



## Article

# Sustainable Financial Products in the Latin America Banking Industry: Current Status and Insights

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**Abstract:** The purpose of this study is to analyse the extant literature on sustainable financial products (SFP) with a comprehensive understanding of the status quo and research trends as well as characterise the existing SFP in the Latin America banking industry. In this way, research papers derived from Scopus as well as institutional reports such as main documents, sustainability reports, and product portfolios publicly available on webpages from public, private, and development banks are used to create a database of SFP where their main characteristics are included and classified. Based on the research trends identified, the results show the development of financial products focused on environmental, social, and government (ESG) matters, mainly from the credit side, of more sustainable financial markets and products under fintech ecosystems. The results show that because of regulatory and government support through mechanisms such as green protocols and social and environmental responsibility policies, private financial institutions of Brazil, Colombia, and Argentina have led the development of both social and green financial products. These study's findings may be used for several policymakers to broaden the opportunities available in sustainable financing and thus, provide a roadmap that researchers and practicing professionals can use to improve their understanding of SFP. Finally, the study presents the potential for further research in the field, both with a qualitative and a quantitative approach.

**Keywords:** sustainable finance; sustainable financial products; sustainable banking; SDGs; sustainable development; Latin America; ESG.

## 1. Introduction

Climate change is one of the greatest—if not the greatest—threats to humanity. In order to avoid reaching critical levels, such as the one represented by an increase of 2° Celsius above the levels before the pre-industrial era, sustainability would play a pivotal role [1]. Recent research suggests that, if this limit is exceeded, it could lead to continuous warming of the earth no matter what actions were taken by humans to reduce CO<sub>2</sub> emissions [2]. On the other hand, global pressures determined by imbalances at the social and economic level, with vast inequalities between countries, accelerated population growth with limited access to primary resources, and more than 1 billion people considered multidimensionally poor demonstrate that commitment on the part of all actors is required, especially governments and private agents [3,4]. In this scenario, it is crucial to mobilise huge financial resources

to achieve the relevant changes. Therefore, there is a substantial opportunity for the banking industry in developing financial products that favour the expansion of sustainable finance and thus, align their activities with a sustainable and green economy [5].

The concept of sustainability has ceased to be a matter merely focused on compliance with regulations or a move towards corporate reputation improvement with activities of merely a philanthropic type [6,7]. At present, it is also considered as an integral part of the business and generator of financial value [8,9]; in particular, green practices impact on both a company's future market value and its profitability [10].

Concepts such as Corporate Social Responsibility (CSR) or Environmental Management are part of the new sustainability perspective as a type of management oriented towards all stakeholders [11–14]. Moreover, a desirable paradigm to implement is Environmental, Social and Government Policy (ESG) throughout the business cycle as a strategy to take advantage of and unleash all the capacities that investors can contribute to reaching the Sustainable Development Goals (SDGs), whose central axis is sustainability [15]. ESG is considered as a strategic factor, which contributes to competitiveness by doing differentiation [16].

In the last decades, for the banking industry, both responsibility and climate concerns have been considered as the main drivers for developing new business models, mainly focused on sustainable banking [17–20]. Given its pivotal role as the leading financial intermediary and cornerstone in the granting of credits for the development of projects, business growth and the weighting of risks embedded therein, the effects that the incorporation of ESG criteria could have on the design of its products and financial services are extensive in the banking industry [21–24].

Since the banking industry is vital for economic growth, this has a considerable indirect impact on the environment and society. Thus, sustainable banks could help provide the estimated US \$5 to the US \$7 trillion per year needed for reaching the SDGs by 2030 [25]. In this sense, the responsible banking industry can be thought of as the appropriation of the industry of the broadest concept of sustainable finance, a term for which there is no single definition and coexists with others such as green finance or social finance and points to new sustainable business models [23,26,27]. However, despite the importance of banks in promoting a transition towards a more sustainable form of growth, the activities related to banks have received little to no attention from sustainable finance scholars [28].

According to [29], sustainable finance refers to financial products or services that integrate ESG criteria in business or investment decisions. This is how multiple initiatives focused on building sustainable banks have been promoted at different levels such as the Sustainable Banking Network (SBN), the International Developed Financial Club and Global Alliance for Banking on Values, and very recently the Principles for Responsible Banking [30] in an attempt to move sustainable banking into the mainstream [31]. For its part, green finance varies on its definition from institution to institution but despite these differences can be well declared as defined by [32] as “financing of investments that provide environmental benefits”. Regarding social finance though, there is no consensus in the industry about its scope [33], as stated in [34] “it may be understood as a broad area wherein various forms of capital are structured in ways that consider and value both financial performance and social value creation”. In the end, both are defined based on the orientation of their funds (environmental versus social) and by the fact that they both are covered under the umbrella of sustainable finance.

Despite being a relatively new trend, several studies have been conducted to aim at examining how the incorporation of ESG criteria can be carried out in the banking industry. Among them, analyses conducted by [35–38] have contributed to understanding how customer sustainability and financed activities can have an impact on financial performance, thus being a promoter of change towards a more responsible economy. However, the evidence shows some unawareness of the implications of an accurate administration focused on sustainability and impact on stakeholders [39]. Some studies argue that it is a trend that is due to solutions using market logic rather than ethics of the firm and shifts towards a private responsibility for the provision of welfare services and poverty treatment [33]. Studies conducted by [40] and [41] suggest measuring the performance and degree of sustainability of

the banks through ratings that evaluate their commitments together with environmental and social indirect impacts generated by credit recipients. They also suggest the existence of two types of banks, and consequently, two different business models: Those of a reactive nature that only adopt certain sustainable banking practices due to regulatory pressures and others that truly recognise the importance of rethinking the business and pretend to be ahead of standards and regulations [40,42,43].

Banks, meanwhile, by developing sustainable financial products (SFP) not only gain first-hand expertise but can also obtain benefits for their corporate image and reputation [44,45], as well as customer loyalty improvements [43,46]. Not to mention that seeing the implementation of more sustainable practices as a resounding alleviation to facing financial crises is something which diverse financial institutions agree upon [23,47]. Regarding profitability, previous research focused on Latin America (Latam) has shown that the performance of those SFP portfolios, particularly green ones, has a significantly better loan performance as well as high growth rates of about 50% year-on-year [48].

Moreover, these products demonstrate a real commitment to international voluntary initiatives to which they have joined and capitalise on an opportunity of a small business niche, but with significant growth. It is worth clarifying, however, that transparency and the real reach of banks that embark on such purposes can be questioned in several cases, as highlighted in [49–51]. Therefore, the inclusion of SFP strengthens overall sustainability performance, as explained by [23] and [52]. Despite this, very few studies have deepened in this specific field, and for the few inquiries that have been made, most have been carried out in European or North American countries, justifying a greater focus on emerging regions.

Thus, from researchers and practicing professionals' perspectives, little attention has been given to research on the SFP available in the market, which have ESG criteria, and what are the features and advantages that they offer to potential users of these products. For capital users, it is essential to know these types of products because obtaining financing through sustainable financial instruments offers companies and project developers a tangible benefit in terms of lower interest rates, which positively impacts on the cost of capital [53–55]. Also, benefits in the granting of loans such as longer terms, longer grace periods, and special guarantees provide valuable conditions to borrowers to comply with debt servicing [56]. The operative part of the projects that look for this type of financing is also favoured since they usually receive technical assistance and even have indirect operating cost reductions such as insurance premiums due to less exposure to ESG risks.

Furthermore, the value of SFP diversity relative to other financing products also lies in allowing green financing to be made available to the real economy and to actors (for example, individuals and SMEs) that do not have sufficiently large financing needs and/or the necessary experience to directly access the green bond market or be of interest to investment funds with climatic/sustainable criteria.

Studies conducted by the North American Task Force of the Finance Initiative of the United Nations Environment Programme [57] and [5] have aimed at mapping and providing a description of green financial products and identifying actors pushing the Italian financial sector to become increasingly greener, respectively. In the same way, studies conducted by [58,59] have deepened the analysis and applications of SFP. However, to the best of the authors' knowledge, no elements in the current literature analyse research on SFP or the mapping of this type of products, especially in Latin America. Latam serves as an interesting and rather unique context for testing old theories and for generating new insights about SFP, and specifically for identifying the effect that these products have on the regional banking industry. It is important to emphasise that in the context of emerging economies, the social, cultural, and managerial practices are significantly and systematically different from developed economies, which could condition the development of effective SFPs.

