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Social Finance and Sustainable Development Goals: A Literature Synthesis, Current Approaches and Research Agenda

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ABSTRACT

The debate, especially in policy circles, around the emergence of Social and Sustainable Finance (SSF), depict as 'paradoxical' the contrast between SSF as a relatively under-developed field of knowledge and thought, and yet as an area of practice with 'vast potential' that is experiencing an 'explosion' in practitioner numbers. Such potential, in term of economic and social value that SSF can deliver, is reflected in the increasing of interest within the public policy-making arena in the achievement of Sustainable Development Goals (SDGs). More in detail, it is also underlined by the raising of public and private investment into promoting and supporting them. Within such evolving arena, the exact scale and scope of SSF's contribution to the improvement of SDGs worldwide is difficult to delineate and measure accurately, but there seems to be universal agreement that SDGs represent an ideal and widespread area where SSF can register a significant growth. However, limited research addressed the marriage of these two fields. The purpose of this research are: i) to shed light on existing academic literature embracing both Social and Sustainable Finance and SDGs issues, ii) explore emerging trends deriving from international policy-making actors, market builders, managers, senior academics and, iii) to identify the main areas for further research focusing on SSF and SDGs. In order to derive a research agenda about such emerging research topic, the study adopts a triangulated approach based on qualitative mixed methods. With such objectives in mind, the study provides an extensive literature review in order to depict a comprehensive overview of existing knowledge considering both SSF and SDGs topics. The analysis is therefore enhanced by the trends identified from literature deriving from public policy- making actors and market-builders as well as from invited commentaries on SSF from senior scholars and managers. Thus, a holistic perspective on SSF experience, useful to identify the main areas for further research on SSF in the sustainability industry, was derived. The study, therefore, aims to provides, through a triangulated analysis of the concepts, frameworks and trends, a detailed understanding of the mechanisms for managing the interplay between SSF and SDGs, by highlight future avenues of research in this field.

Introduction

The Sustainable Development Goals (SDGs) in the last few years have brought about a momentum within the global capital markets by highlighting the link between investments and the achievement of them. In response to this growing momentum, several financial approaches, which adapt the SDGs to an investable context, emerged by a number of institutions and bodies. The Sustainable Development Goals, otherwise known as the Global Goals, are a set of objectives within a universal agreement that sets out vision, principles and commitments to a fairer and more sustainable world for all (United Nations, 2015). The Goals were adopted by all member States of United Nations formally in 2015, for the period 2016–30 in order to securing a fair, healthy and prosperous future for present and future generations. The practical and political importance of the SDGs highlights that all the goals are intimately

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interconnected and a failure to appreciate this will inhibits the courage to act in those areas that need a more specific effort about health, social and economic benefits (Tosun & Leininger, 2017). SDGs represent a follow-up to the Millennium Development Goals (MDGs)[1] while including new areas of sustainable priorities for a total of 17 goals (see Table 1) which are supported by 169 targets and 230 indicators (see Table 2 for those associated, for example, with Goal 13).

In contrast to the MDGs, the SDGs are broader in scope and collective in action and include a clear vision that this time the focus is on the private sector by providing detailed content on how it can contribute to achieving this ambitious set of goals (Mensah & Ricart Casadevall, 2019). More in detail, one of the main core feature of the SDGs is represented by "their strong focus on means of implementation: the mobilization of financial resources; capacity-building and technology; as well as data and institutions" (Morton, Pencheon & Squires, 2017:83). Furthermore, they connect sustainable development and sustainable business issues, such as responsible production, climate action or sustainable cities.

It is estimated that an enormous amount of financing is required to realize the Sustainable Development Goals. Investment from domestic governments would provide not more than 80 percent of this funding and that the remaining funds should come from private investors (Schmidt-Traub & Shah, 2015). Furthermore, national foreign aid budgets are declining as industrialized nations feel budget strains of increasing health and pension costs (Schmidt-Traub, 2018). Within this context, the role of private investment became essential given that other funding sources for addressing the gaps in sustainable outcomes are also inadequate. However, private funding sources appears scarcely aligned with the SDGs and, therefore, a substantial gap in funding required to close SDGs targets remain (Dalby, Horton, Mahon & Thomaz, 2019). As regard, there is a common understanding among international policy actors and regulators that the alignment of the financial sector with sustainable economic development is a prerequisite for achieving such an outcome (see, among others, Ryszawska, 2016; Walker, Kibsey & Crichton, 2018; Zadek & Kharas, 2018).

The adoption of social and sustainable considerations in investments has matured continuously in the past decades. This trend falls under the denomination of Social and Sustainable Finance (Lehner, 2016) – hereafter SSF - and it has evolved from SRI - 'sustainable and responsible investment' to financial approaches, such as impact investing, that seeks opportunities for the creation of long-term value for business and society. The debate, especially in policy circles, around the emergence of Social and Sustainable Finance, depict as '*paradoxical'* the contrast between SSF as a relatively under-developed field of knowledge and thought, and yet as an area of practice with '*vast potential*' that is experiencing an '*explosion'* in practitioner numbers. Such potential, in term of economic and social value that SSF can deliver, is reflected in the increasing of interest within the public policy-making arena in the achievement of Sustainable Development Goals. Within such evolving arena, the exact scale and scope of SSF's contribution to the improvement of SDGs worldwide is difficult to delineate and measure accurately, but there seems to be universal agreement that SDGs represent an ideal and widespread area where SSF can register a significant growth (Cordella, 2018). However, existing Academic research addressed with fragmented analysis the marriage of these two fields. The aim of this study is, therefore, to advance scholarly research on SSF actors, markets and instruments engaged in the SDGs field by providing a comprehensive overview of key concepts bridging SSF and SDGs, a framework for managing the interplay of them, and a rich agenda for future researches.

With such objectives in mind, the study provides an extensive literature review in order to depict a comprehensive overview of existing knowledge considering both SSF and SDGs topics. The analysis is therefore enhanced by the trends identified from literature deriving from public policy- making actors and market-builders as well as from invited commentaries on SSF from senior scholars and managers. Thus, a holistic perspective on SSF experience, useful to identify the main areas for further research on SSF in the sustainability industry, was derived. The study, therefore, aims to provides, through a triangulated analysis of the concepts, frameworks and trends, a detailed understanding of the mechanisms for managing the interplay between SSF and SDGs, by highlight future avenues of research in this field. The chapter is structured as follow: in the next section, the research design and method are illustrated. In section 3 a review of the Academic literature is presented, while in section 4 the analysis is enriched with policy and market-builders insights and emerging trends. Section 5 provides a research agenda integrated from insights deriving from academics and managers commentaries. Thus, conclusion are drowned.

[1] MDGs were in place from 2000 to 2015 and consisted of eight international development goals.

Table 1. The UN's 17 Sustainable Development Goals, linked to the five Areas of Critical Importance (5P's).

People	Planet
− No Poverty (Goal 1)	− Climate Action (Goal 13)
− Zero Hunger (Goal 2)	− Life below Water (Goal 14)
− Good Health and Well-being (Goal 3)	− Life on Land (Goal 15)
− Quality Education (Goal 4)	
− Gender Equality (Goal 5)	
− Clean Water and Sanitation (Goal 6)	
Prosperity	**Peace and Partnerships**
− Affordable Clean Energy (Goal 7)	− Peace, Justice and Strong Institutions (Goal 16)
− Decent Work and Economic Development (Goal 8)	− Partnerships for the Goals (Goal 17)
− Industry, Innovation and Infrastructure (Goal 9)	
− Reduce Inequalities (Goal 10)	
− Sustainable Cities and Communities (Goal 11)	
− Responsible consumption and production (Goal 12)	

Source: Morton, Pencheon and Squires (2017)

Table 2. Example of targets and indicators (for Goal 13).

