400 on 23 degrees of freedom
Multiple R-squared:  0.3004,    Adjusted R-squared:  0.1179
F-statistic: 1.646 on 6 and 23 DF,  p-value: 0.1798
```

The interpretation of the results of the first regression, testing my first hypothesis, clearly shows that that the only statistically significant variable included in my regression is the Dummy for weak FTR, while, instead, all the other variables inserted in my regression seem to not be affecting the dependent variable in any significant way. However, it is important to notice that the value of R^2 is about 0.30, which means that the outcome model responds to about 30% of the variability of the response data around its mean. In other words, the data collected is 30% fit to the regression line, which is index of a quite appropriate multiple determination coefficient. On the other hand, the variable Dw, is statistically significant at the 10% level of significance since it's p-value (0.0728) is less than 0.1. This means that my null hypothesis is accepted and that so my

assumptions about the effect of being a Weak-language FTR speaker were correct: Being a "weak-FTR" language speaking investor or entrepreneur, does really increase the amount of money raised during the crowdfunding campaign. To find out the extent to which Dw, the variable for weak FTR, affects the amount of money, we have to consider the estimate of the variable when β_6 (the coefficient that represents the change in the mean response per unit increase in Dw when all other terms are held constant) when it is equal to one, by conducting a t-test. Following these considerations, it turns out that when the language speaking investor or entrepreneur's language is characterized by a weak future time reference grammatical nature, it leads the amount of money raised during the crowdfunding campaign to increase by about £389000 in the case of my particular regression.

2. RESULTS OF MULTIPLE LINEAR REGRESSION TWO

$$\boldsymbol{EAR_i = \beta_0 + \beta_1 EO_i + \beta_2 Dfb_i + \beta_3 Dfp_i + \beta_4 Dhp_i + \beta_5 FFT_i + \beta_6 Dw_i + \beta_7 FFT_i Dw_i + e}$$

The appropriate formula to run the second regression, inserted into the Rstudio program, produced the following results:

```
Call:
lm(formula = Data$EAR ~ Data$Dfb + Data$Dfp + Data$Dhp + Data$FFT +
    Data$Dw + Data$EO + Data$FFT * Data$Dw)

Residuals:
    Min      1Q  Median      3Q     Max
-429503 -242216  -59346  128259 1255751

Coefficients:
                  Estimate Std. Error t value Pr(>|t|)
(Intercept)         451833     263143   1.717   0.1000
Data$Dfb           -102976     188712  -0.546   0.5908
Data$Dfp            351689     250299   1.405   0.1740
Data$Dhp             82825     217802   0.380   0.7074
Data$FFT         -26079928   25589799  -1.019   0.3192
Data$Dw            -288261     390584  -0.738   0.4683
Data$EO           -1531644    2762356  -0.554   0.5849
Data$FFT:Data$Dw 244275360  122370378   1.996   0.0584 .
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 394600 on 22 degrees of freedom
Multiple R-squared:  0.4077,    Adjusted R-squared:  0.2192
F-statistic: 2.163 on 7 and 22 DF,  p-value: 0.07884
```

The second, adjusted, multiple linear regression demonstrates that the new continuous independent variable, representing the interaction between FFT and FTR, is now the only statistically significant variable of the multiple linear regression, and it is significant to the 10% level because the p-value (0.0584) is smaller than 0.1; thus, that β_7 has to be different than zero, which in turn suggests that I accept the statistical alternative hypothesis, H_1, and reject the statistical null hypothesis H_0. As a result, my second hypothesis, stating that the effect of the future tense on a crowdfunding campaign has a positive impact on the amount of money raised when the FTR of the entrepreneur or potential investors language is Weak, was also correct. The extent to which this happens can be calculated by conducting a t-test, like in the earlier regression, thus verifying the interpretation of the coefficient that represents the change in the mean response per unit increase of the continuous interaction variable, β_7. This can be achieved by calculating how much the amount of money increases when the frequency of future time of a the campaign, who's entrepreneurial team and top funder speak a weak FTR language, rises of a certain amount. A more specific example is: when all other terms are held constant an increase of 10 percentage point increase in the FFT variable is associated, on average, to a ceteris paribus increase of about £24427536 in the amount of pounds raised during the crowdfunding campaign.

In addition, just like in the former regression, in this new case, all other variables don't present any statistical significance level representing a specific relevant relationship between them and the dependent variable of Effective Amount Raised (EAR). Although, it is necessary to note that the new value of R^2 has increased of about 11% from the results of the previous investigation, having a current value of 0.4077 (about 41%). This means that the modified model responds to about 41% of the variability of the response data around it's mean, this shows that the data collected now fit with the regression line is 11% higher than how the old regression data fitted. As deducted from that, the assumptions represented by this new regression are a more appropriate representation for investigating the objective of this thesis: the relationship between future tense and crowdfunding investments.

