



## Delineating social finance

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### ABSTRACT

This paper reviews social finance. Venture philanthropy, microfinance, crowdfunding and social impact bonds are financial and social innovations that reshape capital markets, the production of public goods, entrepreneurship and the fundamental principles of financial analysis. In this context, the pursuit of social and environmental impact is assessed alongside the tradeoff between risk and expected return. The market for impact investments consists of suppliers of capital, recipients of capital, the institutional framework and financing flows. This paper describes the financial market for the pursuit of impact and highlights principal challenges, such as the small scale and long horizon of social ventures, the lack of standardized reporting and financial measures for social outcomes, as well as the elusive causality between impact investments and social change.

### 1. Introduction

Social finance consists of the network of processes, decisions and institutions that finance production of public goods with participation of the private sector, a fusion often called the “third sector” of the economy. The analysis of social finance assesses the feasibility of impact investments, exploring whether the monetary benefit from the production of public goods with the participation of the private sector exceeds the cost. In this context, impact is a value-laden contribution to the solution of a social or environmental problem and investments that are primarily pursued to realize impact are called impact investments. This analysis also assesses the ways of financing impact investments (mainly debt, equity and donations) and the effect of the sources of finance on the governance of social enterprises and investment outcomes. Impact investments produce goods and services that must be as little rivalrous and exclusive as possible and aim at resolving social and environmental problems such as: access to clean water, reduction of social and economic inequality, protection of human rights, improvement of productivity and reduction of poverty, access to energy, inclusion of renewable energy in production processes and everyday life, management of water resources, access to financing, fight against environmental pollution, protection of biodiversity, sustainable utilization of the soil, safe access to nutrition, collecting money for donations and charity purposes in general, resolution of conflicts and many other actions that aim at resolving social, economic, political and environmental problems.<sup>1</sup>

The emergence of social finance is rooted on the standard proposition of market failure, where market mechanisms do not adequately incorporate the positive or negative externalities of a transaction and, therefore, the price mechanism alone cannot efficiently allocate resources in a way that maximizes welfare (Nicholls & Emerson, 2015). The mitigation of these problems is often associated with responses such as environment taxes, emission fines and financing enterprises with social impact. Especially in the case of organized capital markets (e.g., banks and stock markets), investors may exhibit an incomplete assessment of the investment's long-run viability, the required rate of return, the best mix of financing and the best utilization of business proceeds (Baker & Wurgler, 2013). Of course, in addition to market failures, the institutions of social finance try to cope with the failures of government policy in managing social problems.

These considerations, apart from epistemological criticism on mainstream financial economics (Andrikopoulos, 2013; Hodgson, 2009), coincide with the development of a wide network of new forms of financing that involve social entrepreneurship, entrepreneurial philanthropy, socially responsible investments and investments that pursue social and environmental impact. The financial crisis of 2008 triggered many important changes in social economy, social innovation and social finance. Thus, apart from mechanisms that strengthen systemic financial stability and stricter rules of risk management for banks, the crisis spawned new channels of finance that reflect the pursuit of welfare, in addition to the pursuit of profitability that can be measured in monetary terms. This trajectory leads to increased autonomy for social

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<sup>1</sup> <https://thegiin.org/>.

economy and its financing channels precisely because the magnitude of initiatives and the increasing appeal of their arguments contribute to the emergence of social finance as an autonomous area of the economy, entrepreneurship, financing and even economics as a science.

As the impact of social finance extends beyond the individuals who are directly involved in financial transactions with investors, social finance transforms major aspects of conventional financial analysis, such as profit, investment uncertainty, the synthesis of stakeholders' interests, the discount rate, the effect of tax on the value of enterprises, and the distribution of business proceeds among suppliers of capital. These changes are evident in the creation of new financial institutions and risk management techniques with respect to productive activities that do not only serve the investor's financial interest, but also pursue value creation for the society and the environment (Andrikopoulos, 2019). For instance, this is the case of microfinance institutions and venture philanthropy organizations, which transform entrepreneurship, charitable activities and financial intermediation into the direction of common good that is combined with the financial viability of private investments.

However, the pursuit of social impact in many private investments, as well as the pursuit of private benefit in many social investments, blurs any strict definition of impact investments and, therefore, social finance. For example, the founders of a private hospital may aim at improving the living conditions in their region (apart from their profit), the founders of a private school may aim at promoting their ideas of common good via education, the founders of a private sports club may aim at promoting sport in general etc. Furthermore, social finance often involves financing young or very poor entrepreneurs who are excluded from banking services. While these funded activities are 100% for-profit, such channels of finance can be incorporated in the social finance framework to the extent that they reduce inequality, by providing opportunities for wealth creation to people with no capital, increasing employment and, therefore, reinforcing social cohesion and promoting economic development. Mixing private-sector and public-sector characteristics in many markets highlights the need for new institutions to finance the production of public goods and for new instruments of financial analysis.

The next two sections present the institutions of social finance as a field of financial practice. The fourth section discusses the principal characteristics of the social finance network. The fifth section presents the challenges facing the analysis of impact investments and the sixth section concludes the paper.

## 2. Social finance institutions and mechanisms

Social finance institutions are continuously being reshaped, along with the changes in social problems that the social economy is trying to resolve. In 2016, \$114 billion were allocated in impact investments (Global Impact Investing Network, 2017).<sup>2</sup> The financing of impact investments takes place within a dense network of financial institutions. Some of these institutions are conventional, in the sense that the support for social entrepreneurship is not their primary objective (this is the case of a bank that finances social enterprises, along with its principal financial services that are provided to enterprises beyond social economy). Other institutions are closer to social economy and often involve the financing of social enterprises and the support of investments in the context of economic development.

<sup>2</sup> These measurements are based on a survey of 208 impact investors that was conducted by the Global Impact Investing Network. As many investors did not take part in the survey, the capital that has been allocated in impact investments probably exceeds the \$114 billion that is stated in this survey.

