

Social Stock Exchange - Democratization of Capital Investing for Impact

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Abstract

The demand for investments that combine financial return with desired social or environmental impact is growing.¹ Given the recent upsurge in entrepreneurship,² shifting attitudes towards the role of business in society,³ and a broad policy push for sustainable development,⁴ there should also be no shortage of investors and financiers eager to absorb this demand. The problem, as emphasized both by WEF and UNEPFI,⁵ lies in matching assets that create positive impact with investors in a manner that is efficient, effective, transparent, and scalable.⁶ In other words, redirecting investment and finance, to impact oriented investments compatible with the UN Sustainable Development Goals and the Paris Agreement is a key factor in turning around the investment philosophy. The same applies to the process of creating and growing impact assets, and supporting entrepreneurs in their search for capital. Both factors are crucial for making the ‘impact economy’⁷ grow exponentially rather than linearly.⁸ Today impact investing is mostly the domain of wealthy individuals, foundations, and family offices.⁹ Non-accredited investors and/or retail investors plus pensions funds are not yet able to meaningfully participate in this new way of investing.¹⁰ This is because of a lack of products, a lack of access to products available to more affluent investors, a lack of impact advisors serving that segment of the market, and a lack of transaction platforms¹¹. It has been argued that not enough assets can be found that match the

¹ GINN 2016

²Fairlie et.al.2015; OECD 2016; Schawbel 2017

³ Deloitte 2016

⁴ UN 2015; UNFCCC 2015

⁵ WEF 2013; UNEPFI 2017

⁶WEF 2013

⁷ Martin 2016

⁸WEF 2013, Ashoka

⁹Kleissner in K. Wendt Positive Impact Investing, forthcoming

<http://www.springer.com/de/book/9783319101170>

¹⁰Kleissner in K. Wendt Positive Impact Investing, forthcoming

¹¹Kleissner K. Wendt forthcoming

impact definition.¹² The creation of regulated funding platforms known as social stock or impact exchanges (SSEs) has been proposed as a necessary step towards democratizing and popularizing impact investing, easing the asset search process for investors and capital access for entrepreneurs.¹³ While the need for SSE is heavily debated in expert circles along with the challenges they may bring about,¹⁴ the first SSEs have come into existence in the UK, US, Canada, and Singapore, complemented by some smaller SSEs in Brazil, South Africa and Kenya.¹⁵ This paper offers a prognosis about the contribution of SSEs in establishing an efficient market, addressing investment gaps and redirecting capital based on a literature review, analysis on unmet interests and needs and open questions in impact investing.

<https://www.forbes.com/sites/ashoka/2014/03/27/stock-exchanges-for-social-enterprises-heres-where-you-can-find-them/#4f673e7a4e5a>

¹²FASE 2016; GIIN 2016a

¹³Forbes 2014

<https://www.forbes.com/welcome/?toURL=https://www.forbes.com/sites/ashoka/2014/03/27/stock-exchanges-for-social-enterprises-heres-where-you-can-find-them&refURL=&referrer=#4f673e7a4e5a>

¹⁴ The conversation.com <http://theconversation.com/social-stock-exchanges-do-we-need-them-35898>

¹⁵ Forbes 2014 see above

Introduction

Investing with the joint purpose of financial return and a desired social or environmental impact is on the rise according to the Global Impact Investing Network GIIN (GIIN (2016b)), with market size estimates of up to USD 1 trillion by 2020 according to O'Donohoe et al. (2010) and growing attention from mainstream financial institutions as The Economist (2017) finds. In a survey conducted by Morgan Stanley (2015), 65% of individual investors expected social and sustainable investing to become more commonplace in the near future while Millennial and female investors were found particularly keen to direct their savings toward impact-driven companies.

The following trends in society can be identified:

- (1) The recent upsurge in entrepreneurship in many countries (Fairlie et al. (2015); OECD (2016); Schawbel (2017)),
- (2) shifting attitudes towards the role of business in society (Deloitte 2016), and
- (3) a broad policy push for sustainable development which materialized in the 17 Sustainable Development Goals and the Paris Agreement (UN 2015, UNFCCC 2015),.

However, a more recent survey by Barclays (2017) found that despite the widespread interest in the topic, very few investors have actually made impact investments. Practitioners in the field often emphasize a chronic lack of investment-ready projects like the “Finanzagentur für Social Entrepreneurship FASE and the Global Impact investing Network (FASE(2016); GIIN (2016a). This might be an effect caused by limited market access or high transaction costs. Although considerable networking efforts have been made to boost investor demand and establish the necessary infrastructure (see e.g. WEF 2013; Schwartz et al. 2015; Rexhepi 2016), thus far, impact investing has remained the domain of relatively few wealthy individuals, family offices and foundations, while non-accredited investors and pension funds cannot participate in this newly emerged market (Kleissner 2019). At the same time impact investing appears to remain a fuzzy concept and the demarcation line to social entrepreneurship, social investing, SRI investing has not been clearly drawn (Wendt (2015)). Social stock or impact exchanges (from now on referred to as SSEs) have been proposed as a key step in achieving the objective of attracting capital and investors (Nicholls & Patton 2015, 324). Lehner and Nicholls recommend to combine elements of existing crowd-funding (see Lehner & Nicholls 2014),¹⁶ peer-to-peer lending,¹⁷ philanthropic loan¹⁸ or donation, and other

¹⁶Kickstarter (no equity) (<https://www.kickstarter.com>) and Conda (equity) (<https://www.conda.eu>)

¹⁷ThinCats (<https://www.thincats.com>)□

¹⁸Kiva (<https://www.kiva.org>) and Babyloan (<http://www.babyloan.org/en>)□

¹⁹E.G. GLOBALGIVING (<https://www.globalgiving.org>)

comparable platforms²⁰. An interesting question is whether fully fledged and regulated SSEs would essentially operate just like conventional stock exchanges by serving as “marketplaces for listing, trading, settlement and clearance of shares, bonds, and other financial instruments issued by or for social and green businesses,” albeit in the context of highly specific listing and reporting requirements (Shahnaz et al. (2014, 157)). The Nasdaq Stock Market may serve as an example for pushing a market by introducing a new scheme. The Nasdaq Stock Market founded in 1971 is by now the second largest stock exchange by market capitalization.²¹ When the Nasdaq Stock Market began trading on February 8, 1971, it was the world's first electronic stock market and at first, it was merely a quotation system. The Nasdaq Stock Market helped lower the spread (the difference between the bid price and the ask price of the stock and absorbed the majority of trades that had been executed thus far by the over-the-counter (OTC) system of trading.²²

As the Forbes Magazines stated in 2014 “As the spotlight on investors seeking social investments continues to brighten, the rise of social stock exchanges—places where people can buy shares in social businesses with missions that align with theirs—shouldn't be all that surprising”²³. Although very different in their status and characteristics, the four SSEs up and operating include the Social Stock Exchange (SSX)²⁴ in the UK, the Social Venture Connexion (SVX)²⁵ in Canada and Mexico, the Impact Exchange (IX) in Mauritius and Singapore²⁶, the US Mission Markets (MM) in the US.²⁷ In addition to the big four, there are a few other emerging and operating platforms around the globe with related objectives, including the Brazil's Impact Investment Exchange (BRIIX)²⁸ and the Socio-Environmental Investment Exchange (BVSA)²⁹ in Brazil, and the Global Impact Investing Vienna Exchange (GIIIX)³⁰ in Austria. In light of these recent developments, this paper offers a prognosis about the contribution of SSEs in establishing an efficient market, in addressing investment gaps and redirecting capital. The research is based on a literature review, unmet interests and needs and open questions in impact investing and the analysis on existing SSEs and what can be learned from them. Drawing from the development of Nasdaq and a comparative analysis between conventional stock exchanges and SEEs a prognosis for the future development of SSEs is derived.

²⁰ blockchain-based stock exchange for growth companies called Funderbeam (www.funderbeam.com)

²¹ “Nasdaq.com Frequently Asked Questions”. Retrieved October 23, 2016.

²² “Nasdaq.com Frequently Asked Questions”. Retrieved October 23, 2016.

²³ Forbes 2014 see above

²⁴ See <http://socialstockexchange.com>

²⁵ See <http://www.svx.ca> and <http://www.svx.mx>

²⁶ See <http://iixglobal.com/impact-exchange/>

²⁷ See <https://www.naturalinvestments.com/blog/mission-markets-advances-impact-investing/>

²⁸ See <http://www.briix.com.br>

²⁹ See <https://www.bvs.org.br>

³⁰ See <https://giiix.com/en/>

Impact Investing in search of a definition

There is an on-going (and healthy) debate on what, in fact, constitutes an ‘impact investment’. However, leading proponents of the industry generally would agree that they are mobilizing capital for ‘investments intended to create positive social impact beyond financial return’ (Brandenburg and Jackson 2012; Freireich and Fulton 2009). Two key components of this definition are, first, the intent of the investor to achieve such impacts, and, second, tangible evidence of the impacts themselves and most recently an exploration about whether or not a theory of change exists (Grabenwarter 2016).

Only recently researchers have been looking into impact investing. It is mostly practitioners that are driving the impact assessment process and its integration into investment and finance. This has various reasons from managing risks effectively to protecting reputation and addressing stakeholder requirements. The process is most obvious on the lending side where collaborations between the Worldbank, International Finance Corporations, other multilaterals and the private banking sector have contributed to the development of relatively consistent ESG standards which are often referred to as “Global Administrative Law”(McIntyre 2015). It has become increasingly the norm for international development banking institutions, including multilateral development banks (MDBs), and many private sector lenders, to adopt comprehensive environmental, social and governance (ESG) safeguard policies and standards to circumscribe the projects and activities they finance. This is particularly the case in the financing of major infrastructure projects in developing countries or economies in transition. (McIntyre 2015).