Goal	Target
13.1 Strengthen resilience and adaptive capacity to climate related hazards and natural disasters in all countries	13.1.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population 13.1.2 Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030 13.1.3 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies
13.2 Integrate climate change measures into national policies, strategies and planning	13.2.1 Number of countries that have communicated the establishment or operationalization of an integrated policy/strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production (including a national adaptation plan, nationally determined contribution, national communication, biennial update report or other)
13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	13.3.1 Number of countries that have integrated mitigation, adaptation, impact reduction and early warning into primary, secondary and tertiary curricula 13.3.2 Number of countries that have communicated the strengthening of institutional, systemic and individual capacity-building to implement adaptation, mitigation and technology transfer, and development actions
13.a Implement the commitment undertaken by developed country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly $100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully	13.a.1 Mobilized amount of United States dollars per year between 2020 and 2025 accountable towards the $100 billion commitment

Goal	Target
operationalize the Green Climate Fund through its capitalization as soon as possible	
13.b Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities	13.b.1 Number of least developed countries and small island developing States that are receiving specialized support, and amount of support, including finance, technology and capacity-building, for mechanisms for raising capacities for effective climate change-related planning and management, including focusing on women, youth and local and marginalized communities

Extracted from the UN Sustainable Development Knowledge Platform, March, 2020.

Research Design

The purpose of this research are: *i)* to shed light on existing academic literature embracing both Social and Sustainable Finance and SDGs issues, *ii)* explore emerging trends deriving from international policy-making actors, market builders and managers and, *iii*) to identify the main areas for further research focusing on SSF and SDGs alignment. In order to derive a research agenda about this emerging research topic, this study adopts a triangulated approach (Patton, 1999) based on qualitative mixed methods. More in detail the study perform: *a)* a structured literature review of Academic literature and desk research of grey literature deriving from international policy-making actors and SSF market builders; *b)* a content analysis; *c)* a on line survey among senior academics and manager playing in this field.

Triangulation refers to the use of multiple methods or data sources in qualitative research to develop a comprehensive understanding of phenomena (Singleton and Straits, 1999). In this research, a method triangulation was adopted in order to design a set of future research topics that should be addressed from future studies embracing both sustainable finance and SDGs topics. Method triangulation involves the use of multiple methods of data collection about the same phenomenon (Lune & Berg, 2016). For the purpose of this research, we derived a research agenda by identifying gaps emerging from the triangulation of results deriving from academic literature, trends in policy-actors and market builders and commentaries on SSF from senior scholars and managers. A synthesis of the described approach is illustrated in Figure 1.

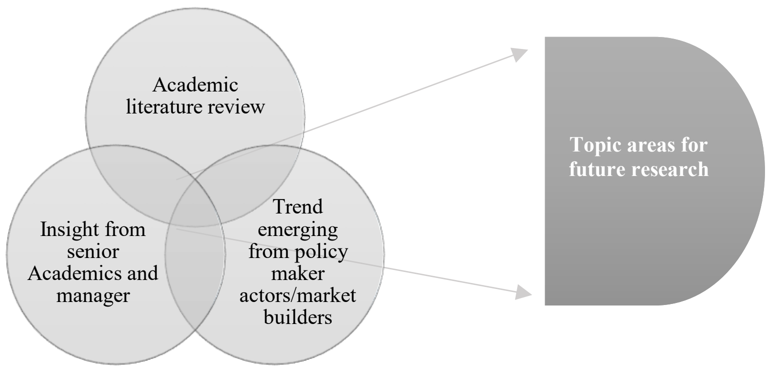

Figure 1: Research design and method

Academic literature review

The method, scope and structure of the review of academic studies was modelled on systematic review dealing contemporary with Social and Sustainable Finance and SDGs. By following the approach identified from Petticrew & Roberts (2006) the literature review was structured in order to compressively identify, appraise and synthesize all relevant Academic studies on a given phenomenon with the aim to identify research gaps in the existing body of knowledge. Moving from these considerations, the review followed two main steps. Firstly, the phase of papers acquisition and selection includes the identification of keywords, the choice of database to be investigated, the definition of criteria for inclusion/exclusion and the relative process of identification of selected papers. Secondly, the review performed the phase of descriptive and content analysis of the selected papers where the papers were collected and, then, were reviewed in order to give a summary view and to highlight research gaps. The papers were identified using the databases and the keywords-set represented in Table 3.

Table 3. Material Search.

Keywords Used	"social finance" and "SDGs" "social finance" and "sustainable goals" "social finance" and "sustainable development goals" "sustainable finance" and "SDGs" "sustainable finance" and "sustainable goals" "sustainable finance" and "sustainable development goals"
Databases queried	Google Scholar*, Scopus, Pubmed, ERIC, Ethos, NBER, NCJRS, OpenGrey and Web of Science
Total hits retrieved	1275
Duplicates	116
Number of hits excluding duplicates	1159
(*) *Only the first 200 results were considered.*	

It is possible to observe how a total of 1159 papers were initially found, excluding duplicates. The sample identification of research contribution closer to the topic under investigation derived from the adoption of three selection criteria, as reported in Table 4.

Table 4. Criteria for inclusion/exclusion.

Criterion	Definition
First criterion: focus of the abstract	Abstract focusing on both SSF and SDGs topics have been included
Second criterion: focus of the papers	Papers focusing on both SSF and SDGs topics have been included
Third criterion: peer reviewed sources	Results not included in peer reviewed journals and book have been excluded

As indicated in Table 4, with the aim to provide a wide perspective on the field of investigation, results included also peer-reviewed books and books-chapters. With this aim in mind, the papers were analyzed from the authors and, then, categorized into three list, as shown in Table 5.

Table 5. Step selection.

List	Description	Number of Papers
A	Papers, Books and chapters with a predominant focus on SSF but scarce or inconsiderable reference to SDGs	357
B	Papers, Books and chapters with a predominant focus on SDGs but scarce or inconsiderable reference to SSF	801
C	Papers, Books and chapters with a focus on both SSF and SDGs	47

The papers contained in list A and B were excluded as they were out of the scope of the research. The results contained in List C were fully considered for the review. Therefore, the papers, books chapters and books selected for the phase of descriptive analysis are 47 (indicated with an asterisk in the references list).
The resulting sample was clustered by *a)* distribution over time (Figure 2), *b)* by methodology (Figure 3) and by topic areas addressed (Table 6).

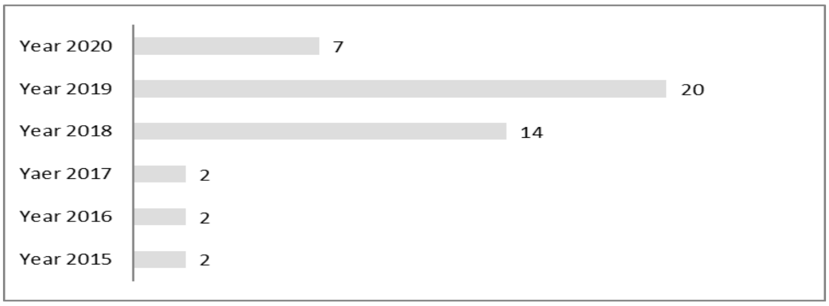

Figure 2. Paper distribution over time.

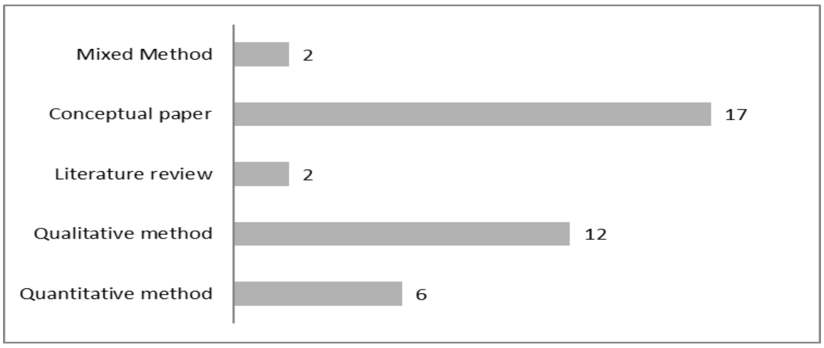

Figure 3. Paper* distribution by methodology.
(*) Only Papers and Book chapters excluded Books.

Table 6. Papers by topic area.