### 2.1. Microfinance institutions

Microfinance institutions are financial institutions that principally aim at fighting poverty by financing people who are excluded by conventional banks because they do not have wealth, steady income or credit history (debt financing to poor women entrepreneurs in South Asia is a characteristic case of microfinance). These loans are often small amounts that are granted with no collateral to small groups of borrowers who assume joint liability for the repayment. Microfinance institutions often extend beyond supporting entrepreneurship to employing mostly women and providing vocational education to the borrowers, as well as student loans. Grameen Bank in Bangladesh is perhaps the most important microfinance organization (97% of 8.93 million borrowers are female and 1.2% are beggars<sup>3</sup>). Microfinance institutions are dealing with major challenges, such as credit risk management for borrowers with no credit history, increased transaction costs, and setting the boundaries between commercial banking and microfinance in the fight against poverty. On the one hand, these challenges spawn doubt about the potential of microfinance institutions to promote economic development (Banerjee et al., 2015; Crépon, Devoto, Duflo, & Parienté, 2015) and have triggered incidents such as the IPO of Banco Compartamos in 2007 and the suicides associated with the debt collection policies of SKS Microfinance in 2010 (Haldar & Stiglitz, 2016; Mader, 2013). On the other hand, successes of microfinance have documented the ability of microcredit to help combat inequality and promote welfare in developing economies (Lacalle-Calderon, Larrú, Garrido, & Perez-Trujillo, 2019; Aigbokhan & Asemota, 2011).<sup>4</sup>

### 2.2. Venture philanthropy

Venture philanthropy is impact investing that merges social entrepreneurship with social finance in a single field. It involves the application of venture capital methods to financing and developing enterprises that pursue social impact along with profit (John & Emerson, 2015; Letts, Ryan, & Grossman, 1997; Pepin, 2005). Venture philanthropy organizations are not constrained to financing social enterprises and development projects, but they also support entrepreneurs with knowhow, providing them with necessary technical support. At the same time, as with conventional venture capital, the prospect of the investment is philanthropic capital's exit from supporting the impact project as soon as the project is financially independent and exit is profitable (Gordon, 2014).

Venture philanthropy emerged in the USA in the late 1980's by venture-capital and private-equity pioneers such as General Atlantic that founded Echoing Green and George Roberts who founded the Homeless Economic Development Fund. In the 1990's impact investments accommodated the financial practices of prominent hedge fund managers such as Paul Tudor Jones who founded the Robin Hood Foundation in New York. The late 1990's and early 2000's witnessed an influx of important entrepreneurs of the information technology industry in the field of impact investments. Social Venture Partners was

<sup>3</sup> [www.grameen.com](http://www.grameen.com).

<sup>4</sup> Microfinance institutions are not the only banks that pursue social impact. They are a special case of social banks. Social banks are financial intermediaries that exhibit a wide range of ownership structures, governance models and financial services. Financial companies like Triodos Bank, GLS Bank, Charity Bank, Cultura Bank, Banca Etica, La Nef and the Alternative Bank Switzerland are driven by a "double bottom line" of financial and social concerns (or triple bottom line, if we include environmental concerns as well). Such pursuit relies on principles like reciprocity, transparency and sustainability (Becchetti & Garcia, 2011; Benedikter, 2011; Cornée & Szafarz, 2014), expands credit scoring to accommodate social screening (Cornée, Kalmi, & Szafarz, 2016) and is assessed on both its financial and social performance (Martínez-Campillo, Wijesiri, & Wanke, 2020).

founded in 1997 by Paul Brainerd who co-founded the Aldus Corporation that produced the desktop-publishing software PageMaker. Paul Shoemaker, a Microsoft executive, was involved in transforming Social Venture Partners into an international network of impact investors. In 2004, Pierre Omidyar, founder of eBay, created the Omidyar Network. The Omidyar Network finances a broad range of impact investments and has assumed a dual legal form: it is both a 501(c)(3) and a limited liability company, exploiting the opportunities and institutional instruments that are available both to profit-seeking and non-profit organizations in the pursuit of social impact.

Venture philanthropy extends beyond the USA, it is global to the extent venture capital and social problems are also global. The UK has been the home of social economy and social finance pioneers such as Baron Michael Young (co-founder of the Open University), Cecil Jackson-Cole (co-founder of Action Aid) and Sir Ronald Cohen. Bridges Ventures and the Social Business Trust are UK-based venture philanthropy organizations that champion the blend of successful entrepreneurial practices with the pursuit of social and environmental impact. Like conventional venture capital investments, venture philanthropy is articulated in investment networks (e.g., Mair & Hehenberger, 2014). Organizations like the European Venture Philanthropy Association and the Asian Venture Philanthropy Network reflect the characteristics of capitalism and social policy in their respective regions, bring together impact investors, financial institutions, inter-governmental organizations, non-government organizations and venture capitalists to identify opportunities for impact investing and respond to social and environmental challenges of international interest.

Despite their contribution to the mitigation of social and environmental problems, venture philanthropy organizations face some criticism (e.g., Boyce, 2013; Katz, 2005; Rodger, 2013). First, the immense wealth of some venture philanthropists is allegedly the flip side of the inequality that most venture philanthropy organizations try to mitigate. Second, venture philanthropy, much like conventional venture capital, relies on the measurable outcomes and the financial viability of impact investments. However, unlike conventional venture capital projects, impact investments often present extraordinary difficulties in measuring outcome (how would one measure the effect of an impact investment on global warming?). This impedes the assessment of the social impact of venture philanthropy vis-à-vis standard methods of charity financing or government policies that address the same problems. Furthermore, problems in measurability imply difficulty in quantifying financial success, which, while necessary, should often take a back seat to charitable causes and social impact (Nielsen, 2017). For example, the Cystic Fibrosis Foundation financed Vertex and Aurora Biosciences to produce Kalydeco, a drug for cystic fibrosis that probably would not have been otherwise financed (Feldman & Graddy-Reed, 2014); the small number of patients would result in an unfavorable break-even analysis. Subsequently, Vertex, a for-profit biotechnology company, sold Kalydeco for \$311,000 in the US market,<sup>5</sup> a price that few patients can afford.

