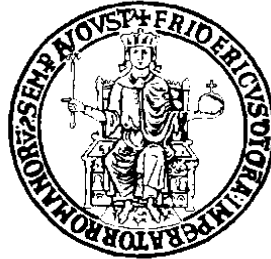


Università degli Studi di Napoli Federico II  
Facoltà di Economia



Dottorato di Ricerca in Management  
XXXI Ciclo  
Dipartimento di Economia, Management e Istituzioni

**Exploring the equity crowdfunding phenomenon: An analysis of regulations, tax incentives, and the fight against corruption**

**Antonella Francesca Cicchiello**  
**Ph.D. Thesis**

Tutor  
Prof. Stefano Monferrà

Coordinator  
Ch.ma Prof.ssa Cristina Mele

October 2018

*It may be that the gulfs will wash us down...  
It may be we shall touch the Happy Isles...  
We are not now that strength which in old days  
moved earth and heaven, that which we are, we are!  
Made weak by time and fate, but strong in will to  
strive, to seek, to find, and not to yield.  
Lord Alfred Tennyson, Ulysses*

*Forse i vortici ci trascineranno giù,  
forse noi approderemo su isole felici,  
e anche se non avremo la forza di un tempo  
che mosse la Terra e il Paradiso  
comunque ci siamo, siamo qui!  
Indeboliti dal Tempo e dal Fato,  
ma forti nel desiderio  
per combattere, per cercare, per trovare.  
E non per arrenderci."  
Lord Alfred Tennyson, Ulysses*

## Acknowledgements

I have been thinking about that poem a lot lately. And I think what it says is that, while it is tempting to play it safe, the more we are willing to risk, the more alive we are. In the end, what we regret most are the chances we never took. And I hope that explains, at least a little, this journey on which I am about to embark. I would like to say a special word of thanks and appreciation to my supervisor, Professor Stefano Monferrà, whose warmth, professionalism and skill have been extremely welcome. I shall never forget the great opportunity and the trust he gave me, guiding and suggesting me into following research topics and directions compliant with my personal interests and skills. I would like to give a special thanks also to all the Professors of the financial intermediaries' group for their very valuable and professional advice.

A lovely thanks go to my colleagues and friends for their availability, precious support, and patience. For three years you have heard me and help me. And for that, I am eternally grateful! Finally, I would also express my love and my gratitude to all my friends and to my family for their constant support, encouragement, never-ending patience, without whose love, this work would never be possible.

## Preface

The research and results described in this Ph.D. thesis have been presented at international conferences. Moreover, it has undergone peer review and, at the date of this printing is being considered for publication in academic journals. The papers developed during my research work as a Ph.D. student are listed below.

1. Cicchiello, A.F., (2018). *Harmonise Crowdfunding Regulation in Europe: Need, Challenges, and Risks*. Submitted to *The Journal of Entrepreneurship and Public Policy*.
2. Battaglia, F., and Cicchiello, A.F., (2018). *Do tax incentives promote crowdfunding investment in Europe?* Submitted to *The European Journal of Finance*.
3. Battaglia, F., Carboni, M., Cicchiello, A.F., and Monferrà, S., (2018). *Does the fight against corruption increase the investors' confidence in equity crowdfunding? Evidence from Latin America*. Presented at *The 8th International Conference of the Financial Engineering and Banking Society (FEBS)*, Università Roma III, 4-6 Giugno 2018. Submitted to *The Journal of Corporate Finance*.

## **Table of Contents**

<i>List of Figures</i> .....	7
<i>List of Tables</i> .....	8
<i>Abstract</i> .....	9

### **Chapter 1**

<i>1.1 Introduction</i> .....	10
<i>1.2 Thesis Contribution</i> .....	15
<i>1.3 Manuscript Reminder</i> .....	17

### **Chapter 2**

<b><i>Harmonise Crowdfunding Regulation in Europe: Need, Challenges, and Risks</i></b> .....	<b>18</b>
<i>2.1 Introduction</i> .....	19
<i>2.2 Need for harmonisation</i> .....	21
<i>2.3 Legal framework in Europe</i> .....	23
<i>2.3.1 The United Kingdom</i> .....	26
<i>2.3.2 France</i> .....	28
<i>2.3.3 Italy</i> .....	30
<i>2.3.4 Spain</i> .....	35
<i>2.4 Challenges and risks of fragmentation</i> .....	36
<i>2.5 Conclusions</i> .....	38

### **Chapter 3**

<b><i>Do tax incentives promote crowdfunding investment in Europe?</i></b> .....	<b>40</b>
<i>3.1 Introduction</i> .....	41
<i>3.2 Related review and research hypothesis</i> .....	42
<i>3.3 Typology of Tax Incentives</i> .....	46
<i>3.4 Tax incentives to promote crowdfunding investment</i> .....	48
<i>3.4.1 The United Kingdom</i> .....	52
<i>3.4.2 France</i> .....	57
<i>3.4.3 Italy</i> .....	59
<i>3.4.4 Spain</i> .....	61
<i>3.4.5 Belgium</i> .....	62
<i>3.5 Conclusions</i> .....	64

**Chapter 4**

*Does the fight against corruption increase the investors' confidence in equity crowdfunding? Evidence from Latin America*.....66

4.1 Introduction .....67

4.2 Literature, contribution and research hypothesis..... 69

4.3 Data and sample..... 74

4.4 Identification strategy..... 77

4.5 Results.....82

4.6 Robustness checks. .... 86

4.7 Conclusions. .... 88

**Chapter 5**

*Conclusions, limitations, and Future Directions*.....90

*References*.....94

**List of Figures**

*Figure 1. Alternative Finance Market Total Volume, 2013-2016 (\$USD) .....14*  
*Figure 2. Successful projects (time period 2014-2017) .....83*

**List of Tables**

*Table 1. Crowdfunding Models.....12*

*Table 2. Overview of crowdfunding regulatory frameworks in force in the UK, France, Italy, and Spain. ....25*

*Table 3. Overview of tax incentive schemes in force in UK, France, Italy, Spain and Belgium.....50*

*Table 4. Crowdfunding platforms.....76*

*Table 5. Projects by platform and year.....77*

*Table 6. Variables and data sources.....81*

*Table 7. Summary Statistics.....82*

*Table 8. Correlation matrix.....82*

*Table 9. The impact of the new anti-corruption framework on equity crowdfunding.....86*

*Table 10. The impact of the new anti-corruption framework on equity crowdfunding (Placebo test) .....88*



## **Abstract**

Equity crowdfunding is becoming more and more an important source of funds to early-stage entrepreneurial firms, in both developed and developing countries. Its rapid growth was likely due to a combination of favourable – and unfavourable - circumstances which have made it a multi-billion-dollar industry worldwide. On the one hand, the 2008 financial crisis has tightened credit availability; on the other hand, financial innovations driven by FinTech companies (including equity crowdfunding platforms) have provided consumers with an excellent opportunity to become investors and take advantage of their knowledge in financial matters. Moreover, financial innovations and the new instruments available have facilitated credit access for entrepreneurs, enabling them to seek funding from anyone. Equity crowdfunding seems thus to have the potential to fundamentally change the investment and financing process, as well as to provide greater transparency especially in countries where high levels of corruption discourage any form of public or private investment.

The academic literature on this topic has analysed the crowdfunding market with growing interest. However, the research and knowledge of this new phenomenon are still limited, and some questions do still arise.

This doctoral thesis aims to address the topic of equity crowdfunding in Europe and Latin America (the higher performing developing country in terms of utilizing crowdfunding, excluding Mainland China). In particular, the three papers that constitute it explores specific strategies to drive equity crowdfunding growth and promote its use in financing entrepreneurship. This dissertation draws inspiration from the following research questions: (i) *Why do we need a harmonised regulation of crowdfunding in Europe? What are the challenges and risks to deal with?* (ii) *Do tax incentives promote crowdfunding investment in Europe?* (iii) *Does the fight against corruption increase the investors' confidence in equity crowdfunding?*

Answers to these questions provide an important step towards a better understanding of the functioning of crowdfunding markets.

# Chapter 1

## Introduction

New digital technologies radically changed the economy, generating consequences in all economic sectors and starting what is called the Fourth Industrial Revolution (Industry 4.0). The trend toward digitalization and technological innovation has reshaped the financial sector by changing the way customers and businesses access financial services. Financial technologies, known as FinTech, have fuelled the emergence of a new generation of companies innovative enough to offer intelligent, however easy-to-use financial solutions through the application of novel technologies and concepts. As a result, user-friendly financial products and services, with a greater level of efficiency, transparency, and flexibility than traditional ones are being made available. In such a highly dynamic scenario, FinTech companies are able to fulfil customers' needs that have previously not (or not sufficiently) been met by traditional financial service providers.

Belonging to the FinTech revolution, crowdfunding is a comprehensive term used to describe a new form of funding projects, companies or ideas by raising many small amounts of capital from a large number of people, typically via the online platforms (Ahlers et al., 2015). Crowdfunding platforms provide funding in a digital environment, thus eliminating the requirement for physical interaction and consequently reducing transaction costs as well as transaction time. This novel form of financial intermediation makes easier for those seeking funding (whether people or companies) to reach a high number of potential investors, who will receive some form of physical or moral reward in proportion to the invested funds (Zhang and Liu, 2012). Since its inception in 2006, various models of crowdfunding have been created, depending on the way in which investors are recompensed. In particular, it is possible to distinguish four main types of crowdfunding models (Mollick, 2014):

- 1) The donation-based crowdfunding is a simple model generally used for social or charitable causes. The investors are mainly driven by altruistic motivation and they donate money without expecting something in return. Examples of donation-based crowdfunding platforms include *GoFundMe* (<http://www.gofundme.com/>), *YouCaring* (<https://www.youcaring.com/>) and *Crowdrise* (<https://www.crowdrise.com/>);
- 2) The reward-based crowdfunding is the most popular model. As the name suggests, investors receive a reward based on the amount of money they brought to the project. Rewards may range from something simple such as a thank-you postcard to a prototype of the product. Cash prizes are never allowed. This model is mainly used for creative

projects, ranging from arts, music, games, to design and technology. Moreover, reward model is often used as a form of pre-selling prior to market entry. Two of the oldest and largest reward-based crowdfunding platforms are *Kickstarter* (<http://www.kickstarter.com>) and *Indiegogo* (<https://www.indiegogo.com/>);

- 3) The lending-based crowdfunding, in both consumer (*P2P- peer-to-peer*) and business (*P2B- peer-to-business*) lending form, accounts for the largest market segment of Alternative Finance in Europe (Ziegler et al., 2018). In this type of crowdfunding, investors provide funds through small loans to consumers or business and obtain repayment with interest in return. This is a way to borrow money at a lower cost compared to the credits that banks can propose. Examples of this model include *Prosper* (<https://www.prosper.com/>), *Twino* (<https://www.twino.eu/>), and *Bondora* (<https://www.bondora.com/>);
- 4) The equity-based crowdfunding offers to investors the opportunity to become shareholders in the funded company through the purchase of a small equity stake. In return for their funding contributions, investors will share the potential profits of the business. This participatory financing with equity participation is a solution for early stage unlisted companies that are too small and risky to obtain funding in the traditional way. One of the world's first equity-based crowdfunding platforms is the English *Crowdcube* (<https://www.crowdcube.com/>) launched in 2010.

Table 1 shown crowdfunding models according to the funding form, the expected return, and the main sector.

**Table 1. Crowdfunding Models**

<b>Model</b>	<b>Funding form</b>	<b>Expected return</b>	<b>Main sector</b>
<b>Donation</b>	Support for non-profit projects	No expectation of returns	Charity and Philanthropy
<b>Reward</b>	Financial support mostly for creative projects	Non-monetary rewards or products	Art, Music, and Design
<b>Lending</b>	Financing of loans to private persons (P2P) or companies (P2B)	Repayment of capital and interest	Education and Research
<b>Equity</b>	Equity investment mostly in start-ups	Profit sharing	Tech & Innovation

Source: Author elaboration

Using social networks, social profiles, and the viral nature of web-based communication, individuals and companies have raised billions of dollars in lending, equity, reward and donations for projects over the last few years. According to the 3rd annual European Alternative Finance Industry Report (Ziegler et al., 2018), the European market has grown by 41% in 2016, reaching €7.7 billion and doubling its volumes from 2015<sup>1</sup>. The United Kingdom still remains the largest online alternative finance market, with a market volume in Europe of € 5.6 billion, followed by France (€ 443.98 million), Germany (€ 321.84 million) the Netherlands (€ 194.19 million), Finland (€ 142.23 million), Spain (€ 130.90 million), Italy (€ 127.06 million) and Georgia (€ 102.58 million). This new form of financing has emerged in the wake of the 2007-2009 financial crisis which severely affected terms and conditions of European SMEs and start-ups' funding (Brown and Earle, 2017; Cosh et al., 2009), by forcing them to use lending channels different from the banking ones, such as venture capital, business angels and, more recently, crowdfunding. These platforms, by facilitating the matching process between

<sup>1</sup> The report is based on 344 crowdfunding, P2P lending and other alternative finance platforms across 45 European countries.

ventures and potential investors, have enriched the diversification of the financing industry changing the way people, businesses and institutions access and invest money.

Over the past decade, crowdfunding (notably in the equity model) has established itself as a new player in the entrepreneurial finance market that is capable of supporting entrepreneurship and employment creation, and spur growth. Its role in the seed and early-stage financing of entrepreneurial projects has grown rapidly across the developed world (Schwienbacher and Larralde, 2012; Wilson and Testoni, 2014; Bruton et al., 2015) and is now attracting considerable interest in the developing world as well, where the banking system is often underdeveloped (World Bank, 2013; World Bank Group, 2015; Wardrop et al., 2016). In these countries, crowdfunding is demonstrating its ability to deliver capital more efficiently to a large number of business and entrepreneurs than has been possible in the past. Data from the “Crowdfunding’s Potential for the Developing World Report” (World Bank, 2013) shows that there are up to 344 million households in the developing world able to make small crowdfund investments. The total market potential by 2025 is estimated to be up to US \$90-96 billion per year. Among developing countries (excluding Mainland China<sup>2</sup>) Latin America is the higher performing in terms of utilizing crowdfunding. As shown by the “2017 Americas Alternative Finance Industry Report” (Ziegler et al., 2017), in 2016, the Latin America online alternative finance industry grew to \$342.1 million, a significant increase compared to the \$110.6 million in 2015 and the \$56.2 million in 2014. Of the \$342.1 million 2016 total, more than \$230 million came from alternative finance platforms focused on small business financing. In particular, lending-based models accounted for \$218.4 million, while equity-based models accounted for \$10.4 million (the 70% of the equity-based business finance in Latin America). High volume markets include Mexico (\$114.2 million), that led equity-based business finance, generating approximately 48% of the segment (\$4.9 million). Chile (\$97.8 million), Brazil (\$64.4 million) and Argentina (\$12.6 million) follow. Compared to other countries with robust crowdfunding industries in place, data show that Latin America has grown very quickly and appear to have good potential in this new form of finance. Beyond the traditional forms of financing (i.e. banks, public grants, venture capital, private equity, business angels), equity crowdfunding platforms allow successful businesses to attract international investors outside of traditional Global Financial Centres.

Figure 1 shows the growth in volume terms of the alternative finance market from 2013 to 2016 in Argentina, Brazil, Chile, and Mexico (the four most active Latin America countries).

---

<sup>2</sup> With \$101.7 billion in total transaction volume in 2015, China is the world’s largest online alternative finance market (Zhang et al., 2016).

**Figure 1. Alternative Finance Market Total Volume, 2013-2016 (\$USD)**



Source: Author elaboration based on data from Ziegler et al. (2018)

In Latin America as much as in Europe, the equity crowdfunding platforms attract companies and stimulate investment in innovative start-ups and small and medium enterprises (SMEs), thus playing a critical role in productive development, employment, and economic growth. However, this type of crowdfunding seems to grow at a slower rate than lending-based counterpart due to regulatory constraints concerning equity-investments in businesses (Bruton et al., 2015). Its success depends on the ability of each country to develop forward-thinking regulations that can adapt to this new investment vehicle by ensuring a high level of investors' protection and providing tax incentive schemes in order to maximize its value. The lack of appropriate regulations creates an unpredictable environment and a state of uncertainty which is deterring investors and, as a consequence, strangles investments in crowdfunding (notably the lending and equity-based forms of crowdfunding). Moreover, building a functioning crowdfunding ecosystem depends on the ability of policymakers and regulators to remove cultural barriers and create and develop the "culture of trust" which is essential for the funding

of companies through crowdfunding platforms (World Bank, 2013). This culture of trust is not easy to establish in an opaque process like the online fundraising (Courtney et al., 2017; Ahlers et al., 2015) in which investors often have no pre-existing relationship with the funded companies and live hundreds or thousands of miles far from them (Agrawal et al., 2015; Günther, et al., 2018). A highly transparent system, defined by clear rules and providing protection from fraud, is a key enabler to build that trust culture, even in highly corrupted economies.

## **Thesis Contribution**

The current dissertation, conducted with the "multiple paper thesis" method, shows the research activity conducted during the doctoral studies program pursued over three years. It aims at contributing to the ongoing debate on how to regulate and promote the crowdfunding market and to examine its impact on business finance in both developed and developing countries. The three papers that constitute this thesis explore specific strategies to drive equity crowdfunding growth and promote its use in financing entrepreneurship in Europe and Latin America - the higher performing developing country in terms of utilizing crowdfunding, excluding Mainland China. By recognising the importance of enhancing the knowledge of areas that have not been deeply investigated or completely clarified in the existing literature, the three studies get inspired from the following research questions:

Research question 1: *Why do we need a harmonised regulation of crowdfunding in Europe? What are the challenges and risks to deal with?*

Research question 2: *Do tax incentives promote crowdfunding investment in Europe?*

Research question 3: *Does the fight against corruption increase the investors' confidence in equity crowdfunding?*

These questions suggest two complementary lines of research. On the one hand, an in-depth analysis of the need, challenges, and risks of not harmonising the crowdfunding regulation in Europe, and the role played by the tax incentive schemes in fostering crowdfunding investment. On the other hand, an empirical analysis of the impact of new anti-corruption legal frameworks - that restore investors' confidence - on equity crowdfunding market in highly corrupted developing countries. More in details, this thesis makes several contributions to the literature. First, this is not the first study to discuss the regulatory reforms in different European countries from a theoretical perspective. Compared with prior literature (Hornuf and Schwienbacher, 2017; Kabai, 2017; Estrin et al., 2018; Macchiavello, 2018), the

first paper of this doctoral thesis addresses in its analysis and implications the issue of regulatory harmonisation, stating that establishing a single market for crowdfunding is a key enabling factor to building a successful crowdfunding ecosystem in Europe.

Second, in this thesis, the role of tax incentive schemes in fostering equity crowdfunding investment in Europe is examined for the first time. By extending the prior literature, which widely recognised the effectiveness of tax incentives in promoting investment (Keuschnigg and Nielsen, 2002 and 2004; Cowling et al., 2008; Klemm and Van Parys, 2012; Cumming and Li, 2013; Wilson and Silva, 2013; Wilson, 2015; Munongo et al., 2017), the second paper provides a detailed and comprehensive analysis of tax incentives schemes in force in Europe for investors and companies planning to use crowdfunding as a fundraising tool. Building on a theoretical framework, it shows that the more tax incentives schemes are properly designed and tailored, the more investors, start-ups and other firms with low liquidity use crowdfunding as a source of funding.

Third, this thesis suggests and demonstrates that the introduction of an anti-corruption framework affecting both public and private spheres has an important impact on the probability of success of equity crowdfunding projects in a highly corrupt environment. The role of regulatory quality is found to be significant in fighting corruption and, as consequence, in promoting investment, consistent with the prior literature (La Porta et al., 1999; Bénassy-Quéré, 2007; Busse and Hefeker, 2007). However, the extant research does not take into account the relationship between corruption and equity crowdfunding investment. By using a difference-in-difference estimation model, the third paper offers empirical evidence from Brazil, Chile, and Mexico on the impact of anti-corruption regulation on equity crowdfunding investment.



## Manuscript Reminder

This doctoral thesis is structured as follows:

- chapter 2 provides an in-depth description of how all different types of crowdfunding are treated under the national regulation of the following five countries: Germany, the United Kingdom, France, Italy, and Spain. Building on a theoretical framework of legislation, the study shows the importance to build a single market for crowdfunding and the complexities to achieve it in a fragmented Europe;
- chapter 3 deeply analyses the different tax incentives schemes in force in UK, France, Italy, Spain, and Belgium, and make a comparison among them. Although all the investigated countries promote crowdfunding investment by offering tax incentives, the study finds evidence that the schemes in force could have a greater positive impact on the crowdfunding campaigns success, by better evaluating and taking into consideration the peculiarities of potential crowdfunding investors and firms that might take advantage of them;
- chapter 4 presents the first empirical evidence of the causal relation between anti-corruption rules and crowdfunding investment in a highly corrupted environment. Based on a unique hand-collected dataset of 492 successful and unsuccessful projects, listed on all existing equity crowdfunding platforms in Brazil, Chile and Mexico over the period 2013-2017, the study finds that anti-corruption laws affecting both public and private spheres is able to increase investors' confidence in equity crowdfunding.
- chapter 5 concludes this doctoral thesis.

## **Chapter 2**

### **Harmonise Crowdfunding Regulation in Europe: Need, Challenges, and Risks**

The purpose of this chapter is twofold. On one hand, it aims to highlight the need, challenges, and risks posed by the too high level of heterogeneity in crowdfunding regulation among European countries; on the other hand, it aims to assess the regulatory reforms to be undertaken from European Authorities in order to harmonise crowdfunding regulation and create a European Single Market.

A more aligned Pan-European market could facilitate cross-border transactions and increases investors protection (European Commission, 2018). However, policymakers and regulators have to implement the regulatory harmonisation process by carefully considering the specific features of each country. This chapter deals with the issue of the harmonisation of crowdfunding regulation in Europe which is currently the subject of debate by policymakers and regulators. To this end, an in-depth comparative analysis of the crowdfunding regulatory frameworks in force in the UK, France, Italy, and Spain is provided. The regulatory regimes are presented and discussed in the light of the harmonisation goal of crowdfunding regulation in Europe. Findings show that crowdfunding market is negatively affected by regulatory heterogeneity. To overcome the barriers hampering the regulatory harmonisation, European countries have to shape the highly heterogeneous nature of their regulatory environments in order to achieve a level playing field for all market actors in Europe and to create a more open crowdfunding ecosystem. Direct implications for future regulation in the crowdfunding industry are found.

## Introduction

Over the past years, crowdfunding (CF) has emerged as a new way to finance projects, ideas or new ventures by raising normally small amounts of money from a large number of investors through online platforms (Belleflamme et al., 2014; Mollick, 2014). Since its inception in 2008, crowdfunding transactions volume has grown considerably at European level. According to the 3rd annual European Alternative Finance Industry Report (Ziegler et al., 2018), the European market has grown by 41% in 2016, reaching €7.7 billion and doubling its volumes from 2015<sup>3</sup>. The United Kingdom is the largest individual online alternative finance market, with a volume in Europe of €5.6 billion, followed by France (€443.98 million), Germany (€321.84 million) the Netherlands (€194.19 million), Finland (€142.23million), Spain (€130.90million), Italy (€127.06million) and Georgia (€102.58million).

Literature has widely recognized the importance of and need for crowdfunding (notably in the equity-based form) as alternative way of funding new business ventures for which conventional ways of funding are often unavailable (e.g., Schwienbacher and Larralde, 2012; Bruton et al., 2015; Wardrop et al., 2015; Vulkan et al., 2016; Cumming and Vismara, 2017; Short et al., 2017; Leboeuf and Schwienbacher, 2018; Estrin et al., 2018).

The rapid growth of crowdfunding has created serious challenges for policymakers and regulators around the world with financial stability implications (Financial Stability Board, 2017), and has drew the attention of academic world (Moritz and Block 2016). Legal scholars in the United States heavily discussed (i) the legislative changes to enable crowdfunding and provide investor protection (Bradford, 2012a and 2018; Hazen, 2012; Cumming and Johan, 2013; Stemler, 2013), (ii) the application of the Securities Act of 1933 (Bradford, 2012; Sigar, 2012), and (iii) the entry into force of the JOBS Act on April 5, 2012 (Knight et al., 2012), in particular of its Title III - also referred to as CROWDFUNDING Act - (Wroldsen, 2013; Hornuf and Schwienbacher, 2017).

---

<sup>3</sup> The report is based on 344 crowdfunding, P2P lending and other alternative finance platforms across 45 European countries.

The existing literature on crowdfunding regulation in Europe focuses mainly on its legal implication and risks, such as the weaker investor protection and potential for fraud, caused by the rapid growth of crowdfunding (Wilson and Testoni, 2014; Boitan, 2016; Kabai, 2017; Macchiavello, 2018). By analysing the legal reforms promoting crowdfunding in six European countries, Hornuf and Schwienbacher (2017) argue that when alternative sources of entrepreneurial finance (such as angel capital and venture capital) are scarce, a too strong investor protection may harm equity crowdfunding investments. Some authors (Wilson and Testoni, 2014; Courtney et al., 2017; Estrin et al., 2018) conclude that in order to mitigate the previous risks, crowdfunding must be approached with caution through specific regulation, and that this is the only workable way of helping investors make informed decisions and limiting the amounts they can put at risk. Moreover, others authors give suggestions regarding the legal provisions required to implement crowdfunding and increase access to capital for start-ups and SMEs (De Buysere et al., 2012; Klöhn and Hornuf, 2012; Juredieu and Mayoux, 2016; Estrin et al., 2018). However, little attention is given to the failure to harmonise the regulation, which can harm crowdfunding initiatives, and the need to develop a harmonised regulatory framework across Europe (European Commission, 2015 and 2018a).

