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### Summary:

The paper focuses on the recent developments in the field of alternative finance business models, called crowdfunding. Based on most recent data, this paper highlights the market size of this alternative finance segment and its growth prospects across European Union member states. An indirect outcome of the paper consists in revealing the degree of financial exclusion from traditional banking products and services and whether it is linked with a higher incidence of transactions on crowdfunding platforms. The assumption to be further investigated relies on the hypothesis that unbanked people, which are excluded by conventional financial institutions, have a sound opportunity to raise money to fund their small-size investment projects or start-ups by relying on crowdfunding.

**Key words:** crowdfunding, regulation, risks, financial exclusion.

JEL Classification: G21, G23

### 1. Introduction

Reshaping traditional banking business models is a topic that gained wide interest across practitioners, regulatory bodies, academia and civil society. The last

decade and particularly the period after the 2008 financial crisis have seen the emergence, development and consolidation of particular financial institutions' business models. These noteworthy models place at the core of their activity customer centricity, transparence of financial operations and values as trust and solidarity. Their spectrum is broad, comprising ethical banks, sustainable banks, microfinance institutions or the newest crowdfunding platforms.

The paper focuses on the most recent development, called crowdfunding. It is a means of collecting households or companies' money, via online platforms, in order to finance small or medium sized projects and start-up businesses. The specificity of this business model, that connects investors and borrowers exclusively via online platforms, depicts advantages but also peculiar risks. Both European Commission and national regulatory bodies have begun to monitor the dynamics of this financial sector niche and to find ways to issue proper legislation and harmonize it across the EU member states where crowdfunding is active.

From an academic and financial industry professionals' standpoint, the available research in the field of crowdfunding is heterogeneous, reflecting the diverse and wide range of research hypotheses tested. For instance, Moritz and Block (2014) argue that crowdfunding is a recent phenomenon, a fact that explains the more pronounced

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conceptual approach of the research papers that define and describe this concept, and present the determinants for success or legal restrictions. They observed that most studies are qualitative and empirical in nature, with data obtained from interviews or surveys.

Ordanini, Miceli, Pizzetti and Parasuraman (2011) have performed an in-depth qualitative analysis of three crowdfunding initiatives in order to explore two research questions, namely how and why individuals turn into crowdfunding participants and how and why service providers set up a crowdfunding initiative.

Lee and Lee (2012) used daily data provided by one of the largest peer-to-peer lending platforms in Korea to investigate the presence of herding behavior on this lending market. They started from two main features of crowdlending, namely lenders are not professional investors, but they take on big risks because loans are granted without collateral. Their findings suggested strong evidence of herding.

Starting from some research evidence supporting the presence of a "beauty premium" effect that favors the more attractive individuals, Gonzalez and Loureiro (2014) investigated whether the personal characteristics of lenders and borrowers on online peer-to-peer platforms might determine the decision making process. They have found that middle-age individuals show significant competence and that the success in receiving financing is quite subjective, as it depends on the relative age and attractiveness of lenders and borrowers.

Some papers address the topic of crowdfunding from fundraisers' perspective. Cordova, Dolci and Gianfrate (2015) used data extracted from four platforms in order to unveil the determinants of the probability that a given project is successful in obtaining the requested financing and respectively, the determinants of the overfunding rate.

Their findings indicated the statistical significance of three factors which exert influence on both the probability of success and the overfunding of projects, namely: the amount of investment requested by the crowdfounder, the duration of the project and its contribution frequency.

Mollick (2014) has used data from over 48,000 projects funded by a US platform and found that the presence of large personal networks and underlying project quality are associated with the success of fundraising efforts, while the geographical affiliation of the individuals seeking financing is related to both the type of projects proposed and to successful fundraising.

Similar results have been obtained by Lichtig (2015), who used data extracted from the same crowdplatform as Mollick (2014). The author concludes that experienced project creators who have already launched several projects are more likely to get the crowd's financial support because it is assumed that they have learnt from past experience. In addition, these experienced project creators get followers as they launch new projects, thus obtaining financial support becomes increasingly easy with the passing of time.