To help bridge the identified knowledge gap, this study aims at analysing the extant literature on SFP with a comprehensive understanding of the status quo and research trends in this topic. Additionally, this study characterises the existing SFP in the Latam banking industry. This paper contributes to the literature in two ways. First, in order to have a better understanding of SFP, an in-depth review that allows for analysing the research areas, trending topics, and evolution in this

arena is carried out. Secondly, the characterisation of the SFP allows having a road map of the offering of this type of products in the Latam bank industry. Thus, to achieve a greater understanding of the motivations of the banks in the incorporation of ESG criteria in their business model, the results obtained are compared with previous analyses on the archetypes adopted by them [22]. This study will help practitioners, consumers, and bank managers to expand their knowledge of the opportunities available in sustainable financing and build on the experience and advances of other banks. The results could be equally useful for policymakers and regulators in the design of public sustainability policies. Besides, the study presents the potential for further research in the field, both with a qualitative and a quantitative approach.

The paper is organised as follows: After this introduction, which provides a context on the main elements of the study, the methodology section is presented. Next, the literature review on sustainable banking and sustainable finance is provided, followed by the results and discussion. Finally, the last section summarises the conclusions and significance of this study, followed by further research topic recommendations.

## 2. Methodology

This study carried out a comprehensive, systematic, and holistic literature review covering all research papers published in leading journals in the fields related to sustainability, environmental studies, economics, finance, and management as well as categorising the leading development of SFP. In this way, research papers derived from the bibliographic database Scopus as well as main institutional documents such as annual reports, sustainability reports, and product portfolio summaries publicly available on webpages from public, private, and national development banks are used in order to create a database of SFP where its main characteristics are included and classified.

To have an in-depth understanding of SFP, a scientometric review that allows analysing the research areas, trending topics, and evolution in this arena is carried out. According to [60], Scopus is among the databases with the highest academic research reputation. For having concise results from the database, combinations based on these keywords are used: sustainable banking, sustainable finance, green financing, green loans, and SFP. Concerning scientometric analysis, [61] argue that this technique allows characterising specific scientific knowledge by identifying structural patterns and research trends by means of an illustrative map. To do this, VosViewer software is used. Given that this tool is substantially useful in mapping knowledge areas through illustrations with graphical maps, several studies such as [62–64] have used it. Figure 1 shows the general methodology of this research and is detailed below.

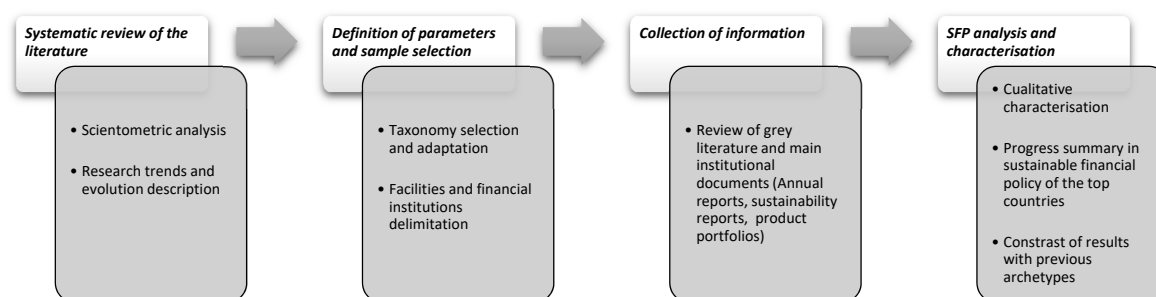


Figure 1. Overall methodology implemented.

For the searching, identifying, and conduction of this study, a broadly accepted set of sustainability-related guidelines were selected seeking despite lacking unified terms and concepts, the adoption of widespread categories and definitions related to SFP. Specifically, what can be understood as a green or social financial product, and some of the more meaningful taxonomies that cover SFP were sought. For this, the Green Loan Principles (GLP) [65] and the Social Bond Principles (SBP) [66] were chosen as referents for SFP, the former for those is more intended to bring mainly environmental

benefits, and the latter for more socially-oriented products. These are both international voluntary forms of guidance that are the result of collaborative work between some of the main market actors, and which seek to foster the market development and guarantee the integrity of the products offered.

Although the GLP and SBP refer to different instruments and impacts (green versus social), both establish the same core components necessary to certify a green loan or social bond: the use of proceeds, the process for project evaluation and selection, management of proceeds, and reporting. For the analysis, SFP is considered to be any financial product existing in the market, whose only destination is the financing or refinancing, whether total or partial, of projects that bring environmental, social, or mixed benefits and that fall within the non-exhaustive categories of eligibility stated in the GLP or SBP.

It must be stressed that the last category in the green-oriented products sphere shown in Table 1—Multiple—does not belong to the original categories included in the GLP; however, it was added to better account for those products that encompass activities or projects related to two or more categories simultaneously, a possibility that the GLP also mentions.

**Table 1.** Taxonomies for Sustainable Financial Products (SFP).

Categories for Social-Oriented Products	Categories for Green-Oriented Products
Affordable basic infrastructure	Renewable energy
Access to essential services	Energy efficiency
Affordable housing	Climate change adaptation
Employment generation including through the potential effect of (SME) financing and microfinance	Pollution prevention and control
Food security	Environmentally sustainable management of living natural resources and land use
Socioeconomic advancement and empowerment	Terrestrial and aquatic biodiversity conservation
	Clean transportation
	Sustainable water and wastewater management
	Eco-efficient and/or circular economy adapted products, production technologies and processes
	Green buildings
	Multiple

The consideration of these taxonomies reflects the approach of sustainable finance adopted, which is not merely restricted to green categories as tends to be believed [67], and is in line with the recommendations of the G20 Sustainable Finance Study Group [25]. Additionally, this separation of products allows a more comprehensive analysis by having higher specificity regarding the use of funds.

On the other hand, the financial institutions considered were local financial institutions (LFI), which include private commercial banks and microfinance banking institutions, and public financial institutions (PFI) that comprise national development banks, state-owned commercial banks, special guarantee funds, or government trusts. The selection of institutions was made by including the banks that met the aforementioned characteristics and that belonged to one of the banking associations listed as active members of the Latin American Federation of Banks (FELABAN). FELABAN is an institution that groups banking associations from all over the continent and gathers more from 600 banks and financial institutions. The chosen associations by country and the number of financial institutions (FI) analysed are shown in Table 2.

Additionally, the SFP considered were limited to saving, credit, and grants-related products. This excluded insurance and investment products, mostly given that the institutions analysed were mainly commercial banks and because governments make the vast majority of clean economy investments, as well as corporations, private equity, and venture capital firms [68], which are outside of the scope of this study. This decision was made because the analysis of these kinds of products has been much more significant in the literature.

Besides, it should be noted that only products that explicitly indicated the sustainable purposes and/or categories of the facilities were considered. Therefore, several were either discarded or not



considered given inaccuracies, or precarious disclosure in the media examined, which attends to the recommendations of the GLP and is consistent with the Climate Bonds Initiative (CBI) methodology for tracking of green bonds [69].

**Table 2.** Selected national banking associations. Source: Author's own research.

Country	Member Association	FI Examined
Argentina	Asociación de bancos de la Argentina	62
Bolivia	Asociación de Bancos Privados de Bolivia	15
Brazil	Federacao Brasileira de Bancos ( <i>FEBRABAN</i> )	79
Chile	Asociación de Bancos e Instituciones Financieras de Chile A.G.	20
Colombia	Asociación Bancaria y de Entidades Financieras de Colombia ( <i>ASOBANCARIA</i> )	32
Costa Rica	Asociación Bancaria Costarricense	14
Ecuador	Asociación de Bancos Privados del Ecuador	28
El Salvador	Asociación Bancaria Salvadoreña ( <i>ABANSA</i> )	13
Honduras	Asociación Hondureña de Instituciones Bancarias ( <i>AHIBA</i> )	16
Mexico	Asociación de Bancos de México	54
Guatemala	Asociación Bancaria de Guatemala	18
Nicaragua	Asociación de Bancos Privados de Nicaragua	7
Panama	Asociación Bancaria de Panamá	44
Paraguay	Asociación de Bancos de Paraguay	15
Peru	Asociación de Bancos del Perú	20
Uruguay	Banco de la República Oriental del Uruguay	11

With this in mind, together with the characterisation and analysis of the main SFP offered in the Latin American market, a catalogue of the main policies and regulations that have favoured the leadership and development of sustainable finances in the best-ranked countries is presented. Likewise, some progress indicators related to SFP provided by the SBN are evaluated. Its inclusion responds to its unique character as a global community that groups financial sector regulatory agencies and banking associations directed at emerging economies, and that in general seeks to provide a knowledge platform for the acceleration and commitment of these economies with the best international practices of sustainable finance [70]. Also, it is a major global player; SBN's 38 member countries are valued at \$43 trillion in total, which is around 85 per cent of emerging market banking assets, 11 of which are Latin American [70].

Finally, the results obtained in terms of categories are contrasted with the most relevant developments in terms of archetypes for the advancement of business models for sustainability in the banking industry exposed in [22].