### 2.3. Social impact bonds

Social impact bonds are loan contracts in which the supplier of capital will be repaid depending on the effectiveness of the financed investment. If the investment accomplishes to mitigate a social problem, then the creditor is compensated by the organization that is responsible for the mitigation and received the loan. In principle, debt capital is managed by an independent organization that receives the money on behalf of the government and coordinates the activities of companies and organizations that are involved in resolving the social problem. The investment's social impact is assessed by a specialized

independent organization and determines the amount of money that will be returned to the creditor. The extent of the accomplished social impact is associated with a decrease in government expenses for the specific social problem and these saved resources render the repayment of the debt contract feasible. These are called pay-for-success contracts or pay-for-performance contracts. The first social impact bond was about HMP Peterborough and social services for former prisoners so that can find employment, be socially integrated and stay out of prison for twelve months after their release (Anders & Dorsett, 2017; Nicholls & Tomkinson, 2015; Shiller, 2013). Subsequent initiatives in the USA included the social impact bond that addressed recidivism in the Rikers Island prison in 2012 and the Massachusetts Juvenile Justice Pay for Success Initiative, signed in 2014, that addressed recidivism in Massachusetts (Olson & Phillips, 2013; Pandey, Cordes, Pandey, & Winfrey, 2018). The social impact bonds that have been completed or being implemented are nowadays approximately 100 worldwide, 40 being in the UK and 20 in the USA.<sup>6</sup>

Social impact bonds have emerged as a financial innovation to address social problems that were aggravated when the financial fragility of the global economy contributed to the outbreak of the crisis of 2008 (Schinckus, 2017). Their rapid growth has highlighted some of the challenges that pay-for-success-contracts face. On the one hand, it is hard to measure social impact and associate it with a specific pay-for-success contract (e.g., if crime rates depend on many policy initiatives and crime rates fall, can we associate the fall exclusively with a social impact bond?). If contract outcomes are difficult to specify and value monetarily, then some investors might hesitate to commit resources to social impact bonds and may not be incorporated in social-policy design. On the other hand, social impact bonds constitute a social and financial innovation that broadens the range of the capital market for impact investments, the pay-for-success structure of the debt contract increases transparency and accountability in the production of public goods. Finally, the fact that debt is repaid only if the contracted social services have been successfully delivered reduces the fiscal cost of producing public goods.

### 2.4. Crowdfunding platforms

Crowdfunding platforms are mechanisms that help collect small amounts of money from many backers and they constitute a special case of crowdsourcing. These amounts are directed to not-for-profit activities, social enterprises and for-profit activities. The funded activities cover a broad range: from impact investments and community projects to real estate, from tech startups to fine arts and medical equipment. Crowdfunding platforms are web-based. They constitute a mechanism of social finance to the extent that they finance not-for-profit enterprises and support ventures that would not be financed by conventional banks, mostly due to the lack of collateral and credit history. In this context, crowdfunding platforms assist the production of public goods by the private sector (Hudik & Chovanculiak, 2018). Financing can take the form of loan, equity, donation and in exchange for a material or other nonmonetary reward (see, for example, Delivorias, 2017). Crowdfunding can be active when the backers are involved in developing and managing the financed project or passive in which case involvement consists only in providing finance.

The network of backers sustains the funded project's social capital and, consequently, its societal acceptance (e.g., Lehner, 2014; Lehner, Grabmann, & Ennsbarger, 2015). For example, the provision of finance to a company that produces jewelry and employs solely women from war-stricken areas indicates that a large number of people (the financial backers) believe that it is necessary to support these regions and that female entrepreneurship can be a pillar of economic development. Furthermore, the communication between financial backers in online

<sup>5</sup> <https://cysticfibrosisnewstoday.com/2018/09/24/vertex-and-treating-cf-costs-can-unsettle-but-vertex-remains-close-to-community-interview-series/>.

<sup>6</sup> <https://www.instiglo.org/en/sibs-worldwide/>.

platforms is fundamental for building social ties and it is the shared values and connections between community members that determine a project's ethical assessment (Arvidsson, 2009). Such a social network facilitates the flow of information, thereby improving the efficiency of the capital market for crowdfunding. Both increased legitimacy and improved capital market efficiency help mitigate backers' perceived risk and, therefore, enhance the flow of funds to projects that may not access finance via conventional ways such as bank loans, private equity or stock markets (Ellman & Hurkens, 2016).

Nevertheless, the financial architecture of crowdfunding platforms presents some weaknesses. First, equity-based crowdfunding is an illiquid capital market since it is difficult for financial backers to sell their stake in funded projects. Illiquidity tends to increase investors' required rate of return and impede the flow of information across the capital market via transactions. Moreover, the fact that funded projects often lack credit history and lie out of the grid of corporate governance regulations can amplify problems of asymmetric information, adverse selection and moral hazard in the market for debt and equity in crowdfunding platforms (Belleflame, Omrani, & Peitz, 2015).

### 2.5. Socially responsible investments

Socially responsible investments consist in the market for securities issued by companies that are considered by the investors to bear positive impact on the environment and society. In this context, socially responsible investments include securities of corporations that are distinguished for their responsibility in producing goods and services as well as their position on the rights of their employees and customers. Furthermore, many socially responsible investments do not include securities issued by companies in the industries of gambling, alcoholic drinks, petroleum, defense and pornography. These investments are implemented by companies such as the American Hospital Association, Calvert, Walden Asset Management etc. In Europe, the capital that has been invested in socially responsible investments exceeds \$12 trillion (Global Sustainable Investment Alliance, 2017). Depending on the emphasis that these investors place on values other than profit, they could be classified even in the core of social finance.

Socially responsible investments are a flagship deviation from the principle of shareholder value maximization in both the financial services industry and the theory of finance. Of course, this does not mean that the maximization of shareholder value is abandoned, but that investment decisions internalize some of the perceived social and environmental externalities that stem from financial transactions. Socially responsible investments are also supported by the assumption that individual investment choices can rely on altruism (Broadback, Guenster, & Mezger, 2019), beyond the pursuit of private monetary gains (Revelli & Viviani, 2015). The blend between serving shareholder interests and fostering social and environmental pursuits is not static. The synthesis of ethical and financial concerns changes constantly. Depending on the quality of such synthesis, socially responsible investments seem to re-embed ethics in finance or, conversely, ethics in finance (Revelli, 2016, 2017).