In this light, this chapter aims to understand how the regulatory fragmentation among countries affects the creation of a single crowdfunding market in Europe, and to assess the recent proposals coming from a perspective of harmonisation in the European market.

The main research questions are:

- 1) How fragmented regulation affects crowdfunding market in Europe?
- 2) How should European countries overcome the (regulatory) barriers slowing down the harmonisation process?

In order to answer these questions, this chapter explores in greater detail the regulatory frameworks that have emerged in the UK, France, Italy, and Spain as a result of the establishment of crowdfunding as a new player in entrepreneurial finance. Then, its analysis brings out those aspects that should be avoided and the lessons that should be learned from each analysed countries in order to implement the process of regulatory harmonisation. From this perspective, this chapter assesses the recent proposal from the

European Commission clearly showing the intention to harmonise crowdfunding regulation. Moreover, it discusses the role and responsibilities of policymakers and regulators in guiding the process of regulatory harmonisation with careful consideration of the need, challenges, and risks of not harmonising the regulation as well. The aim is to create a European 'Single Market' ensuring equality in regulatory conditions for all investors and enterprises and removing potential barriers that prevent platforms activity at the trans-European level (European Commission, 2018).

In conclusion, this analysis presents a number of policy recommendations that emphasize the need to improve access to this innovative form of finance for businesses in need of funding, particularly start-ups and small and medium-sized enterprises (SMEs). The remainder of the chapter is organized as follows. Section 2 describes the legal framework in force in the UK, France, Italy and Spain. Section 3 discusses the need for harmonisation and the recent proposals from the European Institutions. Section 4 analyses the challenges and risks of regulatory fragmentation in Europe. Section 5 concludes.

### **Need for harmonisation**

This section discusses a set of regulatory issues that must be considered with some interest by the policymakers to fully understand the extent of regulatory harmonisation which is necessary among European member countries. As will be shown in Section 3, the current regulatory architecture around crowdfunding in Europe is rather heterogeneous (European Commission, 2017). Indeed, some countries have developed a specific ecosystem for crowdfunding by enacting bespoke regulatory regimes, also relating to the different crowdfunding forms. Instead, other countries are working for improve the flexibility and scope of existing regulatory frameworks, fill the shortcomings within them, and adjust them in response to the challenges posed by crowdfunding. Moreover, the extent of regulation varies according to the different forms of crowdfunding. While equity- and lending-based crowdfunding are subject to strict rules, with high barriers to entry (Gabison, 2015), in most European countries, crowdfunding forms based on donation and reward still remain unregulated.

In general, the objectives pursued by policymakers at national level are mostly to encourage crowdfunding growth by strengthening the internal market integrity and

stability in order to facilitate the entry and participation of agents in competitive conditions, and at the same time, to minimize information asymmetries and guarantee a suitable level of transparency and investors protection. Regulation is one of the important tools used to achieve these goals. However, the weakness of the harmonisation ' and regulatory cohesion' strategy proposed by the European Institutions, has led to a heavy fragmentation in the regulatory frameworks of the Individual Member States, which have implemented the European Directives in very different ways (Cumming and Johan, 2013; Hornuf and Schwienbacher, 2017). This fragmented, cluttered and complex regulation leads to an unlevel playing field causing market access barriers and hindering the implementation of a more aligned Pan-European market in which platforms can easily provide their services cross-border. Furthermore, it creates an unpredictable environment a state of uncertainty which is deterring investors and, as a consequence, strangles investments in crowdfunding (notably the lending and equity-based forms of crowdfunding). It is clear that, the failure to harmonise crowdfunding regulation represent a prime barrier for its development and limit the effectiveness of efforts made to promote it (European Commission, 2017). Therefore, regulatory heterogeneity does not appear to be a desirable characteristic of a borderless crowdfunding common market.

The fundamental objective of the regulatory harmonisation is to achieve uniformity in crowdfunding regulation of member states through the definition and share of common laws, regulations, standards and practices for crowdfunding actors. The removal of regulatory barriers on the European market will allow to create an integrated crowdfunding ecosystem which foster transparency and a sound competition among market participants, and to ensure a better protection regime and a higher level of guarantees for investors thereby helping to restore their confidence in this rapidly developing sector (European Commission, 2018a).

Moreover, the achievement of harmonisation will faster crowdfunding market growth, facilitating the emergence of a common global market which is needed to:

- maximize the growth potential of the crowdfunding market;
- stimulation of cross-border activity and investment;
- help platforms to broaden their cross-border outreach by overcoming the internal market barriers;
- increase the level of investor information on the high risks incurred by them;

- create a true level playing field for all crowdfunding actors in Europe;
- enhance European investors' confidence in the crowdfunding market by increasing legal certainty as regards the fulfilment of the investor protection rules;
- ensuring the uniform and effective application of only one set of rules valid throughout Europe, in order to prevent distortions of competition between individual markets;
- define tailored rules for equity- and lending-based European crowdfunding platforms.

These needs can only be fulfilled (met) when there is standardized regulation for crowdfunding activity which is internationally accepted.

### **Legal framework in Europe**

European countries facing the many legal issues raised by the development of alternative financial markets (such as crowdfunding market) are likely to look at other countries experiences for guidance on the lessons to learn and the aspects that should be avoided.

For this purpose, the following paragraph provides an in-depth comparative analysis of the current crowdfunding regulatory frameworks in force in the UK, France, Italy, and Spain. These are summarized in Table 2.

**Table 2. Overview of crowdfunding regulatory frameworks in force in the UK, France, Italy, and Spain.**

	<b>Regulation</b>	<b>Scope</b>	<b>Financial instruments</b>	<b>Crowdfunding service providers</b>	<b>Authorisation and registration</b>	<b>Maximum offers (Prospectus exemptions)</b>	<b>Maximum investment limits</b>
<b>United Kingdom</b>	The FCA's regulatory approach to crowdfunding over the internet, and the promotion of non-readily realisable securities by other media - PS14/4 of March 2014	Securities and lending	Equities and debt securities, transferable and non-transferable. Non-readily realisable securities (NRRS) only to retail investor certified as sophisticated investors, high net worth investors, and advised investors	Entities authorised by the FCA to carry out the regulated fundraising activities in the UK	Authorisation by FCA	Lower than € 5 million in a period of 12 months	10% of the net investable assets for non-sophisticated investors; No investment limit for sophisticated investors, high-net-worth investors, and retail clients who receive an investment advisory or investment management service from an authorized person
<b>France</b>	Ordonnance n. 2014-559 du 30 mai 2014 relative au financement participatif	Securities and lending	Since the " <i>Loi Macron</i> " preference shares with voting rights (ordinary shares only previously), convertible bonds (straight bonds only previously), and the minibonds	Intermediaire en Financement Participatif ( <i>IFP</i> ) and Conseiller en Investissement Participatif ( <i>CIP</i> )	Authorisation by AMF and registration in the " <i>Registre Unique des Intermédiaires en Assurance, Banque et Finance</i> " managed by ORIAS	€ 2.5 million per year per project (€ 1 million previously)	No investment limit per project and per year. Limit of € 2,000 (€ 5,000 for interest-free loan) per project and per year for lenders



<b>Italy</b>	Decreto Legge n.179/2012 (Decreto Crescita 2.0) and Decreto Legge n.3/2015 (Investment Compact)	Equity	Shares or units of small and medium-sized businesses, social enterprises and mutual investment bodies or other joint stock companies that invest mainly in small and medium-sized businesses	Entities authorised to provide investment services and subject to MiFID rules (ipso iure managers) and other legal entities authorised ad hoc by CONSOB	Authorisation and registration in the ordinary section of the Register of the portals' managers by CONSOB. Ipso iure managers do not need authorisation but must be enrolled in the special section of the Register	Lower than € 5 million per year (€ 100,000 previously)	No investment limit. Exemption from MiFID rules for single investment less than €500 (natural persons) or €5.000 (legal entities) and overall investments during a year less than €1.000 (natural persons) or €10.000 (legal entities)
<b>Spain</b>	Ley 5/2015, de 27 de Abril, de Fomento de la Financiación Empresarial (LFFE)	Securities and lending.	Ordinary and preferential shares, bonds, limited liability company's shares and other transferable securities	Plataformas de Financiación Participativa, (PFP)	Authorisation and registration by the CNMV	€ 2 million per project, per platform, in a given year. €5 million when projects are targeted only to accredited investors	No investment limit for accredited investors. Limit of €3.000 per project and maximum €10.000 per year for non-accredited investors

---

Source: Author elaboration

## *The United Kingdom*

The UK provided for a nimble set of new rules specifically designed for equity- and lending-based crowdfunding in order to facilitate and promote the development of crowdfunding market.

The new rules introduced by the Financial Conduct Authority (FCA) in March 2014 (PS14/4) came into force on 1 April 2014 and were then reviewed in February 2015 and most recently in December 2016 through the publication of a Feedback Statement providing 'Interim feedback to the call for input to the post-implementation review of the FCA's crowdfunding rules' (FS16/13).

According to the regulation of Securities Model under the Financial Services and Markets Act 2000 (FSMA), both equity- and lending-based platforms are regulated by the FCA and they need to be authorized beforehand to carry out the regulated fundraising activities in the UK. Moreover, they have to conform to standards set out by the FCA. There is no national registry for crowdfunding platforms in the UK. Since the UK, as well as Italy, rely upon the self-certification of investors, platforms have to inform investors of potential losses and carry out a screening process in order to identify the so called 'non-sophisticated investors', i.e. retail clients who certify that they will not invest more than 10% of their investible assets (excluding their principal residence, pension and life cover) in unlisted share or debt securities over the 12 months following the investment (FCA, 2014).

The FCA allows investing more than 10% of the net investible portfolio in unlisted shares to the following categories of investors:

- 1) sophisticated investors, i.e. investors who certify to be member of a network or syndicate of business angels from at least 6 months, to have made more than one investment in an unlisted company in the previous two years, to have worked in the previous two years in the private equity sector, or in the provision of finance for SMEs, or to have been in the previous two years a director of a company with an annual turnover of £1 million or more;
- 2) high-net-worth investors, i.e. investors that earn at least £100,000 a year or have at least £250,000 in assets, excluding principal residence, insurance and pension policies; and

- 3) retail clients who receive an investment advisory or investment management service from an authorized person.

Equity crowdfunding platforms may offer investors equities and debt securities, transferable and non-transferable. However, the FSMA restricts the offer of 'non-readily realizable securities' (NRRS), i.e. shares or debt securities not listed on the stock markets but carrying significant risks, only to retail investor certified as sophisticated investors, high net worth investors, and advised investors. Shares in private limited companies cannot be offered to the public (Section 755 of the Companies Act 2006). UK platforms may offer transferable securities across the European Economic Area (EU passport status). Despite the FSMA requires that a prospectus gets published when transferable securities are offered to the public, crowdfunding offers of less than €5 million in a period of 12 months are exempted from such publication. In order to operate, lending-based platforms must have a minimum capital of £50,000 and expose transparent, clear and not misleading information about the offered interest rates. Moreover, all risk warnings shall be clearly identified to ensure an appropriate level of customers' protection.

Regulatory regime for lending-based platforms only apply to loans where either:

- the borrower is an individual;
- the loan is GBP 25,000 or less; or
- the individual is not borrowing for business reasons.

The UK securities regulation does not apply to donation- and reward-based crowdfunding as they do not offer equity stakes or return. Since 2017 the FCA also regulates payment services provided in connection with donation and reward. The UK Crowdfunding Association (UKCFA), set up as a self-regulatory trade body by several UK crowdfunding businesses, published its own code of practice.

## *France*

Until 2014, in France there was no specific definition or legal status for crowdfunding, whose activity was allowed within the general discipline. For a long time, French platforms have been forced to adopt the status of Investment services providers (PSI) other than asset management companies, generally adopted by investment companies and credit institutions defined in Article L.531-1 of the Monetary and Financial Code (Code Monétaire et Financier). On February 14, 2014, the ministry of economic affairs and finance announced measures to facilitate crowdfunding that have become effective since September 2014<sup>4</sup>. In order to make rules regarding crowdfunding more flexible, in 2016 the French regulation has been revised with the entry into force of the Law no. 2015-990 dated 6 August 2015, known as '*Loi Macron*', by which has been given to the web-users the opportunity to invest in projects via new instruments i.e. preference shares with voting rights (ordinary shares only previously), convertible bonds (straight bonds only previously), and the minibonds.

French regulation, supervised by the Authority of Financial Markets (AMF-Autorité des Marchés Financiers) and the National Financial Services Regulator (ACPR-Autorité de Contrôle Prudentiel et de Résolution), has created two specific statuses for the Crowdfunding platforms, both subject to anti-money laundering and anti-terrorism regulations:

1. *Intermédiaire en Financement Participatif (IFP)*. Issuers offering straight loans either interest free or generating interest through crowdfunding platforms must be accredited as Investment Intermediary. Since 1 December 2016, portals offering funds in the form of donations (with or without rewards) have to be accredited as IFP. Platforms registered as IFP are regulated by the ACPR and they must have a minimum capital equal to €40,000;

---

<sup>4</sup> The 'Ordonnance n. 2014-559 du 30 mai 2014 relative au financement participatif' provided the basis for a regulatory framework applicable to crowdfunding to ensure its development according to secure legal conditions and to protect investors and borrowers. The new legal and regulatory framework came into force on 1 October 2014.

2. *Conseiller en Investissement Participatif (CIP)*. Issuers conducting a securities offering (shares or debt instruments) through crowdfunding platforms must be accredited as advisor in participative investments. They can also opt for the status of Investment Services Provider (*PSI-Prestataire de Services d'Investissement*). Platforms registered as CIP are regulated by the AMF and are subject to different obligations. Those registered as PSI, on the other hand, are subject to the joint supervision of both the ACPR and the AMF and they must have a share capital of € 50,000 if the platform does not hold securities or customer funds and € 125,000 if it holds.

For both CIPs' and PSIs' status, the total offering amount may not exceed, for the same issuer, € 2.5 million per year (€ 1 million previously). Law has additionally established that in order to qualify as an IFP, CIP or PSI, a platform shall be registered in the '*Registre Unique des Intermédiaires en Assurance, Banque et Finance*' managed by ORIAS<sup>5</sup> and subscribe a professional liability insurance policy (this being mandatory as from 1 July 2016). They shall also comply with good conduct and organization rules and ensure that their clients' interests are protected and that they receive the adequate level of information to appreciate the risks associated with their investment. Platforms that respect the obligations mentioned above can use the label of '*Plateforme de Crowdfunding Régulée par les Autorités Françaises*' showing that they have been approved by the French authorities<sup>6</sup>. Concerning the prospectus exemptions<sup>7</sup>, the offering of equity and debt instruments on crowdfunding websites is not considered as a public offering (subject to a prospectus) and that's why the issuance derogates from the obligation to produce a prospectus when the project is raising less than € 2.5 million,

---

<sup>5</sup> ORIAS is a French association in charge of a single register of insurance, banking and finance intermediaries.

<sup>6</sup> The use of this collective label is reserved for legal entities meeting the following regulatory requirements: registration on the French register of insurance, banking and finance intermediaries (ORIAS), as a crowdfunding investment advisor (CIP) or a crowdfunding intermediary (IFP); authorization by the ACPR to provide an investment advisory service as an investment services provider (PSI) and offer financial securities offers through a progressive-access website that meets the characteristics set out in Article 325-32 of the General Regulation of the Autorité des Marchés Financiers.

<sup>7</sup> See the '*Prospectus Directive*' 2010/73/EU on the prospectus to be drawn up, approved and published when securities are offered to the public or admitted to trading on a regulated market.

since 30 October 2016 (€ 1 million previously), calculated over a period of 12 months. Beyond this threshold, the obligation to draw up a prospectus for a securities issuer is mandatory. Concerning to investors, no limit per project and per year is established by the law. However, in lending-based crowdfunding lenders can invest up to € 2,000 (€ 1,000 previously) per project and per year, when interest is charged on the loan and, up to € 5,000 (€ 4,000 previously) per project and per year, when interest is no charged on the loan. For IFPs' platforms offering straight loans the total offering amount may not exceed € 1 million per project, and lenders can invest up to € 2,000 (€ 1,000 previously) per project and per year, when interest are charged on the loan and, up to € 5,000 (€ 4,000 previously) per project and per year, when interest are no charged on the loan. Platforms with the PSI status are empowered to offer the investment services for which they are licensed for across the European Economic Area (EU passport status). Foreign platforms which operate under the equity or lending crowdfunding model have to be registered in France as CIP, PSI or IFP and have to abide by French regulation. Equity crowdfunding platforms may offer in France securities of non-French companies, under certain conditions. Since 1 December 2016, donation- and reward-based platforms are subject to IFP status.

### *Italy*

Italy gave a very strong signal to its fellow European Member States, being the first country to regulate equity crowdfunding in Europe by the Decree Law 179 of 18 October 2012 (so called Decreto Crescita 2.0) on 'Further urgent measures for Italy's economic growth', converted into Law 221 of 17 December 2012. The long path of regulation development ended with the entry into force, on 3 January 2018, of the Legislative Decree n.129 dated 3 August 2017, implementing the Directive 2014/65/UE (MiFID II) which has further amended the existing rules of the Italian Consolidated Financial Act (TUF, Testo Unico della Finanze) on the risk capital fundraising through online portals. Under the current Italian law, the fund raising through equity crowdfunding platforms is available for:

- all SMEs, regardless of their innovative nature<sup>8</sup>, including those established in the form of limited liability companies (in derogation from Article 2468 of the Italian Civil Code)<sup>9</sup>;
- Collective Investment Undertakings (CIUs) and investment companies that mainly invest in SMEs.

According to Article 50 quinquies (sub-paragraph 2) of TUF, the management of equity crowdfunding portals can be carried out by two types of subjects:

1. 'ipso iure' managers: entities authorized to provide investment services and subject to MiFID rules, such as 'investment firms, EU investment companies, companies of non-EU countries other than banks authorized in Italy, the managers referred to in article 1 (sub-paragraph 1, letter q-bis) of the TUF<sup>10</sup>, for just the offer of stakes or shares of UCI that invest mainly in small and medium-sized businesses and banks, authorized to the relative investment services'<sup>11</sup>;
2. other legal entities authorized ad hoc by the Italian financial markets regulator (CONSOB, Commissione Nazionale per le Società e per la Borsa) and subject to MiFID rules only in so far as they are required to transmit investors' orders for the subscription, buying and selling of financial instruments representative of capital exclusively to professional brokers (such as banks, investment firms, EU

---

<sup>8</sup> As defined in Article 2 (point 1) of Regulation (EU) n. 2017/1129 dated 14 June 2017, 'Small and Medium-Sized enterprises' or 'SMEs' are (i) companies, which, according to their last annual or consolidated accounts, meet at least two of the following three criteria: an average number of employees during the financial year of less than 250, a total balance sheet not exceeding €43 million and an annual net turnover not exceeding € 50 million; (ii) small and medium-sized enterprises as defined in point (13) of Article 4(1) of Directive 2014/65/EU i.e. the companies that had an average market capitalization of less than EUR 200 million on the basis of end-year quotes for the previous three calendar years.

<sup>9</sup> At first, the Decree Law 179 restricted the public offer of equity participations through online portals solely to the 'Innovative start-ups', as defined in Article 25 of the same Decree Law. With the so called 'Investment Compact Decree' n. 3 of January 24, 2015, the use of equity crowdfunding was extended also to the 'Innovative SMEs.' And then, to all SMEs, through the Law n.232/2016, and also to SMEs established in the form of limited liability companies, with the Decree Law n. 50/2017 (Article 57, sub-paragraph 1).

<sup>10</sup> Asset management company, SICAV or SICAF which directly manages its own capital, an EU management company, an EU AIFM, a non-EU AIFM, and a EuSEF manager.

<sup>11</sup> Until 2017, only 'banks and others investment undertaking already authorized to provide investment services' were listed among the authorized entities. With the Decree Law n. 50 of 24 April 2017, in force from January 2018, the category has been significantly extended to all the subjects mentioned above.

investment companies and Companies of non-EU countries other than banks) for the execution thereof.

Therefore, as stated by Article 100-ter (sub-paragraph 2-bis) of TUF, 'ipso iure' managers, as 'intermediaries qualified for the provision of one or more of the investment services provided for in article 1, paragraph 5, letters a), b), c), c-bis and e)<sup>12</sup>, are the only ones that can subscribe and sell investments shares representing the capital of SMEs and of social enterprises incorporated in the form of companies with limited liability, for their own account and on behalf of third parties that have taken up the offer of financial instruments via online portals. On the contrary, managers in the second category may not in any case hold sums of money or financial instruments pertaining to third parties (sub-paragraph 4, Article 50-quinquies). They must, therefore, transmit the subscription orders to the authorized entities in order to make them effective, collecting - in general, seven days after the dispatch of the participations purchase order, i.e. at the end of the period linked to the revocation right - the corresponding amounts in a tied account destined to the issuer held by the authorized entities that receive and complete the orders<sup>13</sup>. In Italy equity crowdfunding is accessible only for financial instruments issued by 'small and medium-sized businesses, social enterprises and mutual investment bodies or other joint stock companies that invest mainly in small and medium-sized businesses' (Art. 100-ter, sub-paragraph 1). At least 5% of the financial instruments offered shall be subscribed (i) by professional investors; (ii) banking foundations; (iii) innovative start-ups incubators; (iv) investors in support of small and medium-sized enterprises that fulfil certain requirements. The rules on solicitation of public savings laid down in Part IV, Title II, Chapter I, of the TUF do not apply to above mentioned public offers of financial instruments, as long as the overall amount of the offer is lower than €5.000.000 per year, as established by CONSOB<sup>14</sup> pursuant to article 100, sub-paragraph 1, letter c). In this

---

<sup>12</sup> Investment services above are: (i) dealing for own account, (ii) execution of orders for clients, (iii) underwriting and/or placement based on an irrevocable commitment towards the issuer, and (iv) placement without irrevocable commitment to issuers.

<sup>13</sup> See Article 25 of CONSOB Regulation.

<sup>14</sup> See Section 34-ter, sub-section 1 c), of CONSOB resolution 14th May 1999, no. 11971 (the 'Issuers Regulation'), as amended.



case the obligation to publish a prospectus shall not apply. All portals' managers, other than banks and financial intermediaries, have to register with the ordinary section of the Register of the portals' managers, published on the CONSOB website. In order to be enrolled on the CONSOB register these portals' managers must meet a set of capital and disclosure requirements (see Article 50 quinquies, sub-paragraph 2 of TUF). Unlike portals' managers enrolled in the ordinary section, the 'ipso iure' managers, being already authorized to carry out investment services, are enrolled in a special section of the Register of the portals' managers and they only need to inform CONSOB of their intention to start managing an online portal. As said above, MiFID conduct rules apply only to 'ipso iure' managers. Thus, CONSOB authority sets forth ad hoc rules that the other types of portals' managers must respect in their relations with investors, contemplating a simplified system for professional investors and monitors compliance with those rules. Equity crowdfunding regulation in Italy makes distinction between Professional Investors, as defined in point (j) of Article 2, and Retail Investors, providing for the latter a different protection regime, which depends on the amount they wish to invest.

There are no limits for investors, but in order to reduce the intermediaries' obligations, whilst ensuring an adequate level of investors protection, an exemption from MiFID rules is provided for investments 'below threshold' i.e. single investment less than €500 (natural persons) or €5.000 (legal entities) and overall investments during a year less than €1.000 (natural persons) or €10.000 (legal entities). Despite being duly authorized by CONSOB, Italian equity crowdfunding platforms cannot directly carry out their activity in other European countries. Such activity, in fact, are not subjected to the principle of mutual recognition (stemming for Regulation (EC) n. 764/2008), defining rights and obligations for public authorities and enterprises that wish to market their products in another EU country by ensuring that any product lawfully sold in one EU country can be sold in another. Foreign equity Crowdfunding platforms, instead, can directly operate in the Italian market with the prior obtainment of the relevant authorization by CONSOB. Moreover, foreign platforms which hold a MIFID EU license no need to obtain such CONSOB license, since they may perform their activity in Italy through (i) the setting up a local branch office, according to the right of freedom of establishment, or (ii) directly without any establishment of a local branch office, in accordance with the right of

freedom to provide services, or (iii) through an agent established in the Member State in which platforms wish to operate. Donation and reward based crowdfunding do not fall under the scope of the Italian financial services regulation. As consequence, platforms don't need to be licensed and are not monitored by the CONSOB Authority. Lending based crowdfunding (P2P and P2B) has been, instead, recently recognized in Italy through the Bank of Italy resolution n.584, published on 9 November 2016 and come into force the 1 January 2017, laying down provisions concerning Savings Collection by non-Banks. In particular, in Section IX of the resolution the lending based crowdfunding are defined as 'social lending' i.e. an instrument through which a plurality of subjects can request to a plurality of potential lenders, through online platforms, repayable funds (bearing interests) for personal or business use. Lending activity is allowed in compliance with the rules regulating the activities reserved to special categories of subjects, which include, for example and without limitation, banking activity, credit brokerage, payment services and savings collection. Platforms that want to carry out the lending activity have to apply for the Payment Service Provider (PSP) or Electronic Money Issuer (EMI) license granted by the Bank of Italy or ask to passport the license granted by another European supervisory authority in the relevant home member state. The Provisions do not set out a specific limit to the maximum amount that can be invested and raised through online platforms managed by non-bank managers. According to market practice, to date an indicative threshold is from €50.000 up to €100.000 of investments per project and from €15.000 up to €300.000 of raising per project. No quantitative limits to raising capital through online platforms are set out for Banks. Lending platforms which are allowed by Bank of Italy to act as Payment Service Provider (PSP), Electronic Money Issuer (EMI) or financial intermediaries can provide payment services in any other European Member State, through (i) the setting up a local branch office, according to the right of freedom of establishment, or (ii) directly without any establishment of a local branch office, in accordance with the right of freedom to provide services, or (iii) through an agent established in the Member State in which platforms wish to provide payment services. In the same way, foreign PSPs and EMIs, authorized in a European State Member, can provide payment services in Italy, without the need to obtain further authorization. Due to the PSD2 implementation, in the last year many lending platforms from other European countries established their local platforms in the Italian market.