The paper contributes to the existing strand of literature by providing a topical review of the current spread and dynamics of crowdfunding industry at European level, focusing on the most active crowdlending platforms. The novelty of the paper resides in exploring the potential relationship between the high volume of transactions via crowdfunding platforms and financial inclusion.

It aims to provide, first, an exploratory insight into the features, advantages, drawbacks and specific risks depicted by crowdfunding, as well as its dissemination and dynamics across EU countries. Based on most recent data from European Commission and audit companies, the

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paper will highlight the market size of this alternative finance segment, and attempt to outline its growth prospects. Further, the paper will focus on crowdlending, one of the many typologies of crowdfunding platforms, because of more accessible data regarding their activity. Although there is a deficit of aggregate time series related to the financing provided through crowd-platforms, by relying on rankings performed by the online press, a selection of the most active crowdlending platforms in Europe has been made in order to make a comparative study of the peculiarities of the provided financing in terms of maturity, borrowed amounts and interest rates charged. Data have been collected from the website of each online lending platform.

An indirect outcome of the paper consists in revealing the degree of financial exclusion from traditional banking products and services. Financial exclusion is generally defined as the failure of conventional financial institutions to adapt to the needs of different social groups, caused mainly by banks' selectivity and profit-orientation. The assumption to be further investigated in the paper is the hypothesis that unbanked people that are excluded by conventional financial institutions have the sound opportunity to raise money to fund their small-size investment projects or startups by relying on crowdfunding. In other words, they should supposedly convince a crowd by using the internet to describe and promote their business idea. Hence the relationship under investigation is whether countries that boast a high level of transactions via crowdfunding platforms also report a high level of financial exclusion from traditional banks or, on the contrary, customers report a high degree of financial sophistication and wish to diversify the ways of investing or borrowing money by means of both conventional and alternative finance.

The paper is structured as follows: the

first section briefly introduces the reader into the crowdfunding topic, explaining its definition, the main features and specific risks incurred. The second section illustrates the dynamics recorded by the crowdfunding industry in Europe over the last years; the third section discusses the regulatory challenges faced by this particular industry; the fourth section introduces the concept of financial inclusion and quantifies it by means of several indicators. The findings obtained in terms of a country's degree of financial inclusion are then correlated with crowdfunding platforms' data on territorial spread and amount of transactions. The last section outlines the main conclusions of the paper.

## 2. Crowdfunding: meaning, peculiarities and specific risks

According to European Commission's Guide on Crowdfunding, this specific business model is a more viable alternative for raising money than traditional banking. Money demand and supply intersect on online platforms (websites), the fundamental purpose being that of chanelling financing to startups, small businesses and new projects. In its communication European Commission (2014c, p.2) defines crowdfunding as a reliable, complementary source of finance, besides mainstream banking, and agrees that it is one of the newly emerging business models that "contribute to building a pluralistic and resilient social market economy".

The European Central Bank (2015) includes crowdlending among the promising set of alternative sources of financing, due to its potential for providing financing which is tailor-made to the particular needs of small entrepreneurs.

The rationale of crowdfunding is to gather easily and safely small amounts of money from large groups of individuals or crowds instead of big amounts from

few people. The crowdfunding platforms advertise first the projects to be financed; if fundraising campaigns are successful, those that have applied for financing will be charged a fee by the platform. The principle most platforms operate with is all-or-nothing funding, meaning that if the crowd provides money in a total amount that exceeds the pre-defined target the "borrower" will receive the money; otherwise, every individual will get his money back and the business or project will not be financed. Crowd platforms perform an a priori screening of applicants for fundraising, based on several creditworthiness criteria, before promoting their business or project idea on the online platform.

The typology of crowdfunding business models is diverse. The European Commission's Guide on Crowdfunding has identified and defined seven types, namely:

- a) peer-to-peer lending. The crowd lends money to a small business or individual and expects that the money will be repaid with interest. It is very similar to traditional borrowing from a bank, except that the amount is borrowed from many investors.
- b) equity crowdfunding. It allows the sale of shares in a small or medium sized business, the holders expecting a return for their investment.
- c) rewards-based crowdfunding. It implies donations to a project idea or business, by obtaining in exchange some kind of non-financial reward.
- d) donation-based crowdfunding. It relies on voluntary donations made by individuals for specific projects, without expecting any reward or return, neither financial nor tangible.
- e) profit-sharing crowdfunding. It is a promise that small businesses make in terms of sharing future profits with the individuals that provided them funding at present.