Socially responsible portfolio selection criteria lead to alternative ways of performance appraisal; fund managers are assessed by how much they succeed in attaining investor objectives such as social and environmental impact (e.g., Gasser, Rammerstorfer, & Weinmayer, 2017; Statman & Glushkov, 2016). Drawing on the fact that socially responsible investors may be willing to forgo some profits to achieve impact (Riedl & Smeets, 2017), researchers have explored the effect of social and environmental criteria on financial performance, reaching mixed results (Belghitar, Clark, & Deshmukh, 2014; Renneboog, Ter Horst, & Zhang, 2008; Revelli & Viviani, 2015; Xiao, Faff, Gharghori, & Kim, 2017). Furthermore, ecosystems are difficult to financialize (Kemp-Benedict & Kartha, 2019) and, unlike risk and return, a portfolio's social and environmental impact cannot be measured ex post. E.g., if an investor excludes stocks of oil companies to help reduce global

warming, annual changes in earth's surface temperature can never be univocally attributed to this investor's choices. There is no resolute response to this methodological problem, but one way to proxy a portfolio's social and environmental impact is to assess the social and environmental performance of the companies whose securities are included in the portfolio. However, the accuracy of impact metrics vis-à-vis the companies' actual social and environmental performance is not to be taken for granted (Chaterji, Levine, & Toffel, 2009).

### 2.6. Islamic finance

Islamic finance is a system of financial institutions that is governed by the principles of Shariah, which is a fundamental pillar for the articulation of Muslim principles. In the context of Shariah, investment in gambling is forbidden, along with investment in alcoholic drinks, pork meat and pornography. First and foremost, in the context of Islamic finance, interest-bearing loans are forbidden, which leads to different financial services, such that religious principles are respected, while profit is pursued via financial intermediation and entrepreneurship. Despite adherence to religious principles, common characteristics across economies worldwide generate similarities between financial institutions. Thus, sukuk contracts in Islamic finance bear resemblance to bonds in conventional financial services, takaful resembles an insurance contract, musharakah is similar to a joint venture, ijarah is like leasing and murabaha bears some resemblance to conventional bank loans.

Furthermore, in the context of zakat (a rule of Islamic philanthropy), investors are obliged to offer part of their profit to charity. Thus, Islamic finance applies some of the familiar practices of socially responsible investments and corporate social responsibility and faces similar difficulties in matching ethical principles with the portfolio's risk-return tradeoff (Dergis & Marzban, 2009; Erragraguy & Revelli, 2015; Nainngolan, How, & Verhoeven, 2016). Islamic finance is social finance not only to the extent that it applies principles of socially responsible investments but also since investment decisions and financial practice pursue -on top of profit- social impact via the implementation of Shariah in Muslim societies.

The implementation of Shariah is key to the governance of Islamic financial institutions and to the ability of these institutions to respond to the requirements of the global economy. E.g., Islamic banks establish Shariah Supervisory Boards that advise bankers on contract design so that financial services are Shariah-compliant. At the international level, the implementation of Shariah in the financial services industry is fostered by organizations such as the Islamic Financial Services Board that sets standards and guiding principles for financial practice, and the Accounting and Auditing Organization for Islamic Financial Institutions that sets accounting and auditing standards for Islamic financial institutions. These organizations aim at preserving the adherence of Islamic financial institutions to Shariah principles while supporting these institutions deal with major challenges such as the compatibility of Islamic financial practices with conventional ones in a way that accommodates the global features of economic activity and systemic financial stability (e.g., Abozaid, 2016; Hasan & Aliyu, 2018; Pappas, Ongena, Izzeldin, & Fuertes, 2017).

### 2.7. Cooperative financial institutions

Cooperative financial institutions include organizations such as cooperative banks, credit unions and building societies. They are based on the principle of solidarity in the context of a local community. Cooperative financial institutions generally involve the financing of local community needs, with community members being employees of the cooperative financial institutions, depositors and borrowers. Community members also elect the management of cooperative financial institutions. If these financial institutions have, in tandem with profit from financial services, a fundamental orientation to solidarity

among the members of the local community and to its economic development, they constitute mechanisms of social finance.

To the extent that owners, depositors and borrowers are the same individuals, cooperative banks may be in a better position to mitigate some principal-agent and principal-principal conflicts that may plague bigger, joint-stock banks. Moreover, the focus on the local community implies an orientation to long-run objectives (as opposed to short-run profitability in joint-stock banks) and a limited network of suppliers of capital, i.e. the members of the community. Therefore, cooperative financial institutions may tend to make conservative choices and stay rather small in terms of market share. These characteristics may have been decisive in cooperative banks' resilience during the global financial crisis of 2008 (Fiordelisi & Mare, 2014). However, the focus on the local community may increase cooperative financial institutions' dependence on local authorities and their sensitivity to the short-term political cycle, thereby resulting in corporate governance problems (e.g., Anguren Martín & Marqués Sevillano, 2002; Caretta, Farina, Gon, & Parisi, 2012). Moreover, the size and the ownership structure of cooperative financial institutions limits their exposure to the market for corporate control (e.g., hostile takeovers and shareholder activism) which may tend to aggravate problems in corporate governance (D'Amato & Gallo, 2017).

The boundaries between institutions of social finance are not strict and many organizations combine the characteristics of different institutions of social finance. E.g., there are microfinance institutions that apply principles of Islamic finance and venture philanthropy organizations that support social impact bonds. Moreover, there are no strict boundaries between institutions of social finance and conventional financial companies. Conventional banks often finance impact investments and, at the same time, social financial institutions diverge from their fundamental orientation, applying practices of for-profit financial companies.

### 3. The social finance network

As with any institution of financing, the market of social finance is a social network that consists of the suppliers of capital, the recipients of capital, the institutional framework and financing flows (e.g., Varga & Hayday, 2016).

#### 3.1. Capital supply

The supply-side of the impact capital market includes governments, donors, banks, venture philanthropy organizations and social investors. Suppliers of capital vary with respect to the amount of capital that they are willing to contribute, their perception about the purpose of impact investments and, of course, with respect to the financing channels that they are willing to employ. The amount of financing ranges from a small contribution to a fundraiser to underwriting social impact bonds and endowments for the establishment of universities.

Capital supply relies on a wide variety of motives: there is always a mix of pursuing private and public benefit, but the composition of the mix varies. E.g., a microfinance institution pursues profit that is necessary for its survival, maintaining though the emphasis on economic development by financing and vocationally educating very poor people who are excluded from the capital market and from the prospect of setting up their own business. Similarly, in financing a joint-stock shipping company located on an island, the profit motive is combined with the motive to contribute to the island's economic development. The variety of motives and amounts of financing creates problems which involve the combination of different priorities and asymmetric information among suppliers of capital. E.g., the investor in a social cooperative that produces coffee in Kenya may be involved in an area with limited information about local farmers who receive finance and a government policy with different priorities than his own. These problems impede the emergence of international institutions for the

financing of impact investments, contribute to the increase in financing costs. They also indicate the need for institutional changes in financial intermediation to reduce intermediating costs and enhance the flow of finance to impact investments.