## *Spain*

In Spain, the Law 5/2015, of 27 April, on the Promotion of Corporate Financing, also called 'LFFE' (Ley de Fomento de la Financiación Empresarial), provides a regulation for equity and lending crowdfunding investment through the participatory financing platforms (Plataformas de Financiación Participativa, or PFP)<sup>15</sup> - a new category of intermediary in the financial market. Donation and reward based crowdfunding is not being regulated in Spain. In this kind of crowdfunding the general laws affecting to the VAT or tax allowance apply. The LFFE law also introduces new developments in securitization and important changes to the bond issuance mechanism. The Spanish regulation, which took effect on April 29, 2015, the day following its publication in the Spanish Official Gazette (*BOE- Boletín Oficial del Estado*), arrives in Europe after the Italian one (2013), the French one (2014) and the guidelines of the English FCA. According to the article 46, participatory crowdfunding platforms are those authorized companies whose activity is to bring investors (individuals or legal entities who provide funding in exchange for a monetary compensation) into contact with promoters (natural or legal persons who request financing on their own behalf to allocate it to a participatory financing project), in a professional manner and through websites or other electronic means. This rule shall not apply for platforms seeking funding for promoters through donations, sale of goods and services and interest free loans. The participatory crowdfunding platforms may offer different instruments (such as bonds, ordinary and preferential shares or other securities) and provide a range of ancillary services (such as the projects analysis to determine the level of risk for investors and advisory services to promoters). Collective financing platforms are under the authorization and registration of the CNMV, the Spanish securities market regulator, with the participation of the Bank of Spain in the case of lending-based crowdfunding (art.53). The special CNMV register is regularly published on the CNMV's website and must contain the updated data of the corporate name, Internet domain address and registered office of the platform, as well as the identity of the administrators and a list of the partners with significant participation (art.54). Companies have to fulfil certain administrative and

---

<sup>15</sup> The draft law was developed at the end of February 2014, as part of the bill to promote SMEs funding, in order to respond to Spanish companies' traditional dependence on bank financing.

financial requirements to be allowed to operate as crowdfunding platforms (articles 55 and 56). Projects may be proposed by natural or legal persons with tax residence or validly constituted in Spain or in another Member State of the European Union and (art.67), and the amount of funding that can be raised per project through each platform may not exceed € 2 million per year, with the possibility of carry out successive rounds of financing that do not exceed the aforementioned amount in annual calculation. Funding amount increase up to €5 million when projects are targeted only to accredited investors. In addition, promoters cannot have more than one project published simultaneously on one platform (art. 68). Taking as example the US and UK legislations, Spain makes a distinction between accredited (or professional) investors and non-accredited ones (i.e. retail investors). Accredited investors are not subject to any specific investment limits but are exposed to greater risks and enjoys lesser protection. Non accredited investors cannot invest or commit to invest over €3.000 in the same project managed by the same platform or more than €10.000 over a period of twelve months in projects published by the same platform (art.82). Spanish law applies to platforms, as well as to promoters and investors, operating within Spanish territory including those who are abroad but are offering products specifically to residents in Spain, or whose purpose is to advertise, promote themselves or otherwise attract customers in Spain (art.47).

### **Challenges and risks of fragmentation**

Crowdfunding industry has expanded over the past decade and its growth in Europe is predicted to be extremely strong in the coming years, notably in equity-and lending-based forms (European Commission, 2017a). The divergence of regulatory approaches to crowdfunding among European countries pose significant risks to the growth of the European crowdfunding market that, compared to other major world economies, is currently underdeveloped. A recent survey indicates that for the 40% of the European crowdfunding platforms, the risks associated with regulatory changes at both local and European levels are widely perceived as the greatest concern (Ziegler et al., 2018). Moreover, evidence suggests that cross-border transactions still represent a relatively modest share of overall volumes and this may be partly attributed to differences in national regulation which increases transaction costs and hinders crowdfunding service

providers' ability to scale their offering at EU level. Even if there is still no unified regulation at European level (Boitan, 2016), policymakers and regulators in different countries are currently working hard to promote the use of crowdfunding by enacting new or revising existing regulatory frameworks. However, provide a harmonised regulation for crowdfunding, tailored to its characteristics and risks, in order to create a European Single Market poses a number of challenges, including:

1. emergence of a streamlined and sound regulatory regime enabling and not stifling the crowdfunding market;
2. adoption of a sympathetic tax system encouraging investors and firms;
3. removal of cultural barriers concerning the approach to SMEs finance and investors' mentality which are still firmly entrenched in many European countries;
4. identification of linkages with other important policy objectives such as the building of a Capital Markets Union (CMU).

Recognizing the need to establish a harmonised regulatory regime for crowdfunding, on 8 March 2018, the European Commission published a proposal for a Regulation on European Crowdfunding Service Providers (ECSP)<sup>16</sup> as well as a proposal to amend MiFID II to exclude ECSPs from its obligations<sup>17</sup> (European Commission, 2018b and 2018c). The proposals are part of the European Capital Markets Union initiative and the Commission's FinTech Action Plan.

Key initiatives of the proposed ECSP Regulation include:

1. the possibility for crowdfunding platforms to apply for the 'European Crowdfunding Service Providers' (ECSP) label which would allow them to passport their services across Europe according to a single set of rules under the authorization and ongoing supervision by ESMA;
2. all payments for crowdfunding transactions should take place through entities authorized under the Payment Services Directive;

---

<sup>16</sup> This new proposal only applies to those crowdfunding services entailing a financial return for investors (such as investment and lending based crowdfunding).

<sup>17</sup> Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU.

3. greater protection for European investors through clearer rules on information disclosures, an entry knowledge test and a simulation of the ability to bear the loss;
4. stronger supervisory powers by ESMA on crowdfunding service providers and the enforcement of sanctions and administrative fines.

With the introduction of the ECSP passport the current national frameworks will not be repealed. However, crowdfunding platforms which wish to provide services in more than one EU Member State will have to comply with only the proposed ECSP Regulation. In this way, platforms would only be authorized once without the need to ask the national approval from time to time. This would determine a reduction of market entry costs (regulatory and supervisory costs) for crowdfunding platforms and, at the same time, would minimize risks of regulatory arbitrage by ensuring a solid investor protection. The proposed Regulation, still awaiting formal adoption by the European Parliament and the Council, clearly showed the intention to create a European 'Single Market' for crowdfunding where the connections between investors and businesses in need of funding can easily occur, both national and trans-European level. A further proposal comes from the European Parliament's Committee on Economic and Monetary Affairs (European Parliament, 2018). The proposal foresees the opportunity to regulate token sales by creating new regulations for public initial coin offerings (ICOs). According to a document published on 10 August, crowdfunding service providers 'should be permitted to raise capital through their platforms using certain cryptocurrencies.' Supported by a single regulation this proposal should facilitate access to finance through crowdfunding and provide investors for more cybersecurity and legal protection from risks of fraud.

## **Conclusions**

Crowdfunding is a burgeoning market (more than €7 billion reached in 2017) requiring increasingly regulatory attention. There is currently no a single regulation aimed at crowdfunding at European level yet, and the regulatory fragmentation is one of the biggest obstacles to achieving a more aligned Pan-European crowdfunding market. This chapter discusses recent reforms in national regulation concerns improvements to the quality of crowdfunding regulation. While this study requires further thinking, it

contributes to the ongoing regulatory debate on how to remove obstacles and design an appropriate framework for the development of a single crowdfunding market in Europe. This simple theoretical framework generates key policy implications by recognizing the need, challenges, and risks due to the lack of regulatory harmonisation of crowdfunding. A central implication is that, even though the different national regimes may promote and stimulate crowdfunding market locally, these are not necessarily compatible with each other within a transnational context. European policymakers and regulators, with the support of the properly tailored national regulations, should design a single framework which reaches across and beyond the borders of the European Union with the objective of harnessing the great potential of crowdfunding-driven innovations. In particular, it will be necessary to strike a balance between the national potentially conflicting objectives, and identify the aspects that should be avoided and the lessons that should be learned from each European countries. Only in this way will it be possible to establish an innovation-promoting regulatory regime opening new economic opportunities for Europe and generating real impact in terms of new business creation. The work done by policymakers is thus of the highest importance to strengthen the growth of alternative sources of funding - including crowdfunding - and to ensure their access to all Europe's companies, notably start-ups and SMEs. Crowdfunding regulatory landscape is changing rapidly and further research could assess the impact of the harmonisation process on crowdfunding market and its implications from the perspective of investor protection at European level. One conclusion that emerges in response to the recent proposal of the European Commission is that regulatory harmonisation constitutes the basis for a solid, sustainable and inclusive growth of crowdfunding, and of FinTech in general.

## **Chapter 3**

### **Do tax incentives promote crowdfunding investment in Europe?<sup>18</sup>**

Many European countries offer tax incentive schemes to investors and companies in crowdfunding. On one hand, they could be seen as a tool to reduce the system's dependence on banks and increase the availability of credit for start-ups and Small and Medium Enterprises (SMEs). On the other hand, there is the counterweight of disadvantages that investors may face by investing in crowdfunding (i.e. complex and incomplete laws, and weak protection).

The existing literature on crowdfunding does not take into account the effectiveness of such schemes in stimulating this type of investment. This chapter aims to fill this gap, by deeply analysing the different tax incentive schemes in force in the United Kingdom, France, Italy, Spain and Belgium, and by making a comparison amongst them. Although all the investigated countries promote crowdfunding investment by offering tax incentives, the following study finds evidence that the schemes in force could have a greater positive impact on the crowdfunding campaigns' success, by better evaluating the peculiarities related to potential crowdfunding investors and firms that might take advantage of them: the more tax incentive schemes are properly designed and tailored for crowdfunders, the more investors, start-ups and other firms with low liquidity could use crowdfunding as source of funding.

---

<sup>18</sup> Co-authored by Battaglia, F. Dipartimento di Studi Aziendali e Quantitativi, Università degli Studi di Napoli Parthenope, Naples, Italy



## Introduction

The effectiveness of tax incentive schemes in promoting domestic and foreign investment for both developed and developing countries is widely recognised by the existing literature (Cary Brown, 1962; Jorgenson, 1963; Bondolino and Greenbaum, 2007; Klemm, 2010).

According to research commissioned by the UK Government (HM Revenue and Customs Research Report, 2016), for more than 79% of investors the availability of the income tax relief is crucial in their decision to invest into small and high-risk businesses. Moreover, in 2016 among UK higher rate taxpayers (i.e. investors that have more than £40,000 of investments and, pay an income tax four times higher than the national average), IW Capital's Taxpayer Sentiment Report stated the majority (54%) claimed to be willing to invest through the Enterprise Investment Scheme (EIS), which is also used for crowdfunding investment.

Over the past decade, crowdfunding (notably in the equity model) has established itself as a new player in the entrepreneurial finance market and its role in the seed and early-stage financing of entrepreneurial projects has grown rapidly (Schwienbacher and Larralde, 2012; Wilson and Testoni, 2014; Bruton et al., 2015).

According to the 3rd annual European Alternative Finance Industry Report (Ziegler et al., 2018), the European market has grown by 41% in 2016, reaching €7.7 billion and doubling its volumes from 2015<sup>19</sup>. The United Kingdom still remains the largest online alternative finance market, with a market volume in Europe of €5.6 billion, followed by France (€443.98 million), Germany (€321.84 million) the Netherlands (€194.19 million), Finland (€142.23million), Spain (€130.90million), Italy (€127.06million) and Georgia (€102.58million).

Given the importance of young and innovative entrepreneurial firms for the overall economic system (Megginson 2004), many countries around the world have implemented tax incentives schemes in order to promote crowdfunding investment.

At my knowledge, there are no papers investigating the link between tax incentives schemes and crowdfunding investment. This study aims to fill this gap, by giving a primer on the use of tax incentives in fostering investment oriented towards the

---

<sup>19</sup>The report is based on 344 crowdfunding, P2P lending and other alternative finance platforms across 45 European countries.

four main types of crowdfunding (i.e. donation-based, reward-based, lending, and equity), by answering to the following research question: Do tax incentives improve crowdfunding investment in European countries?

Though many European countries have permitted crowdfunding platforms to operate, only some of them have set up specific tax incentives to increase investment through crowdfunding platforms. Therefore, this analysis focuses on UK, France, Italy, Spain and Belgium, because they are currently the only countries adopting ad hoc tax incentives in order to improve crowdfunding activity in Europe.

The remainder of the chapter is organized as follows. Section 2 reviews the relevant literature and develop the research hypothesis. Section 3 analyses the typology of tax incentives which can be used and how they affect tax burdens. Section 4 describes tax incentive schemes in force in the analysed countries, by making a comparison among them. Section 5 concludes.

### **Related review and research hypothesis**

The existing literature on crowdfunding focuses on three streams of studies (for detailed literature review see Kuppuswamy and Bayus, 2015; Bouncken et al., 2015; Moritz and Block, 2016; Short et al., 2017). The first one deals with crowdfunding regulation, and analyses on one side the legal provisions required to implement crowdfunding and to increase access to capital for start-ups and SMEs (Klöhn and Hornuf, 2012; Hornuf and Schwienbacher, 2017), and on the other side, the legal implication and risks caused by the rapid growth of crowdfunding (Hazen, 2012; Fink, 2012; Cumming and Johan, 2013; Stemler, 2013; Wroldsen, 2013). The second stream of literature focuses on the companies and investors' motivations for using crowdfunding (Ordanini et al., 2011; Hemer et al., 2011; Belleflamme et al., 2010, 2013, 2014; Gerber et al., 2012; Hienert and Riar, 2013; Burtch et al., 2014; Lin et al., 2014; Mollick and Kuppuswamy, 2014; Hu et al., 2015; Macht and Weatherston, 2014; Allison et al., 2015; Cholakova and Clarysse, 2015; Hornuf and Schwienbacher, 2018). Authors conclude that both investors and companies are not just driven by the financial motive (i.e. the lack of liquidity, for businesses, and the financial return on investment, for investors), but also by non-financial motivations. In particular, from crowdfunding investors expect more

than the economic return on their investment: social reputation growth, self-affirmation, fun, and the possibility of support companies or projects in which they believe and identify with, are all strong motivations that investors try to satisfy by investing in crowdfunding (Ordanini et al., 2011; Hemer et al., 2011; Gerber et al., 2012; Lin et al., 2014; Allison et al., 2015; Cholakova and Clarysse, 2015; Hornuf and Schwienbacher, 2015; Hornuf and Schwienbacher, 2018).

By using crowdfunding, companies can not only fill the equity gap (notably in the early stage), but also benefit from better access to customers and outside funders (i.e. business angels and venture capital), develop strong relationship networks, and obtain feedback for their products or services. In addition, companies can adopt crowdfunding to increase visibility and public attention and exploit the speed and flexibility of the online funding process (Belleflamme et al., 2010, 2013, 2014; Hemer et al., 2011; Gerber et al., 2012; Burtch et al., 2014; Mollick and Kuppusswamy, 2014; Hu et al., 2015; Hienert and Riar, 2013; Macht and Weatherston, 2014). The third and most extensive stream of literature analyses the determinants of campaigns success (Ordanini et al., 2011; Belleflamme et al., 2013; Mollick, 2014; Ahlers et al., 2015; Colombo et al., 2015; Cordova et al., 2015; Hornuf and Schwienbacher, 2015; Koch and Siering, 2015; Kromidha and Robson, 2016; Kunz et al., 2016; Ralcheva and Roosenboom, 2016; Signori and Vismara, 2016; Vulkan et al., 2016; Angerer et al., 2017; Vismara, 2016, 2018; Vismara et al. 2016; Block et al., 2018; Günther et al., 2018; Polzin et al., 2018). In particular, several of these studies focus on the properties of the offer and its funding dynamics, such as the fundraising goal, the campaign duration, the retained equity, the number of investors, the presence of voting rights or tax incentive schemes, the composition and experience of the top management team, and so on (Belleflamme et al., 2013; Mollick, 2014; Ahlers et al., 2015; Ralcheva and Roosenboom, 2016; Signori and Vismara, 2016; Vulkan et al., 2016; Vismara, 2016; Vismara et al. 2016). Other empirical studies find that a crowdfunding campaigns' success is positively related to the great flow of information that companies provide to investors through video, images, comments, and updates (Colombo et al., 2015; Cordova et al., 2015; Koch and

Siering, 2015; Kunz et al., 2016; Vismara et al. 2016; Angerer et al., 2017; Vismara, 2018; Block et al., 2018).

A number of studies investigate whether the geographical distance of firms and investors affect the funding success of campaigns by reporting the presence of home bias for investors (Lin and Viswanathan, 2015; Hornuf and Schmitt, 2016). In crowdfunding context, investors are more responsive to the distance and prefer to invest in geographically close firms (Burtch et al., 2014; Mollick, 2014; Ahlers et al., 2015; Ralcheva and Roosenboom, 2016; Günther et al., 2018). The recent literature focuses mainly on the role played by investors' and proponents' social networks in increasing the fundraising success probability and in reducing the information asymmetry (Ordanini et al., 2011; Mollik, 2014; Colombo et al., 2015; Kromidha and Robson, 2016; Vismara, 2016; Angerer et al., 2017; Polzin et al., 2018). Currently, there are no papers, analysing the success factors of crowdfunding campaigns, dealing with the effect of tax incentives on crowdfunding investment.

In a very recent study, Estrin et al. (2018), following the 'Gioia Methodology' (Gioia et al., 2012), find that on the investors' side, tax breaks represent one of the 'first-order' reasons for investing in equity crowdfunding. By analysing the determinants of funding success in a sample of projects listed on the UK equity platforms, some authors include in the control variable sets the United Kingdom Investment Schemes (i.e. SEIS and EIS), which are designed to encourage seed investment in early-stage companies (Vismara 2016, 2018 and 2018a; Vulkan, 2016; Ralcheva and Roosenboom, 2016; Signori e Vismara, 2016 and 2018). However, these studies dealing with the impact of tax incentives on crowdfunding, bring mixed results. In particular, Vismara (2016, 2018 and 2018a) finds that tax incentives are not significant in attracting early investors and do not impact the probability of the offerings being successful, even if they do attract professional investors. On the contrary, Signori and Vismara (2016 and 2018) show that being eligible for tax incentives matter, confirming the success of tax policies designed to stimulate investments in early-stage companies. Indeed, as found by these two scholars, firms that benefit from the tax incentive face not only a higher likelihood of a successful outcome (Signori e Vismara, 2018), but are also more likely to succeed in raising additional capital in follow-on offerings and less likely to fail in a post-campaign scenario (Signori e Vismara, 2016). Finally, Ralcheva and Roosenboom, 2016, observe that

successful campaigns often have tax breaks, but companies that do not offer tax breaks to investors do not experience lower funding success. These studies belong to the stream of literature dealing with the effects (i.e. benefits and risks) of tax incentives on investment in both developed and developing countries (Shah, 1995; Aernoudt, 1999; Christofidis and Debande, 2001; Wells et al., 2001; Easson and Zolt, 2002; Keuschnigg and Nielsen, 2002 and 2004; Lipper and Sommer, 2002; Zee et al., 2002; Cowling et al., 2008; Klemm and Van Parys, 2012; Zelekha and Sharabi, 2012; Brodzka, 2013; Cumming and Li, 2013; Wilson and Silva, 2013; Wilson, 2015; Munongo et al., 2017; Kinda, 2018). In particular, the most recent studies on the topic focus on the role and importance of tax incentives as part of a broader set of policy tools used to encourage forms of entrepreneurial finance such as business angel (Aernoudt, 1999; Lipper and Sommer, 2002) and venture capital (Christofidis and Debande, 2001; Keuschnigg and Nielsen, 2002 and 2004; Cowling et al., 2008; Cumming and Li, 2013). A recent report of the European Commission (2017) states that tax incentives for venture capital and business angels' investment significantly influence investment decisions by reducing the effective marginal cost of investing in smaller companies. According to this, in taking the initial investment decision, an investor should be willing to provide more capital through business angels or venture capital funds which benefit from tax incentives, rather than through those not benefitting for them. Then, the report concludes that targeted and properly-designed tax incentives may help to correct some market imperfections or distortions such as moral hazard and information asymmetry. A growing body of literature discusses the controversial use of tax incentives in developing countries (Brodzka, 2013; Munongo et al., 2017). In particular, while some authors emphasize the positive impact of tax incentives in attracting Foreign Direct Investment (FDI) and strengthening the competitive position of developing countries (Shah, 1995; OECD, 2001; Zee et al., 2002; Klemm and Van Parys, 2012), others authors stress the risks and costs related to them (Wells et al., 2001; Easson and Zolt, 2002; Zee et al., 2002; Zelekha and Sharabi, 2012; Kinda, 2018). For instance, Easson and Zolt (2002) argue that tax incentives are the source of two kinds of revenue losses. First, tax incentives discourage other investments in favor of the incentive-receiving projects. Second, tax incentives give businesses the opportunity to shift income from taxable activities to those that fall under tax incentives by improperly claiming the incentives and thereby avoiding tax. Moreover,

authors find that tax incentives encourage the governments' corruption by giving the authorities discretionary power to determine which projects qualify for incentives and which do not. Recent evidence on 30 African countries suggests that these countries should avoid using costly tax incentives and pay more attention to the infrastructure, finance, institutions, and human capital, which are the key aspects of their economy's investment climate (Kinda, 2018).

Despite many theoretical and empirical studies, which analyse the impact of tax incentives on investment, none of them focus on the crowdfunding investments. This study aims to extend the existing literature on factors affecting success of crowdfunding campaigns, by giving a primer on the use of tax incentives in fostering investment oriented towards crowdfunding in Europe. Consistent with the previous literature review and its findings, it aims to investigate the effectiveness of tax incentives on increasing investment within crowdfunding, by answering the following question: Do tax incentives improve crowdfunding investment?

More specifically, the different tax incentive schemes in force in the UK, France, Italy, Spain, and Belgium are considered in detail on the following pages, in order to understand their role in stimulating crowdfunding development.

### **Typology of Tax Incentives**

Tax incentives can be defined as special tax provisions drawn up by governments to provide a more favorable tax treatment to certain activities, investment projects, or taxpayers, compared to the provisions applicable in general (i.e. those that do not receive a special tax provision) (Klemm, 2010). These special provisions can take multiple forms and typically offer investors some combination of tax deductions through investment allowances or tax credits, temporary exemptions on corporate taxes (tax holidays), reduction of capital gains taxes for investors in start-ups, preferential rates, relief on income generated over the life of the investment, relief on gains realised upon disposal of the investment, provisions for carry forward of capital gains or losses, and so on. How these incentives work and the reasons for their use vary considerably from country to country. The most common tax incentives are the following:

- 1) tax holidays are directed to new firms or investments and allow for a temporary exemption from certain specified taxes, typically income tax, which may be total or partial (i.e. with a rate that is below the regular rate for qualified investment projects). They may be granted to particular activities or to particular taxpayers. Of all the different forms of tax incentives available, tax holidays are most popular among developing and transitioning countries, but rarely found in developed countries;
- 2) investment allowances are a form of tax relief on the basis of which a specified percentage of the initial costs on qualifying investments can be deducted from taxable income, in addition to the normal allowable depreciation on the full costs of such investments. Investment allowances aim to encourage capital investment, and they differ from investment tax credits which allows taxpayers to deduct investment costs directly from their tax liability;
- 3) investment tax credits are a form of tax relief structured to encourage economic growth by allowing investors to reduce the amount of taxes to be paid. In particular, investors may deduct a certain fraction of investment costs directly from their tax liability, in the current fiscal year or in a later year (tax carryforward). Being equivalent forms of tax incentives, investment tax credits and investment allowances share the same advantages;
- 4) reduced tax rates provide a reduction of the ordinary rates of tax charged under various tax laws for qualified investment projects, qualified investors, and certain types of firms such as start-ups and SMEs. Reduced tax rates may occur on income, profits, sales, or assets, and they can be a one-time rebate, a reduction in the overall rate, or a tax credit. Unlike tax holidays, the tax liability of firms is not entirely eliminated, but only reduced;
- 5) the Special Economic Zones (SEZs) are limited areas that are subject to unique economic regulations, designated by the trade and commerce administrations of various countries to encourage economic activity and the FDI flows by leveraging tax incentives. In particular, companies that conduct their business in a SEZ typically receive a total or partial tax exemption and the opportunity to pay lower tariffs. The taxation rules are determined by each country and represent a heavily debated argument;

- 6) tax exemptions reduce the amount of the taxable income by relieving the taxpayer of any tax obligation to submit taxes on the tax-exempt transaction or income. Not to be confused with the tax deductions, which reduce (but don't remove) the tax obligation;
- 7) financing incentives are benefits given to customers or companies, to encourage them to do actions (typically invest) they normally wouldn't, by reducing the tax rates applicable to investors.