- f) debt-securities crowdfunding. People invest money in debt securities, usually bonds, issued by small businesses.
- g) hybrid models, which combine the features of several crowdfunding typologies.

A public consultation launched by European Commission (2014b) at end-2013, revealed that the most well-known forms of crowdfunding are donations and rewards (74% and respectively 69% of respondents), pre-sales, profit sharing and equity (50% to 60% of respondents), lending (45%), hybrid models (32%) and debt (25%). The benefits offered by crowdfunding, as they were perceived by respondents are: less dependence on traditional forms of financing (75%), highly beneficial for innovation (74%) and for SMEs and entrepreneurs (67%).

In terms of risks involved, there are several specificities outlined by the EC's Guide on Crowdfunding, namely: copyrights threats, because the intellectual property on a project idea becomes public; underestimating crowdfunding costs, particularly in the case of equity crowdfunding; reputational damage due to project owners' errors or under-preparation when launching a project to be financed through online platforms; law-breaching EU or national regulation; fraudulent platforms.

Other risks revealed by a consultation launched by EC (2014) are represented by the lack of trust among citizens and the lack of knowledge on this type of online fundraising.

Another public consultation launched by EC (2014b) provided a closer insight into crowdfunding's added value and particular risks. The risk of insufficient intellectual property rights protection is perceived as being too high by only 22% of respondents who are in position of project owners. The risks of fraud and misleading advertising are ranked as acceptable by most stakeholders (50% and 47% respectively), while about one in four

Table 1. Peer-to-peer crowdfunding models – financial information

Name of the crowd lending platform	Minimum amount to borrow	Maximum amount to borrow	Range of maturities	Interest rates charged
Funding Circle, UK	£ 5,000	£ 1,000,000	6 - 60 months	up to 16%
Funding knight, UK	£ 25,000	£ 150,000	1 - 5 years	8.8 - 12%
Zopa, UK	£ 1,000	£ 25,000	2 – 5 years	5.5%
Ratesetter, UK	£ 1,000	£ 25,000	6 - 60 months	8.9 – 28%
Isepankur, Estonia	€ 500	€ 10,000	3 – 60 months	26 - 38%
Kokos, Poland	zl 50	zl 25,000	2 – 36 months	up to 16%
Lainaaja, Finland	€ 200	€ 5,000	4 - 48 months	6 - 25%
Smartika, Italy	€ 1,000	€ 15,000	12 - 48 months	6.5 - 10.8%
Arboribus, Spain	€ 10,000	€ 150,000	up to 60 months	7.8%
Comunitae, Spain	€ 600	€ 6,000	6 – 24 months	6 – 12%
Smava, Germany	€ 1,000	€ 75,000	12 -120 months	2.75 – 5.95%
Auxmoney, Germany	€ 1,000	€ 25,000	12 - 60 months	2.9 - 15.25%
Bankless24, Germany	€ 1,000	€ 150,000	up to 60 months	up to 20%
Bettervest, Germany	€ 1,000	€ 200,000	up to 84 months	up to 15%
Babyloan, France	€ 200	€ 7,000	4 – 36 months	up to 27%
Prêt d'Union, France	€ 3,000	€ 40,000	24 - 60 months	7.7%
Cofunder, Ireland	£ 5,000	£ 100,000	3-5 years	Non available

Source: data has been collected by the author from several lending platforms' websites

respondents consider these risks being too high. 74% of respondents believe that a scandal could undermine contributors' future confidence in crowdfunding. Other major concerns relate to risk of fraud, lack of information, maintaining contributors privacy, risks of hackers attacks on platforms, money laundering.

