Systematized literature review on financial inclusion and exclusion in developed countries

Abstract

Purpose - This paper provides a systematic literature review of the research published on financial inclusion (FI) and financial exclusion (FE) in developed countries using key terms and strict inclusion and exclusion criteria.

Design/methodology/approach - Fifty-two papers were deemed to be relevant to the analysis. These works were critiqued using a framework that addressed geographical contexts, topics, methodologies, and theoretical frameworks.

Findings - This review highlights the uneven level of development of the academic debate between North America, the UK, and continental Europe, and identifies the different theoretical frameworks that construe the body of literature in each region. In addition, the findings show the scant offer of work on the impact that the digital economy has on FE, as well as the reduced number of studies which have focused on certain vulnerable groups and the access to some financial services.

Originality/value - The paper synthesizes the main contributions of the top literature on the redefinition of FI/FE in developed countries, the role of fringe services, and new determinants of exclusion. The proliferation of studies regarding financial inclusion in low and middle-income countries has generated a great amount of meta-analysis and systematized reviews of asymmetric results. However, no systematized literature review on the broad scope of FI/FE in developed countries has been published in the last decade. This work sheds light over poorly analyzed areas of research that refer to notable social problems.

Social implications - The studies reviewed have not analyzed the specific needs of vulnerable groups while considering the different contexts and pathways to exclusion. The evaluation of solutions and strategies to achieve inclusion is one of the least addressed aspects in the literature.

Keywords: financial inclusion, financial exclusion, banking, financial services, developed countries.

Introduction

There is a large body of academic literature about financial inclusion and exclusion in both applied and theoretical works. These studies are meaningful particularly because they spot the specific needs of vulnerable communities and financial exclusion processes related to changes in society. However, despite the existing well of consolidated knowledge, research gaps in this field present ample opportunity for further analysis. One area that provides such opportunity results from the contrast between the work performed in developed and developing nations. The three key distinguishing variables that explain most of these differences are: the groups on which these studies are performed, the circumstances to which these studies apply, and the type of exclusion that affects the given population. One further consideration is that although the emergence of fintech and digital banking in the financial services sector has resulted in cost cutting and overall increased efficiencies (European Parliament, 2017), these savings have not morphed axiomatically into the reduction of financial exclusion in developed nations. Furthermore, in recent years, the ageing population of these developed economies has experienced an increase in inequality and social vulnerability. These events are in part linked to the reluctance of the older brackets of their population to adopt new technologies, an attitude that prevents the overall use of remote banking services by a key portion of the citizenry (Fernández-Olit et al., 2018). This finding is contrary to that of developing countries, where the widespread use of technology – and specifically of mobile banking - has been of essence to the development of financial inclusion processes (Demirgüç-Kunt et al., 2015). All these circumstances explain the fact that the research obtained from work done on undeveloped economies varies greatly from that derived from similar studies in developed nations. One additional difference is that no reviews of the literature on FI/FE in developed countries exists, while there are a number of these works that refer to undeveloped economies (see Shaikh and Karjaluoto (2015), Kabakova and Plaksenkov (2018), and Kim et al. (2018)). This paper plans to fill in this void.

The research gap that motivates the key objective of our work will produce a systematic review of a decade of literature on FI and FE in developed economies. This review is a clear and novel contribution to the field. Nonetheless, in addition, this paper has three secondary objectives: to review the evolution of this literature with respect to main sources, studied countries, methodologies and topics, paying particular attention to financial digitalization; to determine the key conceptual frameworks on which the

analysis of FI/FE in developed countries is based; and to discuss the key contributions to the academic study of FI/FE that have occurred over the decade under review. Hence, this work aims to make a far reaching and meaningful contribution by taking a social and economic point of view to reflect on the challenges, problems, and opportunities arising from the processes of digitalization of financial services in developed nations. A clear advantage of this approach is that it will allow us to provide public policy recommendations as well as guidance for financial companies interested in supporting financial inclusion. Finally, in the conclusions section, we disclose a series of additional research gaps detected in this area. We also offer an account of other shortcomings related to the lack of analysis on the evaluation of solutions and action strategies regarding FE. Lastly, we provide an account of future lines of work planed as a follow up to this paper.

It is worth highlighting that the information provided in this study will direct researchers to unexplored areas of analysis. Such information will also prove useful to policymakers wishing to have a better grasp on the problems of FE in developed countries and on the groups neglected within these. As a result, it is possible to use this work to improve FE from a public policy stand. However, in addition, the private sector can also benefit by using our results to detect scarcely analyzed areas and to develop strategic improvement plans. Although all these aspects offer several perspectives about the usefulness of this work, it should be noted that its academic value is its main contribution, since it is intended to be a useful work for researchers in this area.

Review protocol and methodology

Financial inclusion (FI) and financial exclusion (FE) are binary terms that refer to the capacity of people to access useful and affordable financial products and services to meet their needs. The proliferation of studies on FI/FE in low and middle-income countries has generated a great amount of meta-analysis and systematized reviews of asymmetric results (Duvendack and Mader, 2019). However, notwithstanding the large amount of attention paid to this research, no systematized review of the literature on FI/FE on developed economies has been published during the last ten years, albeit works by Aalbers (2015) and Koku (2015) touched upon these subjects tangentially. In 2015, Aalbers published a revision of the birth and development of financial geography since the mid-1990s. This work is interesting in that it sheds light over the start of the new

classification "financial geography" within the existing "economic theory" strand. Nonetheless, this study cannot be considered a proper literature review on FI/FE because it was designed to be limited by its focus on economic geography and by the articles reviewed: a set of fifteen published earlier in the journal *Transactions*. Also in 2015, Koku conducted a cross-disciplinary analysis of the literature on FI/FE in both developed and developing countries. However, this study also fails to account as a formal literature review given that it defined itself as "not systematized," and no specific methodology was used to select the works for review. Lastly, no references have been found to the dimension of digital financial services within the context of FI/FE.

Universe of the sample

Massaro et al. (2016) proposed a structured literature review (SLR) method of examining a corpus of scholarly literature that would lead to "developing insights, critical reflections, future research paths, and research questions" (p.767). This SLR method advices on the steps that should be followed to determine an adequate initial sample selection. For instance, according to these authors, one way to determine the universe for the selection of the sample is by focusing on the highest quality research in a field of interest as defined by the peer-review process on published work. Thus, following this method, the chosen universe for the sample of our review was the journals included in the *Journal Citations Reports Index* in November 2018.

Search and selection criteria

The search performed on the journals in the *Journal Citations Reports Index* in November 2018 looked for a decade of academic works on “financial inclusion” and “financial exclusion” ("financial+*clusion"). The dates of the published works ranged between January 2009 and November 2018. The 448 papers found were first filtered to exclude any whose focus resided in undeveloped or developing countries. The criteria to define developed country was inclusion in the OECD. This sample was then further reduced by limiting the set to those works focusing in Western Europe, and North America, excluding Mexico. The reason for this choice was the desire to perform this initial analysis in a homogeneous context. In pursue of this objective, we discarded all articles with a different focus and excluded: Mexico (4), Israel (2), Australia (2), Chile (1), Turkey (1), Balkan

Region (1), G-20 (1) and not suitable content (1). After these actions, and given we could not access 3 papers, the final sample included 52 works. See Table 1 for a step by step description of the process.

Table 1.

Analysis methodology

Following our sample selection, the chosen articles were classified according to the country on which their research focused. These papers were thereafter grouped in 6 pre-defined overall topic categories: General, Services and Products, Difficulties and Problems, Origins and Causes, Impacts and Consequences, Policies, and Specific Cases of FI/FE. These categories were broken down further into 20 subcategories. See Table 2 for a detailed enumeration of the groups and subgroups of the topics which were defined after a preliminary analysis of the content of the articles.

Table 2.

We also followed the same approach to analyze the various methodologies used in the papers within our sample. Here we grouped them according to two general categories: source of information and statistical analysis. The first one was further broken down into 7 categories, and the latter into 2. Please refer to Table 3 for the detail.

Table 3.

An insight into the literature on FI/FE

Evolution, sources, and quality

The presence of FI/FE publications in top quality journals during the analyzed period increased slightly after the post-crisis year of 2013 (see Figure 1). That is because a high percentage of those journals were rated within the first two quartiles of the JCR ranking (see Figure 2). Among those, the *International Journal of Bank Marketing* and *Policy and Politics* had the largest number of works dealing with FI/FE, three each. With two articles each, the following journals also took an interest in this subject: *Critical Social Policy,*

Environment and Planning A, the *Journal of Economic Geography,* the *Journal of Social Policy*, *Public Money & Management, Social Indicators Research* and *Social Work*.

With respect to the focus of the journals that published these works, during the first half of the decade under analysis most were related to geographic and economic sciences – the traditional spheres of FI/FE. This trend did not continue during the second half when most of the work was published in public administration and sociology related journals.