It should also be noted that social and financial objectives do not necessarily diverge. Sometimes, social investors are the non-profit branch of companies that are primarily for-profit. E.g., the MasterCard Foundation is associated with Mastercard and the GS Social Impact Fund is the social investment branch of Goldman Sachs. A for-profit organization's (such as a bank or an oil company) engagement in the pursuit of a charitable cause (such as the protection of the environment or the fight against crime) can contribute to the organization's acceptance among stakeholders and to improved financial performance (e.g., Caroll & Shabana, 2010; Cho, Roberts, & Patten, 2010; Dhaliwal, Li, Tsang, & Yang, 2011; Ghoul, Guedhami, Kim, & Park, 2018; Lu, Shailer, & Yu, 2017; Patten, 1992).

#### 3.2. Capital demand

The organizations that receive financing constitute the demand-side of the market for social capital. The recipients of capital are social entrepreneurs and civil society organizations with social and environmental pursuits, such as the preservation of the natural environment, promotion of fine arts, support for a political program, and the fight against poverty, inequality, illiteracy, social exclusion, public health threats, refugee problems. The fact that these organizations pursue positive social outcomes does not shield them against the challenges of sound financial management, since they have operating costs, revenues and, ultimately, incur net incomes or losses. For instance, a private, not-for-profit university may be founded upon an endowment fund and focus primarily on the advancement of science in the region where it operates. However, the fact that this university is collecting tuition fees is a fundamental reason that could convince a potential creditor of both capital recovery and interest revenue from financing the university.

Apart from social enterprises and civil society organizations, the demand-side for social capital often involves pure for-profit enterprises whose growth, however, is perceived to foster economic development. Businesses that are started by very poor individuals constitute such a case. These entrepreneurs are often unable to send adequate signals to creditors about their trustworthiness and, therefore, end up with liquidity problems and limited access to capital. Any conventional credit rating system would exclude small farmers and entrepreneurs with no personal wealth, striving mostly for survival in conditions of utmost uncertainty. These are fundamental users of the channels of social finance in developing economies in Sub-Saharan Africa, India and Latin America. Social finance does not include only the financing of very poor people who are excluded from the bank system. It includes generally the financing of people with systematic difficulty in accessing finance, like women in developing patriarchic economies, people who recently got out of jail, former drug addicts etc. To the extent that financing these entrepreneurs is part of the solution for the improvement of their lives and the economic development of their region, the organizations that focus on these channels of finance constitute nodes in the social finance network.

A major challenge on the demand-side involves the uniqueness of the entrepreneurial activity that usually prevents capital-seeking organizations from presenting estimates of future profits and thereby convincing capital suppliers: while financing a publishing company can be based on evidence about the book market and a loan to a hotel can be based on the comparison with similar loans and hotels, the financing of, e.g., a public town library is based on much less information about prospective revenue. Increased investor uncertainty implies higher cost of capital and, ultimately, less available capital for the funded organizations. Furthermore, the uniqueness of the financed project often prevents the funded party from convincing the investor about the feasibility of a project's social impact: e.g., while the achievement of a high

profit margin constitutes positive evidence on an investment's performance in the publishing industry, it is not equally straightforward to determine the adequate performance of an investment combatting illiteracy (how do we connect the reduction of illiteracy with the specific amount of money that was spent for this purpose?).

Overall, it is hard to draw a strict line between the supply and demand of capital in social finance. E.g., microfinance institutions and venture philanthropy organizations can be both on the demand and the supply side, as they are often impact investors themselves, seeking finance to mitigate social problems. Governments are another case in which the boundaries between the supply and demand for capital are indiscernible. Governments are important actors in the capital market for impact investments and, of course, in the field of organizing and implementing an impact investment. After all, governments are the biggest producers of public goods. On the demand side, governments often seek private capital which complements government resources in the production of public goods: initiatives to support the homeless and the formerly incarcerated employ government resources but often also rely on individuals who support government action by financing and implementing social welfare services (as in the case of the HMP Peterborough Social Impact Bond). In the domain of capital supply, governments often do not have all the necessary resources for the implementation of an impact investment, but they support it via funding (e.g., the Australian Government is financing social entrepreneurship via the Social Enterprise and Development Funds and the Irish government is financing the Social Innovation Fund) and infrastructure (e.g., the operation of a hospital that was financed by a donation can be implemented via its inclusion in a National Health System).

### 3.3. Institutional framework

The rules of social finance determine the focus, the scale and the stability of the capital market for impact investments. They also shape the relationship between social finance, entrepreneurship and the mainstream financial system and, finally, the effect of impact investments on economic development. The articulation of an adequate institutional framework can increase the number of investments that are finance-ready, in terms of regulation and business planning. Differences in the quality of institutions can help explain asymmetries in the development of the capital market for impact investments. E.g., while there is a pressing need for impact in Sub-Saharan Africa, pioneering impact investments take place in the United Kingdom, the U.S.A., South Asia and Latin America (Oleksiak, Nicholls, & Patton, 2015).

As the emergence of a growing number of social enterprises and social financial institutions is rather recent, the regulatory framework is still being formed and adjusted to the broader institutional framework of social entrepreneurship and the preexisting framework that affects mainstream financial institutions. In this context, the Social Impact Partnership to Pay for Results Act in the USA complemented the preexisting institutional framework of social enterprises, such as the legal form of the Benefit Corporation and the Low-Profit Limited Liability Company. Likewise, the Jumpstart our Business Startups Act in the USA was adjusted to the institutional framework of the Securities and Exchange Commission about debt and equity securities.

The institutional framework is also important because it determines each organization's position across the impact-profit divide and shapes the match between the supply and demand of impact capital. For example, a non-profit organization is more likely to receive financing in the form of donations and charity grants or via crowdfunding and least likely to receive equity capital. Likewise, an employee-owned cooperative operates under rules and ownership structures that deter large-scale for-profit investors (e.g., Paraque & Wilmott, 2014). In contrast, start-ups and small and medium sized enterprises that are for-profit and operate as corporations can attract both venture philanthropists (that advocate the support of entrepreneurs with limited access to finance) and for-profit investors who supply equity or debt.