As mentioned before, apart from peerto-peer lending, the remaining types of crowdfunding platforms do not make the subject of this paper. Table 1 depicts comparatively a selection of the most active crowdlending platforms in Europe, to gain an insight into the peculiarities of these types of loans, in terms of maturity, amounts to be borrowed and interest rates charged. These platforms are the most representative in Europe due to the number of projects financed, their visibility and reputation. In addition, they are almost always present in the top of the rankings performed regularly by online press.

The selection of peer-to-peer platforms presented in table 1 shows the presence of heterogeneity across all the variables considered. In terms of the maximum amount to be borrowed, UK provides the broadest range, with up to £1,000,000. It should be mentioned that UK holds the most developed, rapid pace expanding crowdfunding market, the four platforms in the table ranging among the top 10 European lending platforms as regards the amount of funds provided. Maturities also vary greatly

across online platforms, from minimum 2 months in Poland up to maximum 120 months in Germany.

The most striking discrepancies are related to the range of interest rates charged among lending platforms and countries. Some of them charge high effective interest rates, a fact that raised some controversies in the media related to the social nature of this type of funding (Boitan, Barbu 2015). The explanation for which interest rates practiced for loans granted are so high is provided by Babyloan (2014), a peer-to-peer platform: a) lending to unbanked customers who have been excluded by mainstream banking due to lack of collateral or low repayment capacity has to be compensated by a higher interest rate; b) to ensure the going concern of the business, to cover the operating costs of the platform, to prevent risks and provide a suitable financial compensation for lenders.

## 3. Crowdfunding market's dynamics across Europe

Although crowdfunding is a new and dynamic segment of the financial market across all European countries, there is no unitary database gathering data on the projects financed, on the monthly financing provided by a platform, and other fearures. Available data is scarce, being difficult to perform comparative analyses across countries, with a high degree of coverage of the available platforms. Yet, some studies elaborate on the spread and dynamics of crowdfunding and their findings have been synthesized below.

In a report compiled for the European

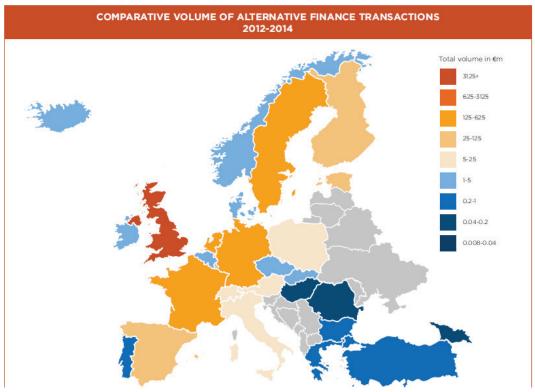


Fig. 1. Volume of transactions operated through crowdfunding platforms Source: Wardrop R., B. Zhang, R. Rau and M. Gray (2015), pag. 15

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Commission by Crowdsurfer (2015) specific information was released about European Union crowdfunding markets' trends in the period 1 January 2013 to 31 December 2014. The study comprised 510 crowdplatforms for which data is available and suitable. At the end of 2014, most platforms were active in UK (143 online platforms), followed by France (77), Germany (65) and the Netherlands (58). However, most EU countries hold less than 8 platforms. In terms of their funding type, 30% represent rewards platforms, 23% are equity platforms, 21% are crowdlending platforms, while 18% comprise donation platforms. According to the launch year criterion, the most prolific year in terms of creating a new platform was 2013, with 133 newly launched platforms, followed by 2012 and 2014 with 96 new platforms. Another result of the report was related to the funding raised during the time span considered. More specifically, 2.3 billion euro has been raised for funding 190,854 successful projects located in EU countries. EU crowdplatforms have been also used for funding projects to be developed in non-EU countries. It has been collected 77.8 million euro for 16,054 projects.

Wardrop et al. (2015) performed a wide-scale survey, by collecting data directly from 255 leading crowdfunding platforms in Europe, which represent around 85-90% of the European online alternative finance market. The results show that European alternative finance market, as a whole, increased by 144% in 2014. In respect of total volumes of financing raised through online platforms, UK is the leader followed by France, Germany, Sweden, Netherlands and Spain.