With regards to the fields of knowledge, during the decade under analysis the FI/FE literature was classified in the following clusters: economy, finance and business, geography and planning, public administration and political science, sociology, social work, and social issues (see Figure 3). These areas relate to the different approaches used to analyze the field of FI/FE (see section: *A critique of the FI/FE literature: Main theoretical approaches and contributions*).

Figure 1.

Figure 2.

Figure 3.

Insight by country and topic

In our review, 11.5% of the articles found do not focus their work on a particular country or region. Instead, these papers discuss the overall context of the field, and concentrate their analyses on the definition and measurement of FI/FE. For example, the work of Salignac et al., (2016) questions the usefulness of the term "financial exclusion" when understood in its traditional context. Here, the authors examine the extant definition of this term to assess that no difference is made between those who choose to be excluded and those who are forced to be excluded. Mixing notions of social exclusion, financial capability, mental models, resilience, and ecological systems, Salignac et al., (2016) propose a more holistic approach. This new angle should be meaningful in how financial exclusion is addressed in developed countries. The reason is that within these economic regions, there is a conscious and voluntary rejection to being unbanked.

Even though Salignac work provides much opportunity for reflection, the most important debate about the conceptualization of FI/FE relates to the individuals' accessibility to financial products and services (Kear, 2013). Of key relevance is the claim that this access is a social and / or human right (Hudon, 2009; Bayulgen, 2013, Yunus 2007). In terms of access to credit, Bourles and Cozarenco (2014) analyze the role of public intervention in the microcredit market. In this work the authors assess the impact of several subsidization models such as loan guarantees and/or business development services on financial inclusion.

Last, a group of researchers centered on the topic of financial geography. At the start, most of these works focused on Great Britain; Nonetheless, as time went by and in more recent years these studies progressively rescaled and decentred to include works outside the UK (Aalbers, 2015). Still, approximately one third of the selected literature on FI/FE is focused on the UK, a country that encompasses the greatest diversity of analyzed topics going well beyond the financial geography focus, as shown in Table 4.

Table 4

The debate about public and institutional policies is highly consolidated in the UK since 2008 when changes in the regulation of the credit unions become a key object of attention. At the time, the new regulation sought to boost the growth of credit unions. The main objective was to increase credit availability and the provision of services to people turning to loan sharks and other alternative entities (McKillop et al., 2007). In reference to the release of policy that encourages financial inclusion, the journal *Public Money & Management* echoed the discussion of governmental strategies to use credit unions as a tool for enhancing financial inclusion (McKillop et al., 2011; Myers et al., 2012). Interestingly, already in 2014 Sinclair discusses the feasibility of universal financial inclusion achieved by means of the voluntary actions by the credit union sector and the impact of these actions on financial sustainability. It is Sinclair's vision that brings together the critical perspectives of a group of researchers who discuss how the process of financialization promoted by public policies focuses on financial inclusion as a means to create financial subjects rather than citizens. Specifically, Prabhakar (2013) reflects on the role of credit unions as he compares Welsh and Central Government public policies regarding Child Trust Funds (CTF). However, Marron (2013) sharply criticizes the

neoliberal premises underlying the concept of financial inclusion that focuses the responsibility on the individual as a player on the market.

Over the decade under analysis, other institutional policies are also discussed. One example is the commitment of banks to disclose lending data per postcode since 2013. In this regard, Henry et al., (2017) analyze the limitations of these open data. A second example relevant in UK literature is the financial inclusion of enterprises and SMEs. For instance, in assessing how to create spaces of financial inclusion Appleyard (2011) compares the role of the Community Development Finance Institutions (CDFIs) in the finances of companies in the USA and in the UK. The author's conclusion is the uneven geography within and between these countries results from the various processes in which FE is defined and addressed. To further look into this issue, in 2013 Appleyard focuses on the case of CDFIs in the UK region of the West Midlands. His conclusion is that CDFIs can contribute to a more financially inclusive environment. In a related quest, Rouse and Jayawarna (2011) hold that capability programs such as the New Entrepreneur Scholarship (NES) are not efficient to assist people in risk of social exclusion. The authors cite multidimensional disadvantages and propose these should be alleviated by stronger social and educational policies.

Much of the welfare and FI/FE debate in the UK revolves around the responsibilities of the state in terms of direct welfare provisions or in “inculcating new social norms around well-being and responsibility” (Berry, 2015, p. 519). This is akin to the individual asset-based welfare related to housing acquisition (Ronald et al., 2017). Financial capability is also discussed under the perspective of whether public policies should target the individuals' responsibility or that of financial institutions (Prabhakar, 2014). Even the analysis of a specific financial product such as insurance is based on this public-individual axis. For instance, Hood et al., (2009) evaluate the reasons why and the degree to which in Scotland “tenants in public-sector housing participate in low-cost household insurance schemes promoted by their landlord” (p. 1807).

The analysis of the situation in other European countries - not the UK - is present in the FI/FE literature from 2012 onwards. In terms of relevance, Spain is the first case where research is focused on the socioeconomic determinants underlying the expansion of bank branches (Alamá and Tortosa-Ausina, 2012; Alamá et al., 2015) and defining the risk of financial exclusion (Fernández-Olit et al., 2018). The second most analyzed

country is Poland, the sole subject of a work on financial education (Horska et al., 2013), and two studies on the Central and Eastern European region where the relatively low degree of access to full banking services is a particularly relevant topic (Burton, 2017; Corrado and Corrado, 2015). Finally, we find three case studies each focused on a different issue: how the debt problems of households relate to socioeconomic and behavioral determinants in Ireland (Russell et al., 2013); the evolution of the presence of banks following socioeconomic segregation in certain neighborhoods in Belgium (Huysentruyt et al., 2013); and lastly, the determinants that condition the migrants' choice of a payment channel for sending remittances in Netherlands (Kosse and Vermeulen, 2014). There is a low number of case studies developed in the EU, although the contribution of EU authors may be considered wider if the authorship of several articles focused on the general dimensions of FI/FE is considered.

Despite the extensive UK literature, Devlin (2009) argues that the USA is the country where the study of FI/FE is the most advanced. In this review, 30% of the articles found are focused on the USA. In this country, a high level of specialization is observed, particularly in relation to some issues. This finding is in contrast to the more diversified European literature. In fact, it is in the USA literature where we find the most thorough analyses of problems associated with specific collectives, such as: racial groups (Latin- and Afro-Americans) (Burton, 2018), migrants (Joassart-Marcelli and Stephens, 2010), and disabled people (Harper et al., 2018). Moreover, generational studies about the financial inclusion of the youth and the elderly are more frequent in the USA. Specifically, Friedline leads relevant studies dealing with the financial inclusion of children and millennials (Friedline, 2012; Friedline and West, 2016; West and Friedline, 2016). In addition, some of the research in the USA grew around the relationship between FI/FE and well-being. For example, Aguila et al., (2016) assess the effect that having a bank account has on the physical and mental health of the individual, while Williams and Oumlil (2015) propose that college students should receive financial education to enhance their decisions with respect to their education and future.

The case of Canada is characterized by studies that address the spatial void in urban financial geography and fringe financial entities (Bowles et al., 2011; Simpson and Buckland, 2016). After taking an innovative perspective to compare the determinants of FI/FE in Canada and Bangladesh, Islam and Simpson (2018) also recommend improving

financial literacy and a more attentive look into the causes of FI/FE. Last, Bowles et al. (2011) focus their study on the Aboriginal population.

The study of the causes of financial inclusion and exclusion ranges from the more usual statistical analysis of socioeconomic determinants under total exclusion (Devlin, 2009) to the ethnographic study of household engagement both with mainstream and alternative financial services (Coppock, 2013). Credit-score processes are reviewed by Wainwright (2011), who provides "insight into the practices that underpin the design of scorecards tools that produce the categories of financial inclusion, graduated by price, and financial exclusion" (p. 662).

The digital dimension of financial services

Finally, in order to complete one of the objectives of this SLR, it is necessary to conduct a review of the strand of literature dedicated to the digitalization of financial services as an issue in the FI/FE literature. Within this cluster, peer-to-peer lending has received a lot of attention. For instance, Loureiro and Gonzalez (2015) criticize the deficiencies of P2P lending as a tool for the mitigation of financial exclusion: "[They] use soft or implicit information such as intuitions about whether or not borrowers appear trustworthy based on their photos, for instance" (p.608). On the other hand, Rogers and Clarke (2016) address the UK regulation of P2P lending and its contribution to the growth of socially useful finance. A benefit the authors stress is that "by bringing it under the regulatory umbrella, the FCA contributed to mainstreaming and granting respectability to this form of financial activity, which has the potential to help expand the constituency participating in it" (p. 942). Thus, despite facing the risk of elite collusion due to the strong impact of the actions of lobbyists and other pressure groups in the design of the legislative efforts, regulators regard P2P lending as socially useful. The reason is that P2P lending communicates savers with productive investments facilitating capital flows and trade and contributing to the financial inclusion agenda.