Broader Topic Areas	Number of papers	Related Author
Financial Approach and Tools for the achievement of SDGs*	22	*Biancone & Radwan (2018); Bos, Pressey & Stoeckl (2015) ; Park (2018); Phillips & Johnson (2019); Roy (2016); Wendt (2018); Méndez-Suárez, Monfort & Gallardo (2020); Withers & Zoltani (2020); Izhar & Dikmener. (2017); Priti (2018); Hill (2020); Betti, Consolandi & Eccles (2018); Johansen & Vestvik (2020); Legoard-Segot (2020); Studart & Gallagher (2018); Sepetis (2019); Osuji, Ngwu & Jamali (2019); Balkenhol (2018); Bento, Gianfrate & Groppo (2019); Tolliver, Keeley & Managi (2020); Walker, Pekmezovic & Walker (2019) ; Etzion, Kypraios & Forgues(2019).*
Islamic Social Finance	13	*Abduh, M. (2019); Abdullah, M. (2018); Biancone & Radwan (2018); Ghoniyah & Hartono (2019); Jouti (2019); Mahadi, Zain & Ali (2019); Putri, Tir Razia & Muneeza (2019); Alshaleel (2019); Ahmed et al. (2015); Cattelan (2018); Izhar & Dikmener (2017); Azman & Ali (2019); eddine Bedoui & Robbana (2019).*
Finance and Banking for Sustainability **	12	*Rezende de Carvalho Ferreira, Amorim Sobreiro, Kimura, & Luiz de Moraes Barboza (2016); Johansen & Vestvik (2020); Walker et al. (2018); Bose, Dong, & Simpson (2019); Galaz et al. (2018); Mendez & Houghton (2020); Henningsson (2019); Mitić & Rakić (2017); Urban & Wójcik (2019);Sepetis (2019); Betti et al. (2018); Contreras, Bos & Kleimeier (2019)*
Financial Accounting and Regulation	6	*Betti al. (2018); Ziolo et al. (2019); Palea (2018); Zhang et al. (2018); Di Vaio & Varriale (2020); Contreras et al. (2019).*
Digital Finance***	6	*Walker et al. (2019); Zhang et al. (2018); Thomason et al. (2018); Chiu & Greene (2019); eddine Bedoui & Robbana (2019); Bento et al. (2019).*

Broader Topic Areas	Number of papers	Related Author
(*) Include: ESG, Microfinance, Conservation Finance, Equator Principle, Impact Finance, SIBs, Crowdfunding, Catastrophe bonds, and Green Bonds.		
(**) Include: Financial Theory, Banking, Sustainable Banking, and Sustainable Financial System.		
(***) Include: FinTech, ICO, and Cryptocurrency.		

Source: authors' elaboration

Grey literature from policymaking actors and market builders

As above described, the identification of gaps in research focusing on SSF and SDGs was structured by crossing those gaps emerging from the literature review of academic studies with those emerging from trends derived from the grey literature of the main international policymaking actors and market builders playing within this arena. This process was structured in two main steps. First, main players in the filed were identified through internal and external desk research, based both on preliminary works of authors as well as on the results of a desk research by exploring an open web research (by using the same keywords search set described above). As a results, in Table 7, are identified the international actors engaged in this filed which produced a number of relevant studies and reports focused on the topic of this research.

Table 7. Number of studies addressing SSF and SDGs derived from policy-making actors and market builders.

Organizations	N. of studies focusing on SDGs and SSF
United Nation (UN)*	13
World Economic Forum (WEF)	3
Organization for Economic Co-operation and Development (OECD)	2
Global Impact Investing Network (GIIN)	1
Global Steering Group (GSG)	1
(*) *Include: UN Global Compact; UNEP-FI; UNCTAD; UNDP; UNEP*	

Source: authors'elaboration

Commentaries on SSF from senior scholars and managers

Finally, as above described, the analysis of gap in research focused on SSF and SDGs was enriched by considering insights provided by senior scholars and managers active in this field. In addition, this step was structured into two phases: First, a list of international senior academics and managers were derived from authors. The identification considered the following distribution of the number of senior scholar and manager identified for the survey, for a total of 35 academics and 15 managers. For the purpose of our study, the list including senior scholars was structured considering the relevance of their research in the field of SSF and excluding academics involved in the editorial process of this study as well as those belonging to the same University Department or those Colleagues collaborating in similar projects with authors. Managers were identified from those organizations engaged in SDGs investing, derived from *Linkedin* web platform. Over a total number of 50 scholars and managers involved, the survey respondents were 26.

The survey was composed of nine questions with multiple-choice options and open answers and was conducted in anonymous form in March 2020, by sending an email describing the scope of research, and including a web link to the Google survey page. The survey intended to retrieve the key themes identified in Table 8.

Table 8. Key themes explored with the on-line survey about SSF and SDGs.

List of the key themes included in the on line survey
• Research topic priorities within the research about SSF and SDGs • Level of attractiveness of the single SDG for SSF research • Financial strategies adopted from investors to address SDGs that need more research efforts • Relevance of financial innovation in the achievement of the SDGs. • Relevance of technology applied to finance in the achievement of the SDGs.

Source: authors' elaboration

Academic literature review

As illustrated in Table 6, from the review of the academic literature, five main strands have emerged: A) Financial Approach and Tools for the achievement of SDGs; B) Islamic Social Finance; C) Finance and Banking for Sustainability; D) Financial Accounting and Regulation; and E) Digital Finance. It should be noted that there are only two works on the literature review. The first (Rezende de Carvalho Ferreira et al., 2016), a systematic review of the literature about the issue of sustainability and finance, touching marginally on the issue of Sustainable Goals. The second by Azman & Ali (2019), instead, had as its main object the measurement of the social impact in Islamic finance. Therefore, on the base of our knowledge, this study represent a first academic attempt to provide a review and conceptual framework useful to understand and manage the interplay between SSF and SDGs.

Financial Approach and Tools for the achievement of SDGs

A considerable amount of literature has focused on innovative financial tools and approaches to support sustainability outcomes (Johansen & Vestvik, 2020; Osuji et al., 2019; Walker, Pekmezovic & Walker, 2019; Legoarde-Segot, 2020; Biancone & Radwan, 2018; Izhar & Dikmener, 2017; Bos et al., 2015). Walker et al. (2019) explore how a financial system can be designed as environmentally and socially responsible, resilient and aligned with planetary goals. According the authors, a financial system is defined as sustainability-oriented if is in line with larger sustainable development goals and promote social and environmental well-being for current and future generations. Also for Legoarde-Segot (2020) the financing of the SDG agenda entails to reconsider tacit assumptions regarding the functioning of financial systems in order to bridge the SDG budget gap. In this vein, Biancone & Radwan (2018) indicate a need for the reinforcement of current funding alternatives to finance impact driven businesses and this requires the adoption of innovative financing alternatives. Izhar & Dikmener (2017) offers the compatibility and convergence between Islamic finance and impact investing by highlight how to strategize this. With different starting points, Bos et al. (2015) and Johansen & Vestvik (2020) analysing funding gaps for marine conservation and SDG 14 identified critical elements and possible solutions deriving from alternative financial tools. In addition, they highlight how multi-sectoral financial partnerships are essential to reduce the gap between marine conservation funding and support services for marine ecosystems. Among the financial tools considered in the academic contributions under review in the achievement of SDGs there are Crowdfunding, explored as tool to support a low carbon economy (Bento et al., 2019), CSR (Osuji et al., 2019), Green Bond (Tolliver et al., 2020), Social Bonds (Park, 2018) and Catastrophe Bonds (Etzion et al., 2019). Furthermore, also the issue of Financial Inclusion and Microfinance was explored as financial tools able to overcome gender inequalities and social exclusion (respectively: Priti, 2018; Balkenhol, 2018). A particular attention results dedicated to Social Impact Bonds, as an alternative financial instruments (Roy, 2016), which allows an alignment of the interests between investors and donors (Withers & Zoltani, 2020; Wendt, 2018; Méndez-Suárez et al. (2020) however with limitations due to lack of standardized process in the measurement of social impact (Phillips & Johnson, 2019). The potentials of such new financial tools for the agenda 2030 were analysed also by Withers & Zoltani, (2020) that proposed Pay for results instruments to align the interests of both investors and donors in order to mobilize financial resources for sustainable goals. With same focus, Méndez-Suárez et al. (2020) analysed SIB on the basis of an SDG approach where the losses and risks incurred by SIB investors are offset by the positive impact of the intervention on the society. Finally, limited contributions, focused on ESG investing (Hill, 2020; Sepetis, 2019; Betti et al., 2018) as well as on de-risking tools, such as the Global Guarantee Fund (Studart & Gallagher, 2018). Hill (2020) points out that one of the obstacles to the development goals promoted by ESGs is the identification of investment and measurement of returns. In summary, within the financial tools most debated in relation to sustainable outcomes large research efforts focus on the potentials represented by Social Impact Bonds. To a larger extent, studies focusing on the financial system alignment to environmental and social goals represent an emergent stream of research.