Taking a disaggregated look at the different typologies of crowdplatforms, the study revealed that the average growth rates are high across Europe: peer-to-peer business lending grew by 272% between 2012 and 2014, reward-based crowdfunding

grew by 127%, equitybased crowdfunding grew by 116% and peer-to-peer consumer lending grew by 113% in the same period" (Wardrop et al. 2015, p.9).

By correlating the findings in figure 1 and 2, it could be noticed that UK holds the largest number of crowdfunding platforms (65) and by far the largest aggregated amount of funds provided (over 3,000 million euros). France, Germany and Netherlands occupy the second place in this hierarchy, with around 31-33 platforms and a financing between 125 – 625 million euro. Spain holds 34 platforms but the cumulated amount of financing is lower, ranging between 25-125 million euros. At the opposite end is Sweden, with only 3 platforms but a larger amount of financing mediated by them (125 - 625 million Euros). Bulgaria, Slovakia, Portugal and Ireland hold only one crowdfunding platform but perform slightly better in terms of financing successfully provided than several countries with 2 platforms (it is the case of Romania and Hungary, with the smallest amount between 0, 04 and 0, 2 million Euros).

The results reported by the previously mentioned two studies are in line with the findings of Savarese (2015), in terms of total volume of financing and growth rate of crowdfunding market, for the European countries considered.

The study of Daskalakis (2016) has performed a market research on German, Polish and Spanish consumers' awareness of crowdfunding and of risks incurred, as well as of the level of use of online platforms. The author found that, in general, awareness is greater among males, young people (24-34 years), those with a stronger educational background and wealthier. Interest or enthusiasm on a particulat project or company appears to be the main trigger of the investment decision on crowdfunding platforms, although almost 60% of respondents declared that they

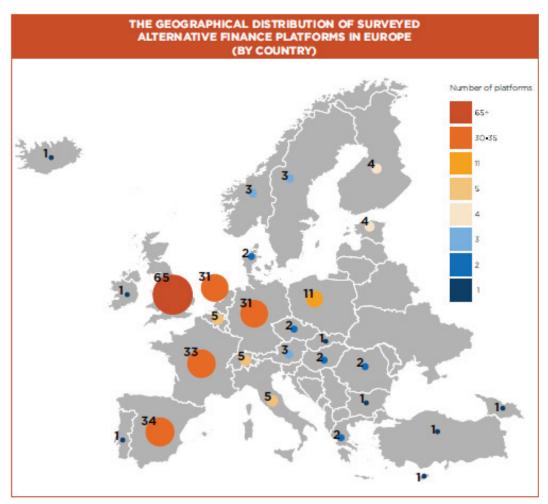


Fig. 2. Territorial spread of European crowdfunding platforms Source: Wardrop R., B. Zhang, R. Rau and M. Gray (2015), pag. 14

invested less than 10% of their savings in crowdfunding. The main risk perceived by the potential customers relates to fraudulent fundraisers or platforms.

## 4. Regulatory challenges at European Union level

Currently, regulation of crowdfunding is characterized by heterogeneity, lack of coordinated actions at the European level, fragmentation among individual jurisdictions. Although the European Commission signals its intention to contribute to the

harmonization, consolidation and unification of national regulations, progress is achieved in small steps and the outlook suggests we are still far from a single European regulatory framework for crowdfunding.

The regulatory landscape of the European crowdfunding market is characterized by practitioners and regulators as being: i) fluid and multifaceted (Wardrop et al. 2015); ii) highly fragmented (European Crowdfunding Network 2014); iii) officially unsupportive regulatory environment (Gajda and Mason, 2013); iv) light regulation would be beneficial

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(Diacci and Pantani, 2014).

Kirby and Worner (2014) notice the lack of harmonization of crowdfunding regulatory regimes. The peer-to-peer lending is either nonregulated, or regulated as a financial intermediary, as a bank or by relying on the US model. As regards equity crowdfunding, it is either prohibited or strictly regulated, with high barriers to entry.

A comprehensive study regarding specific national crowdfunding regulations across European countries has been performed by European Crowdfunding Network (2014), with the aim of investigating the existence and status of national regulations, their degree of harmonization. Lack of convergence is the main impediment in developing a European single market for this method of financing, or in the entrance of crowdfunding platforms from abroad into the European market.