The subject of digitalization has been approached from several angles. For instance, Wainwright (2011) speaks about technology applied to credit scoring but not to financial digitalization per se. Kear (2017) reviews the case of Lending Circles, a peer-lending service in the USA, as well as the practices carried out by financially marginalized people that condition their digital financial representation or credit score.

In any case, except for Corrado and Corrado (2015), who deal with the role that an internet connection plays in reducing costs or in facilitating deposit takings and access to credit in Central-Eastern Europe, so far the digital dimension of financial services is only discussed in the UK and USA literature. The analysis of rural areas and alternative financial options also include the topics of digitalization and online banking (Coppock, 2013).

Insight by methodology

Table 5 shows that the top journals interested in FI/FE published articles focused on both the theoretical discussion and the geographical analysis. This finding is in line with our earlier statements in that the FI/FE literature relies on various disciplines such as economics and finance, which have progressively cleared the way for sociology and political sciences. Financial geography comprises geographical analysis with an empirical base, as well as other theoretical work (Yeung, 2005). Interestingly, the empirical work is more abundant but gets published in less-prestigious journals (see Table 5). Multivariate analysis, as a complex representation of statistical analysis, is used in less than 40% of the articles. On the other hand, more than 11% of the reviewed articles adopted descriptive statistics as their main methodology. Discourse analysis is also used in different studies related to social sciences. This includes one case study based on ethnographic analysis (Kear, 2017). It must be noted that there is no evidence of proposals or development of methodologies to build either financial inclusion/exclusion indexes or benchmarks in developed countries.

Table 5.

The following national and regional statistics may be highlighted in terms of how often they are used in the FI/FE literature. In the USA, these include the National Financial Capability Study (NFCS) and the FDIC National Survey of Unbanked and Underbanked Households; in Canada, the Survey of Financial Security (SFS) and the Canadian Financial Capability Survey (CFCS); in the UK, the Living Costs and Food Survey gathered by the Office of National Statistics, and the data published by the Financial Services Authority (FSA); and in the European Union, the Statistics on Income and Living Conditions (EU-SILC). Using statistics issued by international organizations,

such as the Global Financial Inclusion Database or the World Bank, in studies relative to FI/FE in developed countries is less frequent than when working in the context of developing countries where they are often taken into consideration.

A critique of the FI/FE literature: Main theoretical approaches and contributions

FE is defined as the inability to meet financial needs in the formal market. Hence, being socially excluded becomes a relevant obstacle to the normal development of an individual's life in society. This phenomena and financial inclusion, its binary partner, have been traditionally explored through established financial markets and consumer theories. In addition, economic and financial geography have also contributed to the development of the theoretical constructs of FI/FE. However, the abundance and complexity of the phenomena raises questions that need enriching approaches also from the theoretical frameworks of other fields, such as the political and social sciences. Table 6 summarizes the classification of the main theoretical frameworks identified and that we develop in this section. These categories should not be considered hermetic as some articles may combine two or more of them to perform their analysis.

Table 6.

The debate on market and social exclusion is the most extended approach to FI/FE theory. Thus, it is widely published in economics, business, and management as well as in social work journals, albeit it can also be also found in papers from other disciplines. Given this approach has been employed for decades, it is also predominant in the research that analyzes the situation in continental Europe. Here, the subjacent hypothesis states that a specific situation of market exclusion is created by determinant factors, usually related to the socioeconomic characteristics of the individuals or collectives most often associated with social exclusion variables (Fernandez-Olit et al., 2018; Harper et al., 2018). To identify these determinants, most of the work on this subject uses mathematical and statistical analysis, and presents a positivist perspective. Some examples are Deku et al., (2016) who look into ethnic and income determinants of consumer credit in the UK; the work of Islam and Simpson (2018), who test which personal and social factors determine the use of fringe financial services in Canada and Bangladesh; and that of Kosse and Vermeulen (2014), who assess the costs, ease of use, and availability of the services when selecting a channel for remittances of 501 migrants in the Netherlands.

Concerned with the need to increase access to financial products and services, some authors include the perspective of social policies. One example is Rouse and Jayawarna (2011), who discuss policies that promote entrepreneurship among groups with little resources after determining that a low level of access to financial means is a relevant factor for the failure of businesses. A particularly interesting example is the work of Bourles and Cozarenco (2014), who develop a mathematical model to calculate the impact that different ways of public subsidizations of microfinance have on FI/FE. Subsequently the authors discuss the most suitable policies and introduce a reference to the financialization debate in the case of entrepreneurship microcredit. The question is: should the state's intervention promote social protection (microcredit guarantee) or should it try to encourage individual responsibility (entrepreneurship capability)? Both the market and the social exclusion approach may be incorporated into financial geography, as in Hood et al. (2009). Here, the author's analysis of determinants is related to the spatial distribution of the urban centers of Scotland, showing high permeability among theories.

The financial geography approach

Related to the 'market exclusion debate,' the financial geography approach emerges from a geographic perspective that assigns more relevance to the demographic or territorial characteristics than to the individual characteristics of the consumer. In this context, financial access is determined by geographic factors. Furthermore, Aalbers (2015) suggests that financial geography forms a large part of the literature that brings together finance and geography. According to the author, such an approach was "built originally on work in economic geography, political economy, urban geography, and political geography, but later also included cultural economy and social studies of finance" (p.300). He asserts that its differentiation as a distinct literature from economic geography may be traced back to the mid-1990s in the UK. However, although this was an interesting and novel effort, one must keep in mind that Aalbers' review of the literature only includes works published in the journal *Transactions of the Institute of British Geographers,* hence potentially biased towards UK works. However, as early as the late-1970s and unrelated to these efforts, Seaver and Fraser (1979) had already initiated a body of literature which looked into branch banking in the USA. Encouraged by the Community Reinvestment Act (CRA) of 1977, overtime this work was enriched with a

research on zoning, redlining, and blockbusting, all of which actively contributed to residential segregation. The debilitating impact of these practices over the affected communities was studied by McGrew (2018). Nonetheless, despite a long tradition of bank redlining studies in the USA, the financial geography approach does not have much presence amongst the reviewed literature. That is with the exception of Joassart-Marcelli and Stephens (2010), whose work was classified into the financial ecologies category considering the papers' approach. Overall, our review shows that the financial geography approach is more relevant in the research that focused on continental Europe and Canada. With respect to the work done in Europe, it is striking to assess the noteworthy interest of the authors in branch banking. With respect to Canada, all revised research assumes the spatial void hypothesis. This hypothesis states that alternative financial service suppliers will establish themselves in those locations where mainstream services are not available (Figart, 2013). Thus, financial geography may be considered a secondary dimension even in the two Canadian articles whose focus is the market exclusion approach (Bowles et al., 2011; Islam and Simpson, 2018).

In 2011, Appleyard empirically explores the CDFIs to compare the various geographies of finance for enterprise in the USA and UK (Appleyard, 2011). While her geographical approach may be considered an example of pre-financial ecology, Appleyard's study does not only assess geographic differences between the UK and USA cases, but also includes a debate about the web of partnerships and networks, a discussion that resembles that of political economy and institutional sociology. In fact, her 2013 work was already categorized into the financial ecologies approach (Appleyard, 2013).

Financial ecologies

FI is conceptualized as a system of interconnected elements that define the relationship of individuals with their economic environment. This framework considers "the immediate settings containing the developing person but also the larger social contexts, both formal and informal, in which these settings are embedded" (Bronfenbrenner, 1977: p. 513, in Salignac et al, 2016). This approach appears at the intersection of financial geography and sociology, as it considers individual, social, and territorial elements. The access to financial resources varies in accordance to the individuals' multidimensional experience of disadvantage (Rouse and Jayawarna, 2011). The Financial Ecologies

approach is in line with the social inclusion theory, as well as with several of the works in financial geography. One example is Joassart-Marcelli and Stephens' (2010) paper, where the authors assesses the socioeconomic characteristics of the population (the market and social exclusion approach) and the costs and suitability of formal and subprime services present in a given territory (geographical approach) to define diverse financial ecologies. Another example is Salignac et al. (2016), who proposed a framework created out of social exclusion, resilience, and the ecological systems theories. Their conclusion is that "resilience, together with an ecological systems approach, recognizes and values the contributions of all actors (individuals, families, community organizations, not-for-profit organizations, enterprises, industry, regulators, and governments) in shaping an individual's ability to bounce back from adverse financial events" (p.283). On the other hand, Coppock (2013) analyses three levels of 'financial ecologic systems,' which vary depending on territories and individuals: the formal and informal institutional spaces of financial services; the relationship between individuals and those spaces based on social and financial networks and experiences; and the individual building of financial subjectivities based on socioeconomic characteristics and personal attitudes. Appleyard (2013), again focusing on the CDFIs, describes them as "hybrid financial institutions due to their double bottom line" (p.876). The author concludes that these institutions are alternative sources of funds and thus could help alleviate the enterprise FE problem. Furthermore, Appleyard recognizes no dichotomy exists between mainstream banks and this source of alternative finance.

