Article

Social Finance Investing for a Resilient Food Future

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Abstract: The converging climate, biodiversity, public health and nutrition emergencies highlight the need for more regenerative food systems. Despite the recognition that regenerative food systems enhance resilience, resource efficiency, and equity, they continue to be dwarfed by extractive industrial approaches. One factor that is holding back regenerative food systems is their lack of access to financial capital. In response to this financing gap, social financiers have turned their attention to regenerative food systems. To date, the scholarship exploring the role of social financing in supporting regenerative food systems is limited. Yet, this is an important area of study for understanding the tools that could support pathways towards greater social and ecological resilience in our food systems. This paper develops propositions on the links between social financing and regenerative food systems, with qualitative insights used as illustrations. Six semi-structured interviews were conducted with key stakeholders related to social finance and regenerative food systems in the United States. Additionally, this paper draws on information gathered through presentations from the Regenerative Food System Investment (RSFI) forum. The analysis identified five observations that enrich the social finance and food systems literatures: (1) those who get funded are not necessarily the best placed to advance the goals of regenerative agriculture; (2) tensions exist between the way that scholars and practitioners view social finance; (3) impact metrics are in flux and must be approached thoughtfully; (4) the middle of the food value chain remains severely underfunded; (5) early steps are being taken to maintain diversity that is core to the resilience of regenerative food systems. Topics for further research in this emerging area are identified in the conclusion.

Keywords: regenerative food systems; social finance; impact investing; sustainable food systems; resilient food systems

1. Introduction

The converging climate, biodiversity, public health, and nutrition emergencies highlight the need for more regenerative food systems. Regenerative food systems contribute directly to goals of increasing diversity and resilience (I borrow from Tendall et al.’s definition of resilience as “the capacity to continue providing a function over time despite disturbances” and in how they position resilience as a means to achieving sustainable or regenerative goals, even when the system is under stress [1] (p. 17)). They do so by emphasizing a range of locally adapted farming practices and integrating markers of social and economic diversity to enhance the resilience of food and farming communities [2]. The term “regenerative” is gaining popularity over the now ubiquitous “sustainable” in relation to food systems [3]. For this paper, I interpret regenerative food systems as approaches that are designed to enhance soil fertility, reduce reliance on fossil fuels, and support local communities.

Despite the growing recognition amongst industry, government, and non-governmental organizations alike that regenerative food systems are sorely needed, they continue to be dwarfed by extractive, industrial approaches [4]. One reason why regenerative food systems remain small and are not expanding rapidly is because they lack access to financial capital, as they do not fit well within existing investment modalities that prioritize quick, tangible returns [5] (p. 5). However, in the past 15 years, there has been increased
interest amongst investors to step in and provide the types of capital necessary to allow regenerative food systems to flourish [6]. These investors are known as social financiers because they are not solely driven by the bottom-line, but also seek to make a positive social and environmental impact through their investments. Social financiers seek out social innovations that they believe will deliver strong social, ecological, and financial returns. These actors support regenerative food systems with varying degrees of impact depending on which definition of “regenerative” they aspire to.

To date, the scholarship exploring the role of social financing in supporting regenerative food systems is limited. Yet, this is an important area of study for understanding the tools that could support pathways towards greater social and ecological resilience in our food systems. This paper helps to fill this gap through an examination of the ways that social finance actors are investing in regenerative food systems. I see the problems faced by those seeking to build regenerative food systems as being in part caused by, on the one hand, the ways that “big finance”—or international agricultural derivative markets and other investment products—shape the broad contours of the food system and exacerbate unsustainability. On the other hand, the lending practices of traditional banking institutions at the domestic level, limit the development of regenerative food systems, particularly for infrastructure and processing businesses.

The research questions guiding this paper are: What lessons can we learn from the current trajectory of social finance in regenerative food systems, and are there policy recommendations that arise from studying such initiatives to further support a more resilient food future? To answer these questions, this paper elaborates upon the links between social financing and regenerative food systems, with qualitative insights used as illustration based on a combination of data gathered through semi-structured interviews, primary documents, and conference proceedings.

The interviews provide perspectives from the field into the motivations and strategies of social financiers interested in supporting regenerative food systems. Additionally, this paper draws on information gathered from the Regenerative Food System Investment (RSFI) forum held virtually from 14–17 September 2020. The forum brought together investors (fund managers, foundations, financial advisors, and consultants) and stakeholders (companies operating along the regenerative supply chain) interested in increasing capital investment in regenerative food systems. The presentations provided key insights into how regenerative food systems are positioned as investment opportunities as well as the challenges to building long-lasting regenerative food systems. Throughout the paper, quotes from key stakeholder interviews as well as speakers from the RSFI forum are used to supplement and add a richer picture to the scholarly and gray literatures. The analysis is based on a read of the social finance and alternative food systems literatures and is supplemented by the empirical data. This qualitative study employs the tools of grounded theory to develop key findings.

The analysis identifies the following five observations that help to paint a picture of the current state of social financing for food system regeneration in the United States. These observations indicate areas that are ripe for intervention. Briefly, these are: (1) those who get funded are not necessarily the best placed to advance the goals of regenerative agriculture; (2) tensions exist between the way that scholars and practitioners view social finance; (3) impact metrics are in flux and must be approached thoughtfully; (4) the middle of the food value chain remains severely underfunded; (5) preliminary steps are being taken to avoid concentration and maintain the diversity that is core to regenerative food systems. These observations will be elaborated upon in later in the paper.

This paper proceeds in the following manner. First, background is provided on the conceptual development of regenerative food systems. The fault lines of the debate surrounding what constitutes as regenerative are presented to highlight the importance of understanding which version of “regenerative” those investing in the food system subscribe to. Next the financial landscape as it relates to food and agriculture is presented, which demonstrates the structural challenges that are faced by those seeking to build more
regenerative alternatives to the industrial food system. The notion of corporate consolidation is emphasized here, as it paints a picture of the powerful forces that alternative models come up against in their quest to transform food systems. Following the contextual background, the qualitative methods employed for this study are elaborated upon. The results and discussion are then presented. Finally, the conclusion provides a summary the main contributions and findings of the paper and identifies areas for future research.

2. Context and Background

2.1. Versions of Regenerative Food Systems

There is a growing sense of urgency amongst a variety of actors and institutions on the need for food system transformation [7–9]. The conventional industrial food system has created social and environmental problems that are impossible to ignore and a variety of pathways have been proposed to transition food systems towards greater sustainability. Regenerative food systems have received significant attention amongst academics and practitioners in recent years. “Regenerative” has gained popularity as many believe that merely maintaining the status quo, as the term “sustainability” implies, is simply not enough. Indeed, to regenerate suggests “a degree of cumulative emergence—a more-than-the-sum-of-the-parts type of outlook that is interested in more than maintenance” [10] (p. 1). Some believe that “sustainability” has become watered down and co-opted by defenders of industrial agriculture and maintain that stronger vocabulary is in order [3].

There is however no legal, regulatory, nor widely adopted definition of regenerative agriculture. Some equate regenerative food systems with specific farming practices that are designed to enhance soil fertility and sequester carbon. For instance, Rhodes states that regenerative agriculture “has at its core the intention to improve the health of soil or to restore highly degraded soil, which symbiotically enhances the quality of water, vegetation and land-productivity” [11]. However, others maintain that regenerative food systems are much more encompassing and foster agro-bio-socio-economic diversity. Rather than a rigid definition, Duncan et al. who favor of a more holistic approach present six principles of regenerative food systems and emphasize that these are dynamic and cross-cutting: (1) acknowledging and including diverse forms of knowing and being; (2) taking care of people, animals and the planet; (3) moving beyond capitalist approaches; (4) communing the food system; (5) promoting accountable innovations; and (6) long-term planning and rural-urban relations [10] (p. 5). The above definitions are merely two examples in the wide range that exists.

Since there is no agreed upon definition, some adopt a narrow understanding of “regenerative” and focus mainly on improvements to physical landscapes, while others consider a more encompassing logic that necessitates profound changes in market relationships. This lack of conceptual coherence has meant that a variety of approaches can fall under the banner of “regenerative” with more or less potential for transforming our food systems towards greater resilience. Thus, regenerative food systems can easily fall prey to the same co-optation of the agrifood industry as sustainable food systems. Indeed, there is evidence that this is already underway. General Mills and the World Business Coalition on Sustainable Development (a coalition that consists of corporate heavyweights such as Walmart, Danone, Loblaw Companies Limited, McCain Foods, etc.) endorse the language of regenerative agriculture to drive transformative systemic change. However, they tend to only identify with a narrow definition of regenerative agriculture, largely soil fertility, abandoning the holistic socio-ecological goals that regenerative practices were originally designed to achieve. Similarly, in the world of social finance, there are those who take a more holistic interpretation of “regenerative” and others that focus on narrow indicators to achieve their goals for a more regenerative food system.

Agroecological food systems and related approaches are practices that are designed to produce regenerative outcomes. One of the defining characteristics of these approaches is their commitment to enhancing diversity—both ecological diversity as well as the diversity of actors that can thrive all along the food value chain. Diversified agroecological systems
fall in stark contrast to the conventional food system, which is dominated by a handful of powerful corporations that support industrial methods of production [12].

2.2. The Relationship between Industrial Food Systems and Mainstream Financial Investment Patterns

The industrial food system is characterized by uniformity rather than diversity, making it vulnerable and less resilient to disruption [4,13]. Industrial agriculture which relies on the heavy use of chemicals and fertilizers as well as intensive monoculture and feedlot farming contributes to a host of environmental ills such as biodiversity loss, high CO2 emissions, and polluted waterways [14]. Moreover, food system scholars point to the ways that corporate concentration in the food system increases income inequality along the food value chain and strengthens the power of private interests in food system governance [15–18].

Mainstream finance—both the activities that shape the broad contours of the food system through patterns of international financial investment and localized lending practices—tends to work in ways that reinforce the industrial food system. Structural forces such as financialization, which is the “increased influence of private capital on the agrifood system” [19], intensifies the flow of speculative investments into food and agriculture and furthers industrialization [20]. These investments tend to be in agricultural commodity markets, large scale land investments, and publicly traded food companies—all features of industrialized food systems. The rise of speculative investments in agricultural commodity markets has further entrenched industrial agriculture. For instance, a connection has been made between financial investments in agricultural commodities and higher food prices [21]. These higher food prices, in turn, have led to increased interest in large-scale farmland acquisitions. These investments are often made on land that produces commodities, or adopts large-scale industrial farming methods that are harmful to the environment [22] (p. 215).

Moreover, financialization has also led to the ascendance of shareholder value in corporate governance, which has served to restructure the food system towards greater corporate concentration [23]. Put simply, the rise of shareholder value has led companies to prioritize generating short-term profits for shareholders over other goals such as investments in research and development. According to Clapp and Isakson, to satisfy shareholders “the executives of agrifood firms have pursued growth strategies that include financial activities as well as mergers and acquisitions” [20] (p. 443). Prioritizing investors’ interests has encouraged corporate consolidation in the agrifood sector, ultimately limiting options for more diverse, regenerative models to thrive.

Through vertical and horizontal integration, multi-national food corporations have amassed a significant amount of power over the course of just a few decades. Now a small number of companies control agricultural inputs, food production, processing, distribution, and retailing [17]. In just the last five years, we have witnessed monolithic deals that fundamentally change the structure of the markets they operate in such as the Amazon/Whole Foods acquisition and the Bayer/Monsanto merger [24].

Another manifestation of the shareholder value concept is the development of corporate venture capital funds that are set up to identify and acquire innovative start-ups. Danone Manifesto Ventures, an investment fund established by the European multinational food product corporation, is one such example. This corporate venture arm, “partners with a tribe of disruptive entrepreneurs to serve the food revolution” [25]. The fund is exploring opportunities across the entire agrifood value chain, and according to a 2018 report planned to acquire 20–25 start-up companies over a two-year period [26]. These growth strategies make it difficult to maintain diversity—a cornerstone of resilience in the food system. There is evidence that the acquisition of sustainable enterprises by larger corporations to fill their innovation gaps can dilute social and environmental outcomes as their sustainability commitments are gradually “hollowed out and subsumed into the practices of the parent company” [27] (p. 59). Alternative ownership models such as steward ownership models that are designed to avoid such concentration are avenues that
some proponents of regenerative food systems are exploring to maintain greater diversity along the food value chain.

Bank lending practices are also hindering the potential of regenerative food systems. State funding for agricultural lending declined beginning in the 1980s and the private financial services industry has not adequately filled the gap [28]. Today, alternative, regenerative food and agriculture businesses frequently lack access to capital [29]. Indeed, a lack of access to financial capital in the form of loans and equity is cited as the “chief obstacle” for beginning small to mid-tier food and farm enterprises [30]. The reasons for the lack of financing relate to: “(1) decline in the number of financial institutions providing agricultural loans; (2) decreases in lender staffing levels; (3) fewer staff with agricultural expertise even in rural areas; (4) lenders unwillingness to venture outside of their specialty areas” [31]. Moreover, banks that continue to work in this area tend to use standardized loan packages that are catered to large agribusinesses [30].

Social innovations, including regenerative food and farm enterprises, often require access to different forms of capital to be financially sustainable in the long-term. Their capital needs can differ from more mainstream businesses as the social and environmental impacts that they hope to make may require more patient forms of capital. Patient capital refers to lenient repayment terms, either related to collateral, interest rates, and the length of an investment. Patient capital is one method of ensuring that the investments support and nurture rather than place strain on investees. In addition to flexible repayment options, loan size appears to be a major issue for small to medium food businesses [31].

The market conditions in a country like the United States where industrial agriculture reigns supreme overwhelmingly favor and support large-scale operations, as 85 percent of all farm subsidies go to the largest 15 percent of farm operations [32]. The current financing landscape is evidently not well set up to cater to the types of farms and food businesses that would comprise more regenerative food systems, signaling the need for more alternative and diverse approaches.

2.3. Social Financing and Food Innovations

Several financial intermediaries, sometimes referred to as impact investors, have emerged in an effort to ameliorate conditions for small, innovative food businesses in light of the inadequate financing available. These intermediaries often involve a combination of capital from individuals and foundations. They broadly fall under the umbrella of social finance. At its core, social finance aims to employ capital in a way that is regenerative rather than extractive. The degree of financial return sought through these investments varies, but they each share a desire to generate measurable social and environmental outcomes. The main function of social finance is to support social innovations that are needed to address the complex challenges of the 21st century. It gained popularity after the 2007–2008 financial crisis, when many began to question the existing market’s ability to benefit society as a whole [33]. Today, there is a growing social financing ecosystem as government institutions, non-profits, and the private sector increasingly see benefit in leveraging private capital to deliver public goods (public goods are typically goods and services that are provided through taxation and the benefit all of society – in contrast to private goods, which are “inherently scarce and paid for separately by individuals” (investopedia.com accessed on 4 March 2021). Business schools, consultancies, and public policy think tanks are also turning their attention to the field.

Though there is no clear definition of social finance, it can be narrowly understood as “a set of investment structures—typically providing capital for social enterprises, not-for-profits and mutual organizations operating in the “social economy” across the Global North and Global South—that feature measurable targets for social impact alongside calculations of return on investment” [33] (p.113). Partly because the definition is so broad, there are varying estimates on the size of the social finance market, but the Global Impact Investing Network impact estimates the market at $715 billion globally, which though growing, is still a tiny portion of global investments [34].
Social finance intermediaries have arisen to channel capital towards social enterprises that they believe will help them achieve a desired mission. Social finance intermediaries “connect the supply side of the market, or social finance investors with the demand side, i.e., social enterprises and social good organizations” [35]. In classifying social financing approaches, Nicholls and Emerson offer the concept of a spectrum from “impact first” to “finance first” depending on the priorities of the initiatives [36]. Impact first investors will take concessionary rates of financial return for strong social and ecological performance, while finance-first investors seek market-rate or above market-rate returns to invest in social enterprises. Regardless of where a particular initiative lands, the goal is to generate blended social and financial value. Blended value emphasizes the inseparability of social and economic spheres.

In the past 15 years, there has been increased interest in agriculture amongst institutional investors, impact investors, and other funders via various funding vehicles such as real asset funds, private equity, and venture capital [6]. Indeed, more than half of respondents to the Global Impact Investor Network say they plan to increase investments to food and agriculture over the next five years [37]. Those trying to attract investment into agricultural land point to strong long-term demand and supply fundamentals. These fundamentals include rapid global population growth, economic growth in emerging markets, and changing dietary patterns as well as declining arable land per person. They emphasize how investment in regenerative food systems could generate more favorable farm economics and environmental benefits, creating more climate and community resilience. Additionally, they point to the ways that agriculture is seen as offering historically strong returns and attractive risk-return ratios.

Arguments such as these aim to increase investor confidence in farmland. Though the market fundamentals can be convincing, there is more nuance in terms of farmland investments which, in part, explains banks’ hesitancy to provide loans to individual farmers that are interested in regenerative practices. Indeed, there are inconvenient realities about investing in farmland that make it different from financial assets. As Fairbairn explains, “farmland is laden with varied and sometimes contradictory meanings: a commodity that was not produced and cannot circulate, a source of personal independence and of group identity, a productive asset that moonlights as a financial asset” [38] (p. 81). Even amongst social financiers, there are differences between the levels of financial return that are sought from their land holdings and, consequently, differences in social and environmental impact. As this study shows, distinctions between impact- and finance-first investors and the ways that funds understand what is meant by “regenerative” determine how transformative their investment practices can be.

### 3. Methodology

A combination of qualitative research methods was employed to answer the guiding research questions: What lessons can we learn from the current trajectory of social finance in regenerative food systems, and are there policy recommendations that arise from studying such initiatives to support a resilient food future? This study followed a constructivist research approach and is aligned with the principles of grounded theory, one of the most common qualitative research methods in the social sciences [39]. Put simply, grounded theory is a method that allows a researcher to develop theories that are “grounded” in the data. The main approaches for gathering data through grounded theory are interviews and observations [39]. Grounded theory is an effective method for uncovering an existing social reality, one that has not been systematically studied before and that lends itself well to rich descriptions.

A review of the scholarly and gray literatures on regenerative food systems and social finance helped to provide context for the current state of social financing in regenerative food systems. Interviews with key stakeholders involved in social finance for regenerative food systems and presentations at the RFSI forum provided valuable information regarding the opportunities and challenges facing the field. In-depth semi-structured interviews
were conducted with six key stakeholders involved in social financing initiatives for regenerative food systems. Interviews lasted up to an hour and a half and interviewees were asked open-ended questions about their motivations to invest in regenerative food systems, their investment strategies, and how they track and measure impact amongst others. Interviewees were guaranteed anonymity for themselves and their organizations. I transcribed the interviews and then coded them in two rounds (a first round of initial coding followed by a second round of focused coding). Grounded theory emphasizes the conceptual nature of coding—the fact that at every level of coding analysis is taking place and the coding becomes more abstract with each round [39]. The abstracted codes become the foundation for theories that develop based on the data. Documents such as reports and websites associated with these initiatives were also analyzed for relevant information pertaining to the research questions. Data from the RFSI forum served to triangulate the findings from the literature review and the key stakeholder interviews.

4. Findings and Discussion

Interviews corroborated findings from the literature review regarding the gaps and motivations behind social finance investments in regenerative food systems. As one interviewee noted, “Loans between $50,000 and $500,000 dollars are a difficult size. They are not interesting to large commercial banks; they are still too small. We know that the US has this farm credit system, which is geared towards the industrial food system. For them, a $500,000 loan is very small. They’re set up to do you know 10 to 100 million-dollar loans. So, loan size, I think, is part of the gap issue” (Respondent 1, 29 November 2018). On the topic of appropriately scaled financing, another interviewee relayed an anecdote demonstrating the mismatch between commercial lenders and those seeking to build alternative, regenerative food systems “like the time when a colleague of mine went to JP Morgan, or some bank like that, and [said] we want to try some alternative bond issuance at $10 million and they laughed him out of the room because they were like, “we won’t do anything under $100 million” (Respondent 6, 8 February 2019). According to Sarah Day Levesque, Director of the RFSI forum, agricultural land has outperformed both domestic stocks and bonds on an annualized basis for over 40 years. In her presentation, she highlighted how farmland also compares favorably to other asset classes, demonstrating strong returns per unit of risk that also offer diversification potential and provide a hedge against inflation. The above comments help to paint the picture for why social financiers are targeting innovative food and farming businesses. On the one hand, there is a clear gap in the financing ecosystem, leaving regenerative food businesses underserved. On the other hand, investing in the agriculture sector can be a strong investment strategy, a recognition that is drawing new investors to the sector.

Given that food and agriculture is such a popular site of investment for social financiers, it is important to gain an understanding of the implications for regenerative food systems. Five core observations arose from the interview data and presentations from the RFSI Forum. These observations help to capture a point in time in terms of the way that social finance for regenerative food systems is developing and set a future research agenda for scholars interested in this field. The five themes that emerged from the data shed light on the lessons that can be gleaned from the current trajectory of social financing initiatives for regenerative food systems and point to areas for policy intervention.

4.1. Those Who Get Funded Are Not Necessarily the Best Placed to Advance the Holistic Goals of Regenerative Agriculture

Depending on where they land on the continuum from finance-to-impact first investments, social financiers are variously attracted to enterprises based on the level of returns they can expect to deliver. For instance, funds such as Agricultural Capital which is “held to nothing short of the same return expectations for oil and gas and mining” seek market-rate returns. However, there is debate about the appropriateness and viability of such an approach. For instance, the fund manager of a financial services organization that provides “catalytic capital” to social enterprises noted that, “I think there are certain
types of organizations that you can support as an investor that you can get those market rate returns, but if we’re thinking about those organizations that are truly committed to helping farmers or helping provide healthy food access or bringing about justice in the food system, those organizations cannot deliver high returns” [40]. In addition, Mackay from Iroquois Farmland REIT expressed his opinion on the matter of returns versus impact. He argued that,

People are always asking you know what are your impacts, are you regenerative, and then what are your returns? And the entire concept of creating a system where we’re being more patient and we’re not necessarily planting the same thing every single year, those things are all by definition you know less cost effective than just growing one thing, harvesting it and selling it . . . Complicated is usually expensive and sometimes when you ask how do I solve the world’s problems and make the same amount of money with my investment? The answer is you can’t.

(Mackay, 17 September 2019)

Essentially, regenerative food systems do not always align with the requirements of the mainstream financial system. Though social financiers are attracted to the space for a combination of social, environmental, and financial incentives, the reality is that the financial incentives may not be great enough to attract significant amounts of investment required to properly support and scale these alternative food systems. Therefore, businesses that take a narrower approach to regenerative agriculture might receive more funding than those that take a more holistic approach. A holistic approach tends to take time and is misaligned with the short-termism that is typical of many financial vehicles. This was echoed by an interviewee who shared their awareness of the “social limitations, the boundaries in which our natural social systems have become increasingly misaligned with the norms and day to day operations of the financial industry” (Respondent 6, 8 February 2019). However, they remained hopeful about the “many opportunities to begin to realign those systems in a way that not only provides us with a return on investment . . . but also begin to repair if not reverse the damage that was done to both our social fabric as it relates to food and culture but also to our ecosystems and broader environment” (Respondent 6, 8 February 2019).

There is an obvious role for the public sector and foundations to provide more patient forms of capital that would support businesses that require longer time horizons. Additionally, these comments bring the issue of financialization in the food system to the forefront. Without more regulation of agricultural commodity markets and stronger antitrust laws, the negative impacts of financialization will continue to reverberate through the food system, placing strain on regenerative food systems. Indeed, the current set up tends to reward players in the industrial food system. Even social financiers are limited in the companies that they can fund depending on the level of financial return that they are seeking based on the design and structure of economic incentives in the mainstream financial system.

4.2. Impact Measurement Is in Flux and Must Be Approached Thoughtfully

The way that value is measured and captured by social financiers varies significantly, though there have been efforts to standardize this process through the development of the Impact Reporting and Investment Standards (IRIS) and the Global Impact Investing Reporting System (GIIRS) amongst others. While these tools known, the stakeholders that I spoke with largely measure impact qualitatively. For instance, one fund manager explained,

There’s about a thousand different certifications or specific metrics that you can tie to your fund or firm or operation. At the end of the day if you’re doing something that isn’t covered by one of those metrics, or there’s a holistic attribute that you’re working on that isn’t captured by a specific metric, that’s going to go unreported, and everybody is going to assume it’s zero. And so, on the one hand
don’t let the perfect be the enemy of the good, but one shouldn’t lean on metrics as being a perfect representation of everything that anybody is doing. (Respondent 5, 3 March 2019)

Some social financiers try to strike a balance between more qualitative and quantitative assessments. For instance, one fund manager explained how they measure impact mostly qualitatively, through what they call their “mission aligned assessment” (Respondent 2, 7 December 2018). It covers a few different areas such as business model, community building work, sources of capital, supply chain, resource management, leadership, and organizational culture. Borrowers fill out a tool on an annual basis so that they can then track progress and have conversations about ways to improve equity in the supply chain. This organization is hoping to add more rigor to its measurement process and have hired a consultant to help them do so as donors are “always really interested in impact data, and for good reason” (Respondent 2, 7 December 2018). Another interviewee mentioned that they are trying to figure out the right evaluation systems and put forward the idea of a “principles-based approach” to impact measurement where pre-determined principles are used as a guide (Respondent 3, 18 December 2018). In their mind, a principles-based approach “makes a lot of sense from a systems standpoint, because we can’t use linear strategies to measure a system that’s not linear. Traditional peer reviewed methodologies that isolate variables and show direct causal relationships . . . in a system there are so many indirect relationships” (Respondent 3, 18 December 2018).

The RFSI forum featured speakers from finance-first to impact-first intermediaries who presented different approaches to measurement depending on where they fall on that continuum. For instance, on the finance-first end of the spectrum, Agricultural Capital runs two real asset funds worth around USD 800 million that are trying to bring scale to regenerative agriculture. They have been “habituating measurement” by which they mean they have been putting measurement structures in place so that their team can start collecting data on water, energy, biodiversity, labor, waste reduction, pollinator health, etc. They have a performance system of 150 different factors that fall into social, environmental, and economic categories and track performance quarter over quarter, year over year. In contrast, Adrian Rodrigues from Provenance Capital Group, a boutique financial services firm exclusively focused on investing capital into regenerative natural resources, provided another warning about myopically focusing on certain impact metrics, such as carbon (emitted or sequestered). Rodrigues emphasized that there is no silver bullet to measuring impact or the regenerative capacity of a particular system, and that there is danger is focusing exclusively on a handful of quantifiable metrics and losing sight of what “true balance in an ecosystem is” [41]. Finally, Alex Mackay from Iroquois Farmland REIT noted that they publish a “public benefit report” and adopt guiding principles to track their impact, which includes land security for farmers, healthy and humane farming practices, and democratizing their shareholder base and board (17 September 2019). Mackay mentioned how since they do not own or operate the farmland, they cannot simply “flip a switch and get all the data we need.” They are constrained in collecting data “not because we’re not willing but because the cost of collecting [the data] would be to the detriment of our shareholder return. We’re proud of the metrics we can deliver but there will always be some lacking” (Mackay, 17 September 2019).

The burden that measurement can place on social enterprises in delivering more formal, quantifiable metrics is an issue that has also been raised in the literature. Not only can tracking metrics be onerous for resource strapped social enterprises, but the emphasis on metrics may change the focus on certain organizations in a way that hinders their ability to make impact. As Langley points out, on one level requiring performance data on impact may help to improve organizational efficiency and focus on what is scalable [33] (p. 142). However, “intensified competition between social organizations for social finance works to transform those organizations” towards an organization that “embraces social entrepreneurialism” for better or for worse [33] (p. 142).
Measuring impact and ensuring accountability is a major point of contention in social finance. While many are drawn to identifying quantitative metrics as a proxy for regenerative food systems, the data reveals that this is much more complicated in practice. While some are pushing for standardization of metrics, others point out the importance of a bespoke approach. I argue that reflexivity must be built into any measurement system because as organizations mature and the relevance (or irrelevance) of reporting certain metrics becomes clear over time, there will be a need to adapt evaluation approaches. Impact measurement is still a moving target, and something that is being considered at the organizational, national, and global levels. If holistic and strong regenerative outcomes are the desired goal, then the value of reflexivity and nuance must be prioritized in these conversations.

4.3. Discrepancy between the Way That Social Finance Is Portrayed by Scholars and Practitioners

In the gray literature, it is common to see social finance positioned in a positive light, which contrasts to the more critical view present in the academic scholarship. In a report published by Social Finance at J.P. Morgan and The Rockefeller Foundation in partnership with the Global Impact Investment Network, the introduction opens with “In a world where government resources and charitable donations are insufficient to address the world’s social problems, impact investing offers a new alternative for channeling large-scale private capital for social benefit” [41]. Another example is offered in the inaugural report for the Canadian Taskforce on Social Finance, which states that “mobilizing private capital to generate not just economic value, but also social and environmental value represents our best strategy for moving forward on impact” [42] (emphasis added). Moreover, on the topic of social finance David Cameron, former Prime Minister of the UK, is quoted saying “We’ve got a great idea here that can transform our societies, by using the power of finance to tackle the most difficult social problems” [43]. Interviewees and presenters at the RSFI forum also took a largely uncritical position towards social finance, which fell in stark contrast to the way that it is positioned in the scholarly literature.

Scholarly critiques of social finance point to how it is trying to use the tools of finance to solve the problems of finance. From this perspective, social finance is financializing social and environmental spheres, or, as Rosenman puts it “financializing good intensions” [44]. Here, the logics of the market rather than community-driven logics are extended and overlaid onto issues of concern. Moreover, one could argue as it has been with philanthro-capitalism that social finance relies on the existence of social ills in order to thrive [45].

There has been an effort to increase critical engagement of social finance and the sub-field of impact investing amongst scholarly communities. To this end, the Journal of Business Ethics put out a call for a special issue to critically examine various impact investing practices. In particular, the journal sought submissions exploring the ethical decision-making process in allocating capital to certain social enterprises and not others [46]. This is indeed a core question in determining how transformative social finance can be to socio-ecological systems.

The discrepancy in critical assessment of social financing amongst scholars versus practitioners is perplexing. Without this critical lens, it is unlikely that social finance will usher in radical changes to the systems that it seeks to improve. As innovation scholar Westley points out, social innovations must contain a radical seed and question broader structural constraints stand to bring about transformative change such as those required of our food systems [47]. It is important to bring these critiques to practitioners of social finance so that they can have a more realistic view of the nature of change that is possible with such an approach and as well as its limitations.

4.4. The Problem of the Missing Middle

Social financiers are investing all along the food value chain, though some parts of the value chain are receiving more interest than others. This uneven application of investment dollars creates challenges when trying to build a holistic, regenerative food system. As
mentioned, farmland tends to be a relatively popular site of investment. However, according to the Conservation Finance Network, mainstream farmland ownership and financing avenues have created barriers to the adoption of regenerative agriculture. The first barrier relates to price as farmland values have doubled in the last decade alone. This has made it very difficult for new farmers to enter the space and has led to a situation whereby 38% of all farmland and the majority of cropland is rented in the United States [48]. Tenant farmers are less likely to invest in the types of regenerative agriculture practices required that lead to healthier, more biodiverse soils, as these require long time horizons. If there is a chance that they may not be able to continue farming a particular plot of land once their leases run out, they face a significant disincentive to invest in these types of long-term strategies. Recognizing this, some farmland investment companies with an eye towards impact such as local non-profit chapters and credit unions have developed financing options that will allow farmers greater access to land ownership.

While farmland has received a significant amount of interest from social financiers, the same is not true for infrastructure investments in processing and manufacturing. This is a problem because without that key link in the middle of the food value chain, it is impossible to build whole and thriving regenerative food systems. Indeed, as Paul McMahon, Co-Founder of SLM partners an asset manager that acquires and manages rural land for institutional investors, made clear, “not all parts [of the food value chain] are as investible as others” [49]. Generally, the areas of the food system that tend to receive the most financing from social financiers land on the production or consumption ends. As one interviewee succinctly put it, “obviously the majority of food system impact investors are on either one side of the food system” (Respondent 5, 3 March 2019). Another stated, “there’s so much emphasis on at one end real assets and farmland funds . . . and on the other end consumer packaged goods and bars and things that you squeeze out of tubes on the other end. And not a lot in the middle” (Respondent 1, 29 November 2018). Similarly, speakers at the RFSI forum noted the lack of investment in infrastructure. As Tim Crosby, director of the Thread Fund stated, “I know investing in meat processing is not sexy. I’ve lost some money on it and broken even on others. But it’s necessary, especially if you look at a return spectrum that includes stabilization and re-regionalisation and resiliency, all beyond financial return spectrums.” One of the fund managers I spoke with explained how they have historically targeted “middle of the supply chain infrastructure with the theory of change being that by investing in the processing, distributing and marketing infrastructure that connects farmers with consumer demand for locally, sustainably produced food, we can help to grow a sustainable, regenerative food system” (Respondent 5, 3 March 2019).

At the RFSI forum, David LeZaks from the Croatan Institute shared results from research that he and his team conducted in order to understand the financing needs of regenerative food systems. From his perspective, the consolidation of mid-sized farms has also led to a consolidation of processing infrastructure in the industrial food system, which has increased its vulnerability to external shocks such as COVID-19. In his view, the pandemic revealed the resilience and adaptability of smaller, regional regenerative food systems compared to conventional supply chains. In his conversations with stakeholders in the regenerative livestock and grain sectors across the United States, infrastructure stood out as a core piece that requires greater financing. During his presentation on Identifying Missing Opportunities in Processing and Infrastructure Lezaks surmised that, “If we know what we need to shift towards . . . a new diversified landscape, a new regeneratively managed landscape, then we’re going to need a new type a new model behind this network of physical infrastructure that are going to help get products from farm to market” [50]. Additionally, while he acknowledged that there is already appropriately scaled infrastructure being built, he argued that it is not happening quickly enough.

The observations from interviewees and presenters at the RFSI forum regarding the need for greater diversity in the middle of the food value chain are corroborated by the gray and academic literature. Mid-scale farms have been in decline for several decades causing ripple effects throughout the entire supply chain. In the United States, the only
farms that have experienced growth in recent years are either very large or very small-scale operations. This hollowing out of the agriculture of the middle is translating to a significant lack of diversity and resilience in the food system, as mid-level farms are integral for socioeconomic revitalization in rural communities [51]. Research suggests that mid-sized operations may be “pivotal to helping regional regenerative agriculture reach a meaningful scale” [52]. However, farms of this size need to be plugged into a third-tier marketing option, or midscale value chains, which tend to be underdeveloped. Proponents of these mid-scale food systems believe that they would support redundancy and varied geographic distribution in food production which would enhance food system sustainability and resilience.

However, appropriately structured capital is needed to revitalize infrastructure to support more diversified food systems [53]. This capital is unlikely to come from traditional sources as, “most bankers and investors do not value the full set of benefits that these types of infrastructure investments required for sectoral growth provide” [54] (p. 9). The middle of the food value chain presents a formidable challenge for those seeking to support and grow more generative food systems. Traditional investors and even some finance-first social financiers will not be interested in the risk/return ratio involved. Therefore, this part of the value chain will most likely require patient forms of capital and other concessionary forms of financing to develop to scale to a point where it can support the other ends of the food chain. Program-related investments (PRIs) can be loans, equity investments, or guarantees which allow private foundations to invest in mission-aligned projects that generate low returns. PRIs are the types of investments that would support “less investible” projects such as those occupying the middle of the value chain. Another option to support the missing middle would be government financing.

4.5. Exploration of Alternative Ownership Models to Stave off Consolidation

While social financiers are attempting to realign financial and socio-ecological systems with modest success, another concern relates to the design of the current financial system to encourage consolidation such as the shareholder value conception of control. As regenerative food systems require diversity to deliver environmental and community resilience that they purport to offer, they must stave off consolidation across the food value chain. Indeed, a regenerative food system requires a “re-fragmentation of our food system” [53]. To this end, some of the social financiers I spoke with were considering ways of ensuring long term diversity through the development of alternative ownership structures such as the steward ownership model. As opposed to the shareholder value model that dominates corporate structures today, the steward ownership model helps to “preserve the mission of a business in perpetuity and allow founders to retire and not sell the business creating further consolidation” (Respondent 3, 18 December 2018). This model is still nascent in the United States but has a longer track record in Europe. Purpose, a consultancy based in the United Kingdom supports businesses in transitioning towards steward-ownership models. In their words, “steward ownership structurally retools who holds control in companies and what motivates decisions. By disrupting the relationship between power/money and the purpose of business, steward-ownership is a powerful agent for economic change” (Respondent 2, 7 December 2018).

Avoiding corporate consolidation in the food system was not a strong focus in the conversations I had with interviewees nor at the RFSI forum as it was only raised by a couple of key stakeholders but is a critical piece of the puzzle that is beginning to attract attention from those seeking to enhance the resilience of our food systems. I view alternative ownership models as an important area for future research and policy intervention, as the consolidation of the food value chain is a key factor that is stifling innovation in the food system and blocking efforts to build more regenerative food systems. Indeed, as Jasper van Brakel of RSF Social Finance states, “The world urgently needs to move from an extractive to a regenerative economy, and to do that we need to fundamentally redefine business ownership and governance structure” [55]. In collaboration with Purpose, RSF
Social Finance recently published a report, “The State of Alternative Ownership in the US” where they identify demand and the legal implications of such structures in the US context. This is an area that requires more research, but we believe it will be increasingly relevant as the complex challenges of the 21st century push businesses to operate in a way that leads to a more resilient future.

5. Conclusions

This article aimed to shed light on the state of social financing for regenerative food systems in the United States. This research enriches both the literatures on social finance and alternative, regenerative food systems. Though the focus of this paper is specifically on food systems, the observations have implications for the role of social finance more broadly, such as the insights that arose in terms of how measurement is conducted on the ground, and the targets of investments considered through a diversity lens. Compared to the extensive research conducted on certification standards in the alternative food systems literature, there is a noticeable dearth of studies on metrics as tools to govern sustainability and regeneration so this empirical data helps to enrich the alternative food systems literature [56] (p. 741). Also, though the alternative food systems that scholars acknowledge the need to rethink market relationships for in bringing about long-term transformative change, the role of social finance in this process is underexplored. Thus, this paper provides new insights to both the literature on social finance and alternative food systems and sets the stage for future research agendas at the intersection of social finance and regenerative food systems.

This research develops propositions on the ability for social financing to increase the diversity and resilience of our food systems. First, the paradox of solving problems in part caused by finance with the application of more finance is something that requires further attention amongst practitioners. Though there is scholarship on the topic [44,54], this does not appear to have made its way into conversations amongst practitioners. It raises the question of the ability for private finance to solve broader societal issues as investors will always be drawn to financial returns to some extent. Therefore, government’s role in supporting more holistic outcomes for regenerative food systems should not be ignored. Second, the appropriateness of valuing nature and societal benefits in quantifiable metrics is something that calls for more in-depth engagement. Is such an approach to impact accountability going to support the types of changes we need to see in 21st century food systems? Third, clearly the middle of the food value chain is a weak link for regenerative food systems and scholars could support the movement by exploring ways of supporting this under resourced aspect of the food system. Governments and foundations with patient capital are well positioned to invest in the missing middle to help support the growth of more regenerative food systems. Understanding any hesitancy that these investors face in financing this part of the food value chain would help to identify practical solutions to enhancing the missing middle. Finally, one clear challenge area is how social financiers can address structural factors such as the tendency toward consolidation in the current market system to maintain diversity in the food system. The potential of alternative ownership structures needs further exploration in this context and is an exciting and nascent area ripe for empirical research. This paper aimed to advance preliminary findings and set the stage for further studies on how financing can better support the goals of regenerative food systems.

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