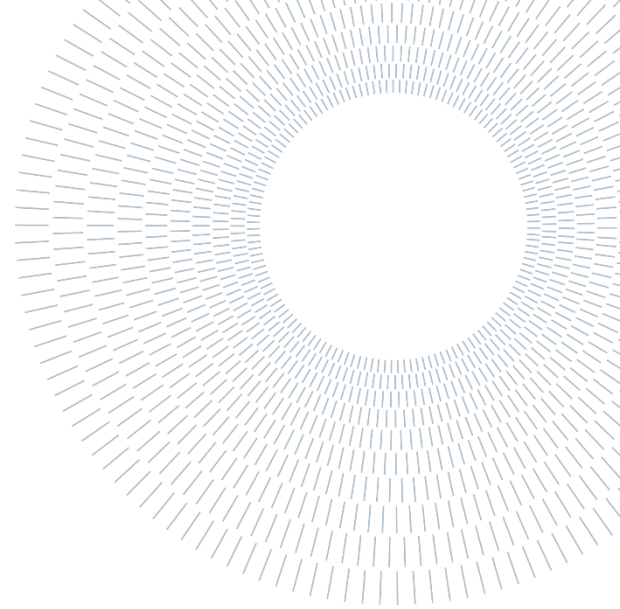




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EXECUTIVE SUMMARY OF THE THESIS

Sustainability Advertisement and other Drivers for the Success of a Real Estate Crowdfunding Campaign

MASTER THESIS IN MANAGEMENT ENGINEERING

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1. Introduction to RECF

Crowdfunding is an alternative financing solution. It is a process by which people (crowd) invest sums of money (funding) financing a business project or other initiatives through a website (platform), sometimes receiving a reward in return.

The first examples of crowdfunding emerged during the second half of the 90s, which is the time when online fundraisers for charitable projects started their activities. Later, in the early 2000s, web portals arose as intermediaries through which it was possible to make small loans. However, towards the end of the first decade of the new millennium, crowdfunding began to spread significantly, also thanks to the appearance of leading platforms such as the American Indiegogo (founded in January 2008) and Kickstarter (founded in April 2009).

The phenomenon has developed into more complicated forms such as equity and debt securities over the years. Nowadays the crowdfunding market represents a multibillion-dollar industry.

The success of such a rapid evolution can be attributed to the main essence of Crowdfunding, which is the "democratization" of investments that were once accessible only by institutional or wealthy private investors. Crowdfunding allows the "crowd" to participate even with small amounts of money to finance projects that otherwise would have been difficult to consider.

The real estate crowdfunding (RECF) is a form of financing that has made more "democratic" and "accessible" the investment in real estate. Indeed, it allows investors to access assets traditionally reserved for the wealthy. The RECF platforms pair real estate developers with individual investors who want exposure to real estate investments without the inconvenience of owning, financing, and managing properties.

Whereas a direct real estate investment is inherently risky, real estate crowdfunding can help diversify investor's portfolio and provide competitive returns.

The real estate crowdfunding can assume mainly two forms:

- Lending-based: the investors finance a loan requested by the real estate sponsor

becoming its creditors. The financial remuneration consists of the gradual or single repayment of the invested capital plus the payment of an ex-ante defined interest.

- Equity-based: the investors finance real estate projects by acquiring ownership shares and becoming holders of the right to receive any profits generated. The investment can be "direct" or "indirect". In the first case, the investors buy the shares of the real estate company or of the financed property. In the second case, they indirectly participate in the financing of the project, subscribing shares of a vehicle (Special Purpose Vehicle, SPV) especially designed for the specific project.

At 31/12/2021 the RECF market exceeded the € 35 B capital raised. According to many scholars the real estate crowdfunding phenomenon has the potential to disrupt the real estate industry (Vogel & Moll, 2014; Cohen, 2016; Montgomery et Al., 2018).