Social studies of finance (SSF)

Social Studies of Finance (SSF) groups works that analyze FI/FE from a social and sociological perspective and address how social reality is materialized in objects and how society's decisions on the allocation of resources are based on these objects (Kear, 2017). According to Kear (2017), this is one of the fundamental questions of Marxism as it can explain how risk is constructed as well as the role of epistemic elites (Wainwright, 2011). In Polillo's (2011) view, financial inclusion is a byproduct of the leftwing innovators' quest for power. Here, rightwing and leftwing theorists analyze the genesis of the 2007-2008 financial crises to reach different conclusions. While those in the rightwing argue the political intrusion to democratize credit and increase the financial inclusion of marginalized groups is the main cause of the increase in instability and risk during that

event, those in the leftwing blame the process of financialization. That is, leftwing observers name the shift of profit-making activities from industry to finance as the key cause for the instability observed during the crisis period. These views portray the theories of Schumpeter and Marx according to Polillo. In this respect, Kear (2017) highlights that allocating resources according to a risk matrix implies the recognition of the role of an object that cannot be performed by an individual. For instance, one might allocate funds to individuals according to the credit scores they obtain. In this sense, the implication is that the object, the credit score, performs a social role that individuals cannot perform. That role is the "impartial discrimination among the concrete risks faced by a diversity of subjects (e.g. a legal technology of arbitration" (p. 353).

The credit score is the object that portrays the social reality analyzed by this author, which creates a 'tampered' reality when excluded groups re-build their own credit record by means of social financial alternatives, such as rotating savings and credit associations (ROSCAs). Rogers and Clark (2016) discuss both the "social purposes of finance" and the "socially useful" types of finance while highlighting credit score as the most usual but imperfect way of assessing the social reality of creditworthiness.

Financialization critique

Financialization is defined as the indispensability of the financial services determined by the behavior of the service providers "which either require customers to use a particular financial service or impose additional costs on those who do not" (Sinclair, 2013, p.670). Such an approach criticizes financial inclusion as an imposed requirement to extend financialization. The notion of financialization began to take place within the Marxist political economy to connect booming finance with poorly performing production. This phenomenon has had a varying role across time. However, during the 2007-2008 crisis, the increasingly predominant role of finance in the economy and society became ever more obvious (Lapavitsas, 2011). A relevant and critical debate about financialization and FI/FE emerged in the UK in 2013. One part of this debate dealt with the promotion of "asset-based welfare" and the reduction of the state welfare provision at the hands of the government. Within this category, efforts were made to assess how governments began to avoid the responsibility for individual welfare by shifting governmental provisions through the "welfare state" to individual provisions through other market

mechanisms (Prabhakar, 2013). Some of these works support the idea that FI/FE should fall within the individual citizens' realm of responsibility rather than under systems of collective protection (Berry, 2015; Sinclair, 2014; Prabhakar, 2014). In this line, Prabhakar (2013) defines FI/FE as a means to create financial subjects instead of citizens. Marron (2013) relates financialization to structures of inequality because of the adaptation of the poor to markets. This adaptation may imply the creation of submarkets and a more intensive relationship with the financial institution also in broader aspects of life such as retirement or studies. Berry (2015) goes further by arguing that financialization entails a threat to political citizenship and admonishes that participation of the political life is threatened if it is not protected against financial risks. Figart (2013) exemplifies the critique on the USA and defines financialization from an institutionalist reading of the capability approach: Confronting each individual's assigned responsibility for their financial situation. Figart proposes that financial capability is neither methodologically nor ontologically individualistic but comprises an institutional dimension (rules, norms, and practices). Lastly, Kear (2013) focuses on the financial citizenship (FC) discourse to propose that FC's claims for a greater financial inclusion are more about marginalized citizens keeping control over their own livelihoods than about financial rights. Kear then introduces his understanding of the relationship between the financial system, the state, and the citizen. His argument is that financialization involves the unveiling of a form of biopolitical government divergent of the idea of financial rights, or basic FI/FE dichotomies. The author conceives financialization as a kind of biopolitical government exerting social and political influence over the life of citizens and whose "subjectivizing tendencies are concomitant with emerging capitalist class processes" (p. 926). In his view, financialization requires the release of a form of biopolitical government incommensurable with the idea of financial rights, or simple dichotomies of financial inclusion and exclusion. Kear recalls Foucault's discernment between technologies of discipline and security to explain how impediments to the expansion of financial government to all social groups results in a double standard of financial government and layers processes of financial subject formation.

Economic psychology and financial socialization approach

The works that fall under the heading of *Economic psychology and financial socialization* come mainly from authors within the areas of consumer behavior and the sociology of

consumption that look at how people build their financial knowledge and behavior. The understanding of finance is “made up of compartmentalized and incomplete pieces of information that become integrated over time” (Friedline, 2012).

However, in the economic realm, the key interest of these researchers is to determine the psychological and sociological variables that condition the financial behavior of certain groups. For instance, much attention has been paid to the actions of youngsters and children in the USA. This approach is closely related to that of the generational studies described in section: *Insight by country and topic,* to cover Friedline, (2012) and West and Friedline, (2016). Nonetheless, the works under the *Economic psychology and financial socialization* category do not exactly have a market exclusion approach as they do not consider determinants to be the equivalent of market barriers. Given that youngsters and children can be considered as "work in progress," the authors do not deem these subjects as excluded from financial markets. Quite to the contrary, they consider them to be improving upon their capacities to enter the market. Also, there is no critical vision regarding the financialization process of children and young people. Instead, their inclusion is assumed to be predetermined and positive. Given the different focus of these papers researchers here do now coincide with other schools on their criticism to the financialization of the economy and society.

The moral approach: access to financial services as a social right

The vision of financial services as a social and human right arises from arguments such as market failure and the people’s dependence on the said imperfect markets (Dreze et al., 1991). Based on the moral approach of credit developed by Yunus and Sen, which considers credit to be essential to overcoming poverty and access to education or health. This approach may extend to other financial services also considered irreplaceable in a specific social context. The concept of financial services and credit as a social and human right first emerged in countries where the state did not design effective social and ethical policies. In these contexts, no policies were designed to fight poverty and birth disadvantages that would guarantee access to the financial markets and the social inclusion of the whole population (Hudon, 2009; Bayulgen, 2013, Yunus, 2007).

The vision of financial services as a social right arises from arguments such as market failure and the people’s dependence on said imperfect markets (Dreze et al.,

1991). The concept of access to financial services as a social right emerged first in countries where the state did not design effective social and ethical policies to fight poverty and disadvantages by guaranteeing access to the market and the social inclusion of the whole population, particularly in credit markets (Yunus, 2007). Thus, the idea that access to credit is a right may be considered to be a radical position of the market and social exclusion theory. That is, in contrast to resolving specific situations or creating policies that would facilitate access to financial resources by certain collectives (i.e.: the elderly, the handicaped, extreme poverty, and so on), the approach here is to consider such access as an essential and ensured right.

In this context, credit is considered a protection against adversity (Dreze et al., 1991) but when expanding this framework to developed countries, other financial services were revealed as more relevant in terms of dependence. In fact, Gomez-Barroso and Marban-Flores (2013) analyze EU's policy to identify whether the EU considers the access to financial services a service of general interest or if it is proposing such consideration be made in the near future. Gomez-Barroso and Marban-Flores' (2013) analysis shows the EU's overall political concern over these questions. This preoccupation matured in to the 2014 publication of the "EU Directive 2014/92 / [...] and access to payment accounts with basic features" also known as "Directive 2014/92/EU on payment accounts".

Hudon (2009) explores the ethical dimensions surrounding the concept of a human right to credit, which might be justified if it "is directly instrumental to economic development, poverty reduction and the improved welfare of all citizens" (p. 17). Bayulgen's (2013) work also supports access to credit as a human right but qualifies this support as legitimate only if the risks and side effects to the borrowers are taken into consideration. She reaches these conclusions after presenting the Yunus case for establishing credit as a human right and then analyzing the impact of five key critiques - institutionalism, feasibility, justiciability, universality, and proliferation - that a rights-based approach to credit could propose. In this work, Balyugen reflects upon the need to develop a definition of credit that will allow the poor to reach its potential and ensure financial inclusion for all. She also proposes revisiting the concept of the right to credit and rephrasing it to the rights to financial services in recognition to the impact of mobile banking services and other technology commonly available currently.