### **Tax incentives to promote crowdfunding investment**

In recent years, crowdfunding has emerged as an effective funding channel for start-ups and new ventures in addition to traditional channels such as venture capital or angel investors. However, seed and early stage funding are extremely risky and investors have to face the uncertainties that permeates investment projects, often without adequate level of protection. In light of the potential role to be played by crowdfunding in the early stage market, policy makers have drawn up tax incentive schemes to promote investment in crowdfunding. A number of specific schemes already exists in Europe, and many European countries are evaluating their implementation. The following subsections provides a detailed description of the tax incentive schemes in force in the UK, France, Italy, Spain and Belgium (the countries with the best systems of tax incentives in Europe<sup>20</sup>). These are summarised in Table 3.

---

<sup>20</sup> Some tax deductions are available for natural persons who acquire shares in SMEs in Sweden. No specific tax reliefs are providing for crowdfunding in Finland and Netherlands. In Germany tax incentives are very limited and mainly comprise pre-investment and investment allowances for certain start-ups and SMEs. No tax reliefs are available for investments made through crowdfunding platforms. Only with regard to donation crowdfunding, if the entity behind the project is a non-profit organization, donations up to 20% of the annual income can be claimed as tax exempt (donations over 20% can be carried into the next fiscal year).



**Table 3. Overview of tax incentive schemes in force in UK, France, Italy, Spain and Belgium.**

Country	Incentive Scheme	Benefits
	<b><u>Equity Crowdfunding:</u></b>	
	➤ Enterprise Investment Scheme (EIS)	<ul style="list-style-type: none"> <li>➤ deduction from the Income Tax up to 30% of the invested amount if the acquired shares are held at least for 3 years;</li> <li>➤ exemption from the Inheritance Tax, if investor holds the acquired shares at least for 2 years, and from the Capital Gains Tax if investor holds the acquired shares at least for 3 years;</li> <li>➤ deferment up to 50% of the Capital Gains Tax on gains realised on the disposal of any asset, provided that these gains are reinvested in an EIS eligible company;</li> <li>➤ tax relief from investment losses.</li> </ul>
	-----	
UK	➤ Seed Enterprise Investment Scheme (SEIS)	<ul style="list-style-type: none"> <li>➤ income tax relief of 50% on investments up to £100,000 per tax year;</li> <li>➤ relief up to 50% on the Capital Gain Tax, with a maximum of £50,000, for capital gains realised and reinvested through EIS eligible companies in the same tax year;</li> <li>➤ income tax relief up to 80% of the investment if the company fail</li> <li>➤ exemption from the Capital Gains Tax for any gain arising on the disposal of the shares, if these are held at least for 3 years.</li> </ul>
	-----	
	<b><u>Lending Crowdfunding:</u></b>	
	➤ Innovative Finance ISA Scheme (IFISA)	<ul style="list-style-type: none"> <li>➤ tax free interest and capital gains on money lend through FCA-regulated and approved P2P crowdfunding platforms, up to the limit of £20,000 for 2017/18 financial year;</li> <li>➤ lenders can offset the losses they suffer on the unpaid loans against the interest they receive on other P2P loans before the income is taxed.</li> </ul>
	-----	
	<b><u>Donation Crowdfunding:</u></b>	
	➤ Gift Aid Scheme	➤ charities can claim back 25 p for every £1 donated by a UK taxpayer.

---

**Equity Crowdfunding:**

- “Madelin” tax reductions
  - stock Saving Plan (PEA/PEA-PME)
  - The "Niche Copé"
  - deduction from the income tax of 25% Of the amounts invested directly or indirectly (through a holding company) in the capital of unlisted French and European SMEs.
  - tax exemption on dividends and capital gains on French and European SMEs' securities, held for a minimum duration of 5 years.
  - exemption from the Corporate Tax of 88% of capital gains received by natural or legal persons, in the case of sale of their subsidiaries or equity securities held for more than two years.
- 

France

**Lending Crowdfunding:**

- losses allocation system
  - lenders can impute the capital losses on unrepaid loans on interest generated by other loans granted during the same year or in the 5 years following.
- 

**Donation Crowdfunding:**

- deduction from the Income tax of 66% of the donated amount, for natural persons;
  - deduction from the Corporate Tax of 60% of the donated amount, for legal persons;
-

---

**Italy**

**Equity Crowdfunding:**

- deduction from the Income Tax of 30% of the invested amount, for natural persons;
  - credit on the Corporate Tax of 30% of the invested amount, for legal persons.
- 

**Spain**

**Equity Crowdfunding:**

- deduction from the Income Tax of 20% of the amount invested in Spanish companies that are less than three years old;
  - regional income tax relief.
- 

**Donation Crowdfunding:**

- deduction from the Income Tax of 75% of the donated amount, for natural persons;
  - deduction from the Corporate Tax rate of 35% of the donated amount, for legal persons.
- 

**Equity Crowdfunding:**

- Tax shelter for investments in start-ups

- reduction from the Income Tax of 30% of the sum invested in SMEs;
  - reduction from the Income Tax of 45% of the sum invested in micro-enterprises.
- 

**Belgium**

**Lending Crowdfunding:**

- tax exemption on interests produced by loans provided to startups through regulated crowdfunding platforms.
- 

**Donation Crowdfunding:**

- Belgians can recover annually between 40% and 50% of their donation in charity which may not exceed 10% of their total net income.
-

## *The United Kingdom*

The United Kingdom has some of the best tax relief schemes in the world. These schemes help UK SMEs and social enterprises to improve their liquidity and offer investors the opportunity to obtain tax reliefs on buying, and holding for a specific period, new shares, bonds, or assets. Her Majesty's Revenue and Customs (HMRC) provides and monitors on the application of four Tax Reliefs Schemes, also known as tax advantaged venture capital schemes<sup>21</sup> (i.e. EIS, SEIS, SITR and VCT). Crowdfunding through equity offers companies and investors the possibility to claim and keep the EIS and SEIS Tax Schemes<sup>22</sup>, as long as the company in which they have invested respects the scheme rules for at least 3 years after the investment is made. Otherwise, tax reliefs will be withheld or withdrawn from investors. Due to equity investments longer term and higher risk nature, the tax incentives for equity investments are very generous. Peer-to-peer (P2P) lending crowdfunding also give lenders the opportunity to get tax reliefs through the Innovative Finance ISA Scheme (IFISA). Donations made through a crowdfunding platform are generally not tax deductible for donors unless the project has been started by a qualified charity and not an individual, in which case, donors can use the Gift Aid scheme to deduct the invested amount. No tax reliefs are available for reward crowdfunding. A description of the aforementioned tax schemes is given below.

### *Equity crowdfunding tax relief: EIS and SEIS schemes*

The Enterprise Investment Scheme (EIS) was introduced in 1994 to encourage investment into unlisted companies. This scheme allows growth companies to raise up to £5 million each year, with a maximum of £12 million in a company's lifetime (including the amounts received from other venture capital schemes and state aid approved under the risk finance guidelines)<sup>23</sup>.

In order to benefit from an EIS scheme, companies have to fulfil the following characteristics:

---

<sup>21</sup> Government of the United Kingdom (UK Government website). 2017. 'Business Tax: Investment schemes'. HM Revenue & Customs, Available at <https://www.gov.uk/topic/business-tax/investment-schemes>.

<sup>22</sup> SITR and VCT Schemes are available for Social enterprises and VCTs companies, respectively.

<sup>23</sup> Government of the United Kingdom (UK Government website). 2016. 'Use the Enterprise Investment Scheme (EIS) to raise money for your company'. HM Revenue & Customs, Available at <https://www.gov.uk/guidance/venture-capital-schemes-apply-for-the-enterprise-investment-scheme#how-the-scheme-works>.

- 1) company can receive investment under EIS scheme only within the first seven years from its first commercial sale. If a company has any subsidiaries, former subsidiaries, or it has acquired other companies, the date of the first commercial sale of the first company in the group is considered;
- 2) cannot be listed on a stock exchange;
- 3) has to be established in the UK;
- 4) cannot control another company other than qualifying subsidiaries<sup>24</sup>;
- 5) cannot be controlled by another company and more than 50% of its shares cannot be owned by another company;
- 6) company and any qualifying subsidiaries must have less than £15 million of gross assets before any shares are issued and not more than £16 million immediately afterwards;
- 7) company and any qualifying subsidiaries must have fewer than 250 full-time equivalent employees at the time the shares are issued.

The money raised by the new share issue must be used for a qualifying business activity<sup>25</sup> and must be spent within two years of the investment, or if later, the date the company began operations. In addition, the raised money can only be used to grow or develop the company business and cannot be used to buy all or part of another business, in any circumstances.

Knowledge-intensive companies that carry out a significant amount of research, development and innovation can raise more than £12 million in the company's lifetime as long as (i) the raised money is being used to enter a completely new product market or a new geographic market; (ii) the claimed money is at least 50% of the company's average annual revenue for the last five years; (iii) company didn't receive investment (under EIS, SEIS, SITR, VCT or state aid approved under the risk finance guidelines), within seven years of its first commercial sale. The shares for EIS investments must be paid in full with cash, at the time of issue and must be full risk ordinary shares (i.e. not redeemable and without special rights to company assets). In addition, shares can have limited preferential rights to dividends.

---

<sup>24</sup> All companies owned or controlled by the company receiving investment under EIS scheme have to be 'Qualifying subsidiary companies'. This means that company must own more than 50% of the subsidiary's shares and no one other than company or one of its other qualifying subsidiaries can control this qualifying subsidiary company.

<sup>25</sup> Qualifying business activity means an existing qualifying trade or which must start within two years of the investment; a research and development activity that's expected to lead to a qualifying trade.

The shares issuance cannot be accompanied by an arrangement which (i) guarantee the investment or protect the investor from risk; or (ii) allows investors to sell the shares at end or during the investment period; or (iii) leaves investor's benefit from the EIS in a way that's not been intended; or (iv) an arrangement authorising investors to raise money for the purpose of tax avoidance; or (v) a reciprocal agreement in which companies invest back in an investor's company to also gain tax relief.

EIS allows sophisticated investors to deduct up to 30% of the invested amount from their income tax, as long as the acquired shares are held at least for three years. Investors can carry back part of the EIS tax relief to the tax year preceding the investment. However, the deduction is limited to a maximum investment of £1 million for a single person and £2 million for a couple in a tax year and investors will be bound into the scheme for a minimum of three years. EIS is exempt from inheritance tax if investor holds the acquired shares for a minimum of two years, and from capital gains tax if investor holds the acquired shares for a minimum of three years. Investors can defer up to 50% of the capital gains tax on gains realised on the disposal of any asset, provided that these gains are reinvested in an EIS eligible company. Moreover, investors can obtain a tax relief from investment losses when the shares of the EIS company are disposed at a loss, and such losses can be used to offset the investors' capital gains or income tax in the year of disposal or the previous year. Currently there is no minimum investment requirement for EIS investments (until 6 April 2012 a minimum investment of £500 was required).

The Seed Enterprise Investment Scheme (SEIS) was introduced in 2012 to encourage investments in seed-stage companies by offering tax reliefs at a higher rate than those offered by the existing EIS<sup>26</sup>. This scheme provides for:

- 1) a reduction of 50% of the invested amount on the income tax liability, but not more than the maximum figure of £100,000 of the investments per tax year. Investors can carry back part of the SEIS tax relief to the previous tax year;
- 2) a relief up to 50% on capital gains tax, with a maximum of £50,000, in respect of capital gains realised and reinvested through EIS eligible companies in the same tax year;
- 3) in case of company fail, investors can claim up to 80% of the investment as tax relief against their income tax liability;

---

<sup>26</sup> Government of the United Kingdom (UK Government website). 2017. 'Venture capital schemes: apply to use the Seed Enterprise Investment Scheme'. HM Revenue & Customs, Available at <https://www.gov.uk/guidance/venture-capital-schemes-apply-to-use-the-seed-enterprise-investment-scheme>.

- 4) an exemption from capital gains tax for any gain arising on the disposal of the shares, if these are held for a minimum of three years.

There is no minimum investment requirement for SEIS investments and investors cannot be employees of the company. SEIS relief can be claimed up to five years after the 31st of January in the year which the investment was made; the maximum amount that can be collected through SEIS investments is £150,000 per year, including any other state aid received in the three years up to the date of the investment. Moreover, SEIS tax relief applies only under the following conditions:

- 1) company has to be established in the UK and carry out a new qualifying trade<sup>27</sup>;
- 2) companies must have 25 or less employees and gross assets of up to £200,000 at the time of the share issue – including the group’s employees and assets if company has subsidiaries;
- 3) companies cannot be listed on the stock exchange, and cannot have (with their subsidiaries) an arrangement to become listed at the time of the share issue;
- 4) company cannot control another company other than qualifying subsidiaries;
- 5) companies shall be incorporated for less than two years;
- 6) an individual’s stake in the company can be no more than 30%;
- 7) companies and their subsidiaries may not be members of a partnership;
- 8) companies cannot have previously raised funds from other EIS investors or from a venture capital trust.

The raised money must be spent within three years from share issue and can be only used on the qualifying business activity for which it was raised. The investment cannot be used to buy shares, other than in a qualifying 90% subsidiary which uses that money for a qualifying business activity. Shares issued for SEIS investments have to fulfil the same requirements provided for shares issued under EIS.

*Peer-to-peer lending crowdfunding tax relief: IFISA tax scheme*

Since April 1999, the UK Government has offered the Individual Savings Accounts (ISAs) in order to promote a higher propensity to save by low and medium income families. The ISAs are tax-exempt savings accounts allowing individuals aged 18 or over who are resident and ordinarily resident in the UK to invest in cash, stocks or shares, and life insurance,

---

<sup>27</sup> New qualifying trade means a trade that must not have been carried out for more than two years by the company or any other person who then transferred it to the company. Moreover, the company, or any qualifying subsidiary, must not have carried on any other trade before started the new trade.

with an investment limit of £20,000 for the 2017/18 tax year, per person<sup>28</sup>. ISAs are exempt from income tax and capital gains tax on the investment returns and investors also do not pay tax on money withdrawn from their ISA. In April 2016, the UK Government introduced the Innovative Finance ISA (IFISA), which allows residents of the United Kingdom to use some (or all) of their annual Individual Savings Accounts (ISAs) to lend money through Financial Conduct Authority (FCA)-regulated and approved P2P platforms. IFISAs also receive tax free interest and capital gains on their investments up to the limit of £20,000 for 2017/18 financial year<sup>29</sup>. The limit is set by the UK Government on an annual basis and investors cannot roll over their investment allowance into the following tax year. Lending products eligible for the IFISA include bonds and revenue based loans - i.e. personal loans, small business loans and property loans. Lenders can offset the losses they suffer on the unpaid loans against the interest they receive on other P2P loans before the income is taxed. Tax relief allows a 12-month carry back and applies only if there is no reasonable possibility of the P2P loan being repaid, and doesn't apply to late payment. If the borrower manages to pay the loan at a later date, or if there is recovery of assets, and the lender has already received the tax relief for a bad debt, the amount is treated as new P2P income of the lender. To obtain the tax relief on a bad debt, the lender must be subject to UK income tax on their P2P income and loan shall take place on P2P lending platforms that are authorised by the FCA. P2P loans through crowdfunding platforms are not currently protected by the Financial Services Compensation Scheme (FSCS).

#### *Donation crowdfunding tax relief: Gift Aid scheme*

Gift Aid is a government tax relief scheme that allows charities to claim back the basic rate of tax already paid on every eligible donation by the donor, since donations are exempt from tax<sup>30</sup>. More in detail, charities can claim back from HM Revenue & Customs (HMRC) 25 p for every £1 donated by a UK taxpayer (VAT and Council Tax do not apply), increasing the donation value by 25%.

The following are not eligible for Gift Aid:

---

<sup>28</sup> The government provides Junior ISAs for UK resident children under the age of 18 who do not have a Child Trust Fund account. Junior ISAs are tax advantaged and have many features in common with ISAs. The annual subscription limit for Junior ISAs for 2017/18 is of £4,128.

<sup>29</sup> See Innovative Finance ISA. 2017. 'The Innovative Finance ISA Explained'. Available at <https://innovativefinanceisa.org.uk/innovative-finance-isa-explained>.

<sup>30</sup> Government of the United Kingdom (UK Government website). 2018. 'Claiming Gift Aid as a charity or CASC'. Available at: <https://www.gov.uk/claim-gift-aid>.



- 1) donations from non-UK taxpayers;
- 2) donations which are not 'freewill' gifts but are made in return of something such as tickets (raffles, events and auctions) or goods and services (including 'experience' days);
- 3) donations made on behalf of third parties – a person, group of people, or company. This is because the HMRC needs to know the details of the person actually contributing the funds and, as a consequence, a Gift Aid declaration can only be made on the taxpayer's personal status;
- 4) donations to a family member who's taking part in an event when the charity is contributing to the cost.

### **France**

Recognising the importance of crowdfunding, France supports the financing of French companies providing tax benefits for investments in SMEs. Individuals and professionals whose income is taxable in France are eligible for the following tax reliefs<sup>31</sup>:

- 1) income tax reduction (IR): all those who are liable for income tax (*IR-Impôt sur le revenu*) are allowed to deduct 25% (18% previously) of the amounts invested directly or indirectly (through a holding company) in the capital of unlisted French and European SMEs. To benefit from the tax deduction, the shares must be held for a minimum of five years and the subscription must take place by 31 December of the current fiscal year. The tax benefit is limited to € 50,000 (with a maximum tax reduction of € 12,500) for a single person and € 100,000 for a couple (with a maximum tax reduction of € 25,000). Investments in excess of the annual limit gives the right to receive, under the same conditions, the tax reduction in the following four years (right to carry forward). This reduction cannot be combined with that of the solidarity wealth tax (*ISF-Impôt de solidarité sur la fortune*). Moreover, depending on the holding period of the securities, a tax reduction is possible on the capital gain resulting from the sale of these securities. For a detention period of one to four years, up to 50% of reduction is possible, 65% from four to eight years and 85% after eight years. The tax relief benefit is reserved for natural persons who have their tax domicile in France;

---

<sup>31</sup> See the Law Madelin n° 94-126 du 11 février 1994 relative à l'initiative et à l'entreprise individuelle, Law n° 2007-1223 du 21 août 2007 en faveur du travail, de l'emploi et du pouvoir d'achat also known as Law 'TEPA' and Law n° 2017-1837 du 30 décembre 2017 de finances pour 2018.

- 2) solidarity wealth tax reduction (ISF): before 31 December 2017 all those required to pay the ISF were allowed, under certain conditions, a reduction of 50% of the amounts invested directly or indirectly (through a holding company) in the capital of unlisted French and European SMEs. However, with the recent reform of the Financial Law in 2018, the solidarity wealth tax has been transformed into the property wealth tax (*IFI-impôt sur la fortune immobilière*). The IFI tax is levied only on property values (primary and secondary residences, rental properties, and so on) excluding securities (stocks, bonds, life insurance, savings products, and so on). Therefore, since 1 January 2018, the ISF tax reduction is no longer in force;
- 3) stock saving plan (PEA/PEA-PME)<sup>32</sup>: natural persons who have their tax domicile in France can buy a portfolio of shares of French and European SMEs and mid-caps, with the possibility to benefit from a tax exemption on dividends and capital gains if securities are held for a minimum duration of five years. The maximum amount is €150,000 for a single taxpayer, and €300,000 for a common taxation. The profits tax depends then on the year of securities divestment. Before five years, the tax will be 22.5%, 19% between five and eight years and, 0% after eight years. In this case the capital gain must be however reinvested in the PEA. The classic PEA (Le Plan d'Épargne en Actions), allows investing in listed and unlisted companies. The PEA-PME, allows investment only in unlisted companies. These benefits cannot be combined with those on the IR or the ISF.

Companies can benefit from the system of taxation applicable in the case of parent companies and subsidiaries (*régime des mères et filiales*) for securities held at least eight years. If the parent company holds at least 5% of the subsidiary company, two years of detention is then sufficient to benefit from the tax exemption (the 'Niche Copé'). The 'Niche Copé' is an exemption of 88% from corporate tax on capital gains received by natural or legal persons, especially holding companies, in the case of sale of their subsidiaries or equity securities held for more than two years.

Donation based crowdfunding also gives investors (individuals and enterprises) the opportunity to obtain tax benefits if and only if the project promoters are organizations that work in the common interest, foundations and associations recognized as being of public utility. Only in this case, the project promoter will send to investors a tax receipt to be attached to their tax return. Investors will benefit from the deduction in force, currently 66% of contribution, if

---

<sup>32</sup> Décret d'application du PEA-PME en date du 4 mars 2014; Règlement (CE) N. 800/2008 de la commission du 6 Août 2008 ; Communiqué de presse du Ministère de l'Economie et des Finances N°1169.

investor is an individual, up to 20% of taxable income (60% of contribution up to 0.5% of annual turnover if investor is an enterprise). The rate of the tax reduction is increased to 75% (up to a limit of € 530) for investments made to non-profit organizations that provide free meals to people in need, who help to promote their housing or who are primarily responsible for the free provision of care. Investments in rewards based crowdfunding provides tax reduction if reward has a value less than 25% of the investment amount and have a value less than € 60. If these conditions are not met, the investment does not give rise to a tax benefit.

To promote the development of lending-based crowdfunding, French regulation has provided for losses allocation system. In particular, Article 25 of the Law 2015-1786 of 29 December 2015 of the Amending Finance Act for 2015, allows lenders to offset the capital losses incurred in the event of non-repayment of loans granted since 1 January 2016, through crowdfunding platforms, against the interest generated by other loans granted during the same year or in the subsequent five years (CGI art. 125-00 A). Article 44 of the Law 2016-1918 of 29 December 2016 of the Amending Finance Act for 2016 extended the benefit of this losses allocation system to the Mini-bonds subscribed from 1 January 2017 up to € 8,000 during the same year.

## *Italy*

The Italian tax regulators provide tax benefits for investments through equity crowdfunding platforms. The benefits were recently increased by the Budget Law that went into effect on 1 January 2018. In detail<sup>33</sup>, natural persons can benefit from a tax deduction on income tax (IRPEF- Imposta sul reddito delle persone fisiche) of 30% (19% previously) of the invested amount. The deduction is limited to €1 million (€ 500,000 previously) per year. In the same way, legal entities can obtain a tax credit on corporate tax (IRES- Imposta sul reddito delle società) of 30% (20% previously) of the invested amount up to a maximum of €1.8 million per year. Tax reductions apply for direct investments made through SMEs and social enterprises, and also for indirect investments made through mutual investment bodies or other joint stock companies that invest mainly in small and medium-sized businesses.

---

<sup>33</sup> See Article 29, sub-paragraph 1, 2, 3, 4 e 5, of Law Decree no. 179 dated 18 October 2012 and subsequent amendments.

To benefit from the tax deduction, the participation instruments must be held for a minimum of three years (two years previously) and must submit as part of the tax filing a set of documents and certifications, which include:

- 1) the certification attesting the compliance with the maximum limits for contributions in relation to the tax period in which the investment was made; and
- 2) the company investment plan, containing detailed information on the subject of its activity, on the products and on the current or expected performance of sales and profits.

Law n.205 of the 27 December 2017 (2018 Budget Law) regulates the P2P lending by including income from loans granted through P2P lending platforms within the incomes from capital<sup>34</sup>. It states that such platforms must be managed by payment institutions or by companies authorized by the Bank of Italy, according to Article 106 of the Consolidated Law on Banking (*TUB – Testo Unico Bancario*). For non-professional lenders, the income from P2P lending is subject to a 26% withholding tax to be levied by the authorised platforms' managers<sup>35</sup>.

It was recently proposed to include P2P lending, originated through crowdfunding platforms, within the eligible investments for the Individual Long-term Savings Plans (PIR), thus taking advantage of the related tax incentives (pursuant to Article 1, sub-paragraph 89, letter b-bis of the Law 232/2016). This proposal is similar to what was implemented by the UK legislator about two years ago with the introduction of Innovative Finance ISAs (Individual Savings Accounts) - the equivalent of Italian PIRs. The potential inclusion of P2P lending in the PIRs will require in-depth analysis and the organization of special products to be implemented and will not occur quickly. In the UK, no material effects have been seen, although the 'IFISA' was approved in April 2016.

---

<sup>34</sup> See the new letter d-bis) inserted in the Article 44, sub-paragraph 1, of the Consolidated Income Tax Act (TUIR).

<sup>35</sup> Previously was subject to the marginal rate applied on personal incomes.

## *Spain*

Spain regulation makes available some very generous tax breaks to investors<sup>36</sup>. Investors in Spanish companies that are less than three years old<sup>37</sup> are entitled to a deduction of 20% of their investment on the income tax (IRPF-Impuesta sobre la renta de las personas físicas). The deduction is limited to €16,000 a year for a single tax payer. Moreover, investors must not have working relations with the company and they must not hold, together with the family group, more than 40% of its capital.