Islamic Social Finance

According to some authors (Alshaleel, 2019; Abduh, 2019; Cattelan 2018, Abdullah, 2018; Ahmed et al., 2015) Islamic Social Finance (ISF) represents an ideal mean for to the realization of SDGs overall because is based on risk sharing (Biancone & Radwan, 2018). According to Abdullah, (2018) ISF presents a good alignment to sustainable as well as with Shariah's long-term objectives. Furthermore, he believes that the global Islamic endowments (awqaf) has the financial capacity to finance Muslim countries to implement some of the most urgent SDGs. In the same perspective, Alshaleel (2019) highlights how Islamic finance is adequate for the promotion of SDG in developing countries. Other authors also put their attention on the cooperation between impact investments and ISF (Izhar & Dikmener, 2017), as well as between businesses and governments in accordance with Sharia law (Jouti, 2019) as a necessary link for the resolution of social problems and the achievement of the SDGs targets. An innovative insight (see Eddine Bedoui & Robbana, 2019) depict ISF as a perfect tools that can satisfy the global demand for sustainable investments, especially those deriving from the Islamic Countries, thanks to the recourse to cryptocurrencies based on Shariah. As far as Islamic banks are concerned, their main objective is to improve living standards rather than profit (Ghoniyah & Hartono, 2019), just as value-based intermediation is very useful in providing impact services to their clients (Mahadi et al., 2019). Abduh (2019) as well as Putri et al. (2019) by examining the role of Islamic social finance in achieving of specific SDGs suggests how collaboration at regional or international level is essential to achieve the objective. Finally, Azman & Ali (2019), underlined how still little is known about the way Islamic financial institutions measure and report their impact. In summary, most of the reviewd studies pointed out their attention on the degree of alignment of ISF with SDGs and depict how can be suitable to bridge the financial gap needed for SDG actions.

Finance and Banking for Sustainability

In order to respond to modern challenges, banks represents a fundamental player in the offering of products aimed at fostering social change (Mitić & Rakić, 2017), allowing every saver an investment appropriate to his or her risk appetite (Bose et al., 2019). Furthermore, Betti et al. (2018), provide a pathway for investors who want to know how ESGs can contribute to achieving SDGs. Moreover, banks can provide a significant contribution to align the financial system with Environmental, Social and Governance (ESG) (Walker et al., 2018), and become an integral part of sustainable economic development (Sepetis, 2019). However, criticism voices pointed out that investment banks do not waive their subscription to reported companies, due to environmental violations or those providing products, such as nuclear weapons (Urban & Wójcik, 2019). In this vein, Mendez & Houghton (2020), criticize the role of Multilateral Development Banks because of their unwitting use of construction methods to respond to modern challenges. Within the barriers identified to achieve these goals from the financial system, the identification of the investment and the measurement of its return remains central (Hill, 2020). Finally, some studies focused their attention on SDG-related risks in banking sector. According to Henningsson (2019), the introduction of rules that include climate-related risk factors could change banks whole perception of risk. Also the Equator Principles were considered in the same perspective (Contreras et al., 2019). In summary, most of the reviewed studies focus on the potential that banks can reveal in the implementation of SDGs while new risks in sustainable banking could be considered as an emergent topic in this field.

Financial Accounting and Regulation

The literature clustered in this area shows that all the articles focused on financial accounting and regulation have been written in the last 2 years (Di Vaio & Varriale, 2020; Ziolo et al., 2019; Contreras et al., 2019); Zhang et al., 2018; Palea, 2018). Palea (2018), based on the post-implementation assessment of International Financial Reporting Standards (IFRS), notes an inconsistency between accounting standardization worldwide. According to Di Vaio & Varriale (2020), evidence some barriers to meet the SDGs in financial and non-financial reporting. Ziolo et al. (2019)

examine the relationship between financial, economic, environmental and social development indicators from the sustainability perspective, with a special focus on externalities and depict how in more sustainability performant countries there is a permanent separation of economic growth from its negative impact on the natural environment. Betti et al. (2018) by mapping 30 generic ESG issues identified by the Sustainability Accounting Standards Board (SASB), found that some SASB issues are more material for SDGs than others. With regard to regulation, the Blockchain technology applied to finance would allow better implementation of a Green Finance regulation (Zhang et al., 2018). In summary, the emerging area of research focused on the interplay between sustainability and regulation and accounting issues seems to be to integrate the SDGs information into financial and non-financial reporting.

Digital Finance

Finally, the thread relating to digital finance includes few papers (Bento et al., 2019; Chiu & Greene, 2019; Walker et al., 2019); Bedoui & Robbana, 2019; Zhang et al., 2018). Bento et al. (2019) in their research fill the gap existing in evidences on whether the returns for crowdfunders are consistent with the risk profile of crowdfunded projects. By analysing 365 European clean-tech projects, they provide an understanding of the drivers of crowdfunding returns and its sustainability. Chiu & Greene (2019) believe that ICO technology is capable not only of transforming the attractiveness of sustainable and social finance, but also of inaugurating a new form of mass capitalism that creates a new social-commercial value and new markets. Walker et al. (2019) put in evidence how Blockchain, Big Data and FinTech could offer great potential to align financial system with sustainable outcomes. They also believe that legislative reforms should be introduced to facilitate the implementation of SDGs with digital financial instruments for the financing of small and medium-sized enterprises (SMEs). Bedoui & Robbana (2019) illustrate the potential of defining a digital finance strategy to achieve the SDGs. Zhang et al. (2018) particularly support the need for governments to establish a financial regulatory environment for the diffusion of Blockchain technologies in finance in order to enable such technologies to support the achievement of the SDGs by the international communities. In summary, large part of the paper analysing digital finance and SDGs is clustered along variegate topics with still unexplored area such as FinTech.

Trends deriving from policymaking and market builders

The implementing of Sustainable Development Goals requires action by a range of stakeholders from both public and private sectors. Among the key actors required to move the lancet are included Standard setters, Framework developers, Data providers, Research providers, Regulators and International Networks of investors and corporates.

In the evolving arena concerning the financing of the SDGs from private sector, various stakeholders dedicated a wide range of resources to explore how the global capital markets can better accelerate progress on the SDGs. Beyond the United Nation galaxy[2], also the OECD, the World Economic Forum (WEF), The Global Impact Investing Network (GIIN) and the Global Steering Group on Impact Investing (GSG) dedicated energies to explore this issue. Studies and report focus on the role of the SDGs in driving change across the financial services ecosystem providing different perspectives and insights. Institutional investors, companies, and foundations need to be an integral part of the design and implementation of the strategy to finance SDGs because they can provide a large source of private capital available to bridge the investment gaps. Enabling companies and investors to scale up investments that embrace sustainability can help in reallocating capital to achieve the SDGs.

A number of Sustainable Finance frameworks, financing tools and innovations in resources mobilization have been identified. The combination of them contribute to gain traction throughout the private investment chain. Furthermore, they are assembling private capitals towards sustainability issues. As concern the various Sustainable Finance frameworks adopted from private actors in the financing of SDGs it is possible to observe three main blocks of SF frameworks adopted: SDGs alignment strategies, environmental focused and, finally, emerging frameworks. The first include strategic alignment to SDGs based on negative impacts such as exclusion lists, safeguard policies (e.g. Equator Principles), sharia compliant (e.g. zakat) or ESG integration. The second include frameworks that embed the Environmental and Climate Change (ECC) dimension of sustainability. Such frameworks appear those that are

[2] More in detail, United Nations Environment Programme Finance Initiative – UNEPFI , United Nations Development Programme -UNDP, UN Global Compact, United Nations Department of Economic and Social Affairs - UNDESA, United Nations Conference on Trade and Development – UNCTAD.

registering the most wide and rapid policy (such as the EU Action Plan) and market developments (such as the Green Bond Principles). The emerging frameworks moved to a consideration of impacts increasingly sophisticated and are represented, overall, by Blended Finance, Impact Investing and Sustainability Themed Investing (see: UN, 2015; UN Global Compact, UNCTAD, UNEP-FI and PRI, 2015; GIIN, 2016; UNEP-FI, 2016, 2017; UNCTAD, 2018; OECD, 2018; GSG, 2018; UN –SECRETARY GENERAL'S and WEF, 2019).