Similar financial possibilities (debt and equity capital) apply to for-profit companies which are incorporated as benefit corporations in the USA and pursue social objectives. However, their obligation to disclose their impact to stakeholders (annual benefit reports) and the fact that their mission is protected against ownership changes makes them more appropriate for impact-minded investors.<sup>7</sup>

### 3.4. Flows of financing

There is a wide range of financing contracts that respond to the financing needs of social investors. Financing contracts are mainly articulated on three elements: equity, debt and charity. These contracts are adjusted to the investor's need for payback, her rights in the management of the social enterprise, the magnitude and the timing of her cash flows (Nicholls & Emerson, 2015). At any rate, financing mechanisms affect the relationships between all stakeholders and they also shape the effectiveness of employed capital.

#### 3.4.1. Donations and charity grants

Charity grants are a typical way of private financing for social investments. Donations and charity grants in the USA exceeded \$390 billion in 2016, according to USA Giving.<sup>8</sup> Charity grants provide the necessary capital for investments like schools, universities, orphanages, libraries, museums and the like. Less frequently, charity grants provide the funding that is necessary for the operation of the impact investment for years after its initial completion. The most characteristic feature of donations and charity grants is that they constitute financial losses: the donation will never yield (to the donor) an adequate cash flow to regain the initial capital outlay, and philanthropy is defined, in financial terms, as investment that leads to complete loss of capital (e.g., Cooper, Envine, Finkelman, Huntington, & Lynch, 2016). This is a characteristic example of the investor's priorities extending beyond the risk-return tradeoff. In standard cases of philanthropic capital, the expected social return and the exposure to social risk are exhausted at the financing phase: at the moment when capital is donated for a social cause, the investor's need to contribute to welfare is "satisfied" and business risk and responsibility are undertaken by the social enterprise that employs the supplied capital.

The fact that some investors are prepared to invest and lose all their money is a catalyst in the design of financial contracts for social investments and in the ability of these investments to generate welfare at a greater scale and for a wider range of social problems. For example, the philanthropic capital (which means – 100% return) can be used as the initial capital outlay for a social investment, underwriting social impact bonds, and providing collateral for a loan to a social enterprise. In this way, philanthropy absorbs part of the financial risk, reducing the financial risk that is undertaken by the other investors, thus helping them achieve a better risk-return tradeoff and assess more favorably their participation in an impact investment. Therefore, by facilitating the engagement of other investors, philanthropic capital acts as a catalyst for financing impact investments.

A fundamental challenge for donation and charity finance is the sustainability of the investment after donation money has been spent. Even in the cases where a donor offers money to cover operating expenses of a social enterprise for long after its inception, this money usually does not suffice and additional funds may be sought from other sources. E.g., the Shantou University in China is a public university that was founded with a donation from the Li Ka Shing Foundation and it is

<sup>7</sup> Being incorporated as a benefit corporation is not the only way for a for-profit company to signal its eligibility for impact capital. For example, the "B corporation" certificate, issued by the B Lab, certifies that a company meets high standards of accountability, transparency, social and environmental performance.

<sup>8</sup> <https://givingusa.org/tag/giving-usa-2017/>.

now also financed by the Chinese government. The American Red Cross largely depends on donations and charity but 17.63% of its liabilities and net assets consist of long-term debt. Another issue with donations is the fact that they are closely connected with business cycles: when the economy is in a recession and business profits are falling, there is also a decline in the possibility to finance impact investment with charity. The decline in charity after the 2008 crisis is a case in point (Meer, Miller, & Wulfsberg, 2016).

Furthermore, donors often set restrictions for those who employ the donated capital and these restrictions reduce entrepreneurial flexibility (e.g., if the donor has offered her wealth for the construction of a hospital there may be problems in converting the hospital to a school). Finally, the financial assessment of donations must consider operating costs that relate to resources that are consumed by a social enterprise in the pursuit, organization and management of donations.

### 3.4.2. Lending

Impact investments can be financed with loan contracts such as bank loans and bonds. The benefits of borrowing are associated with the limited time span of financial dependence and the fact that taxes are expenses that reduce taxable income (even though many social enterprises operate in a favorable tax environment). Furthermore, after the loan has been repaid, the borrower can reassess the strategy of the social enterprise, relieved from restrictive terms such as those that often characterize donations and charity grants.

Of course, there are limits to the advantages of loan finance: extreme borrowing can lead a social enterprise to bankruptcy. However, borrowing is a more frequent form of social finance than equity; 75% of impact investments are financed with loans (Saltuk, Bouri, & Leung, 2011). Moreover, loans play a significant role in impact investments since a major part of social economy involves financial services. Credit unions, microfinance institutions and development banks are cases in point. Loans, however, are not immune to the fundamental problems of social finance. Socially innovative investments in areas with extreme poverty and fragile development dynamics are often plagued with information asymmetries between the lender and the borrower. This asymmetry is incorporated in the terms of financing, increasing the interest rate and, ultimately, the price that the citizens pay to benefit from impact investments.

### 3.4.3. Equity

Equity is an important source of financing for entrepreneurship. It is the capital that is contributed by social entrepreneurs and a fundamental source of financing in the field of venture philanthropy. Organizations like Acumen, the Omydiar Network and LGT Lightstone often participate as owners of funded operations, undertaking the high risk that is associated with innovative investments, which a) are hard to liquidate (could there ever be a stock market for securities of a company that employs only women in warzones?), b) emerge in economies with extreme poverty, often lacking the institutional framework for the capital market to finance development projects and c) are expected to deliver development impact after a long period of time. Acumen, for example, employs the term "patient capital".

As the ownership of a company entails some rights to control the company's management, social investors who act as partners in social enterprises can, through their relationship with the management, offer their knowhow in the planning, implementation and assessment of impact investments. This technical assistance is important for the independent course of the supported impact investment when the initial founders leave the project.

There are no strict barriers between competing forms of social finance. Many investors offer charity grants, debt and equity. This is the case in Ajooni in India, Mission & Co in Malaysia, Partnership for Change in Myanmar, the Rockefeller Foundation in the USA etc. Many venture philanthropy organizations offer complex forms of financing, like the convertible loan (which gives the lender the possibility to

become shareholder) and the convertible grant (which gives the donor the possibility to become a shareholder in case that the impact investment is profitable). Another form of financial innovation in the area of social finance is quasi-equity capital, where the investor gets part of the profits when profits surpass a certain threshold (the investor's participation in the profits may be limited by a maximum level of profitability or a time span after which the investor cannot take part in the profits).