Many autonomous communities offer additional incentives to their residents and companies. These regional tax reliefs are complementary to the state tax reliefs and increase the total deductible limit. For example, in Andalucía investors receive a supplementary 20% break. This means that if they invest in a new company, they can write off 40% of that investment on their income tax returns at the end of the year. Supplemental tax breaks by autonomous communities are described below:

- 1) Madrid: deduction of 20% with a maximum amount of €4,000;
- 2) Cataluña: deduction of 30% with a maximum amount of €6,000;
- 3) Andalucía: deduction of 20% with a maximum amount of €4,000;
- 4) Galicia: deduction of 20% with a maximum amount of €4,000;
- 5) Aragón: deduction of 20% with a maximum amount of €4,000;
- 6) Baleares: deduction of 20% with a maximum amount of €600;
- 7) Murcia: deduction of 20% with a maximum amount of €4,000;
- 8) Cantabria: deduction of 15% with a maximum amount of €2,000.

The remaining regions do not have additional tax incentives. In order to be able to take advantage of these benefits, the company has to be fiscally resident in the same region of the investor. To encourage investing in early stage companies, Spain has also put into place others incentives. First, all profit made upon the disposal of the investment is not taxable under the following conditions:

- 1) the reinvestment must be made in early-stage companies during the year following the disinvestment date;

---

<sup>36</sup> Sociosinversores. ‘¿Tengo deducciones fiscales por invertir en el capital de Empresas ?’. Available at: <https://www.sociosinversores.com/paginas/faq>.

<sup>37</sup> Companies must also have an equity capital lower than €400,000 and must be constituted with the legal status of S.A. (Sociedad Anonima), S.L. (Sociedad Limitada), S.A.L. (Sociedad Anonima Laboral), and S.R.L.L. (Sociedad de Responsabilidad Limitada Laboral).

- 2) the participation in the invested company shall be of at least three year's duration;
- 3) the participation in the invested company together with the relatives of 1° and 2°s degree must not overcome the 40% of the social capital;
- 4) there is no tax exemption for the participations sold to relatives of 2°degrees, or to entities linked to the sender.

Second, if the invested company fails, the investment can be recovered by writing off your capital gains tax for up to four years.

Donation in non-profit entities give investors (natural and legal persons) the possibility to obtain tax benefits<sup>38</sup>. In particular, for natural persons the first €150 donated has a deduction of 75% in the entire IRPF fee. What exceeds €150 has a deduction of 30% in the fee. A deduction of 35% (instead of the general 30%) may be applied, provided that donations have been made for the same or greater amount to the same entity in the two previous immediate tax periods. The deduction has a limit of 10% of the taxable base in the IRPF. For legal persons, the donated amount has a deduction in the corporate tax rate of 35%. A deduction of 40% (instead of the general 35%) may be applied provided that donations have been made for the same or greater amount to the same entity in the two previous immediate tax periods. The deduction has a limit of 10% of the tax base of the tax period.

## ***Belgium***

Belgian legislation provides interesting tax incentives for individuals whom invest in Belgian start-ups (SMEs or micro-enterprises) through crowdfunding platforms recognised by the Authority for Financial Services and Markets (FSMA)<sup>39</sup>. In particular, since the inception of the Crowdfunding Platform Act in 2017<sup>40</sup>, all natural persons subject to the Belgian natural person tax or the non-resident person tax can benefit from:

---

<sup>38</sup> Ramón Pérez Lucena - Abogado de Fundaciones. 2018. 'Guíapráctica de deducciones fiscales en donaciones'. Available at: <http://abogadodefundaciones.com/guia-practica-deducciones-fiscales-donaciones/>.

<sup>39</sup> Bolero Crowdfunding. 'Où en est le Tax Shelter annoncé? Puis-je déduire fiscalement mes Investissements effectués via Bolero Crowdfunding?' Available at: <https://bolero-crowdfunding.be/fr/faq?page=1>.

<sup>40</sup> Before the entry into force of the crowdfunding law in 2017, crowdfunding platforms were not legally recognized in Belgium and tax benefits were available only for direct investment in start-ups. Now, tax benefits also apply for investment in start-ups through licensed crowdfunding platforms.

- 1) a personal income tax reduction of 30% of the sum invested in SMEs which have maximum 50 employees, a turnover of maximum €40 million, and a total balance sheet value not exceeding €20 million; and
- 2) a personal income tax reduction of 45% of the sum invested in micro-enterprises with maximum 10 employees, maximum revenue of €700,000, and a total balance sheet value not exceeding €350,000.

The total amount of the investment qualifying for a tax exemption may not exceed €250,000 per start-up.

Each person can invest a maximum of €100,000 per year and can benefit from a maximum of €45,000 in tax reduction each year. Tax relief can be gained for the year in which the investment occurred and cannot be refunded or transferred. Furthermore, in order to benefit from the tax benefit investors must hold onto the investment (shares) at least four years.

No tax deductions are available to companies and any director of the start-up is not eligible for the tax advantage.

In order to ensure the tax reliefs to their investors, the start-ups have to adhere to certain conditions, including:

- 1) the start-up shall be an unlisted Belgian or EU tax resident company or must have a permanent establishment in Belgium or the EU;
- 2) the funds raised cannot be used to distribute dividends, to issue loans or to buy shares during 48 months as from the investment date;
- 3) during at least 48 months as of the investment, the start-up cannot change their business to become an investment firm, a finance company, a treasury company, a management company, a real estate company, or a patrimonial company;
- 4) the tax reduction may not exceed 30% of the start-up's share capital per investor;
- 5) the tax shelter investment must be fully paid up in cash;
- 6) the start-up may not be the result of a merger or spin-off operation;
- 7) the start-up may not have distributed any dividend or made any capital reduction previously.

The new crowdfunding law also allows for a tax exemption on interest produced by loans to start-ups through regulated crowdfunding platforms. Unlike what is the case for equity investments, the tax exemption on interest is available for both private individuals and start-ups as long as they meet the criteria defined above. The maximum exempted amount on interest, per taxpayer per year, may not exceed €15,000 of the loan (article 21,13° of the Belgian Income Tax Code). The maturity of the exempted tranche of the loan must be of at least four years.

Belgian investors can obtain a tax advantage by supporting a charity (i.e. institutions listed in the law or registered institutions) and large relief operations through donation based crowdfunding platforms. In particular, Belgians can recover between 40% and 50% annually of their donation, which may not exceed 10% of their total net income.

## **Conclusions**

The 2007-2009 financial crisis severely affected terms and conditions of European SMEs and start-ups' funding (Brown and Earle, 2017; Cosh et al., 2009), by forcing them to use lending channels different from the traditional banking channels, such as venture capital, business angels, and more recently, crowdfunding. However, the limited availability in Europe of these new sources of finance has forced policy makers to offer tax incentives in order to remove barriers and encourage investment through venture capital funds, business angels, and crowdfunding (Wilson, 2015). A number of tax incentive schemes to promote crowdfunding has already been implemented in Europe, moreover many additional European countries and regions are considering their implementation. Some countries (i.e. the UK) have adopted existing schemes by adapting them to the new form of investments while others countries have put in place new tailored schemes (i.e. Italy). In addition, some countries provide tax incentives both at the national and regional levels (i.e. Spain). In light of the potential role to be played by crowdfunding in the early-stage market, this chapter provides a comprehensive description of European tax incentive schemes in force in order to understand the drivers behind crowdfunding development. It deeply analyses the tax incentives, including their peculiarities and limitations, for crowdfunding in force in the UK, France, Italy, Spain and Belgium. Its findings are relevant for European policy makers because the development of crowdfunding activity is crucial to tackle the long-standing deficiencies in the entrepreneurial financial environment and improve our financial markets by means of innovation-led growth. Since terms and conditions of European SMEs and start-ups' funding are among the most significant challenges for the creation, survival and growth of these firms, tax incentives to investors can be considered as a tool to reduce their dependence on banks and to increase the availability of credit for those companies, even if tax incentives are difficult to build up and to implement. In order to make them more accessible to start-ups and other resource-constrained firms, we need a proper design of targeted incentives and an evaluation of the different market forces and imperfections.

Moreover, governments have to calibrate their fiscal policies based on the specific characteristics of investors and firms, that might take advantages of such incentives. Mainly



due to the lack of data, there is no conclusive evidence on whether and how tax incentives should be used to promote crowdfunding investments. This work aims to represent a first step in this direction: it provides a detailed and comprehensive analysis of tax incentives schemes in force in Europe for investors and companies planning to use crowdfunding as a fundraising tool.

## Chapter 4

### Does the fight against corruption increase the investors' confidence in equity crowdfunding? Evidence from Latin America<sup>41</sup>

Corruption normally causes diffidence among investors and can be potentially able to negatively affect investments. Specifically, the decline in investments is one of the most significant problems in Latin American countries. In such contexts, anti-corruption laws can have a beneficial double effect to fight corruption and promote business, by restoring investors' trust in doing investments. This chapter investigates whether the introduction of an anti-corruption framework affecting both public and private spheres is able to increase investors' confidence in a new form of investment, that is equity crowdfunding. By using a unique database, with combined information from different platforms in Brazil, Chile, and Mexico, the following study is based on the population of 492 projects over the period 2013-2017.

Implementing a set of linear probability regressions, it finds that the new Mexican anti-corruption law has increased the probability of success of equity crowdfunding projects in this country compared to Brazilian and Chilean projects, suggesting the existence of a causal relation between anti-corruption rules and investments in a highly perceived corrupt environment, further characterized by a low level of investors' protection. A placebo test which confirms the main results was performed as a robustness check.

---

<sup>41</sup> Co-authored by:

- F. Battaglia, Università degli Studi di Napoli Parthenope (Italy);
- M. Carboni, Università degli Studi Roma Tre (Italy);
- S. Monferrà, Università Cattolica del Sacro Cuore (Italy).

## Introduction

The Latin America countries are normally perceived as highly corrupt (Gaviria, 2002; Canache and Allison, 2005; Seligson, 2006; Hauk, 2017). The political scandals affecting these countries over the last few years (Zabludovsky, 2013; Casas-Zamora and Carter, 2017) have sparked public outrage against corruption, so that investors do not consider them as credible countries. Since 2014, Brazil has been rocked by the largest corruption scandal in its history, the ramifications of which are still ongoing. Interestingly, the measures against corruption proposed by the federal prosecutors over the course of the investigation (known as “Operation Carwash”) were then rejected. Compared to Brazil, Chile annually shows a higher score of the Corruption Perceptions Index (CPI), meaning that this country is perceived as having a lower level of public sector corruption<sup>42</sup>. However, recently this country faced some corruption scandals, as those involving the Penta Group and the Chile’s Chemistry and Mining Society “Soquimich”, both accused to corrupt politicians from the current administration, the previous one and the opposition by financing political campaigns (Craze and Quiroga, 2014; The Economist, 2014; Bonnefoy, 2015a and 2015b; Ramírez, 2015; Casas-Zamora, 2016), that contributed to worsen its position in the general ranking reporting the CPI. With respect to Brazil and Chile, Mexico has the highest level of perceived corruption, with a CPI score of 35/100 in 2014, which worsened in the following years (see for example the corruption scandals exposed by the Mexican press which have involved the brother of the former Mexican President, Raúl Salinas de Gortari, accused of “unlawful enrichment”, and the Secretary of Public Security - SSP García Luna, accused of abuse of power and close ties to drug trafficking groups<sup>43</sup>).

Following a growing stream of literature focusing on the relationship between corruption and investment (entrepreneurship), it is possible to argue that corruption reduces economic growth, creates mistrust in institutions and lowers both public and private investments (Mauro 1995 and 1996; Bardhan 1997; Sandholtz and Koetzle 2000; Treisman 2000 and 2007; Montinola and Jackman 2002; Gerring and Thacker 2004; Boudreaux et al., 2018). Specifically, high levels of perceived corruption negatively influence investment decisions by increasing risk and uncertainty faced by investors (Barassi and Zhou, 2012; Delgado et al., 2014; Godinez and Liu, 2015). Importantly, the reduction of national and foreign

---

<sup>42</sup> The CPI is a composite index based on subjective perceptions produced by the Transparency International (a non-governmental organization involved in the fight against corruption worldwide). The index currently ranks 180 countries on a scale from 0 (highly corrupt) to 100 (very clean).

<sup>43</sup> See Estevez, 2013.

investments is one of the most significant problems in Latin America (Zhang, 2001; Bengoa and Sanchez-Robles, 2003). Therefore, anti-corruption rules can represent the solution not only to fight corruption effectively but also to promote investments, by restoring investors' trust. This is the case of Mexico, a highly perceived corrupt country, further characterized by a low level of investors' protection rules (Schwab, 2014), that in 2015 completely reformed the anti-corruption framework in the country. Specifically: “on May 27, 2015, a Constitutional amendment was published in the Official Gazette of the Federation, to reform 14 Articles of the Political Constitution of the United Mexican States<sup>44</sup>, and create a new framework against corruption”.<sup>45</sup> Only one month after, in June 2015, the Mexican states voted to amend the Constitution in order to strengthen the anti-corruption legal framework particularly with reference to the private companies that often exploit tax laws, abuse legal loopholes, hide corrupt acts behind secret subsidiaries and partnerships or pay bribes to influence political decision-making illicitly. The main aim was to prevent corruption by helping companies to develop anti-corruption codes and business principles for countering bribery, and at the same time to assure more severely jail sentences in order to create a more honest and clean operating environment, increasing investors trust. Moreover, through the vote the institutions responsible of the prevention, control, investigation and punishment of corruption in Mexico were given new power, and a National Anti-Corruption System was consolidated. Mexico has taken another important step in the fight against corruption on July 18, 2016, when the Constitutional amendment was implemented by means of a series of laws, including (i) the General Law for the National Anti-Corruption System; (ii) the Organic Law for the Federal Tribunal on Administrative Justice; and (iii) the General Law of Administrative Responsibilities (GLAR - Ley General de Responsabilidades Administrativas). The latter also applies to private persons (companies and individuals) who commit acts considered to be “*linked to serious administrative offenses*” (Article 4, subparagraph III; Articles 65-70).

In a highly perceived corrupt country, besides characterized by a low level of investors' protection rules, the passage of anti-corruption regulation can be able to restore the investors' trust and therefore to foster the level of investments. Specifically, the effect should be greater for investments implying a “bet”, as equity crowdfunding, i.e., a new way of funding early-

---

<sup>44</sup>Articles 22, 28, 41, 73, 74, 76, 79, 104, 108, 109, 113, 114, 116 and 122.

<sup>45</sup>De la Peña, A. and Villasenor, F., 2017, “Upcoming Mexico Anti-Corruption Law: What Does it Mean for Companies Doing Business in Mexico?”, Haynes and Boone, LLP, available at: <http://www.haynesboone.com/publications/new-mexico-anti-corruption-law>. For details see “Decreto por el que se reforman, adicionan y derogan diversas disposiciones de la Constitución Política de los Estados Unidos Mexicanos, en materia de combate a la corrupción”, Diario Oficial de la Federación dated 27 May, 2015. Available at: [http://www.diputados.gob.mx/LeyesBiblio/proceso/docleg/62/223\\_DOF\\_27may15.pdf](http://www.diputados.gob.mx/LeyesBiblio/proceso/docleg/62/223_DOF_27may15.pdf).

stage unlisted companies by raising many small amounts of capital from a large number of small investors – via online platforms – who receive in return equity shares of these companies. Therefore, it is possible to argue that the new framework against corruption, dated May 2015, is able to positively impact investors' confidence, and so the level of investments in Mexico. Among the existing forms of investments, this work focuses on equity crowdfunding by assuming that investors' confidence is crucial in the choice of investing in new projects. In other words, the following study investigates whether the introduction of new rules, aimed to fight corruption and indirectly also to protect investments having great potential in terms of returns, increase investors' confidence in investing in equity crowdfunding.

Although various studies focused on the determinants of equity crowdfunding success (Agrawal et al., 2015; Ahlers et al., 2015; Belleflamme et al., 2013, 2014; Mollick, 2014; Vismara, 2016 and 2017; Vulkan et al., 2016; Angerer et al., 2017; Block et al., 2018; Günther et al., 2018), this is the first study investigating the link between the success of equity crowdfunding projects and anti-corruption regulation in Latin America. Specifically, the study uses a hand-collected database and the creation of a new framework against corruption affecting also the private sector in Mexico as an exogenous shock to investigate whether the fight against corruption increases investors' confidence to invest in new projects, specifically in the emerging segment of equity crowdfunding. The findings show that, following the creation of the anti-corruption framework, equity crowdfunding projects are effectively more likely to succeed.

The remainder of the chapter is structured as follows. Section 2 reviews previous studies and develops the research hypothesis. Section 3 describes data and sample, while section 4 describes the identification strategy. Sections 5 and 6 discuss the main results and robustness checks. Section 7 concludes.

## **Literature, contribution and research hypothesis**

The existing literature on crowdfunding focuses mainly on three streams of studies<sup>46</sup>: (i) crowdfunding regulation (Hazen, 2011; Fink, 2012; Klöhn and Hornuf, 2012; Stemler, 2013; Wroldsen, 2013; Cumming and Johan, 2013; Hornuf and Schwienbacher, 2017); (ii) companies and investors' motivations of crowdfunding (Ordanini et al., 2011; Hemer et al., 2011;

---

<sup>46</sup>For detailed literature review see Kuppuswamy and Bayus (2017); Bouncken et al. (2015); Moritz and Block (2016); Short et al., (2017).

Belleflamme et al., 2010, 2013, 2014; Gerber et al., 2012; Hienerth and Riar, 2013; Burtch et al., 2014; Lin et al., 2014; Mollick and Kuppaswamy, 2014; Hu et al., 2015; Macht and Weatherston, 2014; Allison et al., 2015; Cholakova and Clarysse, 2015; Hornuf and Schwienbacher, 2018); and (iii) crowdfunding success factors ( Ordanini et al., 2011; Belleflamme et al., 2013; Mollick, 2014; Ahlers et al., 2015; Colombo et al., 2015; Cordova et al., 2015; Koch and Siering, 2015; Cumming et al., 2016; Kromidha and Robson, 2016; Kunz et al., 2016; Ralcheva and Roosenboom, 2016; Signori and Vismara, 2016; Vulkan et al., 2016; Angerer et al., 2017; Vismara, 2016, 2017; Vismara et al. 2017; Block et al., 2018; Günther et al., 2018; Polzin et al., 2018). Referring to the first stream of studies, dealing with crowdfunding regulation, a growing body of research focuses on the legal provisions required to implement crowdfunding and increase access to capital for start-ups and SMEs. Some authors highlight the lack of a specific regulation, which can harm crowdfunding initiatives, and the need to develop a harmonised regulatory framework across Europe (Klöhn and Hornuf, 2012; Hornuf and Schwienbacher, 2017). Other studies analyse the legal implication and risks, such as the weaker investor protection and potential for fraud, caused by the rapid growth of crowdfunding (Hazen, 2011; Fink, 2012; Cumming and Johan, 2013; Stemler, 2013; Wroldsen, 2013). They conclude that, in order to mitigate the previous risks, crowdfunding must be approached with caution through specific regulation, and this is the only workable way of helping investors make informed decisions and limiting the amounts they can put at risk.

The second stream of literature focuses on the motivations of crowdfunding, both from the investors and firms' point of view. Some empirical studies, by analysing the determinants of individual investment decisions (Ordanini et al., 2011; Hemer et al., 2011; Gerber et al., 2012; Lin et al., 2014; Allison et al., 2015; Cholakova and Clarysse, 2015; Hornuf and Schwienbacher, 2018), find that investors are not just interested in the financial return but are motivated also by the social reputation, self-affirmation, fun, and the possibility of support companies or projects in which they believe and can identify themselves (notably in the donation and reward model). Other contributions investigate both the financial and non-financial reasons of companies for choosing crowdfunding (Belleflamme et al., 2010, 2013, 2014; Hemer et al., 2011; Gerber et al., 2012; Burtch et al., 2014; Mollick and Kuppaswamy, 2014; Hu et al., 2015; Hienerth and Riar, 2013; Macht and Weatherston, 2014). Generally, these studies suggest that the main reason why companies adopt crowdfunding is the need for liquidity (notably in the early stage). Other potential motivations are related to obtain a better access to customers and outside funders (i.e. business angels and venture capital), as well as strong relationships and networks, and a feedback for their products or services. Finally, companies can adopt crowdfunding also to

increase visibility and public attention and exploit the speed and flexibility of the online funding process.

Finally, the third and the most extensive stream of literature analyses the determinants of campaigns success. Specifically, the most relevant studies on the topic focus on the properties of the offer and its funding dynamics, such as the fundraising goal, the duration, the percentage of offered equity, the number of early investors, the presence of voting rights or tax incentives schemes, the composition of the top management team (Belleflamme et al., 2013; Mollick, 2014; Ahlers et al., 2015; Ralcheva and Roosenboom, 2016; Signori and Vismara, 2016; Vismara, 2016; Vismara et al. 2017; Vulkan et al., 2016). Other authors analyse the information flow, by finding that crowdfunding campaigns' success is positively related to a great deal of information on the campaign, its objectives, and risks, and on the capital distribution of the business plan (Colombo et al., 2015; Kunz et al., 2016; Vismara, 2018; Block et al., 2018). In addition, some empirical studies measure the importance of the presence of a product video, the images quality, and the number of comments and updates in increasing the campaigns success probability (Cordova et al., 2015; Koch and Siering, 2015; Kunz et al., 2016; Vismara et al. 2017; Angerer et al., 2017; Block et al., 2018). Kunz et al. (2016), using data from reward-based campaigns, argue that giving information about promoters' crowdfunding activity, such as financing their own campaign and/or others campaigns, provides them with a useful experience and send a positive signal to investors. Additional studies calculate the effect of the geographical distribution of firms and investors in the funding success of campaigns (Hornuf and Schmitt, 2016; Lin and Viswanathan, 2016). They find home bias effects for investors in crowdfunding contexts, which are responsive to the distance and prefer to invest in geographically closest firms. The recent literature on success factors for crowdfunding focuses mainly on the role of investors' and proponents' social networks (Ordanini et al., 2011; Mollick, 2014; Colombo et al., 2015; Kromidha and Robson, 2016; Vismara, 2016; Angerer et al., 2017; Polzin et al., 2018). Some of these authors find that a larger number of social network connections increases the probability of fundraising success in both reward-based and equity crowdfunding, by reducing the information asymmetry. Indeed, by linking their social network profiles to the platform accounts the projects' proponents provide additional information to potential investors. Some authors (e.g., Vismara, 2016) based their study on professional connections (e.g., the LinkedIn connections), while others (e.g., Mollick, 2014) use friendship connections (e.g., the Facebook and Twitter ones). In these cases, the positive impact on campaigns success is widely recognised. Although the paper of Cumming et al. (2016) fits into this strand of literature analysing the key factors of crowdfunding success, it differs from

previous studies on the topic as it is the first one to investigate the frequency of fraud in crowdfunding markets and its empirical determinants.

This study is related to the growing literature on crowdfunding focusing on the determinants of campaigns success. To this end, an empirical contribution documenting the existence of a causal relationship between the fight against the corruption and the investments in new projects has been carried out. At my best knowledge, there are no studies investigating the link between corruption and crowdfunding. Moreover, there are no papers showing a causal relation between the creation of a new legal framework regulating anti-corruption and the success of equity crowdfunding campaigns.

The point of view expressed in this study is that corruption normally causes diffidence among investors and can be potentially able to negatively affect investments. Specifically, the decline of investments is one of the most significant problems in Latin American countries. In such contexts, anti-corruption laws can have the beneficial double effect to fight corruption and promote business, by restoring investors' trust in doing investments. From a theoretical perspective, by following the legitimacy approach, it is possible to argue that trust is easier to build in countries characterized by a low level of corruption (Bruton et al., 2010; Lin et al., 2013).

Research on corruption is complicated by the fact that the factors causing corruption are also the factors that comes with it, and this creates a vicious circle (Kaufmann, 1997). Nevertheless, there is a large theoretical and empirical literature which analyses the causes and the effects of corruption in both developed and developing countries (Tanzi, 1998; Lambsdorff, 2006; Amore and Bennedsen, 2013)<sup>47</sup>. In these studies, data on corruption are often based on the Transparency International Corruption Perceptions Index (TI-CPI).

An important body of literature on corruption emphasizes the role of regulatory quality on corruption and, as consequence, on investment (La Porta et al., 1999; Bénassy-Quéré, 2007; Busse and Hefeker, 2007). Vague and lax government rules trigger much corruption and create mistrust among investors; instead a “good” regulation, defined by clear rules and applied through transparent mechanisms, can help contain corruption and put investors in a position to trust (Gerring and Thacker, 2005). However, bad regulation and corruption are quite often two

---

<sup>47</sup>Among the main causes of corruption, the existing studies identify the culture and the social norms existing within a society (Hauk and Saez-Marti, 2002; Seleim and Bontis, 2009; Barr and Serra, 2010; Ivanyna et al., 2016), the form of democracy (Huntington, 1970; Andvig, 2006; Corchon, 2008; Iwasaki and Suzuki, 2012; Jetter et al., 2015), the government structure (Gerring and Thacker, 2004 and 2005), the lack of economic competition (Jongsung and Khagram, 2005), and some geographic and historical variables, such as the abundance of natural resources and the geographical proximity to corrupt states (Sandholtz and Gray, 2003; Asiedu, 2006).



side of the same coin. In many cases, corruption causes bad regulation. Under this view, reforms should avoid complicated rules, difficult to administer, and should design individual incentives to promote honest decision making. The absence of law credibility raises the risk of corruption and has a strong impact on both domestic and incoming foreign direct investments, which tend to deteriorate, with some types of investment which suffer more than others. For example, Wei and Wu (2001) find that while corruption reduced foreign direct investments (FDI), there is no impact of corruption on bank loans. The correlation between the size of FDI and the host country's risk factor, which includes corruption, is widely recognized (Wei, 2000; Habib and Zurawicki, 2001 and 2002; Egger and Winner, 2006; Javorcik and Wei, 2009; Asiedu and Freeman, 2009; Barassi and Zhou, 2012; Delgado et al., 2014; Godinez and Liu, 2015).