On the investment, wealth management and asset management side the process of integrating ESG has been fostered by a number of players, in particular the United Nations Environmental Programme. While it has been commonly argued for long that trustees may be acting unlawfully if they take any account of “non-financial” factors in their decision- making more recently legal research from Freshfields shows the contrary. Berry and Scanlan (2014) quotes the following response from a pension fund to an enquiry from a member about the fund’s management of an environmental risk:

The Trustees have a legal duty to not only invest, but to actively seek the best possible financial return . . . even if it is contrary to the personal, moral, political or social views of the trustees or beneficiaries. This was demonstrated in the Cowan v. Scargill (1984) court case (Berry 2015). The first major challenge to the conventional interpretation of Cowan v. Scargill came from the “Freshfields report”, commissioned by the United Nations Environment Programme Finance

Initiative (UNEP-FI 2005). This report argued that there was good evidence that environmental, social and governance. This report argued that there was good evidence that environmental, social and governance (ESG) issues could have an impact on financial returns and therefore, that taking them into account clearly fell within the ambit of fiduciary obligations. Indeed, taking such issues into account was “clearly permitted, and arguably required” in all jurisdictions analysed. Specifically in relation to Cowan v. Scargill, the report concluded that “no court today would treat Cowan v. Scargill as good authority for a binding rule that trustees must seek the maximum rate of return possible with every individual investment and ignore other considerations that may be of relevance, such as ESG considerations” (UNEP-FI 2005).

In 2005, a group of institutional investors met at the invitation of the then UN Secretary General Kofi Annan to formulate the principles for sustainable investment. Since the inception of the UN PRI a lot of initiatives have emerged and populated the field of investment with a focus on social and environmental topics and governance. While dealing with risks and negative impacts, by application of environmental and social governance criteria (ESG criteria), ecosocial ratings and transparency codes, exclusions lists and best in class approaches, the approach was restrictive in so far that it only reduced the existing investment universe and has not entirely captured the upside potential of looking into positive impacts through investment and finance beyond the creation of jobs or new consumption possibilities for customers.

Since the economic crisis triggered in 2008 the concept of impact investing emerged. Impact Investing has initially been a term coined by the Rockefeller Foundation.³¹ Impact creation was necessary “because governments, charities, philanthropists alone were no longer capable of dealing with the twenty-first century’s social and environmental challenges. Focussing on the act of charitable giving rather than on achieving social outcomes and a dependence on unpredictable funding hindered many charitable organizations from realizing their full potential concerning innovations, effectiveness and scale” (Lehner & Brandstetter, 2015). The World Economic Forum recently acknowledged the role the investment and finance sector can play in creating solutions to social problems and stated: “Given the nature of how resources are distributed in the world, private investors may have a special role and responsibility in addressing social challenges.” (World Economic Forum 2013). Yet apart from a small number of specialized forms of impact investing like social impact bonds, green bonds and mission related philanthropic investments little is known about the complex interplay between entrepreneurs or organizations, intermediaries, investor regulations and the successful use of instruments in the field.

³¹ See Rockefeller Foundation <https://www.rockefellerfoundation.org/our-work/initiatives/innovative-finance/>

The World Economic Forum in its 2013 Report states: “Despite the buzz, there is limited consensus among mainstream investors and specialized niche players on what impact investing is, what asset classes are most relevant, how the ecosystem is structured and what constraints the sector faces. As a result, there is widespread confusion regarding what impact investing promises and ultimately delivers.” (World Economic Forum 2013).

Impact Investing has four distinct categories in the view of NPC and Cambridge Associates. It encompasses Responsible Investment or Socially Responsible Investments (SRI), Sustainable Investment, Thematic Investment and Impact First Investments (Cambridge Associates 2015). Many researchers in the literature recognize this journey undertaken by investors from responsible investment (applying some exclusion lists and criteria together with a best in class selection process for the remaining assets) to sustainable investment, which is understood by a majority of industry players as implementing sustainable management practices with regard to environmental, social and governance issues (ESG) to then turning ESG into an innovation driver and cataloguing process while keeping the core of the ESG –value creation process leading to a thematic investment strategy and finally an impact firstdriven investment strategy (Cambridge Associates 2015, New Philanthropic Capital2015). The following figure reflects this journey.



Figure 1: the Impact Investment Journey

Source: Cambridge Associates and New Philanthropic Capital NPC

Impact investing is also a process by which investment managers screen, evaluate and monitor investments using Environmental and Social Governance. Whereas Responsible Investment or Socially Responsible Investment” (SRI) screens to avoid portfolio exposure to socially or environmentally harmful investments, impact investing actively and intentionally seeks to create a positive, measurable impact through profitable businesses. By at the same time applying systematically ESG practice to re-risk assets.They achieve this by including into their due diligence and a gap analysis process environmental, social and governance issues (ESG issues) as well as leadership and culture. They will normally start with a comprehensive gap report including ESG and leadership and culture gap report and actively address the gaps and influence the leadership of a company prior to investing into it., thus exerting influence as active owners over the full life-cycle of their investments. A good example for this is the integrated investment approach of AQAL Capital (Bodzesan 2015).

A classical way of circumscribing impact investing is requiring it to be financially and impact driven as Figure 1 shows. This makes it comparable with a triple bottom line investment, even if as the third quadrant shows that it can host different segments (financial first, impact investors and financial first impact first investors). The Socially Responsible Investment in this new definition has moved to the quadrant where impact potential is limited to risk management and do no harm and therefore sits in a different quadrant than impact investing. The argument provided is that using exclusion lists, best in class approaches are filtering the existing investment universe and therefore reducing it rather than expanding it by enabling the creation of new assets. Social Responsible Investing (SRI) in distinction to Positive Impact Investing presents itself as a broad category in literature, consisting of a range of different investment activities based on negative screening of existing assets in various asset classes and negative selection of those assets that have been screened out. This approach is usually complemented by a Best in Class benchmarking approach for assets that have passed the negative screen and therefore are eligible for investment. Best in Class approaches are meant to provide further support and guidance to the investor. SRI approaches are not designed to intentionally create assets with measurable positive environmental or social outcomes. Rather it is a negative screening and selection process reducing the investment universe of investors instead of intentionally increasing it by adding more sustainable positive impact driven assets driving the market in a desired direction. For a detailed elaboration on the issue of SRI, see, for example, Renneboog, Ter Horst, and Zhang (2008), Sandberg et al. (2008), Lee et al. (2010), Harji and Hebb (2010) and Berry and Junkus (2012).

The ESG filtering approach therefore is also restricted to the second quadrant., while impact investors will use ESG in their due diligence and gap analysis, but will go beyond risk management and filtering by proactively and intentionally seeking to foster new assets that have impact creation at the core of their strategic concept. From the third quadrant it can be seen that a clear intention to create measurable impact is different from merely de-risking assets by applying ESG filters. The field of impact investing is populated by different classes of investors as shown in the figure below. Impact first investors, those prepared to forgo a marginal unit of additional profit for a marginal unit of impact(often foundations, endowments) and those who according to their mandate and fiduciary duties will focus on financial profit first. Impact first, financial first investors will not compromise on either. Integral investors are also part of the impact and financial first segment. A systematic analysis and further in depth analysis on the various forms of impact investing (financial first, impact first and layered structures) as well as on the role of philanthropy and ethical banks in nourishing the impact

investing market and its reach can be found at Bridges Ventures³² at <http://bridgesventures.com/wp-content/uploads/2014/07/Investing-for-Impact-Report.pdf>

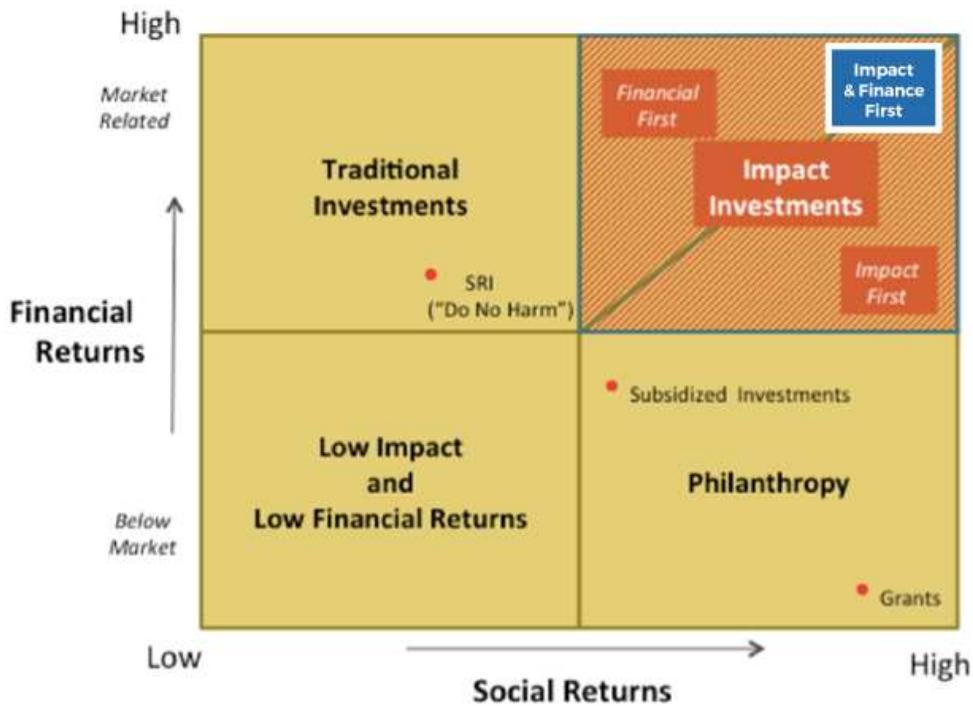


Figure 2:

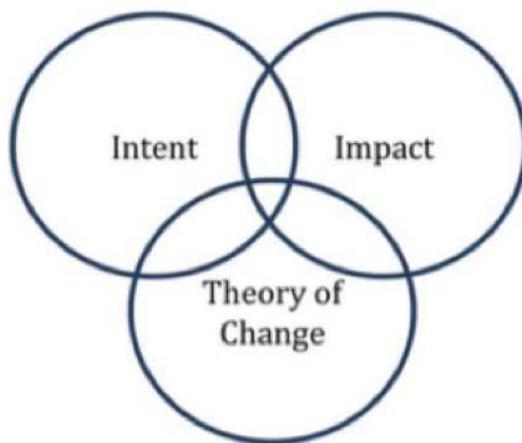
One important aspect often alluded to when defining the demarcation line between impact investing and Socially Responsible Investing (SRI) is the implementation of a Theory of change (ToC). Impact investing is the approach seeking to generate both an eco-social and financial return plus applying a Theory of Change (ToC).³³ Various players like the European Investment Bank, GIIN and IRIS have required impact investing to do more than applying a triple bottom line investment approach. While a triple purpose financial, social and environmental performance is a key concept in impact investing to make it sustainable and to allow bigger, existing companies to join investors should also evaluate the Theory of Change (ToC) that a company applies in order to catalyze internal dynamics as well as the markets in which it operates and seek to influence its players. The GIIN website states that „A theory of change (also referred to as the Theory of Value Creation or Logic Model) is an expression of the sequence of cause-and-effect, actions or