2. The RECF market

In the first part of this master thesis, insights about the RECF worldwide market were provided. The analysis conducted first studied the industry as a whole, describing the different organizational structures of the platforms, their business models and the market trends. It then focused specifically on each of the main geographical market areas of the world, reporting some economic data.

The study was based on a hand collected database of 178 platforms worldwide selected among those ones with at least one project financed and € 1 million raised capital during 2021 (except the Italian portals for which the limit was postponed until 30/6/2022). The 3 main market areas analyzed were:

- USA: Here is where crowdfunding was born. The active platforms in this market are 36 with a cumulative collected capital of \$ 21 B. The leading RECF platform is Cadre, with \$ 5 B collected. The second and third platforms are PeerStreet and Sharestates, with an overall amount collected of \$ 4.2 B and \$ 2.75 B respectively.

- Europe: This market is growing fast and will soon reach the US one. Overall, the European active platforms are 100 and have collected € 6.5 B. To deepen the analysis of the European market a database composed of data about 2514 projects of the 20 main platforms in Europe was built.
- The leading country is France in terms of capital raised whereas the largest platforms are the German Exporo and the Estonian Estateguru which have collected € 639 M and € 496 M, so far. By the end of 2023 the new law ECSP will come into force and will guarantee the growth of the process of internalization of the platforms, standardizing the European market.
- ROW: This is represented by 42 platforms that collected cumulatively € 8.3 B. It is divided into 4 macro areas: European countries that do not belong to the EU (such as Norway the United Kingdom and Switzerland), Asia-Pacific, Middle East and Latin America.

Moreover, the analysis focused separately on the Italian market that is very recent with respect to the other European ones. This market is composed of 23 portals that have launched 713 projects collecting € 287 M. The 5 main players in this market are the equity-based platforms Concrete Investing and Walliance and the lending-based portals Rendimento Etico, Recrowd and Trusters.

3. The Empirical Study

In the second part of this master thesis, an empirical study was carried out.

The purpose of this study was to find out the drivers for success of the Real Estate Crowdfunding campaigns. In order to accomplish the task, the campaigns published by the Italian platform Trusters were chosen as sample. The reason why only one platform was selected is that the data provided by each platform are quite heterogeneous. The sample used was made by 232 observations which correspond to the projects published on the platform from 2018 until October 2022. The projects involve all properties constructed or renovated in Italy, especially in the metropolitan city of Milan. Every project provides sufficient data to build a meaningful dataset,

including the exact starting and closing collection dates and hours. This information is registered on a blockchain which can be found in a dedicated section of each project. Another important feature of the campaigns is the degree of detail of their descriptions, which allowed to use textual variables to use in the models.

3.1. Hypotheses and Variables used in the models

The information obtained from the research on the literature and the suggestions provided by some representatives of the main Italian RECF platforms (Trusters and Build Lenders) helped in choosing the right success drivers. Indeed, 5 main macro-factors were elected as predictors of a RECF campaign: (i) the sustainability advertisement, (ii) the projects characteristics, (iii) the location of the properties, (iv) the information asymmetry and (v) the Real Estate market conditions. From these factors 27 variables were obtained: (i.a) the level of the energy class, (i.b) the usage of renewable resources, (i.c) the presence of autonomous systems, (i.d) the presence of a heat pump, (i.e) the presence of a heating floor, (i.f) the presence of a condensing boiler, (i.g) the presence of a system for thermal insulation, (i.h) the possess of a seismic certification, (i.i) the purpose to make a social impact, (i.j) the presence of a system for sound isolation, (ii.a) the target return, (ii.b) the duration of the investment, (ii.c) the destination of use of the property, (ii.d) the number of financing rounds, (ii.e) the contribution of the platform's investors, (ii.f) the number of properties of the building, (ii.g) the square metres of the properties, (iii.a) the population of the area in which the project is financed, (iii.b) the price per square metre of the neighbourhood, (iii.c) the revaluation of the area in which the project is financed, (iii.d), (iv.a) the number of pages of the specification, (iv.b) the number of photos showing the project, (iv.c) the presence of an explainer video, (iv.d) the number of documents available to the investors, (iv.e) the past projects of the company promoting the initiative, (v.a) the percentage change of the Italian Real Estate market index with respect to the year before the starting date of the project.