Many papers on the topic explore more specifically the rates of entrepreneurship as they relate to corruption (e.g., Anokhin and Schulze, 2009; Avnimelech et al., 2014; Dutta and Sobel, 2016; Tonoyan et al., 2010; Dreher and Gassebner, 2013; Rose, 2000; Radaev, 2004; Ovaska and Sobel, 2005; La Porta et al., 1999; Treisman, 2000; Busenitz et al., 2000; Glaeser and Sacks, 2006; Estrin et al., 2013; Aidis et al., 2012) and find mixed results regarding the impact of corruption on entrepreneurship and economic growth. Some papers (e.g., Dreher and Gassebner, 2013; Rose, 2000; Radaev, 2004; Ovaska and Sobel, 2005) suggest that corruption can improve entrepreneurial opportunities, conditional on a country having a preexisting bad business climate. For example, Dreher and Gassebner (2013) find that corruption is beneficial in highly regulated economies with a higher number of procedures required to start a business and a larger minimum capital requirement. The contrasting strand of literature (e.g., Anokhin and Schulze, 2009; Avnimelech et al., 2014; La Porta et al., 1999; Treisman, 2000; Busenitz et al., 2000; Glaeser and Sacks, 2006; Estrin et al., 2013) argues that corruption in government is harmful for overall growth and prosperity in general. More specifically, Anokhin and Schulze (2009) show that corruption is bad for entrepreneurship and innovation and that efforts to control corruption increase levels of trust in the ability of the state and market institutions to reliably and impartially enforce law and the rules of trade. Estrin et al. (2013) find that less corrupted environments and stronger protection of property rights increase the growth plans of entrepreneurs. Aidis et al. (2012) find mixed results, however when they remove the richest countries from their models, the effect of corruption appears strongest in lowering entrepreneurship.

Despite many theoretical and empirical studies analyse the impact of corruption on investments and entrepreneurship, this literature review clearly shows the lack of papers investigating the relationship between corruption and equity crowdfunding investment. This

completely new environment requires investigation in order to assess whether a new legal framework regulating anti-corruption in highly perceived corrupt contexts, with a low level of investors' protection, could promote the success of equity crowdfunding campaigns, by restoring investors' trust in doing investments.

To this end, the following analysis aims to extend the existing literature on factors affecting the success of crowdfunding campaigns, by providing a first and unique empirical evidence on the effect of the fight against corruption on investment oriented towards crowdfunding in Latin America.

## **Data and sample**

This study is based on a hand-collected dataset of 492 projects, out of which 338 were unsuccessful in reaching their fundraising goal, listed on all existing equity crowdfunding platforms in Brazil, Chile, and Mexico at the date of data collection (November 2017). Specifically, the following platforms are analysed:

- Broota.com.br, Eqseed, Start Me Up, and Eusocio from Brazil;
- Broota.cl from Chile, and
- Crowdfunder.mx and Play Business from Mexico<sup>48</sup>.

The list of platforms is reported in Table 4, which reports the city in which the platform is located, the foundation year, and the current state (active/inactive).

---

<sup>48</sup> The list of Mexican equity-based platforms is from the AFICO (Asociación de plataformas de fondeo colectivo) website and it refers to the members list. The list of Chilean platforms is from the FinteChile (Asociación Fintech de Chile) website. The Brazilian platforms list has been built up basing on the record provided by the report "2017 The Americas Alternative Finance Industry Report" (see Ziegler et al., 2017) carried out by the Cambridge centre of alternative finance, the Polsky Center for Entrepreneurship and Innovation, and the University of Chicago Booth School of Business. Since the list provided by this report includes all the typologies of crowdfunding, platforms have been double-checked on the web and only the equity-based ones have been selected.

**Table 4. Crowdfunding platforms**

Platform	City	Foundation year	Model	Status
Brazil				
Broota.br (currently Kria)	São Paulo	2014	Equity	Active
Eqseed	Rio de Janeiro	2014	Equity	Active
Eusocio	Rio de Janeiro	2013	Equity	Active
Startmeup	São Paulo	2015	Equity	Active
Chile				
Broota.com	Santiago	2013	Equity	Active
Mexico				
Crowdfunder.mx	Mexico City	2015	Equity	Currently inactive
PlayBusiness	Mexico City	2014	Equity	Active

Source: Authors' elaboration

A time period spanning 4 years, i.e., from the inception of the platforms (2013 for Chile and Brazil, and 2014 for Mexico) to the end of 2017 was considered. The number of projects by platform and year is reported in Table 5.

**Table 5. Projects by platform and year**

Campaign year	Broota	Broota.br	Crowdfunder	Eqseed	Eusocio	Playbusiness	Startmeup	Total
2013	11	0	0	0	0	0	0	11
2014	5	6	0	0	3	45	0	59
2015	13	17	0	1	3	119	2	155
2016	13	19	3	2	0	89	6	132
2017	18	17	15	9	0	73	3	135
Total	60	59	18	12	6	326	11	492

Source: Authors' elaboration

The analysis covers only Brazil, Chile, and Mexico since the remaining countries in Latin America do not have a single equity crowdfunding platform (Ziegler et al., 2017). Moreover, only the native equity crowdfunding platforms, excluding foreign ones, are taken into account. To the best of my knowledge, this is the only sample of equity crowdfunding campaigns in Latin America collected so far.

The analysed platforms work according to the traditional “All-or-Nothing” model (Cumming et al., 2015), thus a project is considered as successful or funded only if the 100% of the funding goal or more is reached within the specified time period, which is generally of 60-180 days. However, to encourage the use of equity crowdfunding, the "Instrução nº 588" of the Securities and Exchange Commission of Brazil - Comissão de Valores Mobiliários (CVM) – states that on the Brazilian platforms it is enough to raise at least two-thirds of the fundraising goal to obtain a success. Once the campaign is ended, invested amounts are transferred from the escrow accounts to the founders' accounts. After that, investors become shareholders in the company and they acquire all the established rights. Conversely, when the funding goal is not reached, the platforms will refund the invested amount to investors. All the successful campaigns are displayed on platforms websites following a similar structure, ensuring homogeneity and comparability for the collected information. The collected information includes the properties of the offer (i.e., on the fundraising goal and the minimum investment allowed for each campaign), and the founders' features, including their total number and their crowdfunding activity on the platform, as reported on the “team” page of each campaign. Information about the number of LinkedIn connections which are available on the personal LinkedIn profile of each founder are also collected.

All the unsuccessful campaigns are deleted at the end of fundraising round, thus information on them are obtained from the platforms' CEOs and CTOs. Since data on

companies' location are not always available on the platforms websites, these information are drawn from Orbis database. Then, the four classes of functional urban areas, identified by the Organisation for Economic Co-Operation and Development (OECD), are used to distinguish between large metropolitan areas (i.e., areas with population above 1.5 million), metropolitan areas (i.e., areas with population between 500.000 and 1.5 million), and medium-sized and small urban areas (i.e., areas with population, respectively, between 200.000 and 500.000 and 50.000 and 200.000).

### **Identification strategy**

This chapter investigates whether the new framework against corruption - affecting the private sector - increases investors' confidence in new investments, and therefore the success of equity crowdfunding campaigns by using a difference-in-difference model applied to a repeated cross-sections data structure. To employ such a model, the outcome in the treatment and control group would follow the same trend without any treatment. Since the common trend assumption is hard to verify, in the results section is shown that the trend of the two groups was the same before the treatment.

In the analysis is employed a set of linear probability regressions, where the dependent variable (*project\_status*) is a binary variable taking value 1 for successful equity crowdfunding campaigns (i.e. campaigns reaching the fundraising goal in the time period imposed by the platform), and 0 otherwise. The coefficient of interest is  $\beta$  for the binary variable *w*, which takes value 1 for Mexican campaigns after investors became aware of the anti-corruption law enactment (i.e., after 2015) and 0 otherwise. The variable *treated* is a binary variable taking value 1 for Mexican campaigns, and 0 for Brazilian and Chilean campaigns; while the variable *post* is a binary variable equal to 1 one year after that the new framework against corruption was published in the Official Gazette of the Federation on 2015 (i.e. from 2016 onward), and 0 otherwise, i.e. for the years 2014-2015. Specifically, the year 2013 is dropped since only Chile showed information for this year.

This study investigates the impact of the new anti-corruption rules one year after the introduction of the new anti-corruption framework since in Mexico the government bureaucracy is highly inefficient (Peeters et al., 2018). Therefore, it is possible to believe that the effect of the new regulation could be observed starting from 2016.

According to previous studies, the fundraising goal variable (*f\_goal*) is measured as the natural logarithm of the amount that founders seek to raise using crowdfunding, in millions

USD (Mollick, 2014). The analysis includes the average investment (*av\_inv*), which is calculated by dividing the final funding by the number of investors, and the minimum investment allowed for each campaign, in millions USD (*inv\_min*). Since the web page of each project on the platform reports additional information about the founders' team, data on the number of founders' members are collected (*n\_fund* - see Vismara et al., 2017). Founders have the possibility to self-financing their own project and any other project published on the platform. These information (including the invested sums) are made publicly available through the "Team" page of each project, which implies that each potential investor can easily become aware of the crowdfunding activity carried out by each founder. By following Kunz et al. (2016) it is possible to argue that, funding their own project and/or that of others, founders send a positive signal to the potential investors, by showing them that they used crowdfunding, not only to get money but because they believed in the crowdfunding idea. Therefore, the analysis includes two variables referring to the other campaigns financially supported by the company's team (*t\_oth*), and the team self-financing (*f\_self*).

Following Ralcheva and Roosenboom (2016), also the company location (*large*) is considered. Specifically, in this analysis the functional urban areas - identified by the Organisation for Economic Co-Operation and Development (OECD) – are used<sup>49</sup>. The expectation is that companies located in large metropolitan areas, due to the highest concentration of potential investors, are more effective in attracting investors than those located either just in metropolitan areas or in small and medium urban areas. To attract potential investors, founders may open a Facebook, Twitter or LinkedIn profile of the project in addition to their personal one, and they may link these social network profiles to the platform accounts, to interact with potential investors, by providing them additional information about the company and the team activity, and by sponsoring the campaign. Following Colombo et al. (2015), the number of connections of each founder on his LinkedIn profile (*lkd*) is recorded, and then the average number of the LinkedIn connections of all founders are calculated. Given that the LinkedIn connections are not immediately available on the platforms, this information is obtained by searching on LinkedIn the name, the geographic location, and profession of founders, when available. However, due to limitations in data collection, this information is collected at the end of the campaign, rather than at its beginning. Since it is not possible to exclude that the campaign success may increase the LinkedIn connections, following Mollick

---

<sup>49</sup> The OECD identifies four classes of functional urban areas: Small urban area, with population between 50.000 and 200.000; Medium-sized urban areas, with population between 200.000 and 500.000; Metropolitan areas, with population between 500.000 and 1.5 million; and Large metropolitan areas, with population above 1.5 million.

(2014), Colombo et al. (2015), and Vismara (2016), the analysis considers the founders' personal connections, which are less likely to increase significantly after the project success, rather than project connections. Among the different social networks, it is preferable to use LinkedIn, which is based on professional contacts, instead of social networks that are based on friendship (such as Facebook). Data sources and variables are presented in Table 6, Table 7 reports the summary statistics, and Table 8 reports the correlation matrix.

**Table 6. Variables and data sources**

<b>Variable</b>	<b>Symbol</b>	<b>Description</b>	<b>Data sources</b>
<i>Dependent variables</i>			
Project status	<i>project_status</i>	Binary variable equals to 1 if crowdfunding project succeeds, and 0 otherwise.	Platforms*
<i>Explanatory variables</i>			
Treated	<i>treated</i>	Binary variable equals to 1 for Mexican campaigns, and 0 otherwise.	Platforms
Post	<i>post</i>	Binary variable equals to 1 for campaigns made from 2016 onwards, and 0 otherwise.	
Treatment effect	<i>w</i>	An indicator variable that takes the value of 1 for Mexican campaigns made from 2016 onwards, and 0 otherwise.	Platforms
Fundraising goal	<i>f_goal</i>	The amount that founders seek to raise using crowdfunding in millions USD.	Platforms
Average investment	<i>av_inv</i>	The total amount raised at the end of the campaign divided by the number of investors, in millions USD.	Platforms
Number of founders	<i>n_fund</i>	The total number of company's founders as reported on the "team" page of each campaign.	Platforms
Minimum investment	<i>inv_min</i>	The minimum investment allowed for each campaign, in millions USD.	Platforms
Team support others campaigns	<i>t_oth</i>	Binary variable equals to 1 whether the team members of the company made an investment to others campaigns, and 0 otherwise.	Platforms
Urban area type	<i>large</i>	Binary variable equals to 1 whether the company is located in a large metropolitan area, and 0 otherwise.	Orbis
Founders self-financing	<i>f_self</i>	Binary variable equals to 1 whether the founders have self-financing their own project, and 0 otherwise.	Platforms
LinkedIn founders' connections	<i>lkd</i>	The average number of founders' LinkedIn connections.	LinkedIn

Source: Authors' elaboration



**Table 7. Summary Statistics**

This table reports the descriptive statistics for all the variables used in this study, by taking into account the same number of observations of the first model's running (see Table 9). All values are expressed in real USD to 31 December of the year related to the campaign. Treated campaigns (Mexican campaigns) are 284, while untreated campaigns (Brazilian and Chilean campaigns) are 122.

	Obs	Mean	Std. Dev.	Min	Max
<i>treated</i>	406	0.6995	0.4590	0	1
<i>f_goal</i>	406	69478.69	82305.38	2896.2	737664
<i>av_inv</i>	406	1451.818	2772.836	0	25450
<i>n_fund</i>	406	1.9901	0.9053	1	6
<i>inv_min</i>	406	286.7157	982.8904	4.827	16500
<i>t_oth</i>	406	0.06650	0.2494	0	1
<i>large</i>	406	0.6773	0.4680	0	1
<i>f_self</i>	406	0.0985	0.2983	0	1
<i>lkd</i>	406	299.6124	182.7182	0	501

Source: Authors' elaboration from STATA

**Table 8. Correlation matrix**

This table reports the correlation matrix for the variables used in this papers.

	treated	post	f_goal	av_inv	n_fund	inv_min	t_oth	large	f_self	lkd
treated	1									
post	-0.0622	1								
f_goal	-0.4836	0.1233	1							
av_inv	-0.3610	0.0949	0.4791	1						
n_fund	-0.1453	0.1450	0.0039	0.0704	1					
inv_min	-0.3172	0.0422	0.3241	0.3228	0.0741	1				
t_oth	-0.4074	0.0313	0.2562	0.2319	0.1237	0.1969	1			
large	-0.0375	0.0304	0.0646	0.1277	-0.0326	0.0749	0.0146	1		
f_self	-0.4866	0.0444	0.2881	0.2998	0.1870	0.2241	0.5089	-0.0199	1	
lkd	-0.4114	0.0716	0.3553	0.2627	0.0700	0.2159	0.2387	0.2025	0.2548	1

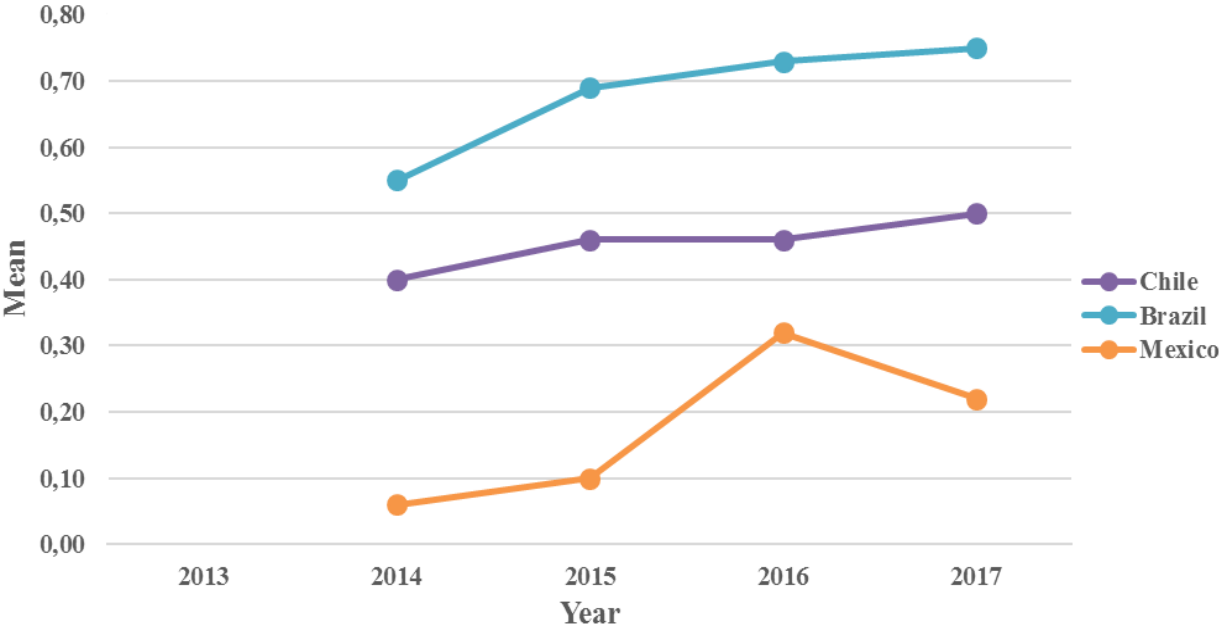
Source: Authors' elaboration from STATA

**Results**

This study investigates whether, after the introduction of a new framework against corruption affecting the private sector in Mexico, the equity crowdfunding campaigns become more likely to succeed. First, the analysis shows that the common trend assumption holds. The Figure 2 provides the mean of the dependent variable (*project\_status*) for the period before the treatment (i.e., for the years 2014-2015) and also after the treatment (i.e., for the years 2016-2017), reporting a parallel trend for the pre-treatment period.

**Figure 2. Successful projects (time period 2014-2017)**

This figure shows the mean of the dependent variable *Project status* on the vertical axis from 2014 to 2017. The years are plotted along the horizontal axis. The Mexican campaigns represent the treated group, while Brazilian and Chilean campaigns represent the untreated group. The trend of treated and untreated campaigns is parallel in the pre-treatment period (2014-2015).



Source: Authors' elaboration

Table 9 reports the results for the linear probability regressions. The coefficient of interest is always estimated for the treatment variable  $w$ , which equals 1 for treated campaigns after the introduction of the new framework against corruption (i.e., 2016 onward) and 0 otherwise (i.e., for untreated campaigns at any time and treated campaigns up to 2015). This coefficient provides information about the causal effect of the establishment of a new anti-corruption framework. Specifically, the coefficient estimate for the treatment variable ( $w$ ) is statistically significant (at 5%) in all model specifications. As expected, the treatment effect is not affected by adding campaigns' characteristics to the regression model. In columns 4, 3, 2, and 1 are added campaigns characteristics (fundraising goal, average investment, number of founders, minimum investment, team support other campaigns, urban area type, founders self-financing, LinkedIn founders' connections) as control variables, and the effect remains statistically significant, indicating that treated campaigns increased their success probability more than untreated campaigns did, following the new framework against corruption. Specifically, the first column (Table 9) shows that the introduction of the anti-corruption framework in Mexico increased the probability of project success by 13.17%.

A potential explanation for these results is that treated campaigns enjoyed of a greater trust from investors who felt more protected following the creation of a more robust legal framework.

Regarding the control variables, the results are generally consistent with those obtained from previous studies. Specifically, the regression analysis finds statistically significant empirical evidence that the others projects financially supported by the company team are associated with the final success of the crowdfunding campaign, as well as the founders' self-financing. These evidences reflect the investors' positive perception of team crowdfunding activity (Kunz et al., 2016).

In line with Ahlers et al. (2015) and Vismara (2016), the analysis finds that the number of founders is positive and statistically significant related to campaign success. This evidence is consistent with the possible conviction of investors that a higher number of founders, with different backgrounds and different type of knowledge coming together, can ensure the success of the invested companies.

The results also show that the founders' LinkedIn connections significantly affect the campaign success probability. Previous studies investigating the relevance of social networks in the equity crowdfunding context show that founders' LinkedIn connections are predictors of campaigns' success. Vismara (2016), for example, finds that campaigns in which founders have a large number of LinkedIn connections increase their success probability.

According to Mollick (2014) and Colombo et al. (2015), the analysis finds that the probability of success is negatively related to the fundraising goal.

As expected, campaigns from companies located in large metropolitan areas are more likely to succeed than those located in smaller urban areas due to the highest concentration of potential investors.

**Table 9. The impact of the new anti-corruption framework on equity crowdfunding**

This table reports the results for a set of linear probability regressions in which the dependent variable is *project\_status* (a binary variable that identifies the success of equity crowdfunding projects). The treatment variable (*w*) is equal to 1 for Mexican campaigns, which were affected by the new framework against corruption, following the new regulation (i.e., for years 2016-2017), and 0 otherwise. Starting from the last columns (column 5), in each regression are included control variables referring to the social network information (*stlkd*), the financial information (*f\_self*), the geographical information (*large*), the information about investment to others campaigns by the team members (*t\_oth*), the minimum allowed investment (*stinv\_min*), the total number of company's founders (*stn\_fund*), the average investment (*stav\_inv*), and finally information related to the amount that founders seek to raise using crowdfunding (*stln\_f\_goal*). The variables *stln\_f\_goal*, *stav\_inv*, *stn\_fund*, *stinv\_min*, *stlkd* are standardized. All the specifications include year fixed effects. Standard errors (in brackets) are clustered at industry level (three-digit sic codes, except in 4 cases providing only two-digit sic codes). The asterisks \*, \*\* or \*\*\* denote significance at the 10%, 5% and 1% levels, respectively.

VARIABLES	(1) project_status	(2) project_status	(3) project_status	(4) project_status	(5) project_status
treated	-0.4545*** (0.0676)	-0.5108*** (0.0773)	-0.5409*** (0.0692)	-0.5355*** (0.0673)	-0.5626*** (0.0723)
post	0.0073 (0.0751)	-0.0459 (0.0689)	-0.0455 (0.0720)	-0.0485 (0.0719)	0.0599 (0.0864)
w	0.1317** (0.0575)	0.1473** (0.0628)	0.1441** (0.0558)	0.1402** (0.0560)	0.1711** (0.0706)
stln_f_goal	-0.1563*** (0.0197)	-0.1180*** (0.0227)	-0.1187*** (0.0236)	-0.1167*** (0.0237)	
stav_inv	0.0263 (0.0265)	0.0300 (0.0306)	0.0358 (0.0263)	0.0389 (0.0265)	
stn_fund	0.0513*** (0.0116)	0.0526*** (0.0111)	0.0573*** (0.0123)	0.0560*** (0.0128)	
stinv_min	0.0427** (0.0184)	0.0443** (0.0206)	0.0458** (0.0221)	0.0467** (0.0218)	
t_oth	0.1699*** (0.0583)	0.2111*** (0.0588)	0.2844*** (0.0511)	0.2840*** (0.0514)	
large	0.0288 (0.0283)	0.0726** (0.0284)	0.0674** (0.0281)		
f_self	0.1555* (0.0848)	0.1723** (0.0792)			
stlkd	0.1280*** (0.0307)				
Constant	0.5484*** (0.0561)	0.5855*** (0.0689)	0.6204*** (0.0609)	0.6677*** (0.0575)	0.6715*** (0.0842)
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Observations	406	406	406	406	406
R-squared	0.3519	0.3013	0.2942	0.2900	0.2166

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Standard errors clustered at industry level

Source: Authors' elaboration from STATA

## **Robustness checks**

To further verify that the effect on the success of equity crowdfunding was exclusively due to the introduction of the new anti-corruption framework, a placebo test is conducted. Therefore, after defining as treated the Mexican campaigns and untreated the Brazilian and Chilean campaigns, the models are run pretending that the year of the regulation was 2014. In this way, it is possible to observe its effect on the probability of crowdfunding success in 2015. Therefore, the model from 2014 to 2015 is run, and the year 2015 is used as the treatment period. As previously, the choice to investigate the impact of the regulation one year later its passage is justified by the fact that in Mexico the government bureaucracy is recognized to be highly inefficient. Table 10 shows that the treatment effects estimated in the pre-treatment period are never statistically significant.