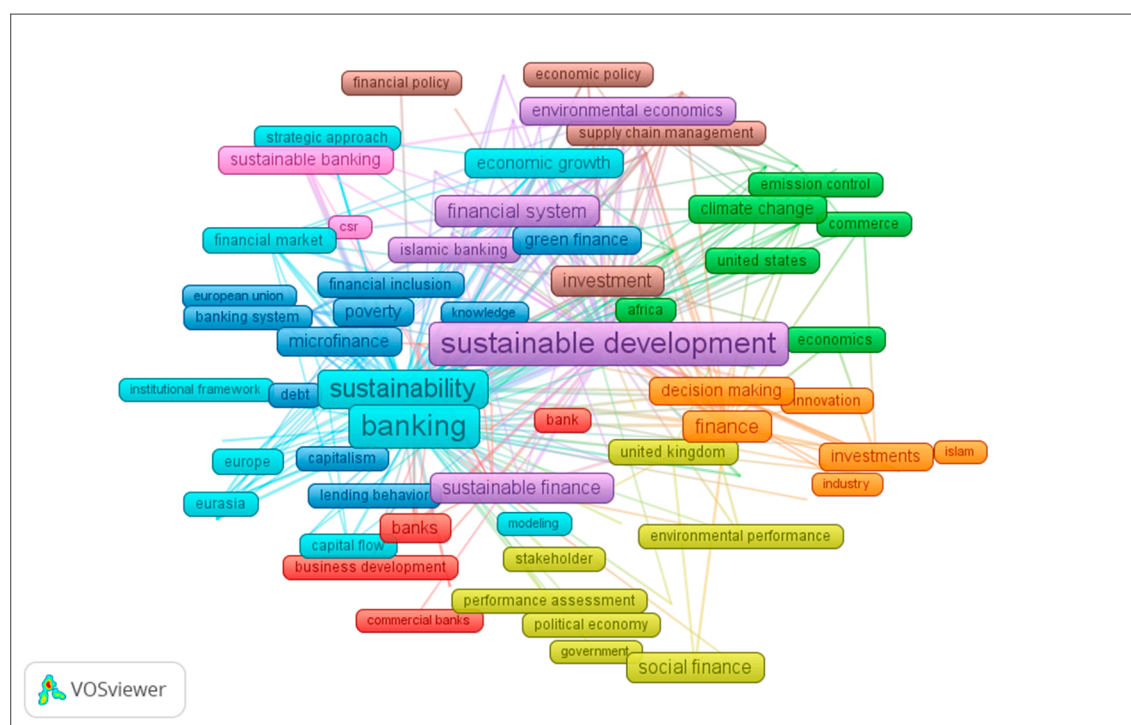
### Literature Review

Although the existing literature lack a common definition for it, SFP can be understood as the practical instrument of sustainable finance. Based on the previous definition of sustainable finance [29], SFP could be specified as financial instruments whose issues and whose deployment points to the allocation of funds to causes related to sustainability improvements, an approach that we consider most significant and will be adopted throughout the study. The above can take place both with totally new products and by adapting non-sustainable financial products, namely traditional ones.

In the most significant contributions to SFP, concepts such as sustainable development, corporate social responsibility, and impact investing have the most attention, while only recent and very few research studies have managed to identify an explicit and comprehensive approach to SFP [58,59,71–73].

Figure 2 presents the most relevant keywords obtained after refining the search with the words previously mentioned in the methodology. It allows observing a variety of terms among which, at least directly, it is not possible to observe SFP, responsible financial products, new financial instruments, or anything else that could be a synonym for SFP. All these terms appear in the universe of results; however,

they are notably small, suggesting they are of relatively little relevance, highly novel, and poorly related to the rest of the resulting words. Such an outlook in the academy is consistent with [71] in exposing the incipient development of responsible financial products, especially in emerging market and developing countries, and which has only recently begun to emerge. In this context, three well-defined research development trends can be identified in the scientific literature.



**Figure 2.** Most important keywords in the Sustainable Financial Products (SFP) research. Source: Author's own research.

A first research development trend focuses on a set of topics that cover risk management, sustainable banking practices, processes, environmental risks, and sustainability measurement as well as the business performance and sustainability relationship. Within this trend, the contributions conducted by [35,74] stand out as referents in the field for rethinking the credit risk management process framed in terms of sustainability. In [74] the benefits for both parties of considering the sustainability profile in the granting of credit were analysed.

In this regard, the bank for its part reduces reputational, regulatory, and credit risks arising from an imprecise risk rating and borrowers can enhance their perceived solvency thanks to lower exposure to ESG risk with the improvement in the negotiating power that is highlighted by [35].

Likewise, there is evidence of the benefits of integrating ESG ratings on traditional credit risk ratings from obtaining improvements in the accuracy of default predictions of a loan, as shown by this author with a significant sample of credit assessments, which is extremely useful for loans to small to middle-sized enterprises (SME) whose qualification is a challenge. Furthermore, these results are complemented by [75] who through regression analysis of several different Chinese banks focused on the effects of China's green credit policy on their bank's credit risk, discovering that banks with a higher proportion of green loans are associated with a lower non-performance loans ratio. This trend is characterised by the connection between financial and sustainability performance. For example, [76] contributes to refuting the incompatibility paradigm between financial performance and sustainability efforts by identifying a two-way causality relationship between these two variables for Chinese banks. Meanwhile, the bidirectional nature of the relationship between financial results and sustainability

performance of the organisation is also defended by [77], pointing this time to French banks using a regression panel model and a sample of 68 banks for this purpose.

Within this research trend, assess sustainability risk is common among authors. [41] suggests a sustainability credit score system based on stages as a practical way to strengthen usual credit rating models in light of the sustainability considerations normally ignored in the banking industry. The authors of [78] for their part propose a framework to quantify, analyse, compare, and glimpse water risks by making investment decisions. The question about the actions taken to involve biodiversity in the bank's operations and the motivators for this purpose are addressed by [17]. The relations between a bank's CSR policies and the countries' peculiarities in developing countries have been conducted [12]; however, there is a scarcity of studies on these topics in Latam.

A second research development trend is about sustainable banking's evolution, which includes incorporated practices and the barriers, obstacles, and pitfalls faced as well as schemes and propositions of solutions. In this trend, studies on analysis at the institutional, sector, and macro regulatory level are common. Thus, the importance of banking industry in the mobilisation of resources towards sustainable finance is generally recognised; however, as is highlighted by [48,56,79], the practical understanding of how to develop sustainable finance in their product portfolio is vague. In line with the above, [80] focuses on the approaches that seek to embody sustainable solutions in the bank's operation, arguing their usefulness to the extent that banks can impact the business models and strategic decisions of their clients given their potential to determine whether projects can obtain the requested capital or not based on sustainability considerations, which can be measured by ESG when considering the viability of a loan.

Although disparities regarding concepts of what can be classified as sustainable finance, diverse types of barriers for the development of financial innovations have been identified, as stated by [19]. These authors also examine the concept of financial eco-innovation and recompile several existing barriers to its expansion and the suggested instruments to undertake them. On the other hand, [81] analyses difficulties due to information gaps on social and environmental impacts and risks that transcend the purely monetary perspective as well as the widespread predilection for short-term returns and investments with relative security, asserting that the combination of both constitutes a crucial barrier that negatively affects financing for sustainable activities. The above is supported by [56], who focuses on fostering of green lending and acknowledges the incompatibility between the terms granted by traditional bank loans and the typical time horizon of benefits in sustainable projects.

Likewise, concerns relative to high costs associated with the development of departments dedicated to sustainable loans within banks, non-existent mechanisms for managing the risks of such loans, and the insufficient capacity for evaluation and segmentation once they are granted are addressed by [56] and [82]. To help sustainable lending get to gain traction among banks, [83] suggest considering certain minimum times being required before noticing an improvement in the return on assets, and differences on their magnitudes according to the degree of development of the financial market in question.

In this regard, [21] aims at considering monetary policies dedicated to easing lending conditions for the low-carbon firm, since nationally developed market schemes such as carbon pricing through carbon markets are insufficient to meet the imperative need for credit that sustainable activities entail, and also do not address the high capital costs associated with investments in clean technologies depicted in [84].

Hence, the insufficient disclosure and offers in the bank industry of SFP make it possible to identify a knowledge gap, particularly in having a better understanding of the existing SFP [16,22,85–87].

Finally, the third research development trend discusses new financing instruments, namely sustainable ones, the redevelopment of traditional products, and microfinance schemes. This trend is characterised by the fact that it contains research with a greater focus on SFP, or at least more directly related than the rest. For instance, [71] exposes the incipient development of responsible financial products, especially in emerging market and developing countries, which have only recently



begun to develop. This study also highlights the role of SMEs as clear potential users of this type of products, particularly in the environmental area with feasible investments in renewable energy, resource efficiency, and pollution abatement, among others.

On the other hand, [73] conducted a study to identify investors' preferences regarding ESG criteria, their real-life investment needs, and the most relevant SFP in the Spanish market, with special focus on Socially Responsible Investing (SRI) funds, bonds, SR loans, and SR current accounts and savings. This study concludes there is a need to adapt the SRI products to those of the public investor's preferences, and, at the same time, to promote knowledge of the characteristics of these products, for instance, their risks and returns, to eliminate supply and demand's mismatch.