Hemer (2011) argues that the consolidation of crowdfunding industry will take place over many years, during which we will witness either failures or cases of fraud, and the onset of feasible business models. The great range of experimentation in this field is a consequence of little regulation of the crowdfunding market, including the lack of rules meant to protect both the project initiators and the investors.

Wardrop et al. (2015, p.24) have performed a survey related to EU countries' crowdfunding regulation and the industry's perception on the specific regulation in the country of residence. They noticed that most respondents (45%) believe national regulations are excessive and strict, 18% perceive them as adequate and appropriate, while 15% claim the absence of such specific regulations.

The report issued by Crowdsurfer (2015) at the request of European Commission has assessed how crowdfunding markets have changed in several European countries, after the occurrence of a regulatory event. It is the case of Italy which has regulated

equity crowdfunding in June 2013, of UK (April 2014) and of France (May 2014). In Italy crowdfunding market is less active than the other two countries, as it comprises a low number of equity platforms, which have financed a small number of projects. The new regulation has restricted the types of organisations eligible to enter the equity crowdfunding market. UK has witnessed a small decrease in the number of newly launched platforms, while France is on a rising trend after the regulatory policy measures. However, there are indications that strengthening the regulatory framework has improved investors' trust and will further catalyse the maturing of this market.

The market research conducted by Daskalakis (2016) has covered respondents from all EU countries which were registered on crowdfunding platforms, the survey being performed during May 2015 January 2016. The findings indicated that half of respondents invest on equity platforms which are regulated by law, 16% invest on self-regulated markets, while almost 30% of respondents do not know whether the platform is regulated or not. In addition, 83% of respondents agree the positive relationship between crowd-equity regulation and their trust in investing. As regards crowdlending platforms, 40% of respondents chose regulated platforms, 28% invest on self-regulated markets while 24% are not aware of any regulation. 86% of respondents ascertain the direct relationship between the regulation of crowdlending and their level of trust.

At end-2013 the European Commission launched a consultation on issues related to assessing awareness and the existence of crowdfunding code of conduct, targeted to project owners, associations, online platforms, financial institutions, regulatory and supervisory bodies, academia and civil society. The results have indicated that awareness rising is important for all types

of crowdfunding platforms, but especially for equity and lending models (49%). In terms of the code of conduct, it is not uniform across European platforms.

As mentioned in a previous paper (Boitan, Barbu 2015), traditional banks are facing a new, rapid pace evolving competitor, which operates with low administrative costs, provides simple products and has a different approach to the process of risk management. Therefore, debates are open regarding the impact and effects crowdfunding segment will exert on the whole financial industry.

In this regard, BBVA Research, in its Economic Outlook for 2013, points out the impredictibility of crowdfunding prospects for further development. The financial services consumers will continue to go to the bank to satisfy their demand of basic or more complex transactions that crowdfunding platforms do not offer. On the other hand, it is expected that crowdfunding platforms evolve toward becoming the main financial services provider for the young generation.

### Financial inclusion: concept, indicators and pattern across EU countries

The second part of the paper addresses the issue of financial inclusion, in order to explore whether the high volume of transactions via crowdfunding platforms is partly determined by the presence of a high level of financial exclusion from traditional banking system.

Financial exclusion is a "process whereby people encounter difficulties in accessing and/or using financial services and products in the mainstream market that are appropriate to their needs and enable them to lead a normal social life in their society" (European Commission, 2008).

Financial exclusion, through its two forms, namely the difficulty of accessing financial products and services (current accounts, savings accounts, credits, insurance) and

the difficulty of using them is due primarily to the failure of financial institutions to adapt to the needs of different social groups, caused by banks' selectivity, lack of explicit information and transparency practiced by traditional banks.

Aveni (2015) has proposed the use of the syntagm "digital financial inclusion" for linking people excluded from accessing formal financial services with the use of online technologies, namely internet banking. In his opinion, crowdlending contributes to enhancing financial inclusion by its fundamental aim: chanelling available money of a crowd for investments into start-up projects. Their functioning is motivated by filling a financing need not satisfied by mainstream banking, and not by some social cause to be addressed.