**Table 10. The impact of the new anti-corruption framework on equity crowdfunding (Placebo test)**

This table reports the results for a set of linear probability regressions in which the dependent variable is *project\_status* (a binary variable that identifies the success of equity crowdfunding projects). The treatment variable (*w*) is equal to 1 for Mexican campaigns, which were affected by the new framework against corruption, for year 2015, and 0 otherwise. Starting from the last columns (column 5), in each regression are included control variables showing social network information (*stlkd*), financial information (*f\_self*), geographical information (*large*), information about investment to others campaigns by the team members (*t\_oth*), the minimum allowed investment (*stinv\_min*), the total number of company's founders (*stn\_fund*), the average investment (*stav\_inv*), and finally information related to the amount that founders seek to raise using crowdfunding (*stln\_f\_goal*). The variables *stln\_f\_goal*, *stav\_inv*, *stn\_fund*, *stinv\_min*, *stlkd* are standardized. Standard errors (in brackets) are clustered at industry level (three-digit sic codes, except in 4 cases providing only two-digit sic codes). The asterisks \*, \*\* or \*\*\* denote significance at the 10%, 5% and 1% levels, respectively.

	(1)	(2)	(3)	(4)	(5)
VARIABLES	project_status	project_status	project_status	project_status	project_status
treated	-0.4312*** (0.1176)	-0.4637*** (0.1242)	-0.4786*** (0.1126)	-0.4731*** (0.1076)	-0.5114*** (0.1346)
post	0.0546 (0.1151)	0.0232 (0.1245)	0.0311 (0.1239)	0.0273 (0.1202)	0.0733 (0.1239)
w	-0.0670 (0.1220)	-0.0735 (0.1279)	-0.0796 (0.1283)	-0.0818 (0.1253)	-0.0679 (0.1315)
stln_f_goal	-0.1281*** (0.0310)	-0.1117*** (0.0302)	-0.1100*** (0.0327)	-0.1073*** (0.0303)	
stav_inv	0.0073 (0.0592)	0.0131 (0.0642)	0.0211 (0.0509)	0.0215 (0.0505)	
stn_fund	0.0500** (0.0203)	0.0660*** (0.0188)	0.0664*** (0.0183)	0.0644*** (0.0162)	
stinv_min	0.0382** (0.0152)	0.0390** (0.0171)	0.0373** (0.0148)	0.0378** (0.0140)	
t_oth	0.2705*** (0.0797)	0.3178*** (0.0835)	0.3300*** (0.0866)	0.3332*** (0.0838)	
large	0.0279 (0.0606)	0.0471 (0.0594)	0.0450 (0.0651)		
f_self	0.0887 (0.1696)	0.0967 (0.1761)			
stlkd	0.0868*** (0.0203)				
Constant	0.5460*** (0.0954)	0.5805*** (0.1027)	0.5983*** (0.0950)	0.6281*** (0.0885)	0.6364*** (0.1254)
Year fixed effects	No	No	No	No	No
Observations	158	158	158	158	158
R-squared	0.4249	0.3997	0.3974	0.3952	0.3073

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Standard errors clustered at industry level

Source: Authors' elaboration from STATA

## Conclusions

This study employs a unique database of successful and unsuccessful projects in three Latin American countries to investigate the impact of anti-corruption rules affecting the private sector on investment growth. The analysis is conducted by using a shock in regulation, represented by the introduction of a new anti-corruption framework in Mexico, to show the existence of a causal relation between the fight against the corruption and the investments in new projects. The initial assumption is that anti-corruption regulation increases investors' trust, so that investors feel more confident to invest in an emerging segment as crowdfunding.

Using a difference-in-difference estimation model, it emerges that following the new framework the equity crowdfunding projects in Mexico are more likely to succeed. Since Mexico is one of the most perceived corrupt country in the world (as proved by the CPI), these findings should be extendible to highly corrupt contexts. In this sense, this study can be useful to define political actions aimed to increase investments, and therefore to sustain economic growth, in countries publicly recognized as highly corrupt.

Even if the results show that increasing anti-corruption regulation impacts on the success of equity crowdfunding campaigns, a decline in the mean of successful projects following the initial increase in 2016 is signalled (see Figure 2). This effect could be due to the repeated corruption scandals reported by various newspapers during the year 2016, such as that concerning the Mexican president Enrique Peña Nieto and its presidential election<sup>50</sup>, or those involving the OHL México company, the Higa Group and the ICA-Alstom-Carso consortium<sup>51</sup>, but especially during 2017 (e.g., the scandal involving the former governor of Veracruz, Javier Duarte, who fled Mexico during the federal investigations on money laundering, embezzlement, buying homes using public funds<sup>52</sup>; and the famous “spyware scandal” involving the Mexican government accused of spying on journalists, activists, and opposition

---

<sup>50</sup>See “Un nuevo caso de corrupción estalla al Gobierno de Enrique Peña Nieto: Una trama habría desviado 12 millones de dólares de la secretaría de Hacienda al PRI para beneficiar al partido en las elecciones de 2016”. El País, available at: [https://elpais.com/internacional/2017/12/21/mexico/1513826104\\_500954.html](https://elpais.com/internacional/2017/12/21/mexico/1513826104_500954.html).

<sup>51</sup>See “4 casos de corrupción corporativa en México”. El Financiero (2016, April 14). Available at: <http://www.elfinanciero.com.mx/empresas/casos-de-corrupcion-corporativa-en-mexico>.

<sup>52</sup> See “Ex-Veracruz governor oversaw fake medical treatments for children”. El País (2017, January 18). Available at: [https://elpais.com/elpais/2017/01/18/inenglish/1484740910\\_263904.html](https://elpais.com/elpais/2017/01/18/inenglish/1484740910_263904.html).



politicians through the use of spyware on their mobile phones<sup>53</sup>). All these corruption scandals are reflected in the worsening conditions of the CPI of the country, which reduced from a score of 30 in 2016 to 29 in 2017. Based on these results it could be concluded that the new rules should be implemented and put into practice to be really effective (see Gerring and Thacker, 2005). In other words, regulation needs to be clear and credible in order to produce any positive effects, especially in highly corrupt environments.

---

<sup>53</sup> See “Mexican spy scandal escalates as study shows software targeted op position”. The Guardian (2017, June 18). Available at: <https://www.theguardian.com/world/2017/jun/19/mexico-cellphone-software-spying-journalists-activists>.

## Chapter 5

### Conclusions, limitations and future directions

This thesis is based on the premise that equity crowdfunding is becoming more and more an important source of funds to early-stage entrepreneurial firms, in both developed and developing countries. The rapid growth of equity crowdfunding market was likely due to a combination of favourable – and unfavourable - circumstances which have made it a multi-billion dollar industry worldwide. On the one hand, the 2008 financial crisis has tightened credit availability, depressing early-stage finance for entrepreneurs and halving Europe's growth potential. On the other hand, financial innovations driven by FinTech companies (including equity crowdfunding platforms) have provided consumers with an excellent opportunity to become investors and take advantage of their knowledge in financial matters. Moreover, financial innovations and the new instruments available have facilitated credit access for entrepreneurs, enabling them to seek funding from anyone.

Equity crowdfunding seems thus to have the potential to fundamentally change the investment and financing process, as well as to provide greater transparency especially in countries where high levels of corruption discourage any form of public or private investment. The important role played by equity crowdfunding should be properly recognised, and the increasing volumes of the market - in terms of the number of investors, the amount invested and sums raised for new ventures - should be properly favoured and encouraged by all the political forces.

The academic literature on this topic has analysed the crowdfunding market with growing interest. However, the research and knowledge of this new phenomenon are still limited, and some questions do still arise.

This doctoral thesis, which aims to address the topic of the equity crowdfunding in Europe and Latin America (the higher performing developing country in terms of utilizing crowdfunding, excluding Mainland China), it draws inspiration from the following research questions:

Research question 1: *Why do we need a harmonised regulation of crowdfunding in Europe? What are the challenges and risks to deal with?*

Research question 2: *Do tax incentives promote crowdfunding investment in Europe?*

Research question 3: *Does the fight against corruption increase the investors' confidence in equity crowdfunding?*

Answers to these questions provide an important step towards a better understanding of the functioning of crowdfunding markets. The three papers that constitute this thesis provide answers to the questions above by exploring specific strategies to drive equity crowdfunding growth and promote its use in financing entrepreneurship.

In particular, the second chapter entitled “*Harmonise Crowdfunding Regulation in Europe: Need, Challenges, and Risks*” deals with the issue of the harmonisation of crowdfunding regulation in Europe which is currently the subject of debate by policymakers and regulators. The too high level of heterogeneity in crowdfunding regulation among European countries is described as a need, as well as a major risk and a big challenge. While the properly tailored national regimes may promote and stimulate crowdfunding market locally, these are not necessarily compatible with each other within a transnational context. A heavy fragmentation in the national regulatory frameworks of the Individual Member States makes a more aligned Pan-European market less likely. Furthermore, the state of regulatory uncertainty deters investors and, as a consequence, strangles investments in crowdfunding. European policymakers and regulators should design a single framework which reaches across and beyond the borders of the European Union with the objective of harnessing the great potential of crowdfunding-driven innovations. Only in this way will it be possible to establish an innovation-promoting regulatory regime opening new economic opportunities for Europe and generating real impact in terms of new business creation.

The third chapter entitled “*Do tax incentives promote crowdfunding investment in Europe?*” investigates the role that tax incentives schemes can play in fostering investment in young, growing and innovative businesses through crowdfunding platforms. Seed and early-stage funding are in fact extremely risky and early stage investors have to face the uncertainties that permeate investment projects, often without an adequate level of protection. Therefore, the tax incentive could support the de-risking of crowdfunding investment. The chapter begins by describing the different types of tax incentive schemes designed to promote crowdfunding investment in the sample of 5 countries (the United Kingdom, France, Italy, Spain, and Belgium). Building on a theoretical framework, it subsequently shows that the more tax incentives schemes are properly designed and tailored, the more investors, start-ups and other firms with low liquidity use crowdfunding as a source of funding.

The fourth chapter entitled “*Does the fight against corruption increase the investors’ confidence in equity crowdfunding?*” addresses the concern with corruption in equity crowdfunding markets and the resulting response of Government regulation in Latin America. More in detail, it is based on the assumption that a high level of corruption, combined with

unstable economic policies, weak and poorly investors' protection, as well as inefficient government institutions, creates a "non-transparent" environment where the risk and uncertainty faced by investors are very high. In such a context, corruption creates mistrust among investors and deters crowdfunding investment, thus develop anti-corruption laws can be the key to fight corruption effectively, promote transparency, and to build the "culture of trust", which is essential to crowdfunding success (Belleflamme et al., 2014; Ahlers et al., 2015; Courtney et al., 2017). Based on a unique database, with combined information from different equity crowdfunding platforms in Brazil, Chile, and Mexico, this chapter investigates whether the introduction of the Mexican anti-corruption framework affecting both public and private spheres is able to increase investors' confidence in crowdfunding investment. Implementing a set of linear probability regressions, it finds that the new Mexican anti-corruption law has increased the probability of success of equity crowdfunding projects in this country compared to Brazilian and Chilean projects, suggesting the existence of a causal relation between anti-corruption rules and investments in a highly perceived corrupt environment, further characterized by a low level of investors' protection.

As with most studies, this thesis has several limitations which open the door to future research. To start, the first paper discusses recent reforms in national regulation concern improvements to the quality of crowdfunding regulation. While this study contributes to the ongoing regulatory debate on how to remove obstacles and design a single crowdfunding market in Europe, it requires further thinking. As future work, a way ahead could be to observe the implications of the harmonisation process from the perspective of investor protection at the European level.

The second paper considers the effectiveness of tax incentives schemes in promoting crowdfunding investment in Europe. Although the paper contributes to extending the effect of tax incentives on investment in the novel context of equity crowdfunding, all findings should be viewed in the light of the qualitative and exploratory nature of the research work. Indeed, the paper can only offer a preliminary insight into the effect of tax incentives in stimulating crowdfunding investment. Further research could extend these insights in a quantitative way.

Finally, the third research examines the effect of the Mexican anti-corruption law on equity crowdfunding investments. It would be interesting for future research to observe - potentially to different degrees - this effect for other asset classes as stocks, bonds, venture capital, private equity, etc. Moreover, while the Latin America sample remains unique and representative of the whole market in each country, its size is relatively small due to the recent

market development. A bigger and deepest sample would allow a better analysis of the treatment effect.

## References

- Aernoudt, R. 1999. Business angels: should they fly on their own wings? *Venture Capital: An International Journal of Entrepreneurial Finance* 1 (2), 187 – 195.
- Agrawal, A., Catalani, C., Goldfarb, A. 2015. Crowdfunding: Geography, Social Networks, and the Timing of Investment Decisions, *Journal of Economics and Management Strategy* 24 (2), 253-274.
- Ahlers, G.K.C., Cumming, D.J., Guenther, C., and Schweizer, D. 2015. Signaling in Equity Crowdfunding, *Entrepreneurship Theory and Practice* 39 (4), 955-980.
- Aidis, R., Estrin, S., and Mickiewicz, T. M. 2012. Size matters: Entrepreneurial entry and government, *Small Business Economics* 39 (1), 119-139.
- Allison, T. H., Davis, B. C., Short, J. C., and Webb, J. W. 2015. Crowdfunding in a Prosocial Microlending Environment: Examining the Role of Intrinsic Versus Extrinsic Cues, *Entrepreneurship Theory and Practice* 39 (1), 53-73.
- Amore, M.D., and Bennedsen, M. 2013. The value of political connections in a low-corruption environment, *Journal of Financial Economics* 110 (2), 387-402.
- Andvig, J. C. 2006. Corruption and fast change, *World Development* 34 (2), 328–340.
- Angerer, M., Brem, A., Kraus, S., and Peter, A. 2017. Start-up funding via equity crowdfunding in Germany – a qualitative analysis of success factors, *The Journal of Entrepreneurial Finance* 19 (1), 1-34.
- Anokhin, S., and Schulze, W. S. 2009. Entrepreneurship, innovation, and corruption. *Journal of Business Venturing* 24 (5), 465-476.
- Armour, J., and Cumming, D.J. 2006. The Legislative Road to Silicon Valley. *Oxford Economic Papers* 58, 596-635.
- Asiedu, E. 2006, Foreign Direct Investment in Africa: The Role of Natural Resources, Market Size, Government Policy, Institutions and Political Instability, *The World Economy* 29 (1), 63-77.
- Asiedu, E., and Freeman, J. 2009. The effect of corruption on investment growth: evidence from firms in Latin America, Sub-Saharan Africa, and Transition Countries, *Review of Development Economy* 13 (2), 200-214.
- Authority, Financial Conduct. 2014. The FCA’s regulatory approach to crowdfunding over the internet, and the promotion of non-readily realisable securities by other media. *Policy Statement* 14 (4).
- Avnimelech, G., Zelekha, Y., and Sharabi, E. 2014. The effect of corruption on entrepreneurship in developed vs. non-developed countries. *International Journal of Entrepreneurial Behavior and Research* 20 (3), 237-262.
- Barassi, M. R., and Zhou, Y. 2012. The effect of corruption on FDI: A parametric and non-parametric analysis, *European Journal of Political Economy* 28 (3), 302-312.
- Bardhan, P. 1997. Corruption and development: a review of issues, *Journal of Economic Literature* 35 (3), 1320-1346.
- Barr, A., and Serra, D. 2010. Corruption and culture: An experimental analysis, *Journal of Public Economics* 94 (11-12), 862–869.
- Belleflamme, P., Lambert, T., and Schwienbacher, A. 2010. An industrial organization. Prepared for the workshop *Digital Business Models: Understanding Strategies*, held in Paris on June, 2010, 25–26.

- Belleflamme, P., Lambert, T., and Schwienbacher, A. 2013. Individual crowdfunding practices, *Venture capital: An International Journal of Entrepreneurial Finance* 15 (4), 313–333.
- Belleflamme, P., Lambert, T., and Schwienbacher, A. 2014. Crowdfunding: tapping the right crowd, *Journal of Business Venturing* 29 (5), 585–609.
- Bénassy-Quéré, A., Coupet, M., and Mayer, T. 2007, Institutional Determinants of Foreign Direct Investment, *The World Economy* 30 (5), 764-782.
- Bengoa, M., and Sanchez-Robles, B. 2003. Foreign direct investment, economic freedom and growth: new evidence from Latin America, *European Journal of Political Economy* 19 (3), 529-545.
- Block, J., Hornuf, L. and Moritz, A. 2018. Which updates during an equity crowdfunding campaign increase crowd participation? *Small Business Economics* 50 (1), 3-27.
- Block, J.H., Colombo, M.G., Cumming, D.J. and Vismara, S. 2018. New players in entrepreneurial finance and why they are there. *Small Business Economics* 50 (2), 239-250.
- Boitan I.A. 2016. Crowdfunding and Financial Inclusion Evidence from EU Countries. *Economic Alternatives* 4, 418-432.
- Bondolino, D. and R.T. Greenbaum, 2007. Do local tax incentives affect economic growth? What mean impacts miss in the analysis of enterprise zone policies. *Regional Science and Urban Economics* 37 (1), 121–36.
- Bonnefoy, P. 2015a. Executives are jailed in Chile finance scandal, *New York Times*, 7 March, available at: <http://www.nytimes.com/2015/03/08/world/americas/executives-arejailed-in-chile-finance-scandal.html>.
- Bonnefoy, P. 2015b. Four prominent Chilean politicians are charged with tax fraud, *New York Times*, 22 June. Available at: <http://www.nytimes.com/2015/06/23/world/americas/fourprominent-chilean-politicians-are-charged-with-tax-fraud.html>.
- Boudreaux, C.J., Nikolaev, B.N. and Holcombe, R.G. 2018. Corruption and destructive entrepreneurship, *Small Business Economics* 51 (1), 181-202.
- Bouncken, R. B., Komorek, M., and Kraus, S. 2015. Crowdfunding: The current state of research, *The International Business & Economics Research Journal (Online)* 14 (3), 407-416.
- Bradford C. S. 2018. The Regulation of Crowdfunding in the United States. In *The Economics of Crowdfunding*, ed. D. Cumming and L. Hornuf L., 185-217. Palgrave Macmillan, Cham.
- Bradford, C. S. 2012. The new federal crowdfunding exemption: Promise unfulfilled. *Securities Regulation Law Journal* 40 (3), 195-249.
- Bradford, C.S. 2012a. Crowdfunding and the federal securities laws. *Columbia Business Law Review* 2012 (1), 1-150.
- Brodzka, A. 2013. Tax incentives in emerging economies, *Business Systems and Economics* 3 (1), 26-36.
- Brown, J. D., and Earle, J. S. 2017. Finance and growth at the firm level: evidence from SBA loans. *The Journal of Finance* 72 (3), 1039-1080.

- Bruton, G. D., Ahlstrom, D., and Li, H. L. 2010. Institutional theory and entrepreneurship: where are we now and where do we need to move in the future? *Entrepreneurship Theory and Practice* 34 (3), 421-440.
- Bruton, G., Khavul, S., Siegel, D., and Wright, M. 2015. New Financial Alternatives in Seeding Entrepreneurship: Microfinance, Crowdfunding, and Peer-to-Peer Innovations. *Entrepreneurship Theory and Practice* 39 (1), 9-26.
- Burtch, G., Ghose, A., and Wattal, S. 2014. Cultural Differences and Geography as Determinants of Online Pro-Social Lending, *MIS Quarterly* 38 (3), 773-794.
- Busenitz, L. W., Gomez, C., and Spencer, J. W. 2000. Country institutional profiles: unlocking entrepreneurial phenomena. *Academy of Management Journal* 43 (5), 994-1003.
- Busse; M., and Hefeker, C. 2007, Political risk, institutions and foreign direct investment, *European Journal of Political Economy* 23 (2), 397-415.
- Bygrave, W. D. 2004. GEM 2003 global report on venture capital, Global Entrepreneurship Monitor, USA.
- Canache, D., and Allison, M. 2005. Perceptions of Political Corruption in Latin American Democracies, *Latin American Politics and Society* 47 (3), 91-111.
- Carpentier, C., and Suret, J.-M. 2007. On the usefulness of tax incentives for informal investors. *Venture Capital: An International Journal of Entrepreneurial Finance* 9 (1), 1-22.
- Cary Brown, E. 1962. Tax Incentives for Investment. *The American Economic Review* 52 (2), 335-345.
- Casas-Zamora, K. 2016. The state of political finance regulations in Latin America, *International IDEA Discussion Paper* 12, 1-34.
- Casas-Zamora, K., and Carter, M. 2017. Beyond the Scandals: The Changing Context of Corruption in Latin America, Washington, DC: Inter-American Dialogue.
- Cholakova, M., and Clarysse, B. 2015. 'Does the possibility to make equity investments in crowdfunding projects crowd out reward-based investments? *Entrepreneurship Theory and Practice* 39 (1), 145–172.
- Christofidis, C. and Debande, O. 2001. Financing innovative firms through venture capital. *European Investment Bank Sector*, Paper 81.
- Colombo, M. G., Franzoni, C., and Rossi-Lamastra, C. 2015. Internal social capital and the attraction of early contributions in crowdfunding, *Entrepreneurship Theory and Practice* 39 (1), 75–100.
- Corchon, L. C. 2008. Forms of governance and the size of rent-seeking, *Social Choice and Welfare* 30 (2), 197–210.
- Cordova, A., Dolci, J. and Gianfrate, G. 2015. The Determinants of Crowdfunding Success: Evidence from Technology Projects, *Procedia-Social and Behavioral Sciences* 181, 115-124.
- Cosh, A., Cumming, D. J., and Hughes, A. 2009. Outside entrepreneurial capital. *Economic Journal* 119 (540), 1494–1533.
- Courtney, C., Dutta, S., Li. Y. (2017). Resolving Information Asymmetry: Signaling, Endorsement, and Crowdfunding Success. *Entrepreneurship Theory and Practice*, 41 (2), 265-290.



- Cowling, M., Bates, P., Jagger, N., and Murray, G. 2008. Study of the Impact of Enterprise Investment Scheme EIS and Venture Capital Trusts (VCT) on Company Performance. HM Revenue & Customs. Research Report no.44.
- Craze, M. and Quiroga, J. 2014. SQM's Ponce fined \$70 million in record Chile sanctions, *Bloomberg Business*, 2 September. Available at: <http://www.bloomberg.com/news/articles/2014-09-02/sqm-s-ponce-fined-70-million-in-record-chile-sanctions>.
- Cumming, D.J., Hornuf, L., Karami, M., Schweizer, D. 2016. Disentangling crowdfunding from fraud funding. Max Planck Institute for Innovation & Competition Research Paper No. 16-09. Available at SSRN: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2828919](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2828919).
- Cumming, D.J., and Johan, S. 2013. Demand-driven securities regulation: evidence from crowdfunding, *Venture capital: An International Journal of Entrepreneurial Finance* 15 (4), 361-379.
- Cumming, D.J., and Li, D. 2013. Public policy, entrepreneurship, and venture capital in the United States. *Journal of Corporate Finance* 23, 345-367.
- Cumming, D.J., and MacIntosh, J. G. 2006. Crowding out private equity: Canadian evidence. *Journal of Business Venturing* 21 (5), 569– 609.
- Cumming, D.J., and Vismara, S. 2017. De-segmenting research in entrepreneurial finance. *Venture Capital: An International Journal of Entrepreneurial Finance* 19 (1/2): 17-27.
- Cumming, D.J., Leboeuf, G., and Schwienbacher, A. 2015. Crowdfunding Models: Keep-It-All vs. All-Or-Nothing. Available at SSRN: <https://ssrn.com/abstract=2447567> or <http://dx.doi.org/10.2139/ssrn.2447567>.
- De Buysere, K., Gajda, O., Kleverlaan, R., and Marom, D. 2012. A framework for European crowdfunding.
- De la Peña, A. and Villasenor, F. 2017. Upcoming Mexico Anti-Corruption Law: What Does it Mean for Companies Doing Business in Mexico?, Haynes and Boone, LLP, available at: <http://www.haynesboone.com/publications/new-mexico-anti-corruption-law>.
- Delgado, M. S., McCloud, N., and Kumbhakar, S. C. 2014. A generalized empirical model of corruption, foreign direct investment and growth, *Journal of Macroeconomics* 42, 298-316.
- Dreher, A., and Gassebner, M. 2013. Greasing the wheels? The impact of regulations and corruption on firm entry. *Public Choice* 155, 413-432.
- Dutta, N., and Sobel, R. 2016. Does corruption ever help entrepreneurship? *Small Business Economics* 47(1), 179-199.
- Easson, A., and Zolt, E. M. 2002. Tax incentives, Washington DC: World Bank Institute.
- Egger, P., and Winner, H. 2006. How corruption influences foreign direct investment: a panel data study, *Economic Development and Cultural Change* 54 (2), 459-486.
- Estevez, D. 2013. The 10 Most Corrupt Mexicans Of 2013, Forbes, 16 December, available at: <https://www.forbes.com/sites/doliaestevez/2013/12/16/the-10-most-corrupt-mexicans-of-2013/#7df65be5720d>.