At the same time, it is possible to observe an evolution of financing models from a prevalence of development aid and international public finance towards a model that expanded financial sources to multiple poles of private capitals. Financial as well as technological innovations in finance facilitated such expansion by adding to traditional financing tools a number of solutions able to increase interdependence and integrations of financial markets as well as the access to them from people previously excluded. For these reasons, financial instruments born from financial innovations such as Crowdfunding, Social Impact Bonds, Blue Bonds, Debt for Nature Swaps, Impact Funds are mentioned as new frontiers in the financing of SDGs (see: Douma, Scott and Bulzomi, 2017; UNDP, 2018; UNEP-FI, 2018; UN SECRETARY-GENERAL'S 2019; Gurria, 2020).

Finally, recent trends in this evolving arena derive from interesting insights about innovations that open market opportunities to mainstream investors by optimizing the conditions for SDG impact. Such strategies and tools focus to increase the financial resources mobilization for SDGs. They are represented from integrated models for corporate finance and strategies that integrate in an holistic environment SDG impact into sustainable business models. Such model provides an answer to sustainability-oriented investors through investments made by using traditional financial tools such as bonds and equity of companies with a positive, or at least, neutral SDG rating. With the same potential, the digitalization of finance produced synergistic forces – the interplay of tech-enabled innovations like Artificial Intelligence and Machine Learning with exponential growth in data – that are reshaping finance. More concisely, such forces are stimulating the identification of new models in which investors may engage with markets to support the financing of SDGs (see: UN GLOBAL COMPACT AND UNEPFI, 2019; UN GLOBAL COMPACT, 2019a, 2019b; Wilson, 2019; Gornitzka and Wilson, 2020).

Future avenues of research: an integrated agenda

The review and content analysis of Academic and non-Academic resources analysed in this study provided a detailed overview of the main issues covered on research about Social and Sustainable Finance addressing SDGs. Our observations showed that the field of research explored in this study is at the beginning and in strong expansion. In fact, only from 2017 (2 publications) the number of publications increased significantly in only two years (20 publications in 2019) as shown in Figure 2. These results allowed identifying the principal research gaps characterizing the literature on the topic, which will be integrated in this section with insights deriving from senior Academics and managers active in this field.

Research topics emerging from the field

In order to strengthen our analysis, a questionnaire was drawn up and forwarded both to Senior Academics and to Managers who are engaged in their activities with SSF and SDGs. Respondents are located in different countries around the world (China, France, UK, Netherlands, Greece, Morocco, Norway, Spain, Malaysia, USA). The questionnaire explored five main issues. First, a prioritizing of research topics within the research about SSF and SDGs was asked. From the elaboration of the answers, as emerges in Figure 1, significant research gaps in this field were registered among: (i) Financial Partnership; (ii) Impact Measures and Standards; (iii) Sustainable Business Model; (iv) Role of Central Banks; (v) Risk Evaluation; and (vi) Portfolio management. Not significant research gaps exist over the following topics: (i) Green Bonds and climate related investment; (ii) The influence of ESG on Institutional decision's investment; (iii) Risk Evaluation; and (iv) Carbon Finance.

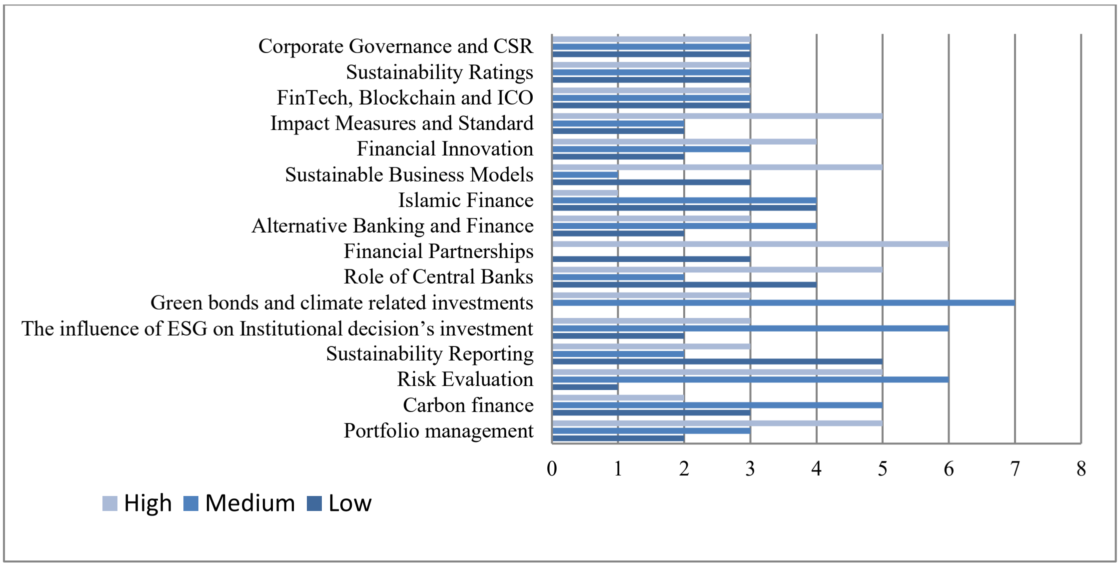

Figure 4. Research topics priorities for Senior Academics and Mangers.

A further element of analysis was to understand which SDG need additional research efforts in SSF research. The preferred indications, as shown in Figure 5, were registered for (i) SDG 8-Decent Work and Economic Growth; (ii) SDG 1-No Poverty; (iii) SDG 10-Reduced Inequality; (iv) SDG 3-Good Health and Well-being, (v) SDG 13-Climate Action; and (vi) SDG 17-Partnerships to achieve the goals.

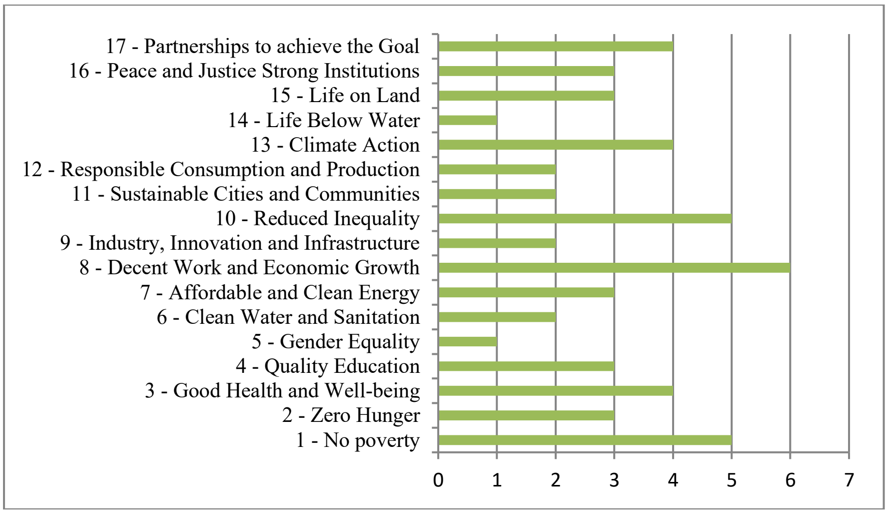

Figure 5. Single SDGs where additional research efforts are needed in SSF research.

Furthermore, among the financial strategies adopted from financial actors to achieve SDGs that need more research efforts, respondents indicated that are Impact Investing together with Sustainability Themed Investing, the approaches which requires a greater scientific effort, as shown in Figure 6.