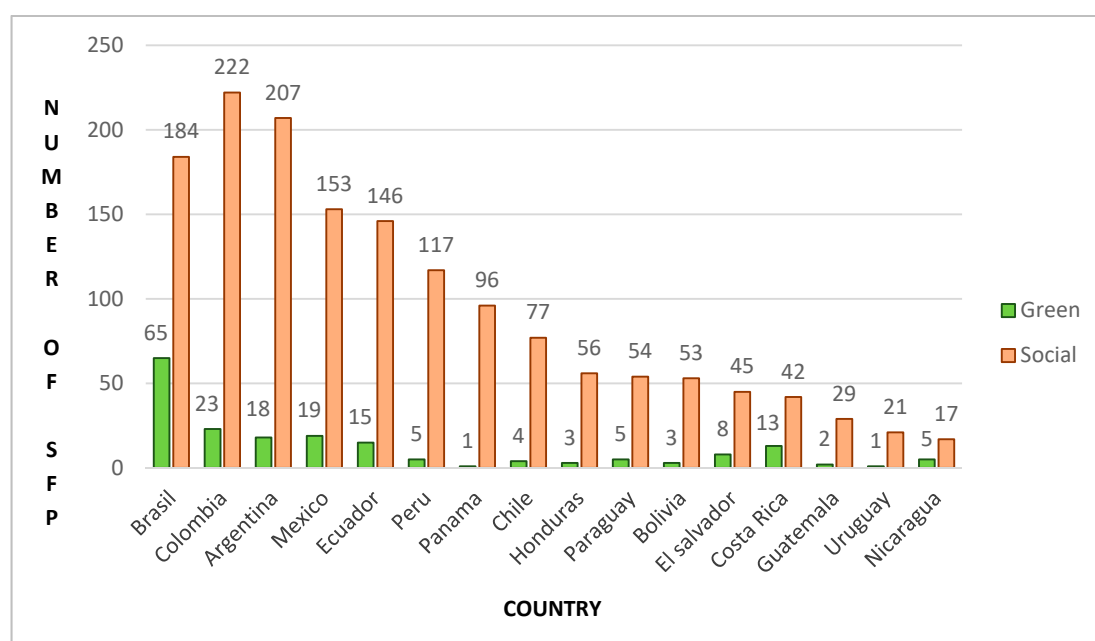
In this regard, [72] addresses the supply-demand discrepancy of SFP in Germany. Based on this, it is necessary to diversify, customise, and make known to current banking customers the existing SFP. This study also argues that new SFP can allow the growth of sustainable finance in risk-averse countries such as Germany, where the stock market stands as the principal sustainable investment alternative. Within this development trend, a study conducted by [58] delves into the understanding of the state-of-the-art in green leasing in theory and practice from a stakeholder perspective. In this way, [59] suggest a finance framework that serves the financing of environmentally friendly practices in EU agriculture through SFP. On this issue, a securitisation system that allows various sources of financing for farmers, for the most part obtained through public subsidies and improving efficiency in the placement of public resources, is outlined. On the other hand, in [75,88], micro and social finance schemes are discussed. In the former, the case of a Canadian community credit institution dedicated to social finance and that is on the path to realising a 100% social finance portfolio is studied. In the latter, successes, errors, and recommendations are detailed based on a microfinance program in rural areas of Bangladesh [67].

Within these research development trends, the importance of SFP to support the expansion of the banking sector can be clearly observed. However, there is a scarcity of studies that allow having a better understanding of SFP since, although the research that addresses the concerns of massifying sustainable banking has abounded, it has focused mostly on the first two trends described and some other complementary issues, but has hardly delved into the third one. This scene is at least surprising and represents a conjunctural opportunity, since [22] proposes the SFP as one of the new archetypes to be adopted with the greatest potential to materialise sustainable finances towards bank users. In this sense, this gap can be noticed, especially in the Latam context. Therefore, it is necessary to analyse the evolution and characteristics of this type of products in the banking industry.

### 3. Results and Discussion

#### 3.1. Results by Countries

In summary, 448 banks from 16 countries were analysed, with 267 of them with at least one SFP and thus obtaining a record of 1.709 SFP. The results show the number of SFP by countries, as shown in Figure 3. The top three (i.e., best-ranked) countries by offered SFP were Brazil, Colombia, and Argentina. Below are some of the main regulatory milestones that have contributed to their role as leaders in the region and the comparison with some indicators developed by the SBN to assess the performance and coverage of member countries with established national sustainable finance policies. After the selection of these indicators, the relevance of their scope was deemed to judge the progress in SFP. These countries are followed by Mexico and Ecuador that also show significant progress in sustainable finance, and that together account for 61.56% of all identified SFP.



**Figure 3.** Sustainable financial products in Latin America. Source: Author's own research.

### 3.1.1. Brazil

Brazil is the most developed country in the region, working on the subject for more than a decade. In 2008, it established the green protocol and since 2013 it has been annually measuring financial resources for the green economy. In 2014, it established the framework for the creation and implementation of a social and environmental responsibility policy, and in 2016 it generated the guidelines for the issuance of green bonds. More recently, Brazil made progress in monitoring the environmental benefits of its banks' portfolios, while also beginning the creation of a methodology for calculating exposure to climate risks oriented to the national regulatory bodies. The country also has a great variety of national and regional state banks that are mainly active in the supply of SFP. For example, Banco Nacional de Desenvolvimento Econômico e Social is one of the largest banks with a vast number of products, which mark the development and supply of SFP nationwide and that place it above the rest of the relevant countries.

Another peculiar characteristic of Brazil is the special attention given to agricultural activity reflected in multiple products and services oriented to this sector by both PFI and LFI, although to a lesser extent for the latter. This scenario is logically clearly related to its role as a notable producer and exporter of many agricultural products, but it requires some restructuring and consolidation regarding PFI. That is, despite the positive nature of the existence of many programs to support sustainable agriculture, this favours a complex environment of financing that paradoxically hinders the understanding of available opportunities and ultimately hinders the proposed SFP disbursement objectives, as echoed in [69]. Finally, up to 2019, Brazil led investments in the fintech ecosystem, which necessarily drive the existence of a more significant number of SFP of a social nature oriented to financial inclusion and digitalisation of financial services.

The SBN framework contemplates two indicators to measure the progress in the sub pillar "Products and services", within the pillar "Climate and green finance" [70]. They are the indicators 4 and 5: "Defining sustainable assets and financial products" and "Green finance product guidelines", respectively. According to these indicators, Brazil has a 35% gap in that Climate and green finance area, thus being above the regional and global average. This stands out from the framework that provides valuable definitions for green sectors and green bonds, which are in accordance with existing standards such as the Green Bond Principles or Climates Bond Standards. However, according to [89], for further

improvement, there is a planned extension of guidelines for green financial assets that are different from green bonds; they also further detail the definitions and examples of social and sustainable assets.

### 3.1.2. Colombia

Colombia traces its first and most significant advance in the promotion of sustainable finance to the Green Protocol issued by Asobancaria in 2012, the same regulatory entity that issued general guidelines for the implementation of environmental and social risk analysis in 2016. This was then supported in 2017 by a roadmap of actions to launch a green bond market in Colombia. Recently, in 2018, the leading financial regulator (Superintendencia Financiera—SF-) has been striving to establish clear definitions of sustainable finance, and the scope of the Green Protocol has been extended to include other associations in the sector such as insurers and microfinance entities. Besides, Colombia is working on its national emission reduction objective aligned with the Sustainable Colombian Initiative framework (covering 2015–2030) as well as the National Decree on Climate Change. The above, together with its flourishing and diversified thematic bond market (that is, green, social, and sustainable bonds) led by financial institutions issuers augurs well for the expansion of other types of products and services within the spectrum of sustainable banking [69].

Concerning digital finance, Colombia ranks as the third largest fintech ecosystem in Latam behind Brazil and Mexico, favouring and urging on opportunities for innovation and financial inclusion from traditional banks, but there is still much to be done [90]. On the other hand, various support mechanisms used by the central government can only be granted to companies that meet the criteria established by the Mipyme Law in 2000 such as preferred credit lines for working capital, acquisition of productive assets and investment, guarantees to facilitate access to credits through the National Guarantee Fund, and diverse programs to support growth and innovation.

According to the SBN framework [91], within the pillar “climate and green finance”, Colombia has a 60% gap in the sub pillar “products and services”. However, it is above the regional and global average in the two indicators used. In this sense, national regulations define green assets, set targets to develop a green bond sector, and recommend the development of SFP to banks, yet, Colombia needs to develop a greater clarity through more specific taxonomies and more explicit definitions of social and sustainable assets. This is a task that is underway and according to the most updated information from SF, is about to be completed very soon.