- Estrin, S., Gozman, D. and Khavul, S. 2018. The evolution and adoption of equity crowdfunding: entrepreneur and investor entry into a new market. *Small Business Economics*, 1-15.
- Estrin, S., Korosteleva, J., and Mickiewicz, T. 2013. Which institutions encourage entrepreneurial growth aspirations? *Journal of Business Venturing* 28 (4), 564-580.
- European Commission communication. 2014. Unleashing the potential of Crowdfunding in the European Union. Available at: [http://ec.europa.eu/internal\\_market/finances/docs/crowdfunding/140327-communication\\_en.pdf](http://ec.europa.eu/internal_market/finances/docs/crowdfunding/140327-communication_en.pdf).
- European Commission communication. 2015. Crowdfunding: Mapping EU markets and events study. Available at [https://ec.europa.eu/info/sites/info/files/crowdfunding-study-30092015\\_en.pdf](https://ec.europa.eu/info/sites/info/files/crowdfunding-study-30092015_en.pdf).
- European Commission communication. 2016. Crowdfunding in the EU Capital Markets Union. Available at: [https://ec.europa.eu/info/system/files/crowdfunding-report-03052016\\_en.pdf](https://ec.europa.eu/info/system/files/crowdfunding-report-03052016_en.pdf).
- European Commission. 2015. Building a Capital Markets Union.” Brussels.
- European Commission. 2017. Identifying market and regulatory obstacles to cross-border development of crowdfunding in the EU. Final report December 2017.
- European Commission. 2017a. “Assessing the potential for crowdfunding and other forms of alternative finance to support research and innovation.” Final report January 2017.
- European Commission. 2018a. Completing the Capital Markets Union by 2019 – time to accelerate delivery. Brussels.
- European Commission. 2018b. Proposal for a Regulation of the European Parliament and of the Council on European Crowdfunding Service Providers (ECSP) for Business. Brussels.
- European Commission. 2018c. Proposal for a Directive of the European Parliament and of the Council amending Directive 2014/65/EU on markets in financial instruments. Brussels.
- European Parliament. 2017. Crowdfunding in Europe: Introduction and State of Play. Available at: [http://www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS\\_BRI2017595882](http://www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS_BRI2017595882).
- European Parliament. 2018. Draft Report on the proposal for a regulation of the European Parliament and of the Council on European Crowdfunding Service Providers (ECSP) for Business. Committee on Economic and Monetary Affairs.
- Financial Stability Board 2017. Supervisory and Regulatory Issues Raised by FinTech that Merit Authorities’ Attention.
- Fink, A. 2012. Protecting the crowd and raising capital through the JOBS Act. Available at SSRN: <http://ssrn.com/abstract=2046051>.
- Gabison, G. A. 2015. Equity Crowdfunding: All Regulated but Not Equal. *DePaul Business and Commercial Law Journal* 13 (3), 359-408.
- Gaviria, A. 2002. Assessing the effects of corruption and crime on firm performance: evidence from Latin America, *Emerging Markets Review* 3 (3), 245-268.
- Gerber, E. M., Hui, J. S., and Kuo, P.-Y. 2012. Crowdfunding: Why People Are Motivated to Post and Fund Projects on Crowdfunding Platforms, In Proceedings of the International Workshop on Design, Influence, and Social Technologies: Techniques, Impacts and Ethics 2 (11). New York, NY: ACM.

- Gerring, J., and Thacke, S.C. 2004. Political Institutions and Corruption: The Role of Unitarism and Parliamentarism, *British Journal of Political Science* 34 (2), 295-330.
- Gerring, John, Thacker, Strom C. 2005. Do Neoliberal Policies Deter Political Corruption? *Cambridge University Press* 59 (1), 233-254.
- Gierczak, M.M., Bretschneider, U., Haas, P., Blohm, I., and Leimeister, J.M. 2016. Crowdfunding: Outlining the New Era of Fundraising, in *Crowdfunding in Europe: State of the art in theory and practice*, ed. B. Dennis and G. Oliver., 7-23. Springer International Publishing.
- Gioia, D. A., Corley, K., and Hamilton, A. 2013. Seeking qualitative rigor in inductive research: notes on the Gioia methodology. *Organizational Research Methods* 16 (1).
- Glaeser, E., and Saks, R. 2006. Corruption in America, *Journal of Public Economics* 90 (6-7), 1053-1072.
- Godinez, J. R., and Liu, L. 2015. Corruption distance and FDI flow into Latin America, *International Business Review* 24 (1), 33-42.
- Günther, C., Johan, S., and Schweizer, D. 2018. Is the crowd sensitive to distance? How investment decisions differ by investor type, *Small Business Economics* 50 (2), 289-305.
- Habib, M. and Zurawicki, L. J. 2001. Country-level investments and the effect of corruption - some empirical evidence, *International Business Review* 10 (6), 687-700.
- Habib, M. and Zurawicki, L. J. 2002. Corruption and Foreign Direct Investment, *Journal of International Business Studies* 33 (2), 291-307.
- Hauk, E., Oviedo, M., and Ramos, X. 2017. Perception of Corruption and Public Support for Redistribution in Latin America, Institute for the Study of Labor (IZA) *Discussion Paper* No. 10854. Available at SSRN: <https://ssrn.com/abstract=2998963>.
- Hauk, E., Saez-Marti, M. 2002. On the cultural transmission of corruption, *Journal of Economic Theory* 107 (2), 311-335.
- Hazen, T. L. 2011. Social Networks and The Law: Crowdfunding or Fraudfunding? Social Networks and the Securities Laws. Why The Specially Tailored Exemption Must Be Conditioned on Meaningful Disclosure, *NCL Rev.*90, 1735-2162.
- Hazen, T.L. 2012. Crowdfunding or Fraudfunding? Social Networks and the Securities Laws - Why the Specially Tailored Exemption Must Be Conditioned on Meaningful Disclosure. *N.C. L. Rev.* 90,1735-1769.
- Hemer, J., Schneider, U., Dornbusch, F., and Frey, S. 2011. Crowdfunding und andere Formen informeller Mikrofinanzierung in der Projekt- und Innovationsfinanzierung, Fraunhofer Verlag, Stuttgart.
- Hienert, C., and Riar, F. 2013. The wisdom of the crowd vs. expert evaluation: A conceptualization of evaluation validity. In 35th DRUID Celebration Conference, Barcelona, Spain, June, 17-19.
- HM Revenue and Customs. 2016. *Use and impact of venture capital schemes*. HRMC Research Report no.355. Available at: [file:///C:/Users/Utente/Desktop/tax%20incentives/Venture\\_Capital\\_Schemes\\_report\\_v11\\_PUBLICATION.pdf](file:///C:/Users/Utente/Desktop/tax%20incentives/Venture_Capital_Schemes_report_v11_PUBLICATION.pdf).
- Hornuf, L., and Schmitt, M. 2016. Does a local bias exist in equity crowdfunding?

- Hornuf, L., and Schwienbacher, A. 2015. Funding dynamics in crowdinvesting.
- Hornuf, L., and Schwienbacher, A. 2017. Should securities regulation promote equity crowdfunding? *Small Business Economics* 49 (3), 579-593.
- Hornuf, L., and Schwienbacher, A. 2018. Market mechanisms and funding dynamics in equity crowdfunding, *Journal of Corporate Finance* 50, 556-574.
- Hu, M., Li, X., and Shi, M. 2015. Product and Pricing Decisions in Crowdfunding, *Marketing Science* 34 (3), 331–345.
- Huntington, S. 1968. Political order in changing societies, Yale University Press.
- Huntington, S.P. 1970. Political order in changing societies, *VRÜ Verfassung und Recht in Übersee* 3 (2), 257-261.
- Institute for Advanced Studies (IHS), 2017. Effectiveness of tax incentives for venture capital and business angels to foster the investment of SMEs and start-ups. Taxation Papers no. 68, Directorate General Taxation and Customs Union, European Commission. Available at: <https://ideas.repec.org/p/tax/taxpap/0068.html>.
- Ivanyna, M., Moumouras, A., and Rangazas, P. 2016. The culture of corruption, tax evasion, and economic growth, *Economic inquiry* 54 (1), 520-542.
- IW Capital: Invested Interest. 2016. Taxpayer Sentiment Report 2016. Available at: <https://iwcapital.co.uk/wp-content/uploads/2016/03/Taxpayer-Sentiment-Report-2016.pdf>.
- Iwasaki, I., and Suzuki, T. 2012. The determinants of corruption in transition economies, *Economics Letters* 114 (1), 54–60.
- Javorcik, B. S., and Wei, S-J. 2009. Corruption and cross-border investment in emerging markets: Firm-level evidence, *Journal of International Money and Finance* 28 (4), 605-624.
- Jetter, M., Montoya Agudelo A., and Ramirez Hassan, A. 2015. The Effect of Democracy on Corruption: Income is Key, *World Development* 74, 286–304.
- Jong-Sung, Y., and Khagram, S. 2005. A comparative study of inequality and corruption, *American Sociological Review* 70 (1), 136–157.
- Jorgenson, D. W. 1963. Capital Theory and Investment Behavior, *American Economic Review* 53 (2), 47-56.
- Juredieu, F. and Mayoux, S. 2016. Crowdfunding Legal Framework: An International Analysis. In *International Perspectives on Crowdfunding: Positive, Normative and Critical Theory*, ed. J. Méric, I. Maque and J. Brabet, 81-97. Emerald Group Publishing Limited.
- Kabai, M. 2017. Twist and turns of crowdfunding regulation. *Journal of Public Administration, Finance and Law* 11, 181-188.
- Kaufmann, D. 1997. Corruption: the facts, *Foreign Policy* 107, 114-131.
- Keschnigg, C., and Nielsen, S.B. 2002. Tax Policy, Venture Capital, and Entrepreneurship, *Journal of Public Economics* 87 (1), 75–203.
- Keuschnigg, C., and Nielsen, S.B. 2004. Taxation and Venture Capital Backed Entrepreneurship, *International Tax and Public Finance* 11 (4), 369-390.
- Kinda, T. 2018. The Quest for Non-Resource-Based FDI: Do Taxes Matter? *Macroeconomics and Finance in Emerging Market Economies, Taylor & Francis Journals* 11 (1), 1-18.

- Klemm, A. 2010. Causes, benefits and risks of business tax incentives, *International Tax and Public Finance*, 17(3), 315–336.
- Klemm, A., and Van Parys, S. 2012. Empirical evidence on the effects of tax incentives. *International Tax and Public Finance* 19 (3), 393–423.
- Klöhn, L., and Hornuf, L. 2012. Crowdfunding in Deutschland, *Zeitschrift für Bankrecht und Bankwirtschaft* 24 (4), 237–266.
- Knight, T. B., Leo, H., Ohmer, A. 2012. A Very Quiet Revolution: A Primer on Securities Crowdfunding and Title III of the Jobs Act. *Michigan Journal of Private Equity & Venture Capital Law* 2, 135-153.
- Koch, J.-A., and Siering, M. 2015. Crowdfunding success factors: The characteristics of successfully funded projects on crowdfunding platforms, *Proceedings of the 23rd European Conference on Information Systems (ECIS 2015)*, Münster, Germany, May 26–29, 2015.
- Kromidha, E., and Robson, P. 2016. Social identity and signaling success factors in online crowdfunding, *Entrepreneurship & Regional Development* 28 (9-10), 605-629.
- Kunz, M. M., Englisch, O., Beck, J., and Bretschneider, U. 2016. Sometimes You Win, Sometimes You Learn—Success Factors in Reward-Based Crowdfunding, *Proceedings of the Multikonferenz Wirtschaftsinformatik(MKWI)*, Ilmenau, Germany.
- Kuppuswamy, V., and Bayus, B.L. 2017. A Review of Crowdfunding Research and Findings. In *Handbook of New Product Development Research*, ed. P. Golder and D. Mitra. Northhampton, MA : Edward Elgar.
- La Porta, R., Lopez-de-Silanes, F., and Shleifer, A. 2006. What works in securities law? *Journal of finance* 61, 1-32.
- La Porta, R., Lopez-de-Silanes, F., Shliefer, A., and Vishny, R. 1999. The quality of government, *The Journal of Law, Economics, and Organization* 15 (1), 222–279.
- Lambsdorff, J.G. 2006. Causes and consequences of corruption: what do we know from a cross-section of countries? In *International Handbook on the Economics of Corruption*, Rose-Ackerman, S. (ed) *Edward Elgar*, Cheltenham, UK, 3–51.
- Leboeuf G., and Schwienbacher A. 2018. Crowdfunding as a New Financing Tool. In *The Economics of Crowdfunding*, ed. D. Cumming and L. Hornuf, 11-28. Palgrave Macmillan, Cham.
- Lin, M., and Viswanathan. 2016. Home bias in online investments: An empirical study of an online crowdfunding market, *Management Science* 62 (5), 1393-1414.
- Lin, M., Prabhala, N. R., and Viswanathan, S. 2013. Judging borrowers by the company they keep: Friendship networks and information asymmetry in online peer-to-peer lending, *Management Science*, 59 (1), 17-35.
- Lin, Y., Boh, W. F., and Goh, K. H. 2014. How Different are Crowdfunders? Examining Archetypes of Crowdfunders and Their Choice of Projects, *Academy of Management Proceedings* 2014 (1), 13309. Briarcliff Manor, NY 10510: Academy of Management.
- Lipper, G., and Sommer, B. 2002. Encouraging angel capital: What the US states are doing. *Venture Capital: An International Journal of Entrepreneurial Finance* 4 (4), 357-362.

- Macchiavello, E. 2018. Financial-return Crowdfunding and Regulatory Approaches in the Shadow Banking, FinTech and Collaborative Finance Era. *European Company and Financial Law Review* 14 (4), 662-722.
- Mach, T., and Weatherston, J. 2014. The Benefits of Online Crowdfunding for Fund-Seeking Business Ventures, *Strategic Change* 23 (1-2), 1-14.
- Mason, C. 2009. Public Policy Support for the Informal Venture Capital Market in Europe: A Critical Review. *International Small Business Journal* 27 (5), 536–556.
- Mason, C. M., and Harrison, R. T. 1999. Public policy and the development of the informal venture capital market: UK experience and lessons for Europe. In K. Cowling (Ed.), *Industrial Policy in Europe -Theoretical Perspectives and Practical Proposals*. London: Routledge.
- Mauro P. 1996. The effects of corruption on growth, investment, and government expenditure. IMF Working paper 96/98, 1–28. Available at SSRN: <http://ssrn.com/abstract=&#x0003D;882994>.
- Mauro, P. 1995. Corruption and Growth, *Quarterly Journal of Economics* 110 (3), 681-712.
- Meggison, W. L. 2004. ‘Towards a Global Model of Venture Capital’, *Journal of Applied Corporate Finance* 16 (1), 89–107.
- Mollick, E. 2014. The dynamics of crowdfunding: An exploratory study, *Journal of Business Venturing* 29 (1), 1-16.
- Mollick, E., and Kuppaswamy, V. 2014. After the Campaign: Outcomes of Crowdfunding, *UNC Kenan-Flagler Research Paper No. 2376997*.
- Montinola, G. and Jackman, R. 2002. Sources of Corruption: A Cross-Country Study, *British Journal of Political Science* 32 (1), 147-170.
- Moritz A., Block J.H. 2016. Crowdfunding: A Literature Review and Research Directions. In *Crowdfunding in Europe: State of the Art in Theory and Practice*, ed. D. Brüntje and O. Gajda, 25-53. Springer, Cham.
- Munongo, S., Akanbi, O. A., and Robinson, Z. 2017. ‘Do tax incentives matter for investment? A literature review’, *Business and Economic Horizons* 13 (2), 152-168.
- OECD. 2001. Corporate Tax Incentives for Foreign Direct Investment. OECD Tax Policy Studies no. 4, 13-29. OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264188402-en>.
- Ordanini, A., Miceli, L., Pizzetti, M., and Parasuraman, A. 2011. Crowd-Funding: Transforming Customers Into Investors Through Innovative Service Platforms, *Journal of Service Management* 22 (4), 443-470.
- Ovaska, T., and Sobel, R. S. 2005. Entrepreneurship in post-socialist economies. *Journal of private enterprise* 21 (1), 8-28.
- Polzin, F., Toxopeus, H., and Stam, E. 2018. The wisdom of the crowd in funding: information heterogeneity and social networks of crowdfunders, *Small Business Economics* 50 (2), 251-273.
- Radaev, V. 2004. How trust is established in economic relationship when institutions and individuals are not trustworthy: The case of Russia. In *Creating social trust in post-socialist transition*, eds. J. Kornay, B. Rothstein, and S. Rose-Ackerman, 91-111. Basingstoke: Palgrave.

- Ralcheva, A., and Roosenboom, P. 2016. On the road to success in equity crowdfunding. Available on SSRN: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2727742](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2727742).
- Ramírez, P. 2015. Platas negras de SQM: el pulpo que puso sus tentáculos en todos los sectores políticos, [The black money at SQM: The octopus that placed its tentacles on all the political sectors], Centro de Investigación Periodística, 7 September, available at: <http://ciperchile.cl/2015/09/07/platas-negras-de-sqm-el-pulpo-que-puso-sustentaculos-en-todos-los-sectores-politicos/>.
- Rose, R. 2000. Getting things done in an anti-modern society: social capital network in Russia. In *Social capital: a multifaceted perspective*, eds. P. Disgupta and I. Serageldin, 147-171. Washington, DC: The World Bank.
- Sandholtz, W and Koetzle, W. 2000. Accounting for Corruption: Economic Structure, Democracy, and Trade, *International Studies Quarterly* 44 (1), 31-50.
- Sandholtz, W., and Gray, M. N. 2003. International Integration and National Corruption, *Cambridge University press* 57 (4), 761-800.
- Schwab, K., Ed. 2014. The Global Competitiveness Report 2014-2015. The Global Competitiveness and Benchmarking Network. Geneva, The World Economic Forum. Available at: [http://www3.weforum.org/docs/WEF\\_GlobalCompetitivenessReport\\_2014-15.pdf](http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf).
- Schwab, K., Ed. 2015. Global Competitiveness Report 2015-2016. The Global Competitiveness and Risks Team. Geneva, The World Economic Forum. Available at: [http://www3.weforum.org/docs/gcr/2015-2016/Global\\_Competitiveness\\_Report\\_2015-2016.pdf](http://www3.weforum.org/docs/gcr/2015-2016/Global_Competitiveness_Report_2015-2016.pdf).
- Schwiebacher, A., and Larralde, B. 2012. Crowdfunding of Small Entrepreneurial Ventures. In *The Oxford Handbook of Entrepreneurial Finance*, ed. D. Cumming, 1-23. Oxford University Press.
- Seleim, A., and Bontis, N. 2009. The relationship between culture and corruption: a cross-national study, *Journal of Intellectual Capital* 10 (1), 165-184.
- Seligson, M. A. 2006. The Measurement and Impact of Corruption Victimization: Survey Evidence from Latin America, *World Development* 34 (2), 381-404.
- Shah, A. (Ed.). 1995. Fiscal incentives for investment and innovation, New York: Oxford University Press.
- Short, J.C., Ketchen, D.J. Jr., McKenny, A.F., Allison, T.H. and Ireland, R.D. 2017. Research on Crowdfunding: Reviewing the Very Recent Past and Celebrating the Present, *Entrepreneurship Theory and Practice* 41(2), 149–160.
- Sigar, K. 2012. Fret no more: Inapplicability of crowdfunding concerns in the internet age and the JOBS Acts safeguards. *Administrative Law Review* 64 (2), 473-506.
- Signori, A., and Vismara, S. 2016. Returns on Investments in Equity Crowdfunding. Available at SSRN: <https://ssrn.com/abstract=2765488>.
- Signori, A., Vismara, S. 2018. Does success bring success? The post-offering lives of equity-crowdfunded firms. *Journal of Corporate Finance* 50, 575-591.
- Stemler, A. R. 2013. The JOBS Act and crowdfunding: Harnessing the power—and money—of the masses, *Business Horizons* 56 (3), 271–275.
- Tanzi, V. 1998. Corruption around the world: causes, consequence, scope and cures, *IMF Staff Paper* 45, 559-594.

- The Economist. 2014. Business corruption in Chile Nitrate nightmare: Chile's stock market regulator dishes out huge fines over a series of illegal share trades, 15 September.
- Tonoyan, V., Strohmeier, R., Habib, M., and Perlitz, M. 2010. Corruption and entrepreneurship: How formal and informal institutions shape small firm behavior in transition and mature market economies. *Entrepreneurship Theory and Practice*. 34 (5), 803-832.
- Treisman, D. 2000. The causes of corruption: a cross-national study, *Journal of Public Economics* 76 (3), 399-457.
- Treisman, D. 2007. What have we learned about the causes of corruption from ten years of cross-national empirical research? *Annual Review of Political Science* 10, 211–244.
- Vismara, S. 2016. Equity retention and social network theory in equity crowdfunding. *Small Business Economics*, 46 (4), 579-590.
- Vismara, S. 2018. Information cascades among investors in equity crowdfunding, *Entrepreneurship Theory and Practice* 42 (3), 467- 497.
- Vismara, S. 2018a. Sustainability in Equity Crowdfunding. Available at SSRN: <https://ssrn.com/abstract=3135935> or <http://dx.doi.org/10.2139/ssrn.3135935>.
- Vismara, S., Benaroi, D., and Carne, F. 2017. Gender in entrepreneurial finance: Matching investors and entrepreneurs in equity crowdfunding. In *Albert Link, eds., 'Gender and Entrepreneurial Activity', Cheltenham, UK: Edward Elgar.*
- Vulkan, N., Åstebro, T., and Sierra, M. F. 2016. Equity crowdfunding: a new phenomena. *Journal of Business Venturing Insights* 5, 37–49.
- Wardrop, R., Rosenberg, R., Zhang, B., Ziegler, T., Squire, R., Burton, J., Arenas Hernandez, E., and Garvey, K. 2016. Breaking New Ground: The Americas Alternative Finance Benchmarking Report. Cambridge Centre for Alternative Finance.
- Wardrop, R., Zhang, B., Rau, R., and Gray, M. 2015. Moving mainstream: The European alternative finance benchmarking report. University of Cambridge-EY.
- Wei, S-J., 2000. How taxing is corruption on international investors? *The Review of Economics and Statistics* 82 (1), 1-11.
- Wei, S-J., and Wu, Y. 2001. Negative Alchemy? Corruption, Composition of Capital Flows, and Currency Crises, *NBER Working Paper 8187*. National Bureau of Economic Research, Inc.
- Wells, Louis T. Jr., Nancy J. Allen, Jacques Morisset and Neda Pirnia. 2001. Using Tax Incentives to Compete for Foreign Investment: Are They Worth the Costs? Washington, DC: World Bank and the International Finance Corporation.
- Wilson, K. 2015. Policy Lessons from Financing Young Innovative Firms, OECD Science, Technology and Industry Policy Papers, No. 9, OECD Publishing.
- Wilson, K. and Silva, F. 2013. Policies for Seed and Early Stage Finance: Findings from the 2012 OECD Financing Questionnaire, OECD Science, Technology and Industry Policy Papers no. 9, OECD Publishing, Paris, <http://dx.doi.org/10.1787/5k3xqsf00j33-en>.
- Wilson, K. E. and Testoni, M. 2014. Improving the Role of Equity Crowdfunding in Europe's Capital Markets. *Bruegel Policy Contribution Issue* 2014/09, August 2014.
- World Bank Group. 2015. Crowdfunding in Emerging Markets: Lessons from East African Startups. Washington, DC: World Bank.



- World Bank. 2013. Crowdfunding's Potential for the Developing World. Washington, DC: World Bank.
- Wroldsen, J. S. 2013. The Social Network and the Crowdfund Act: Zuckerberg, Saverin and Venture Capitalists' Dilution of the Crowd, *Vanderbilt Journal of Entertainment and Technology Law* 15, 1-45.
- Zabludovsky, K. 2013. Official Corruption in Mexico, Once Rarely Exposed, Is Starting to Come to Light, *The New York Times*, 24 June, available at: <https://www.nytimes.com/2013/06/24/world/americas/official-corruption-in-mexico-once-rarely-exposed-is-starting-to-come-to-light.html>.
- Zee, H.H., Stotsky, J.G., and Ley, E. 2002. Tax incentives for business investment: a primer for policy makers in developing countries. *World Development*, 30 (9), 1497-1516.
- Zelekha, Y., and Sharabi, E. 2012. Tax incentives and corruption: evidence and policy implications, *International Journal of Economic Sciences* 1 (2), 138-159.
- Zhang, B., Deer, L., Wardrop, R., Grant, A., Garvey, K., Thorp, S., ... and Burton, J. 2016. Harnessing Potential: The Asia-Pacific Alternative Finance Benchmarking Report. Cambridge Center for Alternative Finance-Judge Business School, Tsinghua University and The University of Sydney Business School.
- Zhang, J., and Liu, P. 2012. Rational Herding in Microloan Markets. *Management Science* 58 (5), 892-912.
- Zhang, K.H. 2001. Does Foreign Direct Investment Promote Economic Growth? Evidence From East Asia and Latin America, *Contemporary Economic Policy* 19 (2), 175-185.
- Ziegler, T., Reedy, E.J., Le, A., Zhang, B., Kroszner, R.S., and Garvey, K. 2017. 2017 The Americas Alternative Finance Industry Report, Hitting Stride. Cambridge Centre for Alternative Finance at (University of Cambridge, Judge Business School), Polsky Center for Entrepreneurship and Innovation (University of Chicago), and The University of Chicago Booth School of Business in association with major industry associations and with support from the CME Group Foundation and Inter-American Development Bank (IDB).
- Ziegler, T., Shneor, R., Garvey, K., Wenzlaff, K., Yerolemou, N., Hao, R., and Zhang, B. 2018. Expanding Horizons: The 3rd European Alternative Finance Industry Report. Available at SSRN: <https://ssrn.com/abstract=3106911> or <http://dx.doi.org/10.2139/ssrn.3106911>.