3. ANALYSIS OF RESULTS

The results obtained from the statistical investigations performed proved both the essential assumptions I came up with for this thesis to be correct. According to the data collected for this research, the designed statistical models, and the obtained results, I have been able to find out that the effect of future tense on crowdfunding campaigns is positive if, and only if, either the Entrepreneurial team or the investors spoken language is characterized by a weak Future Time Reference grammatical nature. In the following paragraphs I will present a more in depth analyzation and explanation of what I believe to be the reasons for which the two hypothesis of this thesis proved to be correct and backed up by my statistical investigation; in addition I will provide a more detailed final answer to the initial quest of these paper: what the effect of future tense is on crowdfunding investments.

In regard to the first correct proven hypothesis for which it was found out that being a "weak-FTR" language speaking investor or entrepreneur, leads to an increases in the amount of money raised during the crowdfunding campaign of about £389000 more pounds than being a "strong-FTR" speaker; there are two theoretical explanations in support of such claim, other than the statistical results. The first reason for which the amount of money raised is higher, in this particular situation, is the fact that weak FTR language speaking individuals are more likely to invest, and invest a higher amount of money in a crowdfunding campaign. It happens because, basically, speaking a language that is more grammatically flexible in the use of future tense, allows for the possibility of feeling distant future events in the current present, giving the entrepreneur (that is also speaker of a weak FTR language) of the campaign the possibility to include, in the pitch, well promising forecasts about future events, making them appear closer to the present. So, for example, if the pitch of the concerning campaign, which includes the described above characteristics, predicts high returns for the company to share with the investors, the reader will feel that the returns (payments of shares) of his investments will be soon in their possession. That in turn, leads the potential investor to become an actual funder of the company by pledging an amount of money. Of course, on the contrary, strong FTR language speakers tend to have more precise beliefs about the timing of the future rewards, hence they are not so easily persuaded and might be more scared away by the risk of seeing an economic return to their investment so distant in time. In addition,

another possible reason that correlates the amount of money raised by a crowdfunding campaign and the weak future time reference of a language in positively, is the fact that, empirically speaking, weak future time reference speakers turn out to be more likely to have saved during their lives, thus being more wealthy after retirement and having more money to invest in a crowdfunding campaign.

The theoretical explanations in respect to the second hypothesis proven correct by the statistical analysis, claiming that the effect of the future tense on a crowdfunding campaign has a positive impact on the amount of money raised, when the FTR of the entrepreneur or potential investors language is Weak, that I provide you are two. As explained in the first chapter of this theses, writing the pitch for a crowdfunding campaign cannot be done in a superficial way, instead, there has to be thought and logic behind each word or phrase. Additionally the entrepreneurial team must be very careful to include some basic elements and follow basic guidelines to craft a pitch that is going to convince a potential investor to become a founder of their project. Particularly, a campaign pitch must contain the benefits that investors will receive if they invest in project, what the scope of the project is and the already set milestones of what actions come next; this information must be provided by giving assurance to the reader with a positive tone. Notice that all the elements listed above refer to some future thing that has to happen, hence the use of the future tense must be included in a pitch campaign in order for it to contain all fundamental information that a potential investor is interested in receiving. As previously ascertained in this thesis weak FTR language speakers, have an advantage in modifying the appearance of future events by making them look closer. Consequently, weak-FTR entrepreneurs have an additional element to include in a campaign presentative pitch, to persuade it's readers to invest in their company; this means that the more of this tool they add, the higher is the chance to persuade an investor to pledge money to for the realization of your project. From the aforementioned we derive the positive correlation between the frequency of future tense used in a pitch and the money funded for the realization of the project expressed in the campaign, if the language of the entrepreneur has a weak future time reference.