³² Bridges Ventures see <http://www.bridgesfundmanagement.com/publications/bridges-annual-impact-report-2016-tackling-societys-biggest-challenges/>

³³ <http://www.hfrp.org/evaluation/the-evaluation-exchange/issue-archive/evaluation-methodology/an-introduction-to-theory-of-change>

occurrences by which organizational and financial resources are hypothesized to be converted into the desired social and environmental results. A ToC provides a conceptual road map for how an organization expects to achieve its intended impact and is often displayed in a diagram. A ToC can often be expressed as an if-then statement, specifying what the organization does and its expected results.³⁴In this definition Impact Investingprovides a financial and a social return and applies a ToC. It has recently been argued that such a ToC provides a clear framework for measuring, tracking and improving impact³⁵The rationale of the ToC is to shift the focus on successful implementation and proactive design of the desired social and environmental outcome.Jackson 2013) depicts the connection and relations between the elements of impact investing as follows:

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Core components of the definition of an impact investment.

It is unclear at the current point in time how the elements of impact measurement and theory of change could fit into portfolio theory. The application of ToC in a systematic way could help define, measure and improve positive impact, thus focussing on implementation within the invested asset while not restricting the investment universe, but rather help it grow in a new direction. Even if investors have only the choice from assets already traded on major exchanges, a ToC would be able to map the dynamics of a company in heading toward the implementation of

³⁴<https://iris.thegiin.org/metric/4.0/OD6350>

³⁵ see for instance <http://www.hbs.edu/socialenterprise/Documents/MeasuringImpact.pdf>

environmental and social policies or the UN Sustainable Development Goals (UN SDGs). If the intention is

Implementation of positive impacts through innovation, governance and new business models, new entrepreneurs and social entrepreneurship, the sustainable Development Goals could provide a useful framework for setting the preliminaries for suitable theories of change. The UN appears to acknowledge this role in its 2016 paper titledA “Theory of Change” for the UN Development System to Function “As a System” for Relevance, Strategic Positioning and Results, 36 the introduction ofthe UN Sustainable Development Goals therefore can be seen as a game changing event in re-directing investment and capital to a triple purpose (financial, social and environmental) with emphasis on implementation through application of a ToC., the pillars such a ToC have already been defined by the 17 UN SDGs.

This article will draw from existing definitions of business leading organizations like GIIN and the UK Social Investment Task Force apply Theory of Change for positive impactsas a demarcation line to SRI and other concepts that restrict the investment universe.

Impact investments are investments made into companies, organizations and funds with the intention to generate social and environmental impact alongside a financial return 37 and measureachievement of both 38 including the applicationof a Theory of Change³⁹.

The Impact Investing Market in Search of Enabling and Supporting Structures:

There is little research on impact investing at least when it comes to impact first and thematic impact investing. There is a more to find on responsible and sustainable investment (see Meta-analysis provided by Clark, Feiner,Viehs, Selim, Kell, Gifford, Monks, Arai, Turhan 2014). Responsible and Sustainable Investment is included in the impact investing definition used here and also accepted by academic authors (Lehner, Brandstetter 2015).

³⁶Summary Paper Version 1.0 26 January 2016 available at
<https://www.un.org/ecosoc/sites/www.un.org.ecosoc/files/files/en/qcpr/theory-of-change-summary-paper.pdf>

³⁷<https://thegiin.org/impact-investing/>
https://thegiin.org/assets/documents/GIIN_impact_investing_guide.pdf

³⁸GB Social Investment Taskforce availabe at <http://www.theimpactprogramme.org.uk/what-is-impact-investment/>

³⁹<http://www.impactmanagementproject.com/letter/i/>

As documented by Barman (2015), the early discussions about establishing a market for impact investing were very much focused on mobilizing investor demand. The goal was to link together distinct areas of investment such as clean technology, microfinance, and community development, under the general umbrella of impact investing, and introduce basic terminology and infrastructure that could steer the conversation and attract investor interest (see e.g. Monitor Institute 2009). The previous history of practices such as social entrepreneurship, venture philanthropy, and socially responsible investing (SRI), had ensured that there were enough individuals and organizations predisposed to intuitively understand and internalize the basic idea behind impact investing. In short, a suitable set of cognitive instruments that determine how information about finance and investing is processed (Preda 2005, 149) was in place and the initial efforts were quickly amplified into an ‘impact investing movement’ (Bugg-Levine 2016). The creation of SSEs, an “expensive and long-term market building venture,” (OECD 2014, 21) represents an important aspect of this more general process of discursive and institutional development.

Impact Investors use the following vehicles for activating impact investments. They set up Private Equity or Venture Capital Fund, use Direct Investment Strategies and to a lesser extent they have been experimenting with Social Bonds and Green Bonds. But the analysis from J.P. Morgan Social Finance and the global Impact Investing Network (GIIN) shows that private equity is by far the most commonly used tool for impact investment.

J.P. Morgan Social Finance and the global Impact Investing Network (GIIN) further examine and explore Impact Investment dynamics in several publications, such as in “Perspectives on Progress: Impact Investor Survey” (see: <https://www.missioninvestors.org/tools>)

The report reveals the experiences, expectations, and perceptions of 99 impact investors in 2012, and their plans for 2013. Investors surveyed for the report include fund managers, development finance institutions, foundations, diversified financial institutions, and other investors with at least USD 10 million committed to impact investment. Respondents also reported the instruments that they use to make impact investments. Unsurprisingly, most of the respondents used private equity and private debt instruments – 83% use private equity and 66% use private debt. Interestingly, 44% of respondents use equity-like debt structures and 18% of respondents reported using guarantees, higher numbers than we expected.

Private equity is one investment approach within impact investing. It employs the traditional private equity model that intends to generate an attractive financial return for fund managers and their investors. The private equity process is one in which investors structure an investment vehicle (private equity fund) to raise capital from major institutional and individual investors (such as pension funds, endowments and high net worth individuals), committing the commingled capital into private businesses to expand and improve their operations, and

ultimately, and usually after several years, to sell their stake in these businesses or to take them public on a stock exchange in many cases as an IPO.

An important attribute of private equity is that it can enable access to vast pools of financing through global capital markets. By comparison, funding sources such as government aid and philanthropic finance are often limited (and unpredictable) in low-income countries, and represent only a fraction of what is potentially available from the capital markets. Funding from Development Finance Institutions (DFI) may be significant in scale and can play a catalytic role, but is usually only available on the condition that additional private equity and therefore raise much more money than with crowd funding for instance. In addition, it will impose much more restrictions on impact investors and normally is bound to a proven track record, which may not exist in the infancy stage in which many impact investment businesses find themselves.

For example, equity investment can be a more favourable capital base than debt for the many businesses with potential impact that are testing new business models to deliver products or services to consumers who have inconsistent and low incomes. “Some new business models require significant customer education, which can be capital intensive and can take some time to translate into revenues, which can make it challenging to service a debt investment”, explained Yasemin Saltuk of J.P. Morgan Social Finance. In certain situations, particularly in frontier markets or early stage businesses, portfolio companies can face volatile cash flows, unpredictable supply chains, poor infrastructure, or inefficient regulation. This can translate into volatile cash flows for the businesses, making debt payments a burden, especially at high interest rates (EMPEA 2015).

A systematic analysis and further in depth analysis on the various forms of impact investing (financial first, impact first and layered structures) as well as on the role of philanthropy and ethical banks in nourishing the impact investing market and its reach can be found at Bridges Ventures at <http://bridgesventures.com/wp-content/uploads/2014/07/Investing-for-Impact-Report.pdf>

Analysis of Needs and Open Issues in Impact Investing

Attracting institutional capital remains a significant constraint to the development of impact investing. Although increasing in size and prominence in the past several years, private equity-style impact investing remains a “niche” investment strategy according to Bridges Ventures that mainstream institutional investors do not typically include in their portfolios. Attracting institutional investors will require evidence that it is possible to achieve both impact and financial

returns, and education of investors about appropriate opportunities in which to invest. For instance, FIR Capital has raised awareness locally in Brazil by convening private wealth managers, the Brazilian private equity association, universities, pension funds and journalists, with the support of the Brazilian private equity association ABVCAP (EMPEA, *ibid*).

Another necessary milestone is the delivery of evidence that it is possible to achieve impact alongside risk-adjusted financial returns. Developing a comprehensive financial performance database would help enormously to identify critical success factors and to develop customized benchmarks. Many impact investments are first-generation and therefore early in their respective investment cycles. Impact Investors are working together and with partners to collect and analyse data on exits in an attempt to quantify financial returns and key impact metrics. (New Philanthropic Capital, KLF, Cambridge Associates, Aqal, PINEO, EMPEA).

Further relevant and robust metrics are needed that demonstrate success in achieving social and environmental impact. The idiosyncratic nature of impact investing presents some specific challenges with respect to the development of metrics, including:

- Time Scale. Whereas financial returns to investors end once the fund has exited the investment, the social impact continues after a project has been completed. Some projects create impact throughout the life of the investment such as an insurance company, whereas others such as housing or infrastructure deliver impact over the longer term but in many cases only beginning in the final stage of the investment. Vital Capital thus suggests differentiating immediate and long-term impact projects and measuring them differently.
- Differentiated value of outcomes versus outputs. Outcomes, such as poverty reduction, reflect the ultimate impact objective of impact investments while output measure metrics such as units of housing constructed. Yet outcomes are more difficult to measure; to the extent that it is possible to determine a causal link between a firm's operations and the outcome, it is expensive to do so. Attributing the outcome to a particular investment in the firm is a further challenge.
- Each company and product creates impact in its own idiosyncratic way so generic indicators make it impossible to capture the complexity of the true impact. For example, one operational metric for insurance companies is the speed at which a claim is paid, which is not relevant for education where graduation rates would be a more appropriate measure. Even for metrics that appear on the surface to be comparable, variability in the methodology can create challenges. For example, a simple count of the number of jobs created obscures whether those were local workers or child laborers offered at competitive wages. Further, cross-comparisons are extremely difficult for certain units of value that have an inherently subjective component

such as valuing the life of one patient or the value of reducing one unit of fuel consumption. To accommodate the wide range of metrics, IRIS has developed a repository of over 400 metrics, recognizing that no single combination will be right for all organizations. This effort by IRIS (as well as GIIRS) is helpful, but one aspiration among the EMPEA Council Members is to simplify the process and make it more practical by focusing on the key “metrics that matter.” FIR Capital’s Marcus Regueira recommends 4-5 indicators per industry to provide a balance between comparability and overload of indicators.