### 3.1.3. Argentina

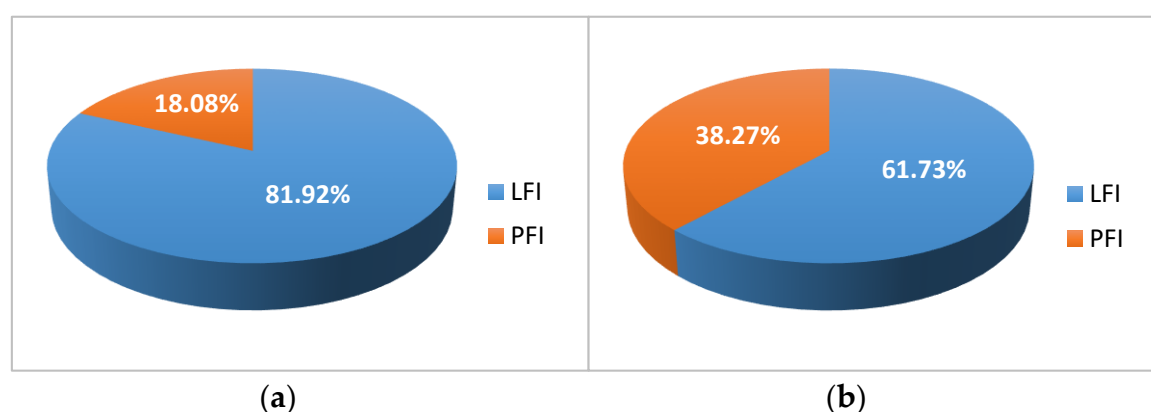
In terms of sustainable banking, Argentina has been behind other countries in the region, including smaller or less developed financial markets. However, it has made several notable efforts beyond the stock market level. These actions include the development of environmental and social impact financing guidelines as well as the launching of a sustainable finance investor awareness campaign by the National Securities Commission, the first Argentinian sustainability index promoted by Bolsas y Mercados Argentinos (BYMA) in cooperation with the Inter-American Development Bank, and the agreement between the Buenos Aires Stock Exchange and the Mexican Stock Exchange to work together on the development of environmental markets. Additionally, in June 2019, the Sustainable Finance Protocol of Argentina was launched, which will be the guide to bringing sustainability to the financial sector. Also, one of the strategic axes of this crucial protocol will be to create financial products and services to support the financing of projects with a positive environmental and social impact, so the outlook is positive.

Argentina, despite being a member of the SBN, does not have a national sustainable finance policy and was not subject to specific evaluation and therefore, there are no indicators related to SFP. This apparent contradiction suggests that despite the lack of a national policy that serves as a frame of reference, the concept does exist in the national banking market. At the same time, it has an important number of products that can be classified as SFP and in some cases products that are unintentionally related in some way to sustainability. This country also reveals great future potential once the recent

sustainable finance protocol or similar initiatives are consolidated and implemented, as this would provide integrity to the SFP and promote collective learning among the actors involved. Nonetheless, it should be highlighted that greater political involvement with these initiatives and sectoral efforts is desirable.

### 3.2. Results by Kind of Institution

Regarding the kind of institutions analysed, only 18.08% were PFI, which in turn translates into approximately 38.27% of the total SFP compared to 61.73% of the LFI, as illustrated in Figure 4a,b. Although this does not represent a majority, it is an important number considering the low participation in the universe of registered financial institutions.



**Figure 4.** (a) Financial institutions examined; (b) Financial institutions offering SFP. Source: Author's own research.

Table 3 shows the first ten banks according to the number of SFP, with a predominance of banks in Colombia and Brazil, in addition to Argentina, Ecuador, and Chile. Although for this ranking the ratio of LFI versus PFI is the same, what is observed is that almost all of them are banks of considerable size and relative importance within the countries where they are located and that somehow gives indications of what has already been suggested about the bidirectional relationship between financial capacity and materialisation of strategies related to sustainability in its business model. In this sense, the average number of SFP per bank is approximately 6, which, however, is affected by the presence of large institutions with enough SFP in their portfolio. It is noteworthy that despite the financial institutions that have 1–4 SFP representing 50%, that is, approximately 132 institutions, only 19 of them are PFI. Then, the best description of the variable number of SFP per institution is that of a distribution skewed to the right with a median of 5 and the most frequent value of SFP equal to 2.

**Table 3.** Leading banks by the number of SFP. Source: Author's own research.

Country	Financial Institution	Kind of Institution	No. of SFP Identified
Brazil	Banco Nacional de Desenvolvimento Econômico e Social	PFI	48
Argentina	Banco de la Pampa	PFI	30
Colombia	Davivienda	LFI	29
Brazil	Banco do Nordeste do Brasil	PFI	29
Chile	Banco del Estado de Chile	PFI	27
Brazil	Banco Bradesco	LFI	24
Colombia	Bancolombia	LFI	23
Ecuador	Banco Pichincha	LFI	22
Colombia	Banco Agrario de Colombia	PFI	21
Colombia	Banco de Bogotá	LFI	21

### 3.3. Results by Products

All the products that are both social and green identified are part of the universe of sustainable finance and are some of the ways selected by financial institutions to adhere to this trend, that is to say, archetypes, but more precisely they are framed in the ways described by [22]. Analysing in depth the rationality on the part of financial institutions towards the offer of SFP is not the central focus of this study, but it is closely related. Thus, in addition to the aforementioned benefits derived from this, [22] has advanced a rigorous inspection of the motivations that drive them. That is why to shed light on this point, such archetypes were contrasted with the results, specifically four of them, which are: “Substitute with digital processes”, “Inclusive value creation”, “Resilience in loan granting”, and “Sustainable financial products”.

The main resulting categories for both social and green SFP indicate which are the archetypes of greater adoption in Latam and preliminarily suggest their pertinency in the region. Socially, the categories of SME financing and microfinance, access to essential services, socioeconomic development, empowerment, and even affordable housing account for the archetypes ‘Substitute with digital processes’ and ‘Inclusive value creation’. There are associations that do not result in the reality of the region with emerging countries and multiple inequities and social problems, and that is evidenced for example in the low figures of financial inclusion. No less obvious is the predominance of informality in business and SMEs in regional economies, and so, by addressing these imbalances with SFP, financial institutions, as highlighted in [22], serve the most disadvantaged and generate opportunities in new markets. The other social categories also respond to a lesser extent to these archetypes.

As Figure 5 shows, products with a social focus are closely related to the unbanked population. These aim at creating opportunities for financial inclusion through microfinance, digital banking, and low-cost initiatives as well as financing of nascent enterprises to improve socio-economic conditions of disadvantaged communities. These products promote the development of SMEs as well as access to essential services.