Despite having its peak moment at the beginning of the 21st century, financial services as a right is the most out-of-fashion theory amongst the ones reviewed. Thus, as of 2013, there are no new articles published among the top-ranking literature on FI/FE.

Discussion on the contributions of recent literature to the main problems of FI/FE and their implications

Finally, in this section we synthesize the main contributions of the leading literature to relevant FI/FE problems and highlight how the cited work addresses the key challenges arising from financial exclusion.

The (Re) definition of financial inclusion and the right to financial services, including access to credit

Much effort has been devoted to study the phenomena of financial inclusion and financial exclusion in the last two decades. Among the many works, Marron (2013) stands out because it explores the meaning behind the concept of financial inclusion as developed in the Britain of the 1990s. Here, the author makes a compelling observation in concluding that this term conceals neoliberal premises that force responsibility upon individuals, as if they were players in the market. In his opinion, financial inclusion is not a political or moral issue but a technical issue that needs resolution. The moral view of the right to financial services, including access to credit, has gained ground due to the weaknesses in financialization and financial innovation processes (Polillo, 2011; Kear, 2013). The shortcomings in these systems became undeniable after the negative effects of the credit expansion to the low-income population had during the 2007-2008 crisis. The consequences of these weaknesses were addressed by Bayulgen (2013) when he offered that the negative impact of the decisions of countless banks to grant inadequate credit to certain sectors of the population should not result in the denial of credit. Bayulgen claims the right to credit while he advises for better supervision. Showing equivalent concerns, Hudon (2009), proposes a goal-rights system to provide universal access to credit. He takes Sen's definition of "a moral system in which fulfillment and non-realization of the rights are included among the goals, incorporated in the evaluation of state of affairs, and then applied to the choice of actions through consequentialist links" (Hudon, 2009, p. 27).

Hudon also advices about minimizing the harmful consequences of spreading credit instead. However, Kear (2013) argues that claiming right of access to financial products "reflects a desire to make the seemingly inexorable financialization of all aspects of life fairer, kinder and gentler" (p. 942). Salignac et al., (2016) go even further by considering that financial inclusion in developed countries should not be measured in terms of appropriate access to financial services. These authors propose a holistic analysis - avoiding individual focus and technical problematization and including notions of social exclusion, financial capability, mental models, resilience and ecological systems - "to better understand how individuals bounce back from adverse financial events and the resources and supports they draw on" (p. 283). This is an interesting line for future research as shown by Salignac et al. (2019) – an article not included in this review since it was published after the period studied. In this work, the author proposes a new framework to measure FI/FE from the perspective of resilience.

Services and products: going beyond credit

The debate on specific products and services in the field of FI/FE is fragmented among various topics. For instance, although credit has been widely discussed from the perspective of social and human rights (Hudon, 2009; Bayulgen, 2013, Yunus, 2007) within the IT and evaluation systems of credit risk frameworks, credit scoring is an issue pending to be fully explored. Even so, in 2011, Wainwright examines the trajectory of the credit scoring technology the UK imported from the USA. In this process, the author identifies the boundaries that divide consumers in terms of inclusion, exclusion, and price. Wainwright then proposes that these divisions derive from the judgments that a risk management elite, the credit analysts, encoded within scorecards. One of Wainwright's key conclusions is that the judgments and decisions made in the use of scorecards open to question the scientific status of credit scoring. He further emphasizes the additional subjectivity that the use of this technology across different nations brings into the task of obtaining standardized and objective policy. Some related arguments were later offered by Loureiro and Gonzalez (2015), who propose that emotional biases in P2P credit scoring may foster the financial exclusion of the "threatened" segments.

There are few studies on remittances in developed countries that take the FI/FE perspective. One of them is a work by Kosse and Vermeulen (2014) whose results reveal the key determinants of the choice of remittance channel are: the remittance amounts, the

education of the sender, the costs, the access, and the financial development in the home country. For large amounts, bank transfers are preferred whereas informal channels are chosen for smaller ones, cost being a key explanatory variable. Thus, different formulae for the use of remittance services are found, the evidence pointing to facts such as the selection of informal intermediaries when the recipient has no access to a bank account and the positive correlation between ATM terminal and GDP. Turning to policy implications, the authors' point to the desirability of increasing the use of formal remittance channels and propose the following actions to stimulate their use: reduce the fees charged by formal services, provide information to increase awareness of the risks of informal channels, and create policy that allow the poorest to hold bank accounts, i.e. reduce costs, simplify requirements for opening and using the accounts, and so on. Lastly, the authors recognize that technological innovations provide remittance options and financial services making the physical access to a banking office unnecessary.

There is a strong connection between financial exclusion and social housing (Hills, 2007). Thus, in an attempt to learn more about this phenomenon Hood et al. (2009) focused their attention on the availability of low-cost household insurance to social housing tenants in Scotland. Household insurance is a service that contributes to financial inclusion. Hence, the observed decrease in the use of this service among the low-income and rented sector in the UK became a matter of preoccupation. The authors' 2009 work aimed to assess the degree to which tenants in public-sector housing participated in low-cost household insurance schemes promoted by their landlords. They further evaluated the motives behind the observed level of participation. The results of their investigation showed that even though low cost affordable insurance was available, this fact did not contribute to reaching the expected take up rates by tenants. The authors concluded that new schemes for the promotion of low-cost insurance need to be devised if this form of financial inclusion is to remain. Lack of awareness and apathy on the part of the tenants has been used to explain this finding.

Concurrently with Hood et al.'s 2009 work, Devlin (2009) argues that to grasp the full extension of the financial exclusion phenomena, one should examine the overall important influences. That is in contrast with the method of looking into specific categories, such as housing insurance or access to credit. In his 2009 work, Devlin uses a sample of 15,000 UK households to analyze total financial exclusion. His findings show two are the key variables that explain this phenomenon: educational attainment and the

type of housing tenure of the household concerned, that is, whether the household was owner occupied, private rented accommodation, local authority housing or housing association rented. In addition, the author listed three other significant influences: household income, employment status, and age. Interestingly, his results show that gender is not significant in explaining total financial exclusion and that regional and ethnic variations are less pronounced. This has important implications for policy design.

Corrado and Corrado (2015) look into the main determinants of a basic form of financial inclusion they define as "the joint probability of using both banking and credit services" (p.1056). Their sample includes data from the Life in Transition Survey II, a work by the World Bank and the European Bank for Reconstruction and Development. To measure the geographical distribution of financial inclusion during 2008-2010, this survey collected information on the financial decision-making and socio-economic background of 25,000 households across 18 Eastern European countries and 5 Western European economies. Because the impact of the 2007 crisis was still present while the survey was taking place, the authors determined a measure of inclusion in terms of the number of individuals who succeeded in obtaining bank loans. Unsurprisingly, in line with the findings of prior works, the results of this analysis also showed the likelihood of financial inclusion as a function of the location of residence, the income, the type of employment, the marital status, the level of education, the age, the religion, and the ethnicity of the family. Also, households with stronger ties to the community enjoyed a greater chance of financial inclusion given their networks acted as a replacement for traditional financial collateral. Finally, the individual likelihood of financial inclusion was found to be affected by the average use of financial services at the local level, suggesting the presence of a financial multiplier effect. Given said relationship between the location of the households' residence and financial inclusion, the authors advocated the active role of central and local governments to help deliver these services to families, such as those outside the Euro zone and in socially deprived areas where high inequality results in the financial exclusion of large communities. One last observation is that internet-connected people are more likely to be included since the new information technologies allow better information flows, which reduce costs and hence ease both deposit taking and access to credit.

Contributing to this area of analysis, Fernández-Olit et al. (2018) focus on socially vulnerable collectives and reviews the literature on the determinants of unbanking and

underbanking. The main objective of this work was to determine whether people at risk of poverty and social exclusion are integrated in the financial system. By applying multivariate analysis to a 2015 survey by the Red Cross in Spain on social vulnerability, the authors show a negative relationship between the risk of social exclusion and the intensity of the use of financial banking services. Two demographic factors were found highly significant: having a Latin American origin and having a Black African origin. On the other hand, neither gender and age nor their interaction were found to be significantly related to financial vulnerability. People in households in situation of monetary poverty where 2.8 times more likely to being underbanked. Additionally, both unbanking and underbanking were associated to job instability and low income. Overall, these results showed three different profiles that should be analyzed separately to promote financial inclusion: the origin of the individual, their job/income situation, and their access to other products or services such as food and energy. For instance, cultural and religious factors might influence the low use of banking services. One example is that of Muslim immigrants, who might be uncomfortable with the banking products they can access. Another example of people who underbank might be the elderly, who could prefer heating consumption rather than other services. This work identifies differentiated determinants leading to social exclusion on the “other side of the coin” of both unbanking (irregular legal situation and unstable employment) and underbanking (poverty and material deprivation). Unbanking, here, is also considered within the conceptualization of FE (Salignac et al., 2016) given that “the current definition does not differentiate between those who choose to be excluded and those who are forced to be” (p. 269).