For representing the success of a project, 4 variables were chosen: (1) the Raising_Time of a project, (2) the Raising_Per_Hour (obtained as the ratio between the Target_Capital and the

Raising_Time), (3) the Number_Of_Investors, (4) the Average_Investment (obtained as the ratio between the Target_Capital and the Number_Of_Investors). The Raising_Time is the time needed to close the fundraising and it is computed in hours because many projects are financed in less than one day (sometimes even in less than one hour). The lower is the Raising_Time, the most successful is the project, because it means that the initiative was well welcomed from the investors. As for the Raising_Per_Hour, it was chosen to distinguish those projects which have the same raising time, but different capital to collect. This variable expresses the speed of the fundraising, differently from The_Raising_Time which is a time measure. The Number_Of_Investors is considered another indicator for the success of a campaign. However, it does not have a unilateral correlation with the success because a project can be successful even when the number of investors is low, but the average investment is high. Finally, the fourth variable, the Average_Investment, is the last measure of success of a campaign.

3.2. Methodology applied

In order to run the analysis, a Multivariate Ordinary Least Square regression model (OLS) was used. Specifically, four different models were run, one for each dependent variable. Furthermore, a stepwise method with a backward elimination approach was applied. The stepwise is a method of fitting regression models in which the choice of the predictive variables is carried out by an automatic iterative procedure. In each step, a variable is considered for addition to or subtraction from the set of explanatory variables based on a prespecified criterion. After each iteration a testing for statistical significance (usually checking the R squared of the model) is conducted. The backward elimination starts with all the 27 variables, testing the deletion of each variable, deleting the variable whose loss gives the most statistically insignificant deterioration of the model fit, and repeating this process until no further variables can be deleted. Before executing this procedure, a test for multicollinearity based of the Variance Inflation Factor (VIF) of each variable was made. Each variable showed a low VIF meaning the absence of multicollinearity.

3.3. Results

The results obtained with the regression models showed that all the five macro-factors significantly contribute to the success of a campaign. Specifically, *The_Raising_Time* tends to decrease if a project provides a high number of documents, involves a building which is in a populated area, has a seismic certification or is acoustically isolated. On the contrary, *The_Raising_Time* increases if the project is divided into different tranches, provides a long specification, involves a building with a high number of properties or located in a neighborhood with a high price per square meter. Surprisingly, even the projects promoting buildings with a better energy label and provided with a heat pump presented longer times of fundraising. *The_Raising_Per_Hour*, the second indicator of the success of a campaign, showed to have a relation with the same variables that affected the *The_Raising_Time*, with similar coefficients, but opposite signs, and the same degree of significance for each of them.

Regarding the *Number_Of_Investors*, less variables emerged from the stepwise procedure but all with a high level of significance. In particular, projects promoting buildings which are thermally isolated or provided with an explainer video, obtain more success. Conversely, the projects for which the contribution from the platform's investors is higher or that are sponsored by real estate companies with a high track record of past projects, tend to attract less investors.

Finally, the same factors impacting the *Number_Of_Investors* are those which turned out to be significant for the *Average_Investment*. The only one difference layed in the presence of the variable *Revaluation_Area*: the projects promoting buildings in an area which has been revaluated tend to have a higher average investment.

4. Conclusions

Overall, the empirical study confirmed the relationship between the success of a RECF campaign and the 5 macro-factors. Some independent variables resulted in having a statistically significant relationship with the success indicators as previously described. However, regarding the remaining variables that did not emerge from the stepwise regression, it

was not possible to reject the possibility of their impact on the dependent variables. The reasons lay in the limitation of the econometric model and of the dataset used in this study. Indeed, the purpose of the whole analysis was to be a starting point for future research which could enrich the dataset and adopt a more suitable model.