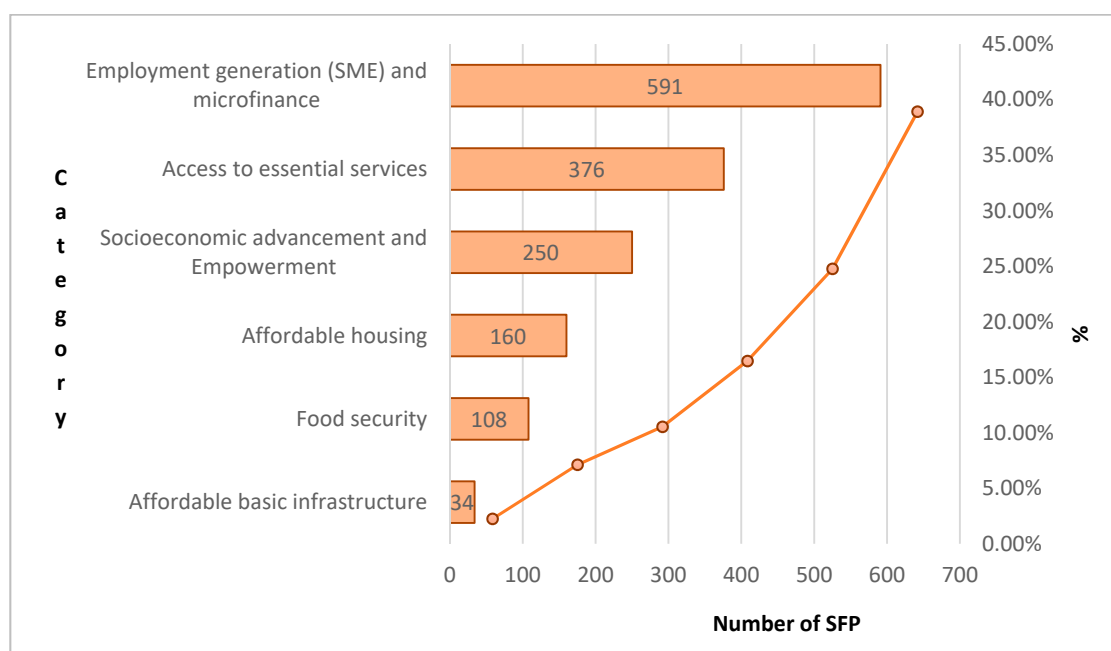


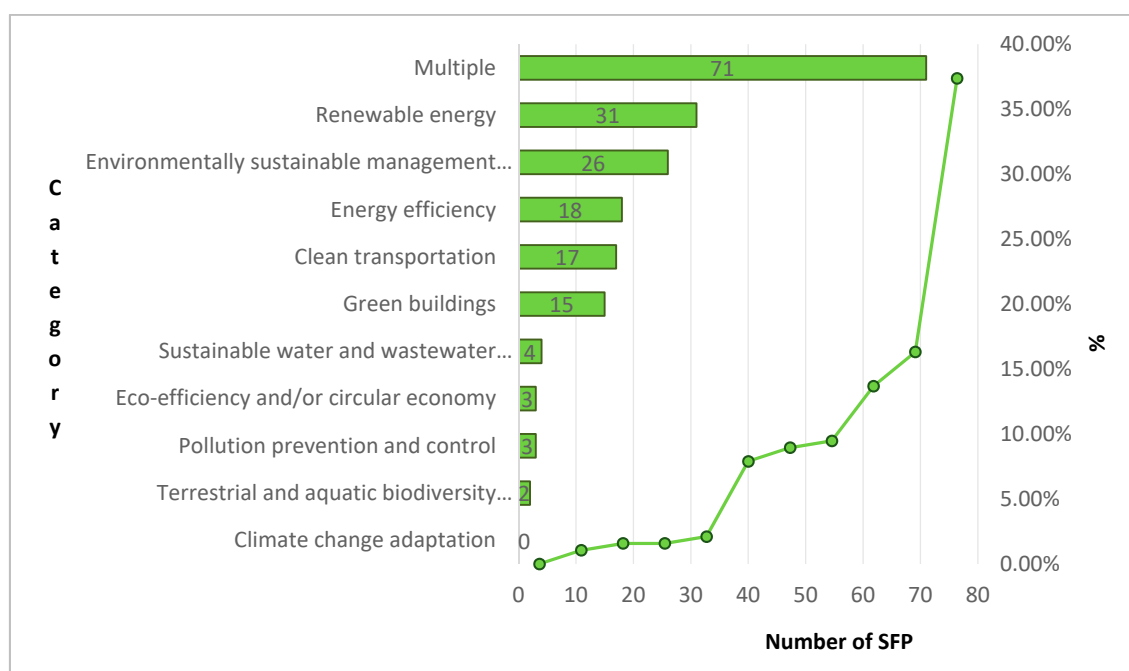
Figure 5. Results obtained for social-oriented SFP. Source: Author’s own research.

It should also be noted that some of these institutions achieve their mission of sustainability using only one of those archetypes, such as a substitute with digital processes. In this sense, the results support what is stated by [22] regarding the persistence of institutions that prefer archetypes of high



visibility and relatively easy and fast implementation over others, with more significant strategic and operational implications for their accomplishments. Once again, short-termism is present.

In products whose main sustainability benefit is environmental, in turn, the SFP, regardless of the category are framed in the archetype ‘Sustainable financial products’ and ‘Resilience in loan granting’. As for green products, the generation of alternative energy, energy efficiency, and sustainable use of the land and its resources, or simply general environmental investments are the main focus of financial institutions as Figure 6 shows. In this sense, the results by categories are also consistent with previous analysis of green products and services in Latam [48,92].



**Figure 6.** Results obtained for green-oriented SFP. Source: Author’s own research.

On the other hand, the fact that the category ‘Multiple’ is by far the largest group of products identified with 38% of the total reflects that several financial institutions through their aim to include SFP develop general ecological products (regardless of the type of facility) that help potential clients to accomplish any activity that generates environmental benefits. The above is quite logical and may be explained by widely recognised barriers such as a lack of knowledge within the bank in terms of sustainability [22,48,56,92], and thus, these types of products are the easiest to structure and practical to use to venture into the SFP.

Lastly, the importance of PFI in the promotion of SFP in Latam should be highlighted, not only for their role in encouraging LFI for the development of their own SFP, but also in a less commented aspect, that of their role in the adjustment and development of SFP according to the environmental and social needs, and economic vocation of the areas where they are located. Evidence of this may be that countries that have diverse state banks in their different regions were clear leaders in some key categories such as the case of Brazil in “Renewable energy” and “Environmentally sustainable management of living natural resources and land use”, and to some extent Argentina in “Employment generation through SME financing and microfinance”. SFP were characterised according to the category, type of facility, and features of the products identified in the financial institutions of Latam and are shown in Table 4.

**Table 4.** Characterisation of SFP.

Category	Type of Facility	Instrument for Delivering Sustainability
<b>Social-oriented SFP</b>		
Affordable basic infrastructure	Credit/Grants	Refundable and non-refundable loans to meet the credit needs of municipal, regional, and national governments that carry out public investment projects in the energy, transportation, construction, sanitation, communication, and social equipment sectors. Up to 100% of the projects are financed and for the most part the financing is provided by PFI
	Credit	Long-term loans with differentiated repayment schemes for infrastructure and public services projects developed as public-private partnerships Personal loans for the installation of natural gas or domestic sanitation networks in houses. These products have fixed interest rates and do not require any guarantee.
Access to essential services	Savings	Savings accounts with returns and without opening, maintenance, or minimum balance requirements charges, and/or that offer exemption or lower commissions on transactions
		100% digital savings accounts, with a special interest rate, debit card, and free transfers
		Savings/currents accounts or integral portfolios specifically designed for SME that meet their basic banking needs and have minimum documentation requirements. Some do not charge for maintenance and include debit cards as well as both cheques and protection for free
	Credit	Accounts or savings plans programmed for use in specific personal projects, with automatic debit and where the holder defines the term. They provide interest rates higher than those of traditional savings accounts and allow the choice of deposit frequency
		Preferential rate credits to afford one's own and family medical procedures and treatments
		Free destination online loans, without guarantee requirement and a lower rate than conventional credit.
		Credit cards with an easy approval (without verification of income or financial references), benefits in the interest rate, discounts in stores and/or an annuity free
		Specific credit cards that donate a percentage of purchases to support a foundation or non-profit organisation dedicated to solutions related to health or education
Affordable housing	Savings	Loans to entities, companies, or financial intermediaries for the development of the inclusion and offer of financial services in specific sectors with a deficit of access to credit
		Savings accounts that offer tax benefits to natural persons who seek to save in the medium or long term to acquire housing. There is no charge for maintenance fees or minimum opening amounts
	Credit	Savings accounts to verify or complete the income needed to access government subsidies for social and/or priority interest housing
		Mortgage loans for the purchase of social interest housing, land for construction, expansion, improvement, or legalisation of housing (either traditional or productive housing) for low-income families
		Mortgage loans intended for legalisation, purchase, repair, construction, and expansion of productive housing (houses and businesses in the same space)
		Social lease programs offered by PFI structured as a long-term loan, with a low initial fee and a low monthly fee that offer a 0% purchase option at the end of the lease term
		Loans to developers, builders, and housing production agencies for social housing development projects (public and private) with interest rates and more convenient structures.
	Grants	Funds granted by PFI to families for free, to strengthen or improve housing at the structural level

Table 4. Cont.