AFS and predatory lending, one last chance for excluded people?

As we expose below, the expansion of fringe and alternative financial services (AFS), as well as the use of predatory lending practices, are leading problematic factors highlighted in much of the recent literature. However, there are different understandings of the ways in which AFS and "financial access" relate to each other. For example, despite the trend that seeks to define financially excluded people as those turning to AFS (see Islam and Simpson, 2018; Koku and Jagpal, 2015;Caplan, 2014), Birkenmairer and Fu (2018) assert that financial access and AFS use are not the inverse of one another, but two separate weakly and positively correlated concepts. The results of this work illustrate the complex relationship between these terms. For instance, the authors find that savings and employer

retirement accounts, investments, and mortgage loans are strong indicators of and positively contribute to financial access. However, the use of auto title loans contributes negatively to financial access, and strongly to AFS use. Pawnshop loans, payday loans, and rent-to-own loans also contribute significantly and positively to AFS use. Here, it is worth highlighting three key findings: 1) credit cards are strongly and negatively related to financial access. This result implies the use of credit cards does not promote overall household financial access. 2) Prepaid debit cards negatively contribute to AFS use. This outcome might indicate prepaid cards are related to less consumer use of other indicators of AFS use. 3) Checking accounts contribute positively and strongly to financial access and more weakly to AFS use. This finding might point to the fact that although the use of checking accounts promotes overall financial access, owning these can also be an indication of AFS use. For instance, checking accounts might be used exclusively to place direct deposits of funds from employers or government sources. Thus, many consumers do not use these as a gateway to obtaining products associated with financial access, such as savings accounts. Overall, the results of the analyses performed in this work show a multifaceted relationship between financial access and AFS use. The conclusion is that procuring access to savings and checking accounts and to affordable and appropriate financial products and services from banks and credit unions does not holistically solve the challenge of AFS use.

In their study of Canadian Aboriginal people, Bowles et al. (2011) conclude that the use of AFS may rely on "reasons consistent with individual rational maximizing behavior (such as convenience factors, for example)" (p. 901) and be "influenced by structural and cultural factors as well" (p. 901), such as coming from rural communities where no banking services exist or money is considered to be no more than a simple medium of exchange.

In continental Europe, the case of post-communist countries seems relevant due to the low access to mainstream credit derived from both the "informalization" of employment to avoid taxation and excessive regulation (Williams et al., 2011) and the growth of door-to-door lenders (Burton, 2017).

Also, through the use of cases, Caplan (2014) assesses the strengths and limitations of three strategies communities use to fight predatory lending and increase financial inclusion in the USA. These strategies are: access to mainstream banks and

credit unions, community-based financial services, and community advocacy for policy and regulation change. Some observed successes include changes mainstream banks partnering in "Bank-On" programs have affected to remove barriers to access, as well as the sheer growth in the number of Bank-On programs available. Also, there has been a significant growth in the number and spread of CDFIs ready to support communities. These private financial institutions deliver responsible and affordable lending to low-income, low-wealth people to help communities join the economic mainstream. One strength of these CDFIs is that they use a variety of funding sources to grant small loans so that the credit-constrained individuals can start to build up their credit scores. A relevant side effect is the savings in fees and interest that would otherwise have been paid to either mainstream or predatory lenders. However, despite some successes overall it has been difficult to assess the effectiveness of these programs and regulatory changes in improving the likelihood of an evaluation. A key limitation refers to the assumptions behind the strategies. For example, it is thought that mainstream banks are fairer than their fringe counterparts, when, in fact, large banks are involved in the fringe financial market. So, vulnerability to economic cycles, to predatory lending, and to the way these institutions skirt laws remains ubiquitous preventing real progress in the fight against exclusion. The case of the bankruptcy of Southshore Bank in 2010 illustrates this situation.

Koku and Jagpal (2015) point to the lack of marketing studies that provide policy guidance with respect to innovative ways of lending to the working poor that does not require borrowers to provide collateral and liquidity. The authors then suggest two ways to approach this problem. Their first idea is that traditional financial institutions voluntarily expand their scope through the introduction of innovative borrowing schemes that require no collateral or liquidity as a part of their CSR. Their second suggestion to prevent the patronage of the working poor at the hands of payday lenders is that policy makers enact laws mandating financial institutions put aside a percentage of their loans for the working poor. Lastly, Burton (2017) also proposes the enhancement of poverty-alleviating approaches such as microfinance and financial capability strategies together with the active regulation of mainstream and fringe financial institutions.

New determinants of FE?

The well-paved research on the causes of financial exclusion is expanded by the conclusions drawn from specific population groups: the racial wealth gap in the USA is aggravated by the wealth management industry (Burton, 2018). In line with these, Deku et al., (2016) had also noted the patterns of access to consumer credit in the UK where non-whites appeared to be in a weaker position with respect to both the access and intensity of borrowing. Burton (2017; 2018) argues that the inequalities in the supply of financial services based on the racial gap or on a low socioeconomic status are a reflection of the competition-for-scarce-resources discourse of "deserving" and "undeserving" people. Race is, together with income and nationality, a factor of segregation in terms of higher costs and financial services of lower quality (Joassart-Marcelli and Stephens, 2010). Finally, Harper et al. (2018) analyze in depth a new dimension of FE: mental illnesses. This work suggests that the autonomy of the mentally ill should be improved by combining public policies as well as personal and technological mechanisms of support.

Impacts and consequences of FE

The analysis of FE has centered more on its causes than on its consequences, other than for the AFS debate. Thus now, the discussion of the effects of FE on welfare is an emerging topic of research and one argument that has focused an important aspect of this discussion is that by Ronald et al., (2017). In this 2017 work, the authors argue that promoting an asset-based social welfare system that depends on housing while governments look to the houses' price increases as a means of improving the households' welfare prospects is creating distortions in the market and enhancing access inequalities. In the authors' view, this kind of "pension strategy" is outdated and inadequate to provide housing or pension conditions for disadvantaged social groups. Looking into a different dimension of welfare within the Hispanic population of the USA, Aguila et al. (2016) find that being banked has positive mental health effects. Furthermore, the results of this work show that those who face greater hurdles to access the formal financial system are those who benefit the most. The authors conclude that "increasing financial-sector participation for minorities and more disadvantaged SES groups can have positive effects on wellbeing and help reduce health disparities" (p. 44).

Has digitalization had a positive or negative impact on financial inclusion?

The scant presence of the digital services dimension in the FI/FE literature severely limits the analysis of this area of knowledge. Having said that, it is also true that we can still find some results, including evidence of positive performance. For example, the existing digitalization has enabled non-profit organizations to create financial data and credit scorings through lending circles for financially marginalized groups (Kear, 2017). This technology has also facilitated socially useful finance, like P2P lending (Rogers and Clarke, 2016). Harper et al., (2018), argue that many developments in financial technology offer promising ways to help serve the needs of lower-income or vulnerable people. One such development is the FreshEBT app, which assists individuals budget their SNAP benefits. Digitalization and online banking are mentioned as tools to provide financial capability and greater access to financial services in both rural areas (Horska et al., 2013; Coppock, 2013) and debranched inner city areas (Simpson and Buckland, 2016). Kosse and Vermeulen (2014) also expect a reduction of the use of informal channels of sending remittances when the adoption of mobile technology becomes ubiquitous (e.g. M-Pesa).

While the spread use of technology has clear advantages, some authors also highlight the risks and negative impacts of digitalization. One such author is Kear (2017), who argues that the introduction of technology and big data into credit scoring imposes a ‘data tax' on those with fewer resources. His objection relates to the plausibility that those with few resources who need financial services will offer their data and privacy to those ‘technologies to quantify the self' and obtain the services. In Kear's mind, this exchange can be thought as alike that expressed by the offer: "Want to lower your car insurance premiums? Let us track your driving patterns by GPS” (p. 19).

In addition, Loureiro and Gonzalez (2015) make a second objection to the benignities of spread digitalization. According to these authors, the characteristics of information transfer in P2P lending will accentuate behavioral biases and further harm certain individuals. This will also be the case of disabled people who are particularly vulnerable to being persuaded that something is a good deal. In this scenario, offers such as frictionless-online credit become a serious and eminent threat to the well being of these collectives (Harper et al., 2018).

In conclusion, the advance of technology and digitalization seems to be a neutral phenomenon, neither positive nor negative, in terms of its impact on FI/FE. In accordance with the most recent research on resilience and financial ecologies, rather than being analyzed as a single category, the impact of this type of development depends on the specific type of service or product, the financial environment, and the characteristics of the individual who receives its impact. Thus, digitalization could be considered to be an element of every ecological system.