IV. CONCLUSION

Nowadays, crowdfunding has certainly been a very useful tool to the realization of new projects and ideas. It has given creative minded people like entrepreneurs the possibility to concretize their ideas, therefore creating new jobs and products to satisfy all kinds of consumers. Furthermore, it has given the biggest audience in the world, the internet platform, the ability to decide and select which products or services are worth creating and which ideas deserve support to become a reality. In order for their idea to become a reality entrepreneurs must be able to create a campaign which catches the attention of potential investors and convinces them that the idea they are offering is worth their support, and money. These campaigns are composed by eye-catching images, advertising videos, and most importantly a written text, called pitch, with whom entrepreneurs need to be able to convince investors, to become funders. There are tools and standard guidelines that exist for the pursuance of this goal, as well as some basic elements that need to be avoided; in this thesis, I investigated if the usage of future tense throughout these campaigns was either a tool or a hoaxer. It turns out that the usage of future tense has different effects on individuals depending on whether it is used with someone that speaks a strong future time reference language (FTR) or with someone which speaks a weak FTR language. More specifically, weak future time reference speakers have the possibility to change the appearance of a distant event, because the nature of their language is more flexible on time tenses that it is for the languages characterized by strong FTR. As a consequence, the perception of future forecasted events in crowdfunding campaigns can be altered by the usage of the future tense, and could be used as a successful tool in the persuasion and acquisition of investors, incrementing the amount of money raised during the course of the crowdfunding. Finally, even though the dataset collected for this thesis is quite small, as it is composed of just thirty campaigns, the results of this investigation still lead us to the discovery that the effect of the future tense on crowdfunding campaign is positive, when the entrepreneurial team and investors speak language with a weak future time reference, as it increases the amount of money raised for the creation of the project described in the latter campaign.

APPENDIX:

(F) phrases	β	(F) phrases	β
project will be	18.48	difference for	5.60
has pledged	5.42	pledged will	4.01
pledged and	3.98	december of	3.21
we can afford	2.94	trip in	2.83
used in a	2.82	par	2.79
around new	2.78	trash	2.75
their creative	2.71	given the chance	2.69
mention your	2.69	your continued	2.65
to build this	2.65	cats	2.64
option is	2.59	inspired me	2.57
workshop and	2.56	project will allow	2.56
the coming	2.55	dollar pledged	2.54
we have chosen	2.53	Scale document down	
and an invite	2.51		
all supporters	2.48	from the past	2.44
pledgers will	2.44	finding out	2.43
lane	2.39	plus recognition	2.37
want them to	2.31	farm	2.31
got you	2.31	atlantic	2.30
and encouragement	2.28	some help with	2.26
that exists	2.25	as people	2.25
in this new	2.22	projects will	2.21
would greatly	2.20	we are fully	2.20
dates and	2.15	a national	2.14
conception	2.14	problem of	2.12
and added	2.11	kind to	2.08
unveiling	2.07	good karma and	2.04
commemorating the	2.04	shows that	2.02
girl and	2.00	il	1.99
two friends	1.96	secure the	1.95
future is	1.94	testament	1.93
that i feel	1.91	the meaning	1.91
fundraising goal	1.89	their thoughts	1.89
nv	1.88	support at	1.87
a personal tour	1.86	are raising money	1.85
the brooklyn	1.85	good as	1.84
administration	1.83	and develop	1.83
also receive two	1.83	the inside of	1.81
upfront	1.81	to play the	1.79
looking for your	1.77	as a small	1.77
for two years	1.76	changed my	1.76
gain a	1.76	our social	1.76
answering	1.74	design elements	1.74
funding will help	1.73	guarantee a	1.73
company for	1.72	all previous rewards	1.72
thanks a	1.72	a detailed	1.71
sharing with	1.71	the correct	1.71
be called	1.70	and share it	1.70
of hot	1.70	a lot about	1.70
message and	1.70	poster of your	1.69

TABLE 1 – Taken from article "The Language that Gets People to Give: Phrases that predict Success on Kickstarter" ,by Tanushree Mitra and Eric Gilbert.

Table Representing the top 100 phrases signaling that the project will be funded. The phrases obtained after comparison with the Google 1T corpus are marked in gold. All phrases are significant at the 0.001 level.