Category	Type of Facility	Instrument for Delivering Sustainability
Employment generation (SME financing and microfinance)	Credit	Loans and credit lines to SME in the formal/informal sector to finance indifferent or exclusively working capital, equipment projects, purchase of fixed assets, and investments to increase productivity. Normally, they leave to the borrower the choice of payment method and the grace period according to the cash flow.
		Credit cards aimed especially at entrepreneurs and SMEs for expenses on supplies and fixed assets. Usually with benefits in associated stores and some are exempt from an annuity
		Microcredits mostly oriented to established SMEs but also for those who want to start their own business or professionals who want to grow their line of work. They offer fast disbursement, convenient repayment schemes according to the ability to pay, and generous grace periods
Food Security	Credit	Loans, credit lines, and microcredits for agricultural and livestock working capital and investment. Many of these include technical assistance
		Credit cards to finance exclusively the purchase of supplies, machinery, and services necessary to fully cover the agricultural or livestock production cycle or related industries through flexible payment plans in line with the natural cycles of the productive project. They feature special discounts at certain distributors and stores, as well as a preferential interest rate. Some are free of monthly maintenance fees
	Savings/Credit	Debit cards and fiduciary guarantee loans for the payment of food pensions legally ordered Special plans for products and services aimed at small and medium enterprises linked to rural businesses or family/subsistence farmers.
Socioeconomic advancement and Empowerment	Savings	Current and savings accounts free of commissions or charges for opening, use, or maintenance intended for artisans, vulnerable populations such as victims of armed conflict, or marginalised rural areas.
		Savings accounts designed for immigrants and their remittances, as well as for the receipt of subsidies and state aid from government social programs. They are exempt from fee collection, minimum balance, or annuity and with direct credit.
	Savings/Credit	Collective savings accounts with which people can save collectively achieve goals with friends or family, and communal credits through the formation of a group with a certain minimum of participants who must be active micro-entrepreneurs. There may be individualised fees.
		Current accounts, savings accounts, and/or loans for investment, social development projects or patrimonial recovery for cooperatives, civil society organisations or associations of the popular and solidarity economy, with a personalised payment frequency according to the cash flow and productive cycle.
		Current savings accounts, or unsecured loans directly to the account for retirees and pensioners with special interest rates and without account maintenance fees. The opening and usage of some of these are digital.
		Bank accounts and financing of activities that are framed in the productive sectors, strategic adaptation of infrastructure, or the purchase of goods and services for people with disabilities.
		Loans and credit cards for personal expenses, household equipment, or for development of economic activities led by women and associations or organisations in situations of violence, with benefits in shops and associated businesses, with no spouse signature requirement and the possibility of training and emergency assistance.
	Credit	Accessible educational loans and credit lines for technical, technological, pre-graduate, or postgraduate programs accessible under conditions according to the type of program such as a preferential fixed rate, flexible payment plan, ease of early cancellation, and grace period for the entire period of studies.
		Special financing provided by PFI for municipalities and government entities for the construction or improvement of public space, community equipment, green areas and/or co-ownership land in neighbourhoods with problems of urban deterioration, segregation, and social vulnerability; this also includes the implementation of social development programs and culture support
		Financing for acquisition of assets and investments for the development of small-scale rural tourism, or adventure and other forms of non-traditional tourism
	Credit/Grants	Non-refundable subsidies and loans for educational institutions and/or applied research, technological development, innovation, and knowledge transfer projects to promote social and territorial development processes

Table 4. Cont.

Category	Type of Facility	Instrument for Delivering Sustainability
<b>Green-oriented SFP</b>		
Renewable energy	Credit	Development loans for the expansion/modernisation of the national energy frontier through the financing of projects for the generation and transmission of non-conventional renewable energies
		Loans for the acquisition of solar panels for family use, as well as other household items related to the use of renewable energies that allow the transformation of expenses into energy savings in the family environment under the distributed clean generation scheme, as well as a preferential rate loan for SMEs and corporations with productive projects related to renewable energy.
Energy efficiency	Credit	Loans with preferential conditions for people to invest in high-energy efficiency home appliances or environmental impact reduction technologies for the home, usually in shops designated by the bank.
		Credits for technical advice, investment projects, replacement of machinery and purchase of new energy-efficient equipment that cause lower consumption of electricity, cost reduction, and improvements in the competitiveness of SME and companies. Characterised by payment terms according to needs and the flow of the project to be financed and is subject to a verification/guarantee scheme for potential energy savings.
Pollution prevention and control	Credit	Development loans for institutional level activities of improvement and recovery of contaminated or degraded soils and areas as well as projects to strengthen the business capacity of reduction and mitigation of socio-environmental risks.
Environmentally sustainable management of living natural resources and land use	Credit	Loans with extended rate and grace period bonus, and non-refundable subsidies to prevent, monitor, and combat deforestation, in addition to promoting the conservation of protected areas and the sustainable use of forests with responsible exploitation and certification practices.
		Loans for investments in low carbon agriculture programs and agro-ecologic productive systems with sustainable practices such as waste management, pasture reform, irrigated agriculture, biotechnology, and eco-efficiency technologies from small to large scale.
Terrestrial and aquatic biodiversity conservation	Credit	Credit lines for investments in the recovery and conservation of ecosystems and biodiversity provided by PFI.
		Collaboration credit cards, which donate a certain percentage of funds from purchases made to funds/NGOs dedicated to promoting wildlife conservation and biodiversity.
Clean transportation	Credit	Loans for the acquisition of bicycles, motorcycles, and automobiles (mostly private but also commercial) hybrids, electric, or lower emissions vehicles. They offer a lower interest rate than the credits for traditional vehicles and finance up to 100% of the commercial value with a quick disbursement by being able to exempt the vehicle from an initial fee or co-debtor. Car conversion to vehicular natural gas is also supported.
Sustainable water and wastewater management	Credit	Exclusive credit lines to finance projects for the efficient and sustainable use of water for public drainage works and resource reuse in condominiums and houses.
Eco-efficiency and/or circular economy	Credit	Loans provided by PFI for investments in process and product efficiency through the application of a preventive or clean production approach and use of supplies from renewable sources or of less environmental impact as raw material
Green buildings	Credit	Loans for builders and real estate developers for projects (housing or commerce) with sustainable architecture or access to eco-efficiency certifications
	Credit/Grants	Mortgage loans, green leases, and state subsidies to access housing units and projects built under sustainability criteria or with environmental certifications, and with a lower financial cost than other similar alternatives.
Multiple	Savings	Green low-cost savings accounts, debit, and credit cards which raise funds for the placement of environmental credits or where the customer can support sustainability issues by contributing with its use to the maintenance and development of non-profit environmental organisations
	Credit	Loans, microcredits, and ecological credit lines to finance projects that explicitly focus on two or more green categories mentioned above, or which through their generality enable a vast range of destinations for general sustainability or environmental protection and improvement projects with differentiated interest rates, assistance, and schemes of amortisation.

Source: Author's own research.

### 3.4. Segments

Individuals, SME, corporations, and government entities were considered as segments for SFP. These products can be directed to one or several segments at the same time. Thus, the records obtained are those observed in Figure 7. These show the relationship between projects and the categories associated with significant investment and projects with corporate segments and government entities. In this sense, credit products for infrastructure projects, public programs, and mega-investments in categories such as affordable basic infrastructure, energy renewable, affordable housing, green buildings, and access to essential services (other than financial) are most commonly offered to this segment. As for the segment of individuals, they are significant recipients of products of various modalities, especially in the social field within the categories of access to essential services, microfinance, affordable housing, and socioeconomic development and empowerment. In the environmental field, they have less prominence and the products they can access are focused on the acquisition of energy-efficient products, green buildings, renewable energy for domestic applications, or personal clean transportation solutions. Although SFP are offered to people in general, population groups with some vulnerability or degree of exclusion (e.g., ethnic minorities, disabled persons, or immigrants) are offered these SFPs more frequently by financial institutions.

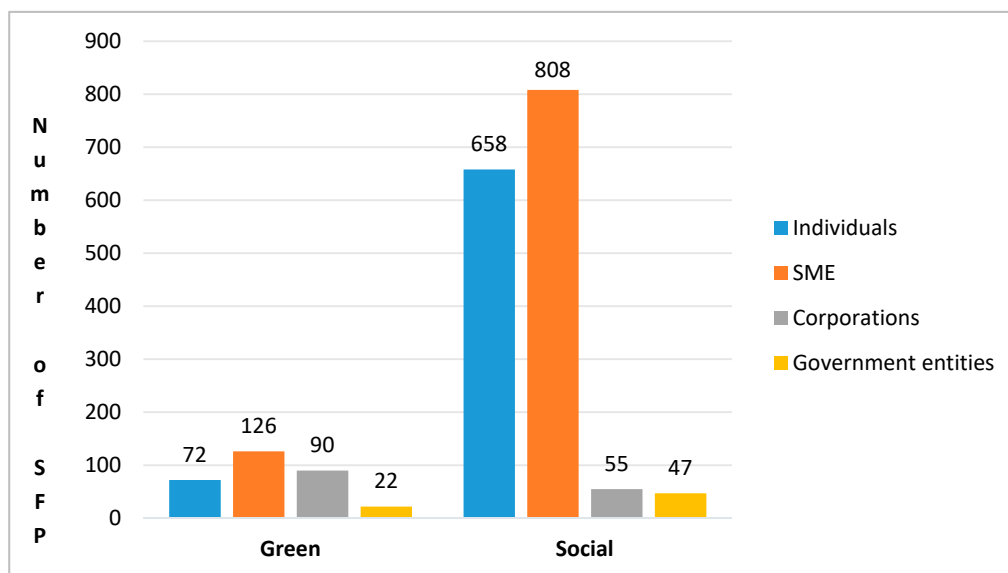


Figure 7. Target segments for SFP. Source: Author's own research.

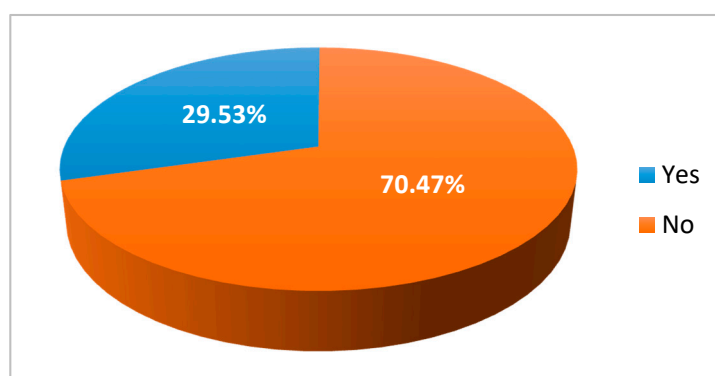
Finally, the SME segment is the most versatile and attended, leading both the social and green ambits. The main categories are access to essential services (financial), food security, and employment generation through SME financing and microfinance. It is remarkable how attractive SMEs are to deploy SFP not only because the sector is a market of great size and potential, but also because of its recognition as high potential actors due to its mainly familiar nature, dynamism, and significant involvement with the communities that can help to achieve several of the social objectives framed in the different sustainability taxonomies and SDGs.

### 3.5. Sustainability and Corporate Social Responsibility Reporting

Along with the revision of the SFP, the existence and publication of sustainability reports or reports on socio-environmental policies on the websites of financial institutions was verified. Figure 8 shows that only 29.53% of the banks analysed report their efforts in terms of sustainability, which is eminently a really small part. It should be clarified that the fact that an institution has not been accounted for does not mean that it does not have SFP. It may have these products, but it has not developed adequate communication or does so insufficiently in the media examined. Besides, there is



evidence of the confusion of sustainability strategies with solidarity and philanthropic activities in financial institutions that they recurrently advertise in so-called sustainability sections on web pages or annual reports but in many cases, this is nothing more than a compendium of donation activities, allied foundations, or occasional campaigns of volunteer activities within the institution. This alone does not meet the requirements of sustainable banking at all and instead provides a window-dressing practice for stakeholders, and therefore was not considered.



**Figure 8.** Financial institutions that communicate their sustainability management. Source: Author's own research.

Moreover, this may be one of the reasons why the levels of reporting observed are much lower than previous measurements in this regard in the region [92], in which the consideration of what is and what is not a report of sustainability efforts was solely the perception of financial institutions' managers.

The results are consistent with the previous descriptions of the precarious communication to the interest groups and particularly to the clients by the banks. What is beyond the report is evidence that even institutions with SFP in their portfolios do not promote them with the fortitude that one would expect in the most essential points of contact today, which are virtual channels [21]. The idea is not only to develop SFP, but they should also be promoted and even more privileged in marketing strategies. As echoed in [22,48], it is just as important to publicise the benefits and impact of sustainable banking with financial institutions and civil society in general, as it is to promote the demand for SFP. The faster and more integrated these efforts are, the greater will be the success in the consolidation of sustainable banking.

The SBN framework contemplates one indicator to measure the progress in the sub pillar "Climate and green investment reporting", within the pillar "Climate and green finance" [70]. It is the indicator: "Tracking and disclosure of climate & green finance". According to this, Brazil has a 60% coverage in that area, positioning itself well ahead of the regional and global average. Meanwhile, Colombia has not yet made any progress in this area, and the essential needs should be to compel reporting on climate / green financing flows and stimulate financial institutions to publicly report on green financing activities. This aspect is vital to address for the sake of standardising information that enables effective monitoring. Then, Colombia is called upon to work with its neighbor countries and build on its recognised experience.

#### 4. Conclusions and Further Research

This paper analysed the extant literature on SFP with a comprehensive understanding of the status quo and research trends and, characterised the existing SFP in the Latam banking industry. In this way, this paper contributes to the body of knowledge and practice by being the first to characterise and analyse the SFP in the Latam banking industry. The results of the study show that Brazil, Colombia, and Argentina are the main countries involved in the development of SFP. Because of regulatory and government support such as through Green Protocols and social and environmental responsibility policies, these countries have led both social and green financial product development.

The development of financial products focused on ESG, particularly from the credit side, is highlighted in the first research trend. It is important to highlight that Brazil has one of the most developed financial markets in the region and it has allowed the development and supply of SFP nationwide. Besides, it has a fintech ecosystem which has allowed it to have a greater financial inclusion and digitalisation of financial services, as well as agricultural activity reflected in multiple products and services oriented to this sector, developed by both PFI and LFI.

On the other hand, Colombia began its evolution towards sustainable finance with the Green Protocol issued by Asobancaria in 2012. Even though Colombia has had relevant advances in fintech, much still to be done to have greater financial inclusion as Brazil and Mexico have, though its ecosystem is highly promissory.

This result was in line with the SBN framework; the authors of [91] found that Colombia had a 60% gap in products and services. This suggests that both the public and private sector should develop strategies for boosting the development of SFP based on fintech. This would include greater clarity through more specific taxonomies and more explicit definitions of social and sustainable assets. Although Argentina has a small and less developed financial market, it has made several efforts towards developing SFP. At this point, campaigns in alliance with BYMA, the Inter-American Development Bank, and the Mexican Stock Exchange, as well as its very recently launched national sustainable finance policy have played a pivotal role and therefore, the outlook is positive.

Thus, barriers, obstacles, and pitfalls are being overcome aimed at developing a more sustainable financial system, which is in line with the second research trend. Other relevant countries are Mexico and Ecuador, these five countries together account for 61.56% of all SFP identified in this study, which is certainly significant.

Concerning the rest of the Latin American countries, it is highly recommended that they deepen cooperative relationships with these five leaders, especially those that are in the basic stages of development respecting SFP. As it has already been demonstrated with countries in Latam and other regions, success is based on sharing experiences and building from the mistakes of others, which will undoubtedly help with the further development of SFP.

About the kind of institutions, the results show the tremendous importance of PFI, which obtained significant results with almost a 40% participation. The role of a promoter and at the same time as a persuader towards the LFI is confirmed, but it is also important to emphasise the work of PFI in matching regional needs with the potential SFP that address them.

The results also indicate a prominent relationship between SFP and the creation of opportunities for financial inclusion for the unbanked and vulnerable population, as well as with SME financing initiatives. These two factors were the main categories in the social-oriented SFP. On the other hand, in the green-oriented SFP, the main categories were occupied by products with multiple environmental destinations, renewable energies, and activities on sustainable management of natural resources and land use, sectors with huge investment opportunities in the region.

When evaluating the target audience of the different SFP, it can be seen that SME are the most flexible segment. These have the highest amount of SFP, both in the green and social spheres.

Regarding the kind of facilities granted, individuals are recipients of savings products such as checking accounts, savings, debit cards, and credit loans mainly to encourage their insertion into the formal financial system and healthy financial habits. Multiple ecological loans, which are another widespread practice, are the most practical and efficient option for financial institutions (regardless of type) to include in green products in the portfolios, which was raised in the second research trend.

At the same time, low levels of bank sustainability reporting expose the imperative need to improve the dissemination of efforts in this regard. Furthermore, in terms of promotion it is required that in addition to informing the details of traditional products, the banks report whether they have SFP, and if so, what are the mechanisms for evaluation and monitoring adopted.

Despite the contributions of the present study, limitations should be acknowledged. The most significant limitation of this study is the scarce information on SFP that financial institutions publish

on websites. Also, there is a lack of homogeneity in the presentation of information as well as a low proportion of institutions that quantify and monitor the flows and performance of SFP if offered. Therefore, it is possible that additional elements not identified may be essential for establishing new features on SFP. This issue should be addressed in further research. Finally, this research is providing a roadmap to SFP in the Latam banking industry so researchers and practicing professionals can improve their understanding of the SFP and thus, they may use these study's findings to broaden the central aspects of this kind of financial products, as the third research trend indicated.

Based on the research trends and results, to go beyond this study, research on topics related to SFP will facilitate improve financial practices for the economic development based on ESG issues. From a practical and research perspective, further research may develop a framework in which each financial institution registers its SFP. It would allow us to determinate the real SFP offers. Likewise, the development of both new metrics for measuring financial leverage from ESG perspective as well as interest rates indexed by ESG issues is required. These issues could complement the sustainability credit score system proposed by [41,74,80]. Additional lines of further research may include:

- Comparing interest rates for similar SFP but in different countries.
- Developing a credit risk framework to measure how much money a sustainable project could borrow.
- Measuring if SFP could boost the generation of economic value added (EVA).
- Analysing the relation between green bonds and SFP in financial institutions.
- Appraising the participation of monetary flows destined to reach green and social loans in the financial markets at a regional level.
- Assessing the applicability of the archetypes established in [21] now for the banking industry in emerging economies.
- In order to have more understanding of the associations and factors determining the offering / not offering of SFP in Latam countries, an analysis by means of numeric analysis, statistic tests, or even econometric models when suitable.

Finally, since only 60% of the banks considered had at least one SFP, and because the average number of SFP among financial institutions is just two, the developing nature of this topic is corroborated. As a result, the topics above represent only a part of the great potential in the SFP research field with both a qualitative and quantitative focus. Thus, greater engagement of public/private agents and awareness-raising for potential users about existing opportunities are the preconditions for triggering a virtuous cycle.

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