Conclusions

This paper has made a critical systematic review of the high-quality publications on financial inclusion (FI) and financial exclusion (FE) in developed economies. In response to the first secondary objective, the third section shows the leading role of the analysis focused on the US and UK representing two thirds of the literature while one fourth focuses on the rest of Europe. In addition, new methodologies, sources and topics are identified. These changes and often characterize the literature of the various countries.

As of the publication of this paper, technology has had little relevance as a "stand alone" issue for the analysis of FI/FE in developed countries. Overall, technology is simply taken for granted and becomes the basis for some alternative responses to FI/FE, both social and mainstream. So far, no debate on or analysis of the impact of digital solutions like banking apps or online banking as existing in developing countries has matured. The potential benefits for vulnerable groups of the use of these technologies have not been properly analyzed yet, let alone the possible processes of social inclusion and exclusion linked to the expansion of new communication channels. Thus, much research is still pending to be done in this field.

The level of access to IT services as a basic condition to using online financial services is relevant in the replacement process of "face-to-face banking" by "online financial services" (Hood et al., 2009; Fernández-Olit et al., 2019). Having digital capabilities is also decisive to prevent a new kind of financial exclusion, especially in developed and ageing societies. Nonetheless, even though these concerns are present and considered by public policy initiatives and the general media, they have not entered the highest-level of academic debate yet. Developed countries depart from high levels of "bankarization" and the focus of much of the research efforts are the groups and

communities still excluded. Here, the analysis is twofold: on the one hand, it is necessary to determine the population groups that are still excluded from digitalization processes. On the other hand, it is also necessary to analyze how the digitalization of financial services can help to integrate certain communities, such as those living in rural areas. The FE effects of new digital financial services should be analyzed carefully (Kear, 2017). For instance, credit-scoring based on big-data may define new risk factors for FE. We should ask questions and find the answers to issues such as whether fringe services are based on technology, or, otherwise, whether AFS are the refuge for 'technology reluctant' people. The low presence of digitalization in the top FI/FE literature may be explained by the fact that this is still an emerging field of research in developed countries. According to Massaro et al., (2016), should this be the case, it would be necessary to broaden the boundaries of the selection of literature to consider publications from leading conferences in the specific research area.

The above conclusions have focused mainly on the shortcomings of IT-related research, given that this is a new field of research whose object of study has a great social and economic impact. However, there are other areas of research that are neglected or poorly addressed in developed countries, as described in the fifth section where the key contributions to the literature over the chosen decade are analyzed. An illustration of this is the case of specific analyses focusing on social exclusion linked to given groups, such as rural inhabitants, immigrant groups, young people, entrepreneurs, the elderly, etc. In this sense, in addition to studying the reasons for exclusion - which is one of the most analyzed aspects - the success of certain inclusion strategies should be analyzed and useful solutions should be put forward. The field of proposal-oriented research is very limited, something that is particularly interesting in relation to digitalization.

The consequences of the AFS and the impact of exclusion also require further development, as certain forms of exclusion have a clear economic impact. The study of FE from a gender perspective has also been ignored in the cases analyzed here, in contrast to those carried out in the developing countries.

Some studies have focused on the market perspective - on how to reach excluded groups - rather than on how to help in this integration process. For example, it is necessary to study how to guarantee financing to lower income sectors without the risk of over-indebtedness. Another line that should be analyzed in the future is the study of specific

financial ecologies. Every environment is specific, so case study focused research planning is recommended, in contrast to generic research. Research in this field is limited to a few countries even though FE is a problem shared by the developed world. The research in this field shows a clear utility, with a strong social and economic impact; thus, demonstrating that the potential research areas detected show latent needs. Research should be approached with a clear social improvement goal, cross-matching the needs of excluded groups with the various financial services susceptible to exclusion. The challenges of developed countries are very specific and hence, require specific research: depopulation processes, sustainability of the pension system, integration of the growing foreign population, ageing, etc. The debates on financialization critique and the rights to financial services should illuminate this applied research and ensure that technical and policy proposals on financial inclusion do not imply market imposition as a panacea, and that the full social and economic integration of citizens is ensured.

This paper offers great academic value as it draws a picture of a research area scarcely analyzed but of great social interest. Specifically, in the fourth section we identify and organize the various conceptual approaches used to study FI/FE in developed countries. In addition, this work has also looked into a second area where much work is needed: the link between FI/FE and the digitalization of the economy. The analysis of the research gaps done in this paper could lead to new work, complementary to that existing currently. Even more so, this work has highlighted the needs that result from the challenges presented by the link between the vulnerable communities and the new products and financial channels resulting from the digitalization processes. Thus, the information uncovered in this review should be of value to policy makers in the public sector. As the work here presents interesting conclusions about FI/FE and highlights areas of analysis that should be further investigated in the planning of public actions to increase the understanding of certain exclusion processes and new strategies that increase FI. Finally, the business sector can take the ideas from this review of the literature as a working tool in the design of financial inclusion policies and even in the analysis of corporate social responsibility processes.

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Tables and Figures

Table 1. Selection process

PHASE	*SELECTION*	*RESULT*
SEARCH IN WOS "FINANCIAL+*CLUSION" *448 references (research articles)*	*Selection 0 = reject non-OECD countries; reject 'developing countries', names of non-OECD, or other non-OECD regions in the article's title.*	*163 references*
ANALYSIS OF TITLES, ABSTRACTS, AND KEYWORDS	*Selection 1 = only OECD countries or generic studies (theoretical) applied to developed economies*	*110 references (92 OECD)*
QUALITY ANALYSIS	*Selection 2 = only included in JCR Index*	*68 references (58 OECD)*
ANALYSIS OF CONTENT. FOCUS ON DEVELOPED EUROPEAN AND NORTH AMERICA COUNTRIES (except Mexico)	*Selection 3 = elimination of other OECD countries (Mexico-4-, Israel -2- , Australia -2-, Chile -1-, Turkey - 1-), European not-OECD (Balkans -1-, and G-20 -1-).*	*55 references EU + UK + USA + Canada + general (applying to developed western countries)*

Source: *The authors*

Table 2. Topics

General	1.Definition and Measurement FE
Services and products	2.1. Remittances
	2.2. Insurance
	2.3. Microfinance
	2.4. General credit/credit scoring
Difficulties/problems	3.1. Fringe financial services
	3.2. Branching/Debranching
	3.3. Unbanking/Underbanking
	3.4. Over-indebtedness
Origins/causes	4.1. Socioeconomic determinants
	4.2. Social exclusion and vulnerable groups
	4.3. Financial behavior
Impacts/Consequences	5.Well-being/welfare
Policies	6.1. Public policies
	6.2. Institutional policies
	6.3. Financial education/capability
Specific cases of FE	7. Entrepreneurship/SME FE
	8. Financial geography
	9. Generational studies

	10.Digitalization

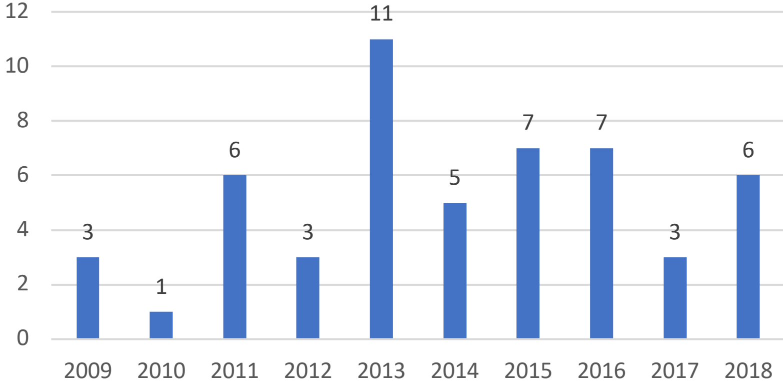
Source: *The authors*

Table 3. Methodologies

		Source of information	Statistical analysis
METHODS OF CLASSIFICATION	1.	SLR (systematized literature review)	1. Descriptive
	2.	General literature review/Theory development	2. Multivariate Analysis
	3.	Existing database analysis	
	4.	Survey/experiment	
	5.	Focus-Group/Interviews	
	6.	Case study	
	7.	Geographical analysis	

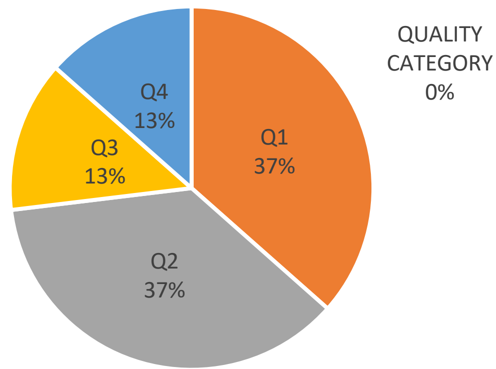
Source: *The authors*

Figure 1. Number of FI articles in JCR Index



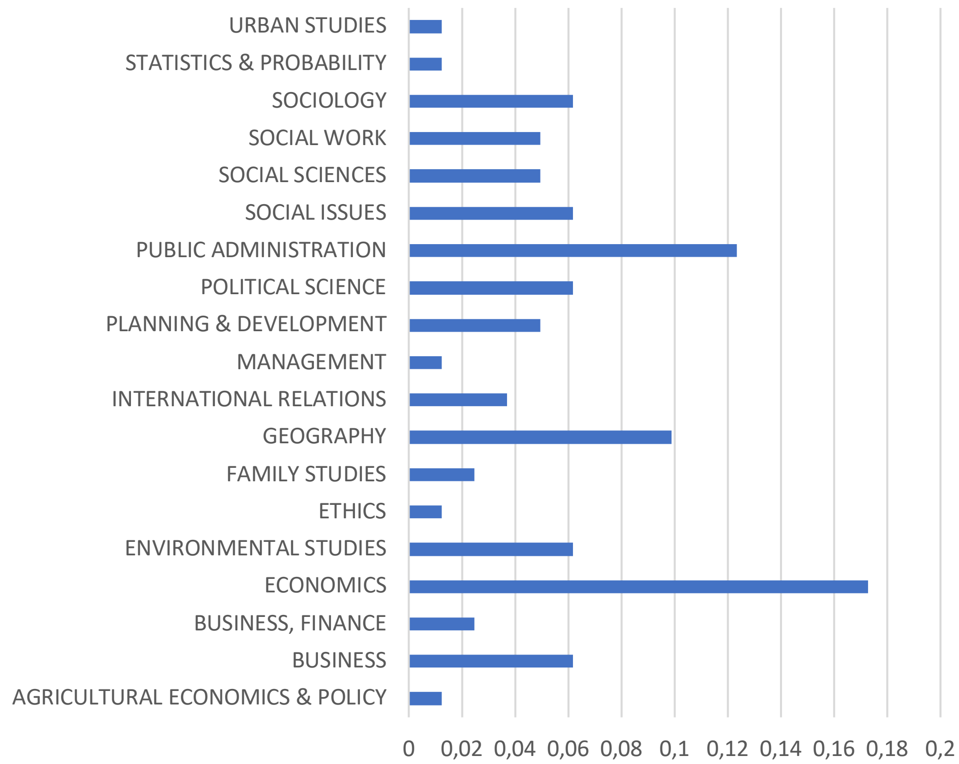
Source: *The authors*

Figure 2. Quality of articles on FI: JCR quartiles.



Source: *The authors*

Figure 3. JCR Categories



Note: the percentages were calculated on the basis of the aggregate of all the JCR categories assigned to every journal included in the analysis.

Source: *The authors*

Table 4. Main topics present in the FI literature by country.

		General/ Developed	The EU	Belgium	Ireland	The	Spain	Poland	Central-Eastern Europe	The UK	The USA	Canada
General	1.Definition and Measurement of FI	***									*	
Services and products	2.1. Remittances					*						
	2.2. Insurance									*		
	2.3. Microfinance	*										
	2.4. General credit/credit scoring									*		
Difficulties/ problems	3.1. Fringe or alternative financial services								*		***	***
	3.2. (De-) Branching			*			**			*		
	3.3. Unbanking/ Underbanking	*							*	*		
	3.4. Over-indebtedness				*							
Origins/causes	4.1. Socioeconomic determinants											
	4.2. Social exclusion and vulnerable groups						*			*	***	
	4.3. Financial behavior											
Impacts/	5.Well-being / welfare									**	**	

consequences						
Policies	6.1. Public policies		*		**	
	6.2. Institutional policies				** **	
	6.3. Financial education/capability			*	*	*
Specific cases of FI	7. Entrepreneurhip/SME FI				** *	
	8. Financial geography	*				
	9. Generational studies					** *
	10.Digitalization				*	**

*Note: * corresponds to the number of articles published in a topic*

Source: The authors

Table 5. Methodologies applied to the literature on FI and articles quality.

METHODOLOGY	STATISTICAL ANALYSIS	Total	Q1 %
Systematized Literature Review		**1**	**100%**
Non-systematized literature review/Theory development		**12**	**50%**
Existing database analysis		**20**	**25%**
	Descriptive	*5*	
	Multivariate Analysis (LOGIT and Multiple regression)	*2*	
	Multivariate Analysis (Benchmark RM)	*1*	
	Multivariate Analysis (Cluster analysis)	*1*	
	Multivariate Analysis (Confirmatory factor analysis-CFA)	*1*	
	Multivariate Analysis (Fixed Effects and Random Effects)	*1*	
	Multivariate Analysis (LOGIT RM)	*3*	
	Multivariate Analysis (Multiple regression)	*1*	
	Multivariate Analysis (POISSON RM)	*1*	
	Multivariate Analysis (PROBIT RM)	*3*	

	Multivariate Analysis (Quantile RM)	*1*	
Survey/experiment		**4**	**25%**
	No statistical analysis	*1*	
	Descriptive	*1*	
	Multivariate Analysis (Multiple regression)	*2*	
Focus-Group/Interviews *(discourse analysis)*		**6**	**33%**
Case study *(discourse analysis)*		**5**	**20%**
Case study (general)		*4*	
Case study (ethnographic)		*1*	
Geographical analysis		**4**	**50%**
	No statistical analysis	*1*	
	Multivariate Analysis (Multiple regression)	*2*	
	Multivariate Analysis (OLS and quantile RM)	*1*	

Source: The authors

Note: RM = Regression Model

Table 6. Main theoretical approaches present in the FI literature.

THEORY	DEFINITION	AUTHORS
Market and social exclusion debate	FE is defined as the inability to meet financial needs in the formal market. It becomes an obstacle to the development of people's regular life.	Burton, 2017; Deku, Kara and Molyneux, 2016; Islam and Simpson, 2018; Loureiro

		and Gonzalez, 2015; Burton, 2018; Fernandez-Olit et al, 2018; Birkenmaier and Fu, 2018; Harper et al, 2018; Henry, Pollard et al, 2017; West and Friedline, 2016; Myers et al, 2012; Williams and Oumlil, 2015; Fiedline and West, 2016; Aguila et al, 2016; Corrado and Corrado, 2015; Koku and Jagpal, 2015; Bourles and Cozarenco, 2014; Kosse and Vermeulen, 2014; Caplan, 2014; Rusell et al, 2013; Horska et al, 2013; McKillop et al, 2011; Rouse and Jayawarna, 2011; Bowles et al, 2011; Devlin, 2009; Hood et al, 2009
Financial geography approach	Related to the 'market exclusion debate'. The theory emerges from a geographic perspective and the individual characteristics of the consumer are not as relevant as the demographic or territorial characteristics. Thus, Financial access is determined by geographic factors.	Simpson and Buckland, 2016; Aalbers, 2015; Alamá and Tortosa-Ausina, 2012; Alamá et al, 2015; Huysentruyt et al, 2013; Appleyard, 2011
Financial Ecologies	FI is conceptualized as a system of interconnected elements that define the relationship of individuals with their economic environment. This framework considers 'the immediate settings containing the developing person but also the larger social contexts, both formal and informal, in which these settings are embedded' (Bronfenbrenner, 1977: 513, in Salignac et al, 2016) This approach appears at the intersection of financial geography and sociology, as it considers individual, social, and territorial elements.	Coppock, 2013; Joassart-Marcelli and Stephens, 2010; Appleyard, 2013; Salignac, Muir and Wong, 2016
Social studies of finance (SSF)	This approach assesses how social reality is materialized in objects and how society's decisions on the allocation of resources are based on these objects (Kear, 2018).	Rogers and Clarke, 2016; Polillo, 2011; Wainwright, 2011; Kear, 2018

Financialization critique	Financialization is defined as the indispensability of the financial services determined by the behavior of the service providers "which either require customers to use a particular financial service or impose additional costs on those who do not" (Sinclair, 2013). Such an approach criticizes financial inclusion as an imposed requirement to extend financialization.	Ronald, Lennartz and Kadi, 2017; Marron, 2013; Berry, 2015; Sinclair, 2014; Prabhakar, 2014; Prabhakar, 2013; Kear, 2013; Figart, 2013
Economic psychology and financial socialization theory	How people build our financial knowledge and behavior. The understanding of finance is "made up of compartmentalized and incomplete pieces of information that become integrated over time" (Friedline, 2012).	Friedline, 2012
Moral approach: credit as a right	Based on the moral approach of credit developed by Yunus and Sen, which considers credit to be essential to overcome poverty and access to education or health. This approach may extend to other financial services also is considered irreplaceable in a specific social context.	Bayulgen, 2013; Gomez-Barroso and Marban-Flores, 2013; Hudon, 2009

Source: The authors