Savarese (2015) agrees that crowdlending is an alternative financing tool which has not been designed to target a specific group, such as the poor or the socially excluded people. However, the author questions the contribution to be exerted by so many new financing channels and market players on improving access to financing for individuals and micro enterprises.

Financial inclusion is a concern not only for Europe, but also for other regions of the world. For instance, Mas (2016) has explored the relationship between broadband channels used for providing financial services and financial inclusion for the Latin American regions. In his opinion crowdfunding online platforms facilitate access to finance at more favorable terms as compared to traditional financial intermediaries. An interesting viewpoint is that these platforms can become a powerful channel for socially minded investors in order to contribute to social and development-oriented projects, as well as for diaspora communities that gain the opportunity to invest in a broad range of projects in their home country.

Table 2. Financial inclusion indicators

Indicator	Explanation
Account at a formal financial institution (% age 15+)	percentage of respondents aged over 15, with an account at a bank, credit union, another financial institution (e.g., cooperative, microfinance institution), including respondents who reported having a debit card.
Loan from a financial institution in the past year (% age 15+)	percentage of respondents aged over 15 who report borrowing any money from a bank, credit union, microfinance institution, or another financial institution such as a cooperative in the past 12 months.
Getting credit: Distance to frontier	the distance of each economy to the "frontier," which represents the highest performance observed on the getting credit indicator across all economies included in Doing Business. An economy's distance to frontier is indicated on a scale from 0 to 100, where 0 represents the lowest performance and 100 the best-practices frontier.
Saved at a financial institution in the past year (% age 15+)	percentage of respondents aged over 15 who report saving or setting aside any money by using an account at a formal financial institution such as a bank, credit union, microfinance institution, or cooperative in the past 12 months.

Source: World Bank database, G20 Financial Inclusion Indicators

Table 3. Financial inclusion indicators (data available for 2011 year-end)

	Account at a formal financial institution (% age 15+)	Loan from a financial institution in the past year (% age 15+)	Getting credit: Distance to frontier	Saved at a financial institution in the past year (% age 15+)
Austria	97.08	8.25	81.30	51.59
Belgium	96.31	10.51	62.50	42.58
Bulgaria	52.82	7.81	87.50	4.80
Croatia	88.39	14.44	68.80	12.23
Cyprus	85.24	26.97	68.80	30.44
Czech Republic	80.65	9.47	68.80	35.48
Denmark	99.74	18.80	81.30	56.51
Estonia	96.82	7.68	75	28.87
Finland	99.65	23.88	75	56.14
France	96.98	18.65	68.80	49.52
Germany	98.13	12.55	81.30	55.90
Greece	77.94	7.93	56.30	19.87
Hungary	72.67	9.40	75	17.25
Ireland	93.89	15.72	87.50	51.26
Italy	71.01	4.59	50	15.48
Latvia	89.66	6.81	93.80	13.32
Lithuania	73.76	5.65	68.80	20.49
Luxembourg	94.59	17.44	31.30	52.01
Netherlands	98.66	12.56	68.80	57.81
Poland	70.19	9.61	93.80	17.99

Portugal	81.23	8.26	50	25.56
Romania	44.59	8.37	87.50	8.69
Slovakia	79.58	11.43	81.30	36.84
Slovenia	97.14	12.83	50	28.85
Spain	93.28	11.43	68.8	35.05
Sweden	98.99	23.40	75	63.58
United Kingdom	97.20	11.85	100	43.80
average	86.16	12.45	72.48	34.52
maximum	99.74	26.97	100.00	63.58
minimum	44.59	4.59	31.30	4.80
standard deviation	14.61	5.78	15.63	17.61

Source: author, based on data collected from World Bank database, http://datatopics.worldbank.org/g20fidata/

For the purpose of this study, financial inclusion has been proxy by several indicators developed by the Global Partnership for Financial Inclusion, with the support of the World Bank. However, this database is unbalanced and lacks the timely reporting of indicators, the most recent data being available only for 2011 year. The most representative indicators related to access and usage of financial products chosen for the purposes of this qualitative analysis have been summarized in table 2 below.