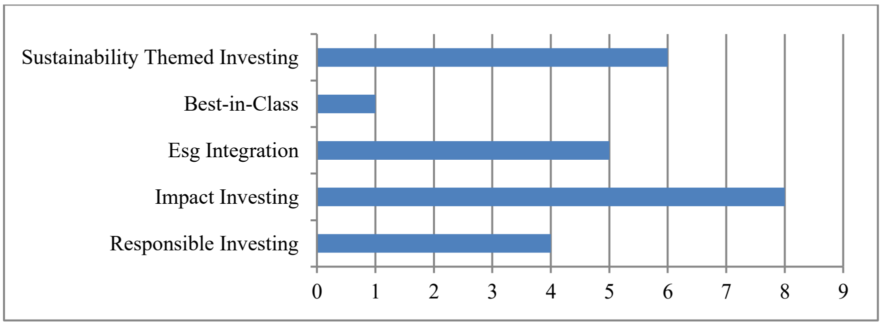

Figure 6. Financial approaches adopted to achieve SDGs that need more research efforts.

Specific research questions

Both from the academic literature and the research questionnaire, however, some issues have emerged that may hinder or facilitate the implementation of the SDGs. For example, it was suggested in the research questionnaire, how legal constraints limit the speed of innovations for impact, as well as the need for cooperation between business and governments (also highlighted in the academic literature from Jouti (2019)), in order to achieve the implementation of SDGs. Moreover, an emerging sector capable of making significant progress could certainly be the technology sector supporting financial intermediation. Technology (e.g. Blockchain) would make it possible to mitigate risks and increase transparency, as argued in the research application. Indeed, according to Zhang et al. (2018), Blockchain would allow for cost reduction and better implementation of the Green Finance as well as the Initial Coin Offering (ICO), which constitute a potential for social finance using technology (Chiu & Greene, 2019). A further significant suggestion emerged as regards the balancing of contradictory objectives: e.g. economic development on the one hand and environmental development on the other. As demonstrated by the academic literature of Ziolo et al. (2019), some countries with high economic, financial and social performance are characterized by negative environmental conditions. In this sense, a decisive limitation in the development of social finance and the implementation of SDGs remains the measurement of impact. Phillips & Johnson (2019), for example, identify as significant obstacles for non-profit organizations in making social impact investments: measuring social impact, market knowledge and financial literacy. Finally, a common understanding that social finance in itself cannot fill all the SDGs emerged, but it could certainly provide a substantial contribution. In this sense, the active participation of banks results necessary to achieve the objectives of the SDGs. This is possible, for example, by diversifying the products offered in favour of products with a social impact (e.g. Social Bonds, Green Bonds and Social Impact Bonds).

Research directions

This overview shows that research embracing SSF and SDGs has become a collective and progressive research program with cumulative findings and increasingly nuanced and differentiated understandings. Even though this chapter tried to be inclusive of missed issues and perspectives, further visions of future researches need to be done, by indicating those *cross-sectoral* topics more suitable to address future research to be explored in future by adopting multi-level methods.

Among them, one important new research theme is represented by those studies that look at the application in finance of the new technologies. More in general, transformations posed by applications of Artificial Intelligence or Machine Learning are creating new ways of assessing risks in near real-time thanks to the enormous data that they can generate or elaborate (Gu, Kelly & Xiu, 2018). The digitalization of finance and markets (Alt, Beck & Smits, 2018), therefore, open multiple and unaddressed questions with an enormous potential of exploration in the research addressing SSF in SDGs. More in detail should be explored those hypotheses that reflect, for example, the current experiences of digitalization of finance in pursuit of the SDGs or, the exploration of the high –impact opportunities for digital financing of the SDGs in the future. In this vein, empirical observations about the interplay of capital markets and the digital financing of the SDGs could result an interesting perspective to be studied.

With the same lens, digitalization are transforming the way investors engage with markets, fostering, for example, ever-deeper analysis (Kou, Chao, Peng, Alsaadi & Herrera-Viedma, 2019). In this direction, research exploring how these synergistic forces act increasingly as enablers of more efficient SDG-linked investment should be conducted. Furthermore, an important contribution of analysis could be provided by case studies exploring the evolution of current asset-pricing and decision models that integrate ESG-related criteria by adopting Machine Learning technologies. Finally, also Blockchain appear very compatible with the structuring of impact finance transactions (Fanning & Centers, 2016) by, for example, aiding in the reporting of impact outcomes and validation. Research exploring progress in impact measurement integrated with Blockchain techniques could represent a useful contribution in reducing the persistent complexity around impact measurement that, ultimately, produces a detraction from SDG-aligned investment flows. Similar research questions could be extended in the area of financial accounting and impact reporting or even in the studies about sustainability ratings standards.

A second area of cross sectoral research include the concept of Sustainable Business Models (SBMs). As research on the role of businesses and industries in sustainability is quite recent (see, amon others, Bocken, Rana & Short, 2015; Joyce & Paquin, 2016; Lewandowski, 2016), there are plenty of opportunities for further work on the above and on new topics within SSF research. More in detail, concepts surrounding the adoption of sustainable business models should be integrated in novel holistic frameworks from future researches aiming to provide to financial actors a deeper understanding of impact in the context of a company’s overall strategy and activities. In this vein, the adoption of an integrated conceptual framework could enables further studies aiming to explore the integration of corporate finance with SDG investment market. Within such arena, financial intermediation could play a critical role in providing capital for the SDGs (Yip & Boken, 2018) when capital markets are not available. Future researches exploring the role of banks as basis for a compelling SDG impact theory could offer several research opportunities, especially when they addressing mainstream capital markets with general-purpose financial tools issued for SDGs rated companies. A related relevant issue that need further explorations cover the interplay of the development of a credible and holistic SDG impact theory, corporate finance and corporate legal frameworks limitations deriving from shareholders primacy (see, among others, Sjåfjell, Johnston, Anker-Sørensen & Millon, 2015).

Finally, a third cross-sectoral area of research in which the relation within SSF and SDGs can offer an enormous potential for future researches is represented by the liason between finance and society. The transition towards a sustainable society implies the idea that economic and financial activities are not disconnected from the societal context but, in contrary, need to be viewed in connection with the broader socio-economic environment. For these reasons, transition towards an impact economy produces relevant transformations in the financial sector, ever more actively stimulated in an active pursuing of positive *real* outcomes. Such paradigm shift open unexplored areas for researches focused on reviewing and rethinking the conventional financial paradigms dominating the economic governance, essentially market oriented and incompatible with a positivist framework. Consequently, as suggested from Lagoarde-Segot "*inquiring into sustainable finance would rather require adopting an open-system view in which human agency is embedded in an organic social context*" (2019:8). Therefore, a multi-stakeholders analysis of the classical financial behaviour, rules and mechanisms should be re-considered by adopting theoretical frameworks based on sustainability-adapted concepts of value, profit and risks.

Conclusions

This chapter provided an overview of existing research and emerging themes in the field of Social and Sustainable Finance oriented to the achievement of SDGs. It is the result of an extensive academic literature review as well as consultation process across the academic and managerial community. From results, emerged a rapid development of the field, with a growing number of studies published from 2015 ranging on different topics. Then, the study proposed an integrated and multi-level research agenda by highlighting issues and perspectives missed from academic research as well as new and emerging topics or research questions to which Academia should deserve more attention in the next future. Such agenda of research intend to be a helpful compass to mark the current 'state of the art' and to further strengthen SSF research.

As final thoughts of this research, it is useful to share three general reflections on the development of the field before examining the challenges that lie ahead. First, SSF studies addressing SDG topics have diversified significantly, with new sub-themes emerging such as impact finance, digital finance, financial accounting and impact reporting, financial innovation and sustainable business models. These themes point to the field continued expansion and demonstrate the usefulness of the broad SDGs framing when reflecting on the dynamics of financial transition to sustainability. Second, SSF it is essential to continue the dialogue with more established disciplines with the purpose to benefit from new perspectives, and to further refine current approaches. Finally, despite being an emerging field with a poor epistemological community, SSF also faces numerous challenges. They are mainly represented from the ways SSF research address situations in which time is running out so quickly towards a *sustainability imperative*. A paradigm shift that implies the overcoming of a "*Grand Challenges"* which will requires *"coordinated and sustained effort from multiple and diverse stakeholders toward a clearly articulated problem or goal*" (George, Howard-Grenville, Joshi & Tihanyi, 2016:1881). Consequently, drastic changes across a broad range of sectors, technology, policymaking, business, and consumption will be necessary. Within such evolving context, SSF studies hold the promise of creating new approaches and understanding in moving society towards Sustainable Development Goals.