## 4. Challenges in the analysis of impact investments

Social economy and social finance are spreading internationally, attracting the attention and the resources of citizens, governments, capital suppliers and people who need the services of the social economy. The design and the analysis of impact investments are facing a wide range of methodological challenges, which are linked with the priorities of social entrepreneurs and the application of conventional methods of financial analysis in an environment of complex investment criteria and limited access to organized capital markets.

### 4.1. Measurement and valuation

An impact investment's social and financial returns must be incorporated in a unified assessment and, if possible, a unified measurement. Apart from evident causality problems in connecting impact investments and social outcomes and the fact that social goods are non-rivalrous and non-exclusive, investment appraisal for impact investments must assess financial and social outcomes as distinct but also as components of a single objective.

The measurement of social impact is important if we want to derive ethical value out of impact investments (Paranque & Revelli, 2019). It is also a necessary condition for expressing social impact in monetary units and, therefore, for the assessment of investment choices. The ability to price impact investments and incorporate evaluation algorithms in the decisions of social finance depends on the availability of data and reflects the priorities of the people who create and employ these decision-making instruments. The subjective point of view of each investor and stakeholder is important because most such investments have a horizon that exceeds the fund managers' limits for accountability and control (e.g., the implementation of objectives like the protection of the environment and social cohesion take place in a usually distant future). In this context, the diverse interests and preferences of all stakeholders affect the assessment of probabilities for the outcomes of impact investments, impact measurement and its expression in monetary terms, the estimation of a discount rate and the analysis of causality between impact investment and social or environmental change.

The need to evaluate impact investments drives the process of standardizing information about social finance and has led to the emergence of impact measurement and reporting systems like the Global Impact Investing Ratings System, the Impact Reporting and Investment Standards, EngagedX and the Outcomes Matrix. Standardization is needed to reduce the impact investors' uncertainty about blended (social and financial) value and to reflect the priorities of a large network of impact investors: Those who supply capital and those who use it to achieve social impact. These are donors, foundations, governments, small and big investors, investment funds and, of course, social enterprises. All these parties are important factors in the demand and supply of information. The demand for information can result in the production of structured information like reports and metrics. Conversely, the production of structured information will reduce the uncertainty that investors perceive and, therefore, will lead to more investments. The relationship between the development of a widely accepted metrics framework and the growth of social economy is largely bidirectional.

#### 4.2. Risk-return: extending the analysis to include social impact

Social finance analyzes investments that are articulated in a triptych: risk, return, social impact. While risk and return are well defined in the theory of financial economics and their magnitude can be expressed with known statistical measures, social impact is hard to measure and even harder to attribute to a specific investment.

Impact investments may often be characterized by a positive risk-return tradeoff. Suppose that an impact investor wants to help combat Alzheimer's disease. One way to do this is to create a facility where patients can have medical care or even be hospitalized for a short period of time. This approach has low risk in the sense that more people will feel better and will be supported in their problem (there are, of course, potential issues with facility operations or patient response). However, this is an investment of low social return, in the sense that it addresses the symptoms (and secondarily the social problems that are associated with the patients' disease and care), but it does not mitigate the causes of Alzheimer's disease. A different approach to disease-related problems is to finance research and development for drugs that can cure the disease. This is an investment with higher risk as there is substantial uncertainty about research outcomes, the trials and the drug's commercial performance. If the investment is successful, the social return will be huge, incomparably greater than simply curing the disease's symptoms.

Impact investments are usually unique, in the sense that they are articulated on the historical trajectory of the social problem that they try to solve. For example, an investment in educating women in a developing country is shaped by the institutional environment of that country and it is hard to compare it with an investment in education in other countries. The particular identity of this investment affects the possibility of assessing its risk. The uniqueness of social phenomena which attract impact investments means that they are not quite repetitive, probability estimates are always subjective and, therefore, it is hard to assess probability as frequency.<sup>9</sup> However, these difficulties do not eliminate the need for quantitative measures and probability estimates: an adequate appraisal for a social investment must include quantitative assessments for both private and social returns and risks that stem from this investment.

The estimation of expected and required returns from impact investments matters since it determines the discount rate and, therefore, affects the verdict on the feasibility of an impact investment. As investors' motives and preferences vary, their required return also varies. For some investors the achievement of social impact suffices and they are satisfied with a risk-free rate of return like that of a Treasury Bill. Other investors believe that they undertake increased risk by financing investments in developing countries and weak institutional framework and require investment returns above 10% (Bugg-Levine, Bradenburg, O'Donohoe, Leijonfvud, & Saltuk, 2010). The first scenario of very low discount rates appears mostly in investments undertaken by governments and development banks (Freeman, Groom, & Spackman, 2018). Low discount rates contribute to an assessment process which does not underestimate positive outcomes that are expected to occur in the distant future. In principle, however, we cannot rely on a very low or risk-free rate of return to evaluate impact investments: impact investors face a wide range of investment choices, which vary not only with respect to the expected social impact but also with respect to the range of possible outcomes (therefore, they have different risk). Thus, one cannot employ a discount rate that assumes that all impact investments have the same expected return (the risk-free rate) and, likewise, that all alternatives have the same risk, which is close to zero.

<sup>9</sup> De Finetti (1989). The subjectivity in probability estimates for social phenomena highlights the possibilities of Bayesian statistics in the appraisal of impact investments.

#### 4.3. The scale of impact investments and conventional capital markets

The organizations of social economy are usually small, in the sense that they employ less capital than conventional firms in the same industry. For example, a social supermarket is always smaller than a for-profit supermarket chain and a microfinance institution is smaller than a respective conventional bank. This essentially excludes social financial institutions from financing infrastructure projects, which shape development dynamics in the very economies that impact investments attempt to change for the better. A change in scale requires a change in the business model, the communication with stakeholders, the perception of social impact and, of course, the relationship with money and capital markets. Furthermore, impact investors often bear a lot of risk and business plans usually limit the project's scope to the founders' vision, away from secondary capital markets and investors who often pursue control in accordance to the amount of supplied capital. While a larger scale of social investments is necessary to achieve broader impact, impact investors' access to conventional finance channels is rather limited (Schmidt, 2010).

Apart from measurement and valuation problems, access to conventional finance is prevented by the fact that founders of social enterprises (on the demand side in capital markets) sometimes lack the skills or the mentality that is needed to convert their enterprise into a large-scale organization. Moreover, there is often a fear of the changes implied by organizational enlargement. It is the fear that monetary criteria will prevail, and social criteria be undermined as new investors may diverge from the founders' non-profit priorities (e.g., Beisland, D'Espalier, & Mersland, 2019; Ebrahim, Batillan, & Mair, 2014). Banco Compartamos is a case in point. It was the largest microfinance institution in Mexico that launched an IPO in April 2007, generating massive profits for initial non-profit investors such as the World Bank and Accion International, while charging interest rates as high as 86% on loans to low-income Mexican women. The combination of high-interest-rate microloans with IPO profits sets an example of the contradictions that can emerge when social finance is integrated in conventional capital markets (Ashta & Hudon, 2012).

A first response to the problem of the scale of impact investments would be the development of organized capital markets for impact investments. The development of capital markets for attracting and circulating capital for impact investments can facilitate the flow of information in this market and increase liquidity, reducing uncertainty for investors and reducing the cost of financing for social enterprises. There are many impact investor networks, which operate mostly as implementation channels for impact investments. Such platforms include SASIX in South Africa, Social Venture Connexion in Canada, Ethex and the Impact Investment Network in the UK.

#### 4.4. Investment horizon

Long-term investment objectives are another characteristic feature of social finance. Since impact investments aim at mitigating social and environmental problems, the investment horizon is inevitably very long. Indicatively, Acumen's "patient capital" refers to an investment horizon between seven and ten years, while other approaches extend the investment horizon even longer.<sup>10</sup> For example, Acumen finances BroadReach, an organization that provides healthcare for AIDS patients in South Africa. In chronic diseases, the investor must be patient and account for all the factors that affect investment success, such as government policy. Of course, lengthy investment horizons aggravate causality problems in the appraisal of impact investments: the longer the investment horizon, the more the factors that -apart from the investment- affect the dynamics of a social phenomenon.

The length of the investment horizon is not only a necessary

<sup>10</sup> <https://acumen.org/about/patient-capital/>.



condition for the achievement of positive impact: it is also an essential element of investor preferences and, therefore, an element of portfolio performance evaluation in impact investments. To the extent that impact investments are articulated on the triptych of risk, return and social impact, an investor's horizon reflects the balance between financial and socio-environmental objectives. In this context, the time-value-of-money principle may not suffice to capture sustainability concerns (Baur & Lagoarde-Segot, 2016): Investors with shorter horizons may place heavier emphasis on financial returns than on sustainable outcomes that emerge after many years.

#### 4.5. Metatheoretical concerns

Financial services and capital markets are interwoven with the theory of finance and the community of financial economists (Andrikopoulos, 2013). This means that financial services are sometimes shaped by the postulates of the theory of finance and that the theory of finance emerges, in part, as a response to the questions that are raised by capital market participants (MacKenzie, 2006). Therefore, if social finance emerges as a response to capital market failures with respect to social and environmental priorities, then the ontological, epistemological and methodological principles of financial analysis must be reconfigured to accommodate the emerging marketplace of social finance (Lagoarde-Segot & Paraque, 2017, 2018; Paraque, 2017).

Since market participants in social finance try to change the society and the environment for the better, financial analysis should depart from the ontological starting point that market participants are rational utility maximizers (utility maximization often being associated with shareholder wealth maximization in the largest part of the theory of corporate finance, asset pricing and portfolio management). When investment decisions rely on principles such as solidarity, trust and altruism (Artis, 2017; Broadback et al., 2019), the analysis of individual behavior can extend beyond the realm of economic analysis and incorporate the epistemic equipment of other social sciences (Lagoarde-Segot, 2015; Lagoarde-Segot, 2016). Moreover, the fact that social-finance market participants try to change the society and the economy implies that social finance does not operate within a closed system where constant regularities help unveil causal relationships and “whenever X then Y” propositions best serve the purpose of explanatory accuracy. Instead, it is precisely because the economy constitutes an open system that social-finance market participants try to change its structural elements, rather than reproduce them.

Furthermore, most social and environmental problems are unique in that they emerge out of a unique social and historical context. For example, one cannot construct a large sample of inequality and poverty problems that are substantially alike, given the diversity of economies and societies across the globe. Likewise, we cannot construct a sample of environmental challenges identical to the ones that the global economy is currently facing, given the uniqueness of our times (or any other point in economic history for that matter). Therefore, epistemologically, we cannot pursue the discovery of regularities as indications of causality (as is often the case in the econometrics of financial markets). Instead, each social and environmental problem must be explored in its unique context, incorporating qualitative research methods which may be more appropriate to investigate qualitative changes that may be delivered by impact investments (Lagoarde-Segot, 2019). This is not to say that quantitative methods are not important; Social Impact Bonds, for example, are designed on the premise that social impact is measurable and associated with monetary payoffs. However, the choice of quantitative approaches must account for the historical context in which social problems and respective financial innovations are situated.

## 5. Conclusion

Social finance is a new financial marketplace which relates to the

emergence of social economy and social entrepreneurship. It is also associated with the limitations of government policy and the failure of markets to efficiently produce solutions to social and environmental problems. The mitigation of these problems can be supported by a network of innovative social enterprises and financing mechanisms. Social impact bonds, venture philanthropy and crowdfunding are mechanisms that transform the landscape of charity and redefine the role of financial institutions in solving social problems and pursuing economic development.

In this context, financial analysis extends beyond the risk-return tradeoff to incorporate social and environmental impact. Monetary profit and positive social change are essential elements of the appraisal of impact investments. The new financial landscape creates challenges for suppliers and recipients of finance, regulators and policy makers. These challenges include the methodological problems of conventional financial economics and expand them to account for the characteristics of impact investments: lack of generally accepted accounting standards and impact metrics, as well as secondary capital markets for financing social entrepreneurship.

Furthermore, the institutions of social finance must be watchful over their ever-changing mix of doing good and making profits. Their financial performance should not be sustained at the expense of misplacing their social mission. Finally, the most important challenge in delineating social finance is to define the boundaries between the private and the public sector in the handling of social and environmental problems. Increased involvement of citizens, companies and civil-society organizations is fundamental for the sustainability of the global economy. However, citizen involvement may lead to welfare state and environment policies being substituted by private initiative. We should keep in mind that the private and the public sector are not perfect substitutes.

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