(NF) phrases	β	(NF) phrases	β
pledged	-7.12	dressed up	-4.64
not been able	-4.02	trusting	-3.91
all the good	-3.89	based in the	-3.87
models of	-3.84	school that	-3.75
information at	-3.65	kids of all	-3.55
of the leading	-3.53	on a larger	-3.44
new form of	-3.43	that uses	-3.42
we have lots	-3.24	to enjoy a	-3.20
way for us	-3.18	room on	-3.18
an honorable mention	-3.17	panel of	-3.17
is time for	-3.14	even a dollar	-3.10
nm	-3.08	be followed	-3.02
easy and	-2.97	later i	-2.96
and to provide	-2.91	will surely	-2.90
word out about	-2.87	picture in	-2.87
logo on it	-2.84	also work	-2.83
location of the	-2.80	people into	-2.78
you message from	-2.76	blanket	-2.76
provide us	-2.76	every time you	-2.73
need one	-2.69	help support our	-2.68
the culture of	-2.68	us from the	-2.67
unseen	-2.67	in school	-2.65
a door	-2.59	a masters	-2.59
a blank	-2.57	discretion	-2.57
volunteers to	-2.56	we raise will	-2.55
to the cost	-2.54	reusable	-2.53
the profits	-2.52	hand made by	-2.52
educate and	-2.51	get to pick	-2.48
based upon the	-2.47	will soon	-2.47
unified	-2.46	illustration	-2.46
to identify	-2.45	the production costs	-2.45
product will be	-2.43	refined	-2.43
space at	-2.41	continue with	-2.41
hope to get	-2.39	no extra	-2.39
present in	-2.37	definitely a	-2.35
occur in	-2.34	you start	-2.34
the needed	-2.34	addition to being	-2.33
decide what	-2.32	tuning	-2.32
deeper into	-2.30	help to bring	-2.29
known and	-2.28	underway	-2.27
campaign will help	-2.25	for decades	-2.23
goes in	-2.23	notoriety	-2.22
get to vote	-2.22	make you an	-2.21
air and	-2.20	an alternative	-2.19
be creative	-2.19	shows the	-2.19
post card with	-2.19	website for more	-2.19
signed postcard	-2.18	varies	-2.18
on different	-2.16	left my	-2.16
of their choice	-2.16	who like	-2.15
name or logo	-2.14	piggy	-2.14

TABLE 2 – Taken from article "The Language that Gets People to Give: Phrases that predict Success on Kickstarter" ,by Tanushree Mitra and Eric Gilbert. Table Representing the top 100 phrases signaling that the project will not be funded. The phrases obtained after comparison with the Google 1T cor- pus are marked in gold. All phrases are significant at the 0.001 level.

REFERENCES:

1. Prive, Tanya. “What Is Crowdfunding And How Does It Benefit The Economy.” Forbes, Forbes Magazine, 25 Mar. 2016, www.forbes.com/sites/tanyaprive/2012/11/27/what-is-crowdfunding-and-how-does-it-benefit-the-economy/#51ca20dbe63e.
2. Wilson, Karen E,, and Marco Testoni. “The Crowdfunding Phenomenon.” Bruegel, Bruegel, 14 May 2014, bruegel.org/2014/05/the-crowdfunding-phenomenon/.
3. “Crowdfunding | Definition of Crowdfunding in English by Oxford Dictionaries.” Oxford Dictionaries | English, Oxford Dictionaries, en.oxforddictionaries.com/definition/crowdfunding.
4. Kolenda, Nick. “19 Psychological Tactics for Effective Crowdfunding Campaigns.” CXL, 11 Aug. 2017, conversionxl.com/blog/crowdfunding-campaigns/.
5. Nigel. “How to Write a Captivating Crowdfunding Description (With Examples!).” Fundly, Nigel Https://Fundly.com/Assets/Logos/v2/fundly_logo_with_text_181_50.Png, 26 Apr. 2017, blog.fundly.com/writing-crowdfunding-description/.
6. Rita. “12 Tips to Write an Engaging Crowdfunding Campaign.” Megafounder Blog, 11 Aug. 2015, blog.megafounder.com/blog/write-engaging-crowdfunding-campaign/.
7. Chen, Kaeith M. “The Effect of Language on Economic Behaviour: Evidence from Saving Rates, Health Behaviors, and Retirement Assets.” Science Magazine, Yale University, School of Management and Cowles Foundation, 339 , Apr. 2013.
8. Therriault, Khrystine. “How Does Seedrs Work?” Crowdfunding Success Tips, 24 Sept. 2015, www.crowdcrux.com/how-does-seedrs-work/.
9. “Seedrs - 2016 Year in Review.” Seedrs - 2016 Year in Review, stats2016.seedrs.com/.

10. Ralcheva , Aleksandrina, and Peter Roosenboom. “The Role of Certification for Equity Crowdfunding Success .” Rotterdam School of Management, 2016.
11. “What Is Multiple Linear Regression?” Statistics Solutions, www.statisticssolutions.com/what-is-multiple-linear-regression/.
12. “The R Project for Statistical Computing.” R, www.r-project.org/.
13. “5.3 - The Multiple Linear Regression Model.” 5.3 - The Multiple Linear Regression Model | STAT 501, The Pennsylvania State University, onlinecourses.science.psu.edu/stat501/node/311.
14. Frost, Jim. “Regression Analysis: How Do I Interpret R-Squared and Assess the Goodness-of-Fit?” Minitab, 30 May 1970, blog.minitab.com/blog/adventures-in-statistics-2/regression-analysis-how-do-i-interpret-r-squared-and-assess-the-goodness-of-fit.
15. “Seedrs.” Invest Online In Startups Via Equity Crowdfunding, www.seedrs.com/.
16. “How It Works.” Online Investing, Equity Crowdfunding, Business Finance : Crowdcube, www.crowdcube.com/.