The raw values recorded by each financial inclusion indicator as well as the main descriptive statistics have been depicted in table 3. The cells filled with red color depict a value below average recorded by a given country for a given indicator. The smaller the value of a financial inclusion indicator, the lower is the degree of financial inclusion recorded by population in a country.

The countries recording a good status of financial inclusion, with above the average values for all the four indicators are Denmark, Finland, Germany, Ireland and Sweden. At the opposite are Greece, Italy, Lithuania and Portugal with all the indicators below the average, signaling a poor status of financial inclusion. Low levels of financial inclusion



Fig. 3. Visual representation of financial indicators' spread
Source: the author, based on data in table 3
Legend:

Color	Explanation	
	4 indicators below average	
	3 indicators below average	
	2 indicators below average	
	1 indicator below average	
	4 indicators above average	

indicators suggest that people do not have sound access to basic financial products. These countries are susceptible to witness a more rapid pace increase of crowdfunding presence and volume of projects financed.

However, by correlating this finding with crowdfunding platforms' data on territorial spread and amount of transactions, the conclusion is rather disappointing. Lithuania has no platform, Greece and Portugal hold one platform with transactions ranging between 0.2-1 million euros while Italy is performing better, with 5 platforms and amount of transactions between 5 – 25 million euros. This pattern maintains also in the case of countries showing 3 out of 4 indicators below average (Bulgaria, Cyprus, Czech Republic, Hungary, Romania and Poland). These countries perform even worsf in terms of volume of transactions operated through crowdfunding platforms, recording values ranging between 0, 04 and 1 million euro. Poland is an exception, with transactions amounting to over 5 million Euros.

This might be the result of multiple factors, such as low financial literacy, lack of knowledge regarding alternative financial models, lack of trust in raising or lending money through online means and no direct, face-to-face connection.

The five countries exhibiting good levels of financial inclusion indicators also perform well in terms of amount of financing intermediated by crowdfunding platforms. Germany and Sweden have the largest market, ranging between 125 - 625 million Euros, followed by Finland with 25 - 125 million Euros. This finding might be explained by investors' choice to diversify their investment portfolio, without necessarily hunting a high yield or return on their investment. It is a clue that investors are well informed, holding financial literacy and a degree of sophistication and social awareness in making their investment decisions.

### Crowdlending and Financial Inclusion – Evidence from EU Countries

### **Conclusions**

In times of financial turmoil, when monetary policy becomes restrictive and the credit crunches as banks are reluctant in provide new loans, the real sector suffers most. SMEs need funding for maintaining the going concern of their business, while investment expenses are postponed. Individuals who wish to launch a start-up in order to become self-employed and escape the unemployment trap are witnessing difficulties in obtaining financing from banking system, or are simply excluded.

Against this background, crowdfunding platforms developed and expanded rapidly across Europe, by acting as an intersection point between the increasing demand for money and money supply. A specific feature of this alternative finance business model is that financing is channeled voluntarily by individual investors to those projects they deem to be the most successful ones in terms of economic and social/environmental impact.

The main finding of the paper is that crowdfunding does not act as a substitute for basic banking products but supplements the mainstream banking activity and tries to alleviate financial exclusion. The results of the qualitative analysis performed have shown that the countries most exposed to financial exclusion threat do not hold either many platforms or large amounts of financing mediated through these platforms. An explanation might be that people are reluctant in borrowing or lending by using this new financial business model or simply it lacks reliable, trustful information on its functioning. On the contrary, countries depicting many platforms and larger amounts of transactions also show a good status of financial inclusion. This might be explained by customers/investors with a higher degree of financial sophistication and knowledge, wishing to diversify the ways of

investing or borrowing money by means of both conventional and alternative finance.

It should also be outlined that the main feature of crowdfunding, namely its borderless nature due to its complete reliance on internet advertising and collection of funds, removes any obstacle for individual projects or SMEs in obtaining funds from more developed markets. SMEs and start-ups across Europe can launch an online campaign in a different country, wherever the crowdfunding market is more developed and active.

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