References

The academic contributions analysed in content analysis are indicated by an asterisk (*).

*Abduh, M. (2019). The Role Of Islamic Social Finance In Achieving SDGs Number 2: End Hunger, Achieve Food Security And Improved Nutrition And Promote Sustainable Agriculture. Al-Shajarah: Journal of the International Institute of Islamic Thought and Civilization (ISTAC).

*Abdullah, M. (2018). Waqf, Sustainable Development Goals (SDGs) and maqasid al-shariah. International Journal of Social Economics.

*Ahmed, H., Mohieldin, M., Verbeek, J., & Aboulmagd, F. (2015). On the sustainable development goals and the role of Islamic finance. The World Bank.

*Alshaleel, M. K. (2019). Islamic Finance, Sustainable Development and Developing Countries: Linkages and Potential. Corporate Social Responsibility in Developing and Emerging Markets: Institutions, Actors and Sustainable Development, 281.

Alt, R., Beck, R., & Smits, M. T. (2018). FinTech and the transformation of the financial industry. Electron Markets 28, 235–243 (2018). https://doi.org/10.1007/s12525-018-0310-9.

*Azman, S. M. M. S., & Ali, E. R. A. E. (2019). Islamic Social Finance And The Imperative For Social Impact Measurement. Al-Shajarah: Journal of the International Institute of Islamic Thought and Civilization (ISTAC).

*Balkenhol, B. (2018). Microfinance: Research, Debates, Policy. Routledge.

*Bedoui, H. E, & Robbana, A. (2019). Islamic Social Financing Through Cryptocurrency. In Halal Cryptocurrency Management (pp. 259-274). Palgrave Macmillan, Cham.

*Bento, N., Gianfrate, G., & Groppo, S. V. (2019). Do crowdfunding returns reward risk? Evidences

*Betti, G., Consolandi, C., & Eccles, R. G. (2018). The Relationship between Investor Materiality and the Sustainable Development Goals: A Methodological Framework. Sustainability, 10(7), 2248.

*Biancone, P. P., & Radwan, M. (2018). Social finance and unconventional financing alternatives: an overview. European Journal of Islamic Finance, (10).

Bocken, N. M. P., Rana, P., & Short, S. W. (2015). Value mapping for sustainable business thinking. Journal of Industrial and Production Engineering, 32(1), 67-81.

*Bos, M., Pressey, R. L., & Stoeckl, N. (2015). Marine conservation finance: The need for and scope of an emerging field. Ocean & Coastal Management, 114, 116-128.

*Bose, S., Dong, G., & Simpson, A. (2019). The Role of Finance in Achieving Sustainability. In The Financial Ecosystem (pp. 1-18). Palgrave Macmillan, Cham.

*Cattelan, V. (Ed.). (2018). Islamic social finance: entrepreneurship, cooperation and the sharing economy. Routledge.

*Chiu, I. H., & Greene, E. F. (2019). The Marriage of Technology, Markets and Sustainable (and) Social Finance: Insights from ICO Markets for a New Regulatory Framework. European Business Organization Law Review, 20(1), 139-169.

*Contreras, G., Bos, J. W., & Kleimeier, S. (2019). Self-regulation in sustainable finance: The adoption of the Equator Principles. World Development, 122, 306-324.

Cordella, T. (2018). Optimizing finance for development. New York, NY: The World Bank.

Dalby, S., Horton, S., Mahon, R., & Thomaz, D. (2019). Achieving the Sustainable Development Goals: Global Governance Challenges. Routledge.

*Di Vaio, A., & Varriale, L. (2020). SDGs and airport sustainable performance: Evidence from Italy on organisational, accounting and reporting practices through financial and non-financial disclosure. Journal of Cleaner Production, 249, 119431.

Douma, K., Scott, L., & Bulzomi, A. (2017). The SDG Investment Case. PIR, PWC, UNEP, UN Global Compact.

*Etzion, D., Kypraios, E., & Forgues, B. (2019). Employing finance in pursuit of the Sustainable Development Goals: The promise and perils of catastrophe bonds. Academy of Management Discoveries, 5(4), 530-554.

Fanning, K., & Centers, D. P. (2016). Blockchain and its coming impact on financial services. Journal of Corporate Accounting & Finance, 27(5), 53-57.

*Galaz, V., Crona, B., Dauriach, A., Scholtens, B., & Steffen, W. (2018). Finance and the Earth system–Exploring the links between financial actors and non-linear changes in the climate system. Global environmental change, 53, 296-302.

George, G., Howard-Grenville, J., Joshi, A., & Tihanyi, L. (2016). Understanding and tackling societal grand challenges through management research. *Academy of Management Journal*, *59*(6), 1880-1895.

*Ghoniyah, N., & Hartono, S. (2019). The Contribution of Islamic Banks towards the Achievement of Sustainable Development Goals: The Case of Indonesia. Economics and Finance in Indonesia, 65(2), 93-110.

Global Impact Investing Network. (2016). Achieving the Sustainable Development Goals: the role of impact investing.

Gornitzka, C. P., & Wilson, Gavin E.R. (2020). Charting the course for SDGs financing in the decade of delivery. World Economic Forum.

GSG. (2018) Investing for A Better World: Strengthening the Financial Services Value Chain to Meet the Sustainable Development Goals.

Gu, S., Kelly, B., & Xiu, D. (2018). Empirical asset pricing via machine learning (No. w25398). National Bureau of Economic Research.

Gurría, A. (2020). Private Finance for Sustainable Development (PF4SD) Conference. OECD.

*Henningsson, J. (2019). Will the Banker Become a Climate Activist?. In Challenges in Managing Sustainable Business (pp. 231-249). Palgrave Macmillan, Cham.

*Hill, J. (2020). Environmental, Social, and Governance (ESG) Investing: A Balanced Review of Theoretical Backgrounds and Practical Implications. Academic Press.31. Blasiak, R., & Wabnitz, C. C. (2018). Aligning fisheries aid with international development targets and goals. Marine Policy, 88, 86-92.

*Izhar, H., & Dikmener, G. (2017). I for Impact: Blending Islamic Finance and Impact Investing for the Global Goals. Islamic Economic Studies, 130(5936), 1-3