Finally, scale in private equity impact investing is hindered by a mismatch between investors’ preferences and realistic investment opportunities. J.P. Morgan Social Finance conducted a survey of leading institutional impact investors and found that absorptive capacity is a critical bottleneck. It is not unusual for mainstream pension funds, insurance companies, and asset managers to consider investing in only those funds that are of significant size (e.g. minimum of US\$500 million). Furthermore, many investors have minimum commitment sizes (e.g. they want to commit more than US\$100 million) and maximum ownership limits (e.g. they cannot represent more than 20% of the fund’s interests). By way of comparison, the average impact investing private equity fund is US\$7 million, and the average underlying investment is US\$2 million.

Another gap lies between investor preferences for the stage of the business in which they would like to invest and where the majority of impact investees are in the growth cycle. The J.P. Morgan survey “Perspectives on Progress” revealed an overwhelming focus on growth stage businesses (78%), while only 51% indicated a focus on venture capital. Eighteen percent of respondents indicated an appetite in seed or start-up capital.

Impact investments do not yet match the logic of traditional finance tools. Measuring the potential social and environmental impact of investments in a generally accepted manner will thus be a key component of research to be undertaken since impact investing explicitly seeks to intentionally generate quantifiable social and financial returns. The World Economic Forum states in its report: “Although many exceptions exist, the leading asset owners that are allocating capital to impact investments today include development finance institutions, family offices and high-net-worth individuals. However, relative to other sources of capital, these investors hold only a small share of the global capital pool.” (World Economic Forum 2013). Addressing the factors that constrain other types of asset owners from allocating capital to impact investments therefore is an important topic for investigation.

The few researches undertaken in the field provides early evidence that overall performance of mixed portfolios might profit because the experienced low correlation of impact investments to traditional markets reduces portfolio risk and increases sustainability (Schäfer, H. Hertrich C.

2015, Lehner, O, Brandstetter L., 2015). In addition, more and more investors demand ESG (environmental, social and governance) criteria to be considered, mainly based on pressure from stakeholders and regulators. Those demands have fostered voluntary frameworks on a global scale, creating global level playing fields for eco-social criteria and standards and are considered by some authors to constitute “Global Administrative Law”(McIntyre O. 2015).

Impact investments differ significantly from traditional investments through their hybrid goals (Doherty, Haugh, and Lyon 2014; Lehner 2012).

The rare authors from the academic field dealing with Impact Assessment will normally use the definition provided by the World Economic Forum, which is materially in line with the definition of practitioners, “Impact Investing is generally understood in science as the proactive intention of an investor to create a measurable positive social and/or environmental impact (in the following referred to as eco-social impact) through investment or finance and to achieve (eco-) social returns alongside with financial returns. Impact Investing is an investment approach that intentionally seeks to create both financial return and positive social or environmental impact that is actively measured “(World Economic Forum 2013). Practitioners have provided a lot more disclosure on their “hybrid goals”.

It is important to stress, that impact investment is an investment approach and not an asset class. It is a criterion by which investments are made across asset classes. Second, intentionality matters. Investments that are motivated by the intention to create a social or environmental good are impact investments. Third, the outcomes of impact investing, including both the financial return and the social and environmental impact, are actively measured (World Economic Forum 2013).

Addressing The Investment Gap

Increasing amounts of capital from investors around the world are waiting to be invested with social and environmental impact.⁴⁰

Why aren't more market based solution models scaling? What can be learned from those that have achieved scale? In the last paragraph the typical barriers to impact investing market development have been outlined.

⁴⁰Björn Strüwer, Roots of Impact, Increasing amounts of capital from investors around the world are waiting to be invested with social and environmental impact.

FASE, the Financial Agency for Social entrepreneurs states that “Our experience shows that for most investors today, impact investing still needs to be translated from a compelling concept into a sound strategy“.

Various players have addressed the investment gap in impact investing. The main reason given is that there are not enough investment – ready assets out there in the marketplace, although increasing amounts of capital from investors around the world are waiting to be invested with social and environmental impact. FASE states in its presentation that “Compared to the massive investment opportunities in traditional financial assets – actual impact investing assets are still small (\$60bn). Why is this? It is not because of the lack of available capital but of the lack of investible target enterprises/organizations.⁴¹

At the same time capital does not flow to impact assets in the size and amount necessary to create change in alignment with the SDGs. Impact Alpha one of the main players in Impact Investing has recently stated that “Indeed, the more one digs into impact investing, the less capital is actually directed toward potentially game-changing sectors and the small and growing businesses within emerging markets that are key to these states’ economic development. Instead of helping to drive a new generation of small and medium-sized goods and services providers integrated into global supply chains, much of impact investment appears to be directed toward efforts to ameliorate the status quo, not change it.⁴²

Another phenomena seems to be that smaller funds tend to significantly outperform larger funds, which may reflect the difficulty of conducting extensive due diligence on or sourcing of the many investments required to allocate an entire large fund to investments.⁴³

Players from jurisdiction that have ”a tradition in impact investing”,⁴⁴ like the UK stress that a supportive policy environment with practical initiatives is a key success factor.

The question how to create a functioning impact market with enough investment ready deals, state of the art due diligence and enough capital to absorb it remains a top priority, if one wants

⁴¹ Roots of Impact, Increasing amounts of capital from investors around the world are waiting to be invested with social and environmental impact.

⁴² <https://news.impactalpha.com/fellow-travelers-impact-investing-in-emerging-markets-is-growing-but-not-fast-enough-part-ii-a7164a934f7f>

⁴³ http://www.foreurope.eu/fileadmin/activities/WfE_at_Conferences/Wachstum_im_Wandel_2016/04_WiW_terBraakForstinger_2016_02_22.pdf

⁴⁴ Daniel Scatter Investment Manager <http://seif.org/en/wp-content/uploads/2016/02/Seif-congress-Broschuere16-V5.pdf>

impact investing to deliver on its promise to be the key for resolving global challenges in a time where the traditional levers of change, including philanthropy and government aid, are insufficient to address the critical issues of our time.⁴⁵ Therefore the market mechanisms to translate a compelling concept into a sound market strategy populating both the field of impact investors in search for assets as well sustainable entrepreneurs in search for capital while making sure the assets are investment-ready in a traditional investment based approach, the rules of the games are clear and met, traditional due diligence is done and potentially complemented by additional layers and a liquid market place is available

The following figure shows the scale up of impact from responsible to philanthropic and presents a different scheme of categorizing the various forms of impact investing. Whereas practitioners in Impact Investing have described Impact Investing as journey from Responsible Investment to Impact first Investment (see Figure 1 above) meaning that positive impact ranks above return, the few sources in academia describe the journey leading through the responsible and sustainable investment process pillars to visionary and philanthropic. The journey described by Lehner & Brandstetter (2015) adopting and adjusting the model provided by Bridges Ventures leads from conventional risk /return driven investment through responsible and sustainable investment to visionary and philanthropic investment (see Figure 3) . The journey is helpful in defining impact assets that go beyond the SRI approach and create and measure impacts in line with the UN SDGs theory of change.

⁴⁵ Fran Seegull, Chief Investment Officer of Impact Asset in Forbes 2016

<https://www.forbes.com/sites/devin thorpe/2016/07/13/is-impact-investing-a-solution-to-global-problems/>

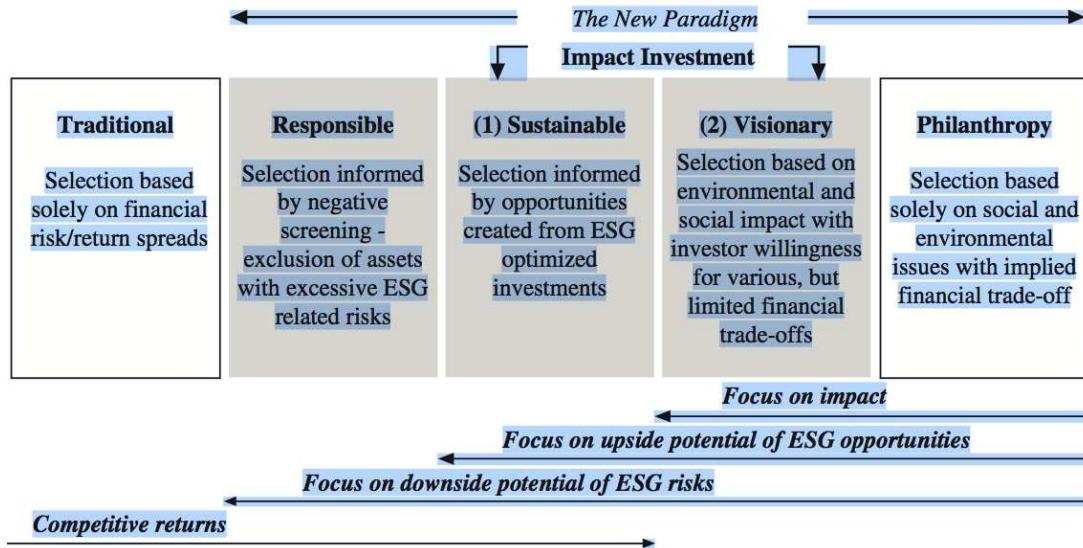


Figure 3: The spectrum of capital

Source: Own description based on Nicklin 2012, and Clara Barby, Bridges Ventures.

There is agreement between practice and science though that Impact Investment is a journey that is starting with responsible investment, then adding ESG, leadership and culture (L&C) analysis and assessment for potential portfolio assets, providing ESG/L&C Gap Reports and ensuring systematic ESG implementation, leadership and culture management throughout the assessment, investment and management process. A good summary of this approach one can find in the AQAL Investment approach (see Figure 3)

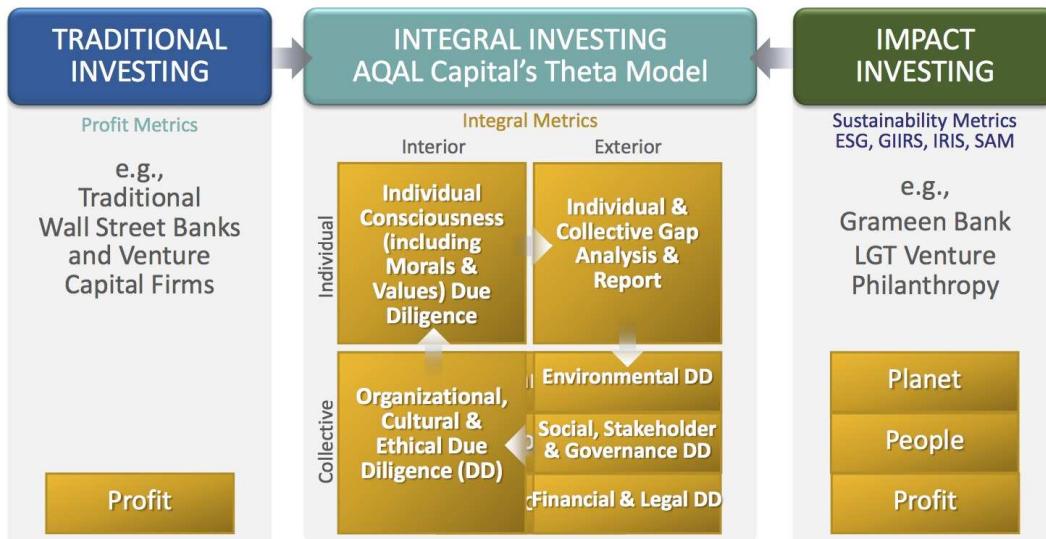


Figure 4: Impact Investment in practice: Mariana Bodzesan's Aqual Capital Investment Approach

According to Lehner & Brandstetter (2015) investors struggle to allocate capital towards the social sector, because the above proposed performance measurement metrics do neither fully assess risks associated with the generation of impact nor consider relationships and interdependencies between parameters of risks and return. This becomes an aggravated problem when looking at a portfolio level, due to inevitable co-variances that remain unaccounted for (Lehner & Brandstetter 2015). Portfolio models can only be applied in situations where risk and return metrics are accurately measurable and comparable. According to the academic research undertaken so far, some researchers find that “Unfortunately, such consistent metrics are largely absent within the emergent field of social finance” (Geobey, Westley, and Weber 2012). According to Lehner & Brandstetter (2015) “Therefore, since an optimized asset allocation is an indispensable necessity for institutional investors, the expected market growth of impact investing will be dampened as long as impact investments’ characteristics do not match conventional portfolio tools.” One question therefore is how can impact investment characteristics meet conventional portfolio tools, or alternatively the regulatory board of a stock exchange sets the rules for impact measurement based on a universally shared ToC drawn from the implementation of the UN SDGs and creates the market place where such shares can be exchanged in a regulated manner eliminating transaction costs and uncertainties of what impact measurement means transferring the task from individual intermediaries with different models to the regulator. Scientific researchers acknowledge that “Across sectors, there are already a number of measurement systems in use, endorsed by various impact investing actors. Among them are the Impact Reporting and Investment Standards (IRIS), the Global Impact Investing Rating System (GIIRS) and the B Impact Assessment powered by B Lab” (Antadze and Westley 2012; Jackson 2013). Those standards can be used to inform the regulation on impact definition and management even more so as for now the UN SDGs can provide the underlying universal framework.

An open question therefore is whether a double auction process could help to resolve the problem of investment ready assets and the investment gap while impact investors are sitting on piles of money to be invested in the market. The Nasdaq defines a double auction Systems by which listed securities are bought and sold through brokers on the securities exchanges, as distinguished from the OTC market, where trades are negotiated. Unlike the conventional auction with one auctioneer and many buyers, double auction markets consist of many sellers and many buyers.⁴⁶

Again, this requires the creation of “listed securities”.

⁴⁶<http://www.nasdaq.com/investing/glossary/d/double-auction-market>

Could the implementation of the UN SDG justify an own market place? Would such a marketplace help address the investment gap in impact investing?

Financial analysis remains the same as for traditional assets. For the environmental and social due diligence and governance or ESG due diligence one could draw from the existing eco-social rating agencies (like oekom research) whereas impact measurement and ToCs implementation – a new part of due diligence could be borrowed from international networks occupied with impact measurement like GIIRS, EIRIS, IRIS B Lab, GIIN.

The UN SDGs could potentially provide a useful framework for a universal ToC. Going beyond a clear systematic gap analysis report on ESG, implementing analysis on leadership and culture for implementation of ToC requires that all elements that all elements have to be defined in the investment approach and investment policies of the impact investor. In addition to these policy requirements the element of application of external measurement criteria taken from GIIRS, EIRIS, IRIS B Lab, GIIN based on a universally shared ToC as provided by the UN SDGs will need to ensure that impact investors create credibility and external endorsement by stakeholders and therefore legitimacy. Could the application of external measurement criteria based on SDGs create a level playing field in measuring impact? Such a level playing field could be a necessary and required preliminary to a double auction system. At the moment there is a wealth of impact measurement tools, techniques and criteria. For creation of a market place a universally agreed ToC as provided by the UN SDGs could provide helpful in creating a transparent double auction market place. SSEs then could be regulated on the basis of such a universally shared model may be a feasible way forward. The benefit of using the UNSDGs as the universal basis of a ToC is that they are endorsed by 194 nation states (note recently the US disengaged in the implementation of UN SDGs).⁴⁷ The criteria visionary in Figure 4 has to be operationalized by the universally shared vision of the UN SDGs⁴⁸ in order to avoid mission drift and be clear and traceable. Otherwise visionary could in practice just mean that the investment complies with the internal investment house policy without any external stakeholder driven “assurance”, endorsement or licence to operate and without the need to be benchmarked against the UN SDGs vision and Theory of Change. In alignment with the definition developed here, this article now will consider visionary as – in implementation of the vision 2030 of the UN SGDs. While philanthropy has been playing an important role in setting up impact investing, the global

⁴⁷ see for instance <https://sustainabledevelopment.un.org/post2015/transformingourworld>

⁴⁸ <http://sdg.iisd.org/commentary/policy-briefs/getting-up-to-speed-to-implement-the-sdgs-facing-the-challenges/>

challenge is beyond the means of this investor. Framed in this way impact investing has to become not only compatible with traditional investment, but be provided with the same set of structural support in order to make it grow. Could Impact investing therefore draw from the advantages of double bind auction systems and could Nasdaq be seen as a role model for SSEs in setting the right framework and putting the right systems in place for enabling and growing social innovation, the way Nasdaq was promoting technical innovation. The question may be beyond this paper, but as a start it is useful to look into the advantages of double blind auction systems and analyse what can be learned from the so far existing SSEs.

The case for Social Stock Exchanges SSEs based on the needs of market participants and the proclaimed “investment gap”

Before looking into the prognosis of SSEs, it may be useful to set the stage by reviewing the key arguments that have been put forward in support of these specialized funding platforms:

1. SSEs improve market access by connecting impact companies with investors who are looking to combine financial return with desired social or environmental outcomes. Given that businesses require finance to grow and investors need information about investable projects, SSEs directly address a legitimate need from both points of view.
2. SSEs help democratize and popularize impact investing by making it accessible to a wider set of investors. This would result in more dispersed ownership, leading to higher liquidity, which in turn would attract additional investors (Hartzell 2007, 10). As emphasized by Kleissner (forthcoming), lack of access to products and transaction platforms means that non-accredited investors have thus far been cut off from impact investing. SSE would allow private and retail investors to invest directly – provided the regulation of the SSE is able to create the required trust in the market. Likewise due to legal restrictions for and investment policies of pension funds this group of investors has been excluded thus far from impact investing due to the current lot size of impact investments. SSEs would help solve this problem as they create a liquid market and also allow the bundling of assets, creation of derivatives and could boost market capitalization – by reducing transaction and research costs. Indeed, according to Tomás Carruthers, the CEO of SSX, making impact investing accessible to not just specialist and professional investors, but also to the wider public, constitutes the core reason why the SSX was brought into being (All Street Research 2017, 15).
3. By aggregating data on impact companies and organizing analyst coverage, SSEs reduce information and transaction costs while being essential for the accurate valuation of the listed securities (Campanale 2010) and make capital markets work for society. Without an SSE, transaction costs are especially high

for investors. For impact companies, strict listing and reporting requirements may introduce additional costs, but in return, they can benefit from listing, feedback on what requirements to be met to become listed, better accessibility and availability, better marketing and access to a wider investor base.

4. Being an SSE-listed company serves as a seal of quality, providing investors with confidence that proper due diligence has been undertaken (Newsweek 2009). In other words, investors would look at SSEs not merely as positive alternatives to conventional exchanges (Hartzell 2007, 15), but as tools for identifying projects with the highest social or environmental impact.

5. Without a liquid marketplace, investors may be excessively cautious, reducing the amount of capital available to impact companies (Shahnaz et al. 2014, 155). SSEs offer an exit route for early-stage investors and make impact assets more attractive to investors in general. A liquid market place should also allow a sustainability premium for IPOs that might be more visible than on a traditional market. In line with portfolio theory only in an IPO situation or a merger the goodwill can be monetized. So it would help the current venture capitalists and private equity investors to exit existing assets by placing them on a liquid market, which creates room for new investments for this investment group. At the same time the assets currently bound in private equity and VC could populate the SSE and therefore counter the argument of “missing impact assets”.

6. SSEs introduce market discipline and encourage competition between impact companies. The securities issued by the best performing firms would carry a premium, and conversely, inefficient companies would be penalized by the market (Chhichhia 2014, 21). By creating a more transparent impact measurement framework and mandating regular disclosure of relevant information, SSEs would thus allow for better informed investment decisions (Shahnaz et al. 2014, 156).

7. Just like conventional stock exchanges serve an important regulatory function, SSEs would help establish the currently underdeveloped regulatory framework for social finance (Dadush 2015).

8. By making impact investing more accessible and popular, SSEs would increase investment for sustainable development, both in developed and developing countries. If tied to the UN SDGs the carrying vision and impact could be huge. It has been suggested that SSEs may emerge as an important channel for directing future flows of international development finance (Campanale 2010; Chhichhia 2014). Indeed, if impact investing reached just half of the optimistic USD 1 trillion market size predicted by 2020, it would still surpass current Official Development Assistance (ODA) by a factor of four (Dadush 2015, 144).

9. SSEs would help protect the mission of the listed companies by connecting them with investors whose values and objectives are aligned with their own. According to Shahnaz et al. (2014, 155- 156), many impact companies are deterred from traditional exchanges due to fears of conceding control to investors

who may be indifferent to the social or environmental purpose of their business. SSEs would help avoid this problem by connecting companies with investors who understand impact investing and are less likely to demand excessive focus on financial profit.

10. To bring any new institution into being requires considerable organized effort, both discursive and material, that must be sustained for extended periods of time. As explained by Preda (2005, 149), the “discourses about investing establish how investment activities are conceptualized and represented” while material arrangements “determine the settings of investment activities, the quality of financial information, and shape the interaction modes of investors,” and by extension, of other actors involved in the investment process. The social construction of impact investing and SSEs represents a special case of what this might entail in practice.

11. As documented by Barman (2015), the early discussions about establishing a market for impact investing were very much focused on mobilizing investor demand. The goal was to link together distinct areas of investment such as clean technology, microfinance, and community development, under the general umbrella of impact investing, and introduce basic terminology and infrastructure that could steer the conversation and attract investor interest (see e.g. Monitor Institute 2009). The previous history of practices such as social entrepreneurship, venture philanthropy, and socially responsible investing (SRI), had ensured that there were enough individuals and organizations predisposed to intuitively understand and internalize the basic idea behind impact investing. In short, a suitable set of cognitive instruments that determine how information about finance and investing is processed (Preda 2005, 149) was in place and the initial efforts were quickly amplified into an ‘impact investing movement’ (Bugg-Levine 2016). This impact investing movement can now be merged with the UN SDG vision for 2030. The creation of SSEs, constitutes an “expensive and long-term market building venture,” (OECD 2014, 21), but also represents an important aspect of this more general processUN SDG implementation and institutional development.

12. From the very beginning, a defining feature of impact investing has been what Dadush (2015, 173) refers to as ‘blueprinting’ – the use of templates from conventional finance to create social and sustainable finance. This becomes evident when one juxtaposes some key terminology from both fields: regular investing becomes impact investing, instead of conventional bonds there are social impact bonds, instead of traditional banks – ethical and sustainable banks, instead of credit risk ratings – social impact ratings, return on investment (ROI) becomes social return on investment (SROI), and conventional stock exchanges are re-conceptualized as SSEs. According to Dadush, this systematic imitation has been strategically important to attract a wide range of individuals and institutions by communicating the message that, at the end of the day, impact investing is nothing and now can provide helpful to mainstream impact investing using special SSE exchanges.SSEs are not something altogether alien or out of the ordinary. These attempts to legitimize and popularize impact investing bear a similarity with how

investing as such, during the first globalization wave, was conceptualized and promoted as a natural human activity that should be made accessible to everyone (see Preda 2005). Obviously, the current context is very different and the comparison should not be taken literally, but it does help understand the underlying dynamics.

13. Finally it can be argued that SSEs help the sector to transition into a more regulated capital market, regulated by the SSE board which can help avoid mission drift, focus attention on UN SDGs and help their implementation while eliminating market inefficiencies. As markets constitute a double blind action process and set a clear universal framework of expectations.

A Critical Perspective to SSEs

More generally, the emergence and subsequent development of impact investing has been characterized by a deep interest in the quantification and measurability of outcomes to allow for performance-based accountability, while harnessing the ‘inherent virtues of the market’ to organize and guide the financing of impact-driven entrepreneurship. At the same time, however, there is no universal agreement on whether impact investing, and social finance in general, can be seamlessly integrated with dominant structures and ideology, or whether they might develop into a more fundamental critique of traditional financial and economic ideas (see Lehner 2016a). A full consideration of this issue is beyond the scope of this paper. Suffice it to say that the hybrid character of social finance allows this phenomenon to be conceptualized as a positive redefinition of conventional finance, but also as a potentially problematic application of a particular politico-economic way of thinking in the context of sustainable development and the non-profit economy, making it an extension of some key ideological and economic trends of the past few decades, in particular market-fundamentalism and financialization.

With regard to the structural genesis of social finance, including the opportunities and limitations entailed in SSEs, Gläenzel et al. (2013) propose four possible scenarios. First, the Social Investment scenario, or the ‘social innovation boom’, characterized by large volumes of private investment and the emergence of a broad spectrum of financial instruments and actors. This would eventually include fully developed SSEs, successfully operating in the context of sophisticated regulatory and institutional standards. Second, the Garage Lab scenario in which the supply of finance would exceed the demand, leading to a scattered ecosystem with few scalable projects and the continued importance of more traditional forms of funding. Third, the Commercialization scenario where demand for finance would be relatively high, but it would be met with a restricted supply focused on profitable large scale projects. In such a scenario, the role of SSEs may be commercially significant, although the profit motive would dominate over social and environmental objectives, leaving many high-impact but commercially unattractive initiatives

underfunded. And fourth, the Wasteland scenario where, apart from occasional deals and success stories, the field as a whole would remain underdeveloped and marginal, while the majority of social purpose organizations would continue to be dependent on public support and traditional philanthropy.

Figure 1 provides an overview of the landscape of impact entrepreneurship and finance, structured around income models and finance instruments most applicable in different sectors of economic activity. Detailed descriptions of the four quadrants can be found in Glänzel et al. (2013, 61-62). Here, it is important to note that the concept of SSEs is not universally applicable across all four quadrants. For example, organizations leaning towards Quadrant 1 and especially Quadrant 2 have limited ability to cover their costs from earned income alone, even though their social or environmental impact may be considerable. In other words, many of these organizations rarely generate positive financial returns, making them dependent on favorable tax laws, private donations, or public subsidies, and thus relatively less attractive to impact investors, most of whom are, at minimum, looking to recover at least their initial investment (GIIN 2016a).

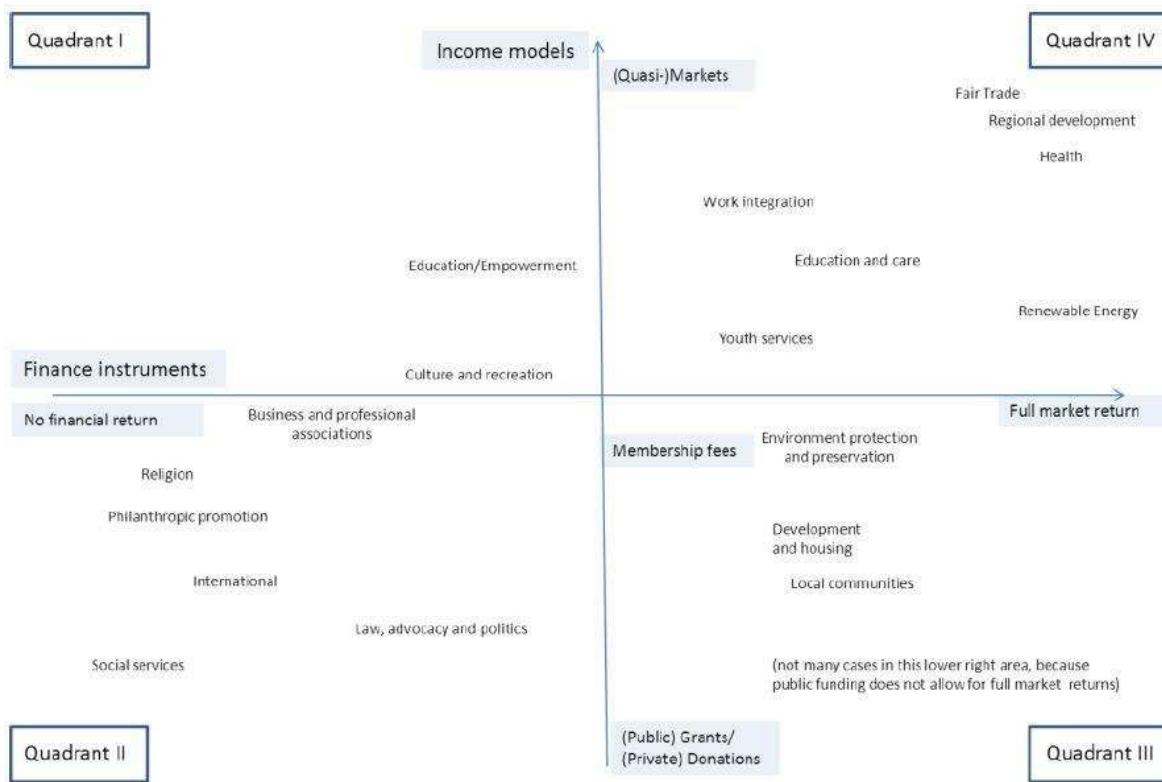


Figure 5: The landscape of social entrepreneurship and finance (Source: Glänzel et al. 2014)

The most likely candidates for SSEs can be found in Quadrants III and especially IV. Although services like environmental conservation, education, housing, or energy are often supported by the state, and are not necessarily better organized on a commercial basis, many activities in Quadrants III and IV do involve

opportunities for combining positive financial returns with an environmental or social mission. However, as mentioned above, such opportunities do not exist across the whole spectrum covered by Figure 1. For this reason, Gläzel et al. (2014, 63) call for a balanced mix of funding mechanisms, and note that although SSEs may prove useful for financing certain types of initiatives, they also have their limits, especially when it comes to activities where success is difficult to define and measure. These caveats are highly relevant in the context of analyzing the discourse and activities driving the structural development of impact investing, especially as they relate to the broader economic and political issues mentioned above.

Are SSEs the Right Place to address the Investors and Investees needs? What can be learned from existing SSEs?

Hartzell (2007, 4) asserted in 2007 that “the establishment of an ethical exchange is an idea whose time has come.” This conclusion was subsequently echoed by Nicholls & Pharoah (2008, 28).

The concept of SSEs has grown out of a gradual confluence of four distinct phenomena. First, there are the ideas and practices of corporate social responsibility (CSR) (Lee 2008; Schmitz & Schrader 2013) and social entrepreneurship (Leadbeater 1997; Poon 2011), both with histories of at least several decades. Second, there are approaches to investment that combine financial objectives with social and 2004), SRI (Sparkes & Cowton 2004; Wallis & Klein 2015), Shared Values – how to reinvent capitalism and unleash a wave of innovation and growth (M.Porter and MKramer(2011)) and more recently impact investing (Bugg-Levine & Emerson 2011; WEF 2013; Daggers & Nicholls 2016). Third, there is the reconceptualization of philanthropy over the past couple of decades, characterized by the emergence of ‘venture philanthropy’ (Letts et al. 1997; Alter et al. 2001; Grossman et al. 2013; Bishop & Green 2015; John & Emerson 2015). And finally, there is the widespread concern for sustainable development (Lélé 1991; Redclift 2005; UN 2015).

Looking into the history there appears to be a clear need for a transparent, clearly regulated marketplace for impact investing serving the UN SDG goals. This can be derived from what the sector has achieved thus far without the help of market infrastructure assistance. Up to now we see one functioning role model for investors SSEs– the SSX. So what is SSX doing differently from other players.?The idea of issuing shares for a social or environmental mission comes from the non-profit sector and still is alive – albeit in a grow linearly mode.

Companies with a social or environmental mission have been issuing shares for several decades. In 1984, the UK-based fair trade company Traidcraft made the first ever public issuance by an ethical business,

raising £0.3 million. Over the next couple of decades, many other mission-oriented companies in the UK followed. Of course, none of these businesses offered their shares through a dedicated SSE as no such platform existed. Unless the company was listed on a regular stock exchange, there was also no secondary trading, apart from a few exceptions in which small and relatively inactive ‘matched bargain’ markets were operated either by the brokerage firm Brewin Dolphin or Triodos Bank. In the early to mid-2000s, in the midst of an increasing number of ethical issuances, Triodos considered opening a single public market, called Ethex, but the idea failed to materialize. Instead, shares of ethical companies kept trading through a matching service provided by Brewin Dolphin (Hartzell 2007, 12). Ethex was eventually opened in 2012, and continues to operate as a non-profit online service with secondary trading for some securities, although the platform is not a regulated stock exchange (Ethex 2017). This case provides a useful model for understanding that social stock exchanges are feasible with the will of philanthropy for a limited segment offering limited services and certainly not going as far as being regulated like a traditional stock exchange. A parallel development in the second half of the 1990s was the discussion on the possibility of creating an exchange-type funding platform for non-profit organizations or an index of social enterprises to flag investment opportunities for socially responsible investors (Nicholls & Pharoah 2008, 28). According to Emerson & Wachowicz (2000, 186), these ideas were first raised in a publication titled “Grants, Debt and Equity: The Nonprofit Capital Market and Its Malcontents” (Emerson 1996). By the early 2000s, combined with the popularization of social entrepreneurship and venture philanthropy on the one hand, and the growing discourse on the importance of measurable outcomes and accountability in the non-profit sector on the other, the idea of SSEs as a way to connect mission-oriented organizations with potential investors began gaining some traction. A landmark event took place in 2003 when São Paulo’s stock exchange BOVESPA launched the world’s first ‘social stock exchange’ – a project proposed by Celso Grecco and his CSR-focused marketing firm Attitude Social Marketing (Newsweek, 2008).

The idea behind this platform was to use BOVESPA’s infrastructure and expertise to connect ethical investors with carefully screened social purpose projects in Brazil that benefitted children and youth in areas of health, literacy, citizenship, education, training, culture, psychosocial care, and environment (Zandee 2004). Importantly, the system involved no transfer of ownership or secondary trading – the return on investment was purely social, making the exchange more of a crowd-donation platform, albeit with specific listing and reporting requirements and as of early 2017, the platform continues to operate as the Socio-Environmental Investment Exchange (BVSA). From BOVESPA’s point of view, the project served an important marketing function, as the exchange was looking to improve its public image, explain the operations of a stock exchange to the general public, and thereby attract more people to invest and trade in conventional securities (Zandee 2004).

The BOVESPA SSE, with a stamp of approval from UNESCO and the UN Global Compact, attracted interest not just from other countries in the region but from around the world. In June 2006, a similar

project was launched in South Africa – the South African Social Investment Exchange (SASIX) (see CSR 2006; BSA 2006; and Chichhia 2014, 5-9 for an overview). However, despite the initial plan of developing SASIX into the world's first fully independent SSE (Fury 2010), as of 2017, the platform no longer exists.

Also in the mid-2000s, inspired by these early experiments, a model for a globally standardized social investment market was being developed by a think tank called GEXSI – the Global Exchange for Social Investment.⁴⁹ As discussed by Hartigan (2006), this attempt was met with the difficulty of establishing universally accepted performance criteria for listed entities as well as an appropriate accreditation process to generate deal flow. As part of the GEXSI initiative, SSEs were being considered in a number of countries in Europe, Africa, Latin America, and Asia (GEXSI 2017). The idea was to create a global network of platforms focused on funding early-stage projects to help them scale, and thereby make them more attractive to other forms of financing. However, the demand was not sufficient for any of these initiatives to become fully realized (Fury 2010). There might be several reasons why GEXSI did not scale as anticipated. First of all, it was a charity platform and therefore attracted a different kind of “investor”. GEXSI grew out of a panel discussion on social entrepreneurship at the WEF in Davos, Switzerland in 2002. Investors who were ready and willing to support worthy charities expressed frustration at the difficulty of evaluating charitable projects. While these investors were not looking for a financial return, they did want to maximize the social benefits generated by their investment. Toward this end, they wanted to analyze charitable organizations as rigorously as they assessed for-profit companies. □.platform was only serving the primary market. Therefore GEXSI can be seen more as a complementary stock exchange for not for profit organizations , helping to focus on making charity organizations investment readyas well as help to organize and work on the investment-readiness of not for profit special interest projects like biodiversity conservationbut is currently not able to attract capital from traditional investors as in first place charities need to get investment-ready in order to qualify for listing.⁵⁰

Meanwhile in the UK, the topic of SSEs was being actively discussed in reports issued by the Social Investment Taskforce (see Chichhia 2014, 3-5) and at events such as the 2006 Skoll Forum (Hartzell 2007, 12; cf. Wheeler 2006). These discussions were followed by the publication of a report by the New Economics Foundation titled Developing a Social Equity Capital Market which, among other things, discussed the main fundraising obstacles of social enterprises and offered recommendations for developing a more effective market for both primary funding and secondary trading – “essentially a social stock exchange that's fit for the needs of the sector” (NEF 2006, 6). The report emphasized the need,

⁴⁹ See <http://gexsi.org>

⁵⁰ see socialfunds at <http://www.socialfunds.com/news/print.cgi?sfArticleId=784>and GIZ at<https://www.giz.de/de/downloads/giz2015-0058dt-mobilizing-private-financing-biodiversity.pdf>

possibly in partnership with existing exchanges and intermediaries, to establish a common information point, transparent reporting standards, an accreditation process, a network of supportive roles such as social auditors and advisers, and rules and regulations to minimize the threats of speculation and commercialization.

Whereas both the BOVESPA SSE and SASIX were oriented primarily toward mobilizing funds for non-profit organizations, the discussion in the UK was much more focused on companies that combined for-profit activities with a social or environmental mission. This is clearly evident in the landmark publication by Hartzell (2007), ownership structure (cf. Aggrawal & Dahiya 2006), daily running of SSEs, the complexities of price determination, and the need to develop methods for evaluating the social and environmental performance of the listed firms (cf. Barman 2015) and the subsequent development of impact measurement tools such as IRIS and GIIRS) are the key success factors of such an SSE marketplace. The London SSX therefore details its mission as follows: Our mission is to create an efficient, universally accessible buyers' and sellers' public marketplace where investors and businesses of all sizes can aim to achieve greater impact either through capital allocation or capital raising.

Through a unique partnership with regulated investment exchange NEX, the Social Stock Exchange is the only venue of its kind in the world to give impact businesses of all sizes the opportunity to access public financial markets, thus maximising their capital raising and growth potential. So the intention is clear: it is a double blind auction system, designed for businesses and investors seeking to create impact through their core business activity or through investment and it is for profit. It is regulated. So the regulators are responsible when listing the asset, that the criteria of the Social Stock Exchange with regard to financials and impact have been met.⁵¹

In February 2009, a conference initiated by GreaterGood – a South African trust that in 2006 had launched SASIX – met in Bellagio, Italy. The goal was to discuss the possibility of creating a global coordinating body for SSEs – a Global Social Investment Exchange (GSIX), similar in its structure and functions to the World Federation of Exchanges (Alliance 2009). Although no such organization emerged, with support from the Rockefeller Foundation and various family offices, the idea of SSEs continued to be explored in a number of countries (Campanale 2010).

In addition to SSX there are a number of additional smaller initiatives to be mentioned, which are thus far too small to be evaluated in a meaningful manner. the Kenya Social Investment Exchange (KSIX) (see Alliance 2010; Butunyi 2011) and the Portuguese Social Stock Exchange (BVS) (see Costa & Carvalho 2012; Bernardino & Santos 2015; Bernardino et al. 2015; also Galina et al. 2013).

There have also been reports of planned SSEs in Germany, India, Singapore, New Zealand, Colombia,

⁵¹<http://socialstockexchange.com/about-ssx/what-we-do/>

Thailand, and the US (see Newsweek 2008; Heinecke et al. 2011, 56; RGB 2011; Abraham 2013; Socialab 2013; Chhichhia 2014; Shahnaz et al. 2014; Wilson 2014), but none of these seem to have gotten much further from the drawing board.⁵²

Another SSE that is regulated and seems to take up speed is NeXii. In 2011, a South African social enterprise advisory firm NeXii, in collaboration with the Stock Exchange of Mauritius (SEM), received regulatory approval to open the world's first stock exchange dedicated entirely to impact investing, called Impact Exchange (IX) (Field 2012; Shahnaz et al. 2014, 152). Also in 2011, a private placement platform Impact Partners was launched in Singapore by the Impact Investment Exchange Asia (IIX) to connect social entrepreneurs and impact investors in the Asia Pacific region. In 2013, NeXii and IIX agreed to collaborate and subsequently merged their efforts to create a fully regulated SSE under SEM – the IX (IIX 2013; Shahnaz et al. 2014, 152; OECD 2015, 30). In June the same year, the Social Stock Exchange (SSX) opened in London, initially as a platform to aggregate information on publicly listed impact companies but with a clear aspiration to become a fullyfledged SSE regulated by the Financial Conduct Authority (FCA) in the future (Shahnaz et al. 2014, 152). Later in the year, a private placement platform called the Social Venture Connexion (SVX) opened in Canada, allowing accredited impact investors to connect with local mission- oriented companies (see Spence & Sinopoli 2013; SVX 2013; and Ritchie & Emes 2014 for an overview).⁵³ Backed by the Ontario government, this initiative was originally proposed as early as 2007 (Floyd 2013) and has subsequently expanded to Mexico (Spence 2014).

Conditions and criteria for successful growth

The successful scaling up of SSEs – understood as both primary and secondary trading platforms for

⁵²A conceptually related development in the late 2000s was the launch of the Sustainable Stock Exchanges Initiative by the UN (see <http://www.sseinitiative.org>), a learning platform to encourage the integration of environmental, social and governance (ESG) considerations into the rules and procedures of conventional stock exchanges. A full consideration of this topic is beyond the scope of this paper. Suffice it to say that, theoretically, just like the majority of existing firms could over time become ‘socially responsible’ and ‘green’, traditional stock exchanges could evolve into ‘social and sustainable’ stock exchanges by introducing strict listing and reporting requirements, effectively encouraging the inclusion of only ‘positive impact’ companies, although such a scenario is unlikely

⁵³between 2009 and 2016, including three that continue to be developed – IX, SSX, and SVX – can be found in Mendell & Barbosa (2013), Shahnaz et al. (2014), and Dadush (2015).

Although there is currently no visibly active SSE in the US, there is an organization called the Social Impact Exchange, “dedicated to building a capital marketplace that scales proven solutions,” that has developed the Social Impact 100 (S&I 100), an index of high-performing US non-profits (see <http://www.si100.org>). □

securities issued by impact companies— is dependent on a number of enabling conditions and contextual factors. To begin with, there needs to be a broad enough consensus among various stakeholders that SSEs are both necessary and effective in addressing the real needs of impact companies and investors. Whether this will translate into successful scaling depends on the degree of ecosystem synergies and patient financial and political support.

A fully operational SSE would need to perform a variety of functions, such as bring new issues to market, support impact companies in finding and securing start-up finance, attract new investors, provide training to companies in regulatory and compliance issues, and generate liquidity, thus offering the opportunity for investors to disinvest. Performing all these functions requires that SSEs themselves are sufficiently funded. As discussed by Hartzell (2007, 24-25), SSEs should ultimately be capable of financing themselves through membership and brokerage fees, as well as various professional and marketing services that they could offer to both businesses and investors. In short, an important condition for the success of SSEs is their financial self-sufficiency and be able to charge market rates.⁵⁴ for their services (Nicholls & Pharoah 2008, 29).

An important decision in setting up an SSE is whether to establish it as a freestanding structure or as part of an existing stock exchange. This decision may turn out to have implications for avoiding certain threats and challenges later down the road, although both alternatives have their immediate advantages and downsides. Connecting the SSE to an existing exchange has the benefit of allowing access to its infrastructure and technology, thus reducing costs and accelerating the initial setup. So far, this has been the approach taken by most SSEs. However, such a strategy may be discouraging to companies that are worried about risks associated with conventional stock markets. Given that the culture and governance of traditional stock exchanges may not be acceptable to at least some impact companies and their ethically driven investors (Hartzell 2007, 7), an SSE that is connected to an existing exchange should operate as a separate board with its own listing and reporting requirements (Shahnaz et al. 2014, 157-159).

⁵⁴ Before SSX became operative, Mendell & Barbosa (2013) compares six SSEs that existed in the early 2010s and identifies the key barriers and challenges for their future development, such as the problem of transfers of ownership, lack of appropriate legislative and institutional frameworks, low deal flow and liquidity, and the need to develop a more diverse set of financial products to serve the varying needs of different impact companies. Shahnaz et al. (2014) provide a more general introduction to social and environmental exchanges, including the regulatory status and operational mechanics of those that existed in the early 2010s. Dadush (2015) takes a more critical approach, focusing on the regulatory risks and challenges associated with SSEs which she identifies as ‘transnational rulemaking laboratories for social finance’. After reviewing the governance of three existing SSEs – IX, SSX, and SVX – Dadush argues that none of these impose adequate requirements when it comes to protecting the interests of not only investors and investees, but also the ultimate beneficiaries of impact investing, i.e. the affected communities. The authors are unaware of any subsequent papers dedicated entirely to the topic of SSEs.

Setting appropriate eligibility and reporting criteria, and the governance of SSEs in general, are themselves essential determinants of their success. Theoretically, SSEs could be instrumental in creating a sophisticated, transparent, and widely applicable impact measurement and reporting framework for mission-oriented businesses, perhaps with the assistance and continued monitoring of dedicated rating agencies (Egan 2011). Becoming listed on an SSE would require going through a highly customized due diligence process, while staying listed would be conditional on regular standardized reporting on how well the company is serving its social or environmental mission. These mechanisms are of key importance in determining the attractiveness of SSEs to both impact companies and investors (Campanale 2010). Similarly, rules must be in place to coordinate trading, settlement, clearance, and other key operations.

One of the most decisive factors in determining the long-term success of SSEs is their ability to attract new issuances. This is at least partly a function of the types of securities handled by the exchange – a more diverse set of securities would attract a larger group of companies with different financing needs. Similarly, the less the SSE limits itself to particular areas (e.g. renewable energy, healthcare, housing, etc.) the broader the spectrum of potential issuers, leading to bigger deal flow. At the same time, some impact companies may be discouraged to list on SSEs. For example, they may see engaging with a liquid marketplace as an encouragement to their investors to disinvest, or it may seem to them too costly, especially if the company is not planning to make additional issues in the future. Founders and management may also fear losing control of their company, or the excessive pressure to become more profitable (Hartzell 2007, 26).

It is interesting to note that a widely acknowledged challenge among impact investing practitioners is the alleged lack of investment-ready projects and companies (Bertelsmann Stiftung 2016; FASE 2016; GIIN 2016a). This points to a need for capacity-building assistance for social and green entrepreneurs. For example, SSEs could provide services that encourage the creation of new impact companies and raise the professional capacity of existing ones, thus increasing the number of potential issuers. This would include training and support for meeting the strict listing and reporting requirements, a feature of SSEs that demands considerable commitment and resources from companies. As pointed out by Shahnaz et al. (2014, 156), operating a fully regulated SSE entails “striking a balance between the benefits to the investors of access to complete information and the corresponding costs to social enterprises of providing rigorous disclosure.”

The flipside of a critical mass of issuers is the demand from investors. As mentioned above, the trend here seems to be positive and thus supportive of the future growth of SSEs. The option of secondary trading is also likely to attract additional investors. Whether the demand for impact assets is sustained over time depends not only on the success of impact companies, but also the motivations and characteristics of impact investors. Here, Gödker & Mertins (2015) offer a useful discussion, pointing out that researchers

do not yet have a good enough understanding of what drives impact decisions, although it seems to be a mix of personal values, identity, and political orientation on the one hand, and expectations regarding return, principles of diversification, and the use of internalized heuristics about investing on the other. A noteworthy recent development with regard to investor behavior is the emergence of ‘100% impact’ investors who have committed their whole portfolio to impact assets (Toniic 2016). A growing number of such investors could certainly have a considerable effect on the future development of SSEs.

A defining feature of most organizations in the fields of social entrepreneurship and finance is hybridity – trying to combine the goals, principles and methods of business with those traditionally associated with the non-profit sector (Birkholz 2015). In many ways, SSEs represent a perfect case study of what this might entail in practice. The growth of SSEs is therefore also dependent on how well these institutions combine ideas and practices that may sometimes be difficult to reconcile (see Hartigan 2006). If SSEs fail in maintaining the delicate balance between the rationales of ‘profit’ and ‘impact’, they may risk alienating certain investors and companies whose active participation may be essential for the long-term success of SSEs. In other words, ‘success’ may mean different things for different stakeholders. Therefore a universal underlying framework as provided by the UN SDGs is helpful in defining success in a manner that is not arbitrary. As emphasized by Dadush (2015), merely quantitative measures (e.g. deal flow), although important, may not be sufficient to assess the overall performance of SSEs, as many investors and investees may give equal weight to mission alignment, ethical integrity, and whether the SSE itself is run as a social enterprise which all are expressions of their ToC. Here, healthy competition between SSEs would help ensure that both investors and businesses have the option to choose a platform that is best aligned with their values and purposes.

And finally, effective regulation is another key determinant of the long-term success of SSEs and social finance in general (see Addis 2015). On the one hand, SSEs are embedded in existing judicial frameworks and must therefore abide by the rules and regulations that apply to the legal form that a particular SSE has taken. On the other hand, they are innovative platforms that have considerable self-regulatory leeway. In many ways, SSEs currently under development will set the regulatory standard for years to come. And since these platforms bring together a variety of actors and organizations, this may have far-reaching implications not just for SSEs, but for the social enterprise and impact investing sectors more broadly. As pointed out by Dadush (2015), merely ‘blueprinting’ the regulatory model of conventional stock exchanges may prove to be highly problematic and potentially even undermine the fundamental purpose of SSEs.

Threats and challenges

A more critical interpretation would see the emergence of SSEs as the result of applying a particular politico-economic way of thinking in areas that have traditionally been associated with philanthropic giving and the activities of