*Johansen, D. F., & Vestvik, R. A. (2020). The cost of saving our ocean-estimating the funding gap of sustainable development goal 14. Marine Policy, 112, 103783.
*Jouti, A. T. (2019). An integrated approach for building sustainable Islamic social finance ecosystems. ISRA International Journal of Islamic Finance.
Joyce, A., & Paquin, R. L. (2016). The triple layered business model canvas: A tool to design more sustainable business models. Journal of cleaner production, 135, 1474-1486.
Kou, G., Chao, X., Peng, Y., Alsaadi, F. E., & Herrera-Viedma, E. (2019). Machine learning methods for systemic risk analysis in financial sectors. Technological and Economic Development of Economy, 25(5), 716-742.
Lagoarde-Segot, T. (2020). Financing the Sustainable Development Goals. *Sustainability*, *12*(7), 2775.
Lagoarde-Segot, T. (2019). Sustainable finance. A critical realist perspective. *Research in International Business and Finance*, *47*, 1-9.
Lehner, O. M. (2016). Routledge handbook of social and sustainable finance. Routledge: London.
Lewandowski, M. (2016). Designing the business models for circular economy—Towards the conceptual framework. Sustainability, 8(1), 43.
Lune, H., & Berg, B. L. (2016). Qualitative research methods for the social sciences. Pearson Higher Ed.
*Mahadi, N. F., Zain, N. R. M., & Ali, E. R. A. E. (2019). Leading towards impactful Islamic social finance: malaysian experience with the value-based intermediation approach. Al-Shajarah: Journal of the International Institute of Islamic Thought and Civilization (ISTAC).
*Mendez, A., & Houghton, D. P. (2020). Sustainable banking: the role of multilateral development banks as norm entrepreneurs. Sustainability, 12(3), 972.
*Méndez-Suárez, M., Monfort, A., & Gallardo, F. (2020). Sustainable Banking: New Forms of Investing under the Umbrella of the 2030 Agenda. Sustainability, 12(5), 2096.
Mensah, J., & Ricart Casadevall, S. (2019). Sustainable development: Meaning, history, principles, pillars, and implications for human action: Literature review. Cogent Social Sciences, 5(1), 1653531.
*Mitić, P., & Rakić, S. (2017). Social finance and social banking: a path towards a more sustainable future. Review of applied socio-economic research, 108-119.
Morton, S., Pencheon, D., & Squires, N. (2017). Sustainable Development Goals (SDGs), and their implementationA national global framework for health, development and equity needs a systems approach at every level. British medical bulletin, 1-10.
*Osuji, O. K., Ngwu, F. N., & Jamali, D. (2019). Introduction to Corporate Social Responsibility in Developing and Emerging Markets: Institutions, Actors and Sustainable Development. Corporate Social Responsibility in Developing and Emerging Markets: Institutions, Actors and Sustainable Development, 1.
*Palea, V. (2018, September). Financial reporting for sustainable development: Critical insights into IFRS implementation in the European Union. In Accounting forum (Vol. 42, No. 3, pp. 248-260). Taylor & Francis.
*Park, S. K. (2018). Social Bonds for Sustainable Development: A Human Rights Perspective on Impact Investing. Business and Human Rights Journal, 3(2), 233-255.
Patton, M. Q. (1999). Enhancing the quality and credibility of qualitative analysis. Health services research, 34(5 Pt 2), 1189.
Petticrew, M., & Roberts, H. (2008). Systematic reviews in the social sciences: A practical guide. John Wiley & Sons.
*Phillips, S. D., & Johnson, B. (2019). Inching to Impact: The Demand Side of Social Impact Investing. Journal of Business Ethics, 1-15.
*Priti, C. (2018). Attaining Sustainable Development through Financial Inclusion and Women Empowerment. Asian Journal of Technology and Management Research (AJTMR) ISSN, 2249, 0892.
*Putri, A. K., Tir Razia, E., & Muneeza, A. (2019). The Potential of Bai Salam in Islamic Social Finance to Achieve United Nations' Sustainable Development Goals. International Journal of Management and Applied Research, 6(3), 142-153.
* Rezende de Carvalho Ferreira, M. C., Amorim Sobreiro, V., Kimura, H., & Luiz de Moraes Barboza, F. (2016). A systematic review of literature about finance and sustainability. Journal of Sustainable Finance & Investment, 6(2), 112-147.
*Roy, R. N. (2016). Social Impact Bonds: An Innovative Mechanism of Funding for Social Problems in Developing Countries Rabindra Nath Roy1, Rabindra Nath Sinha2. Journal of Comprehensive Health
Ryszawska, B. (2016). Sustainability transition needs sustainable finance. Copernican Journal of Finance & Accounting, 5(1), 185-194.
Schmidt-Traub, G. (2018). On metrics and financing for the Sustainable Development Goals.
Schmidt-Traub, G., & Shah, A. (2015). Investment needs to achieve the sustainable development goals. Paris and New York: Sustainable Development Solutions Network.
SDG. (2015). New Global Goals For Sustainable Development.
*Sepetis, A. (2019). Sustainable Finance in Sustainable Health Care System. Open Journal of Business and Management, 8(01), 262.
Singleton, R., & Straits, B. C. (1999). Approaches to social research. Oxford, UK: Oxford University Press.
Sjåfjell, B., Johnston, A., Anker-Sørensen, L., & Millon, D. (2015). Shareholder primacy: the main barrier to sustainable companies.
*Studart, R., & Gallagher, K. (2018). Guaranteeing sustainable infrastructure. International Economics, 155, 84-91.

*Thomason, J., Ahmad, M., Bronder, P., Hoyt, E., Pocock, S., Bouteloupe, J., ... & Joseph, L. (2018). Blockchain—Powering and empowering the poor in developing countries. In Transforming climate finance and green investment with blockchains (pp. 137-152). Academic Press.
*Tolliver, C., Keeley, A. R., & Managi, S. (2020). Drivers of green bond market growth: The importance of Nationally Determined Contributions to the Paris Agreement and implications for sustainability. Journal of Cleaner Production, 244, 118643.
Tosun, J., & Leininger, J. (2017). Governing the interlinkages between the sustainable development goals: Approaches to attain policy integration. Global Challenges, 1(9), 1700036.
UN. (2015). Addis Ababa Action Agenda of the Third International Conference on Financing for Development.
UNCTAD. (2018). Scaling Up Finance For The Sustainable Development Goals: Experimenting with Models of Multilateral Development Banking.
UNDP. (2018). Financing The 2030 Agenda.
UNEP Finance Initiative. (2016). The Principles For Positive Impact Finance A Common Framework To Finance The Sustainable Development Goals.
UNEP Finance Initiative. (2017). Positive Impact Finance A Common Vision For The Financing Of The Sustainable Development Goals (SDGs).
UNEP Finance Initiative. (2018). Rethinking Impact To Finance The SDGs: A Position Paper and Call to Action prepared by the Positive Impact Initiative.
United Nations Global Compact . (2019b). Scaling Finance For The Sustainable Development Goals.
United Nations Global Compact and UNEP Finance Initiative. (2019). Corporate Finance: A Roadmap to Mainstream.
United Nations Global Compact. (2019a). Leveraging Capital Markets for the SDGs.
United Nations Global Contact, United Nations Unctad, UNEP Finance Initiative and Principles for Responsible Investment. (2015). Private Sector Investment And Sustainable Development.
United Nations Secretary-General's and World Economic Forum. (2019). Unlocking Capital Markets to Finance the SDGs.
United Nations Secretary-General's. (2019). Roadmap for Financing the 2030 Agenda for Sustainable Development.
United Nations, (2015). Transforming our world: The 2030 agenda for sustainable development. New York, NY: United Nations.
*Urban, M. A., & Wójcik, D. (2019). Dirty banking: Probing the gap in sustainable finance. Sustainability, 11(6), 1745.
*Walker, J., Pekmezovic, A., & Walker, G. (2019). Sustainable Development Goals: Harnessing Business to Achieve the SDGs through Finance, Technology and Law Reform. John Wiley & Sons.
*Walker, T., Kibsey, S. D., & Crichton, R. (Eds.). (2018). Designing a Sustainable Financial System: Development Goals and Socio-Ecological Responsibility. Springer.
*Wendt, K. (2018). Positive Impact Investing: A New Paradigm for Future Oriented Leadership and Innovative Corporate Culture. In Positive Impact Investing (pp. 1-26). Springer, Cham.
*Withers, O., & Zoltani, T. (2020). Leveraging support for pangolin conservation and the potential of innovative finance. In Pangolins (pp. 579-595). Academic Press.
Wolf, M., Commentator, C. E., & Times, F. (2018). Making Blended Finance Work for the Sustainable Development Goals. OECD.
World Economic Forum. (2019). 4 key ways for countries can finance their SDGs ambitions.
Yip, A. W., & Bocken, N. M. (2018). 303701. Sustainable business model archetypes for the banking industry. Journal of cleaner production, 174, 1011-1020.
Zadek, S., & Kharas, H. (2018). Aligning financial system architecture and innovation with sustainable development. G20 Insights, July, 25.
*Zhang, X., Aranguiz, M., Xu, D., Zhang, X., & Xu, X. (2018). Utilizing blockchain for better enforcement of green finance law and regulations. In Transforming Climate Finance and Green Investment with Blockchains (pp. 289-301). Academic Press.
*Ziolo, M., Filipiak, B. Z., Bąk, I., Cheba, K., Tîrca, D. M., & Novo-Corti, I. (2019). Finance, Sustainability and Negative Externalities. An Overview of the European Context. Sustainability, 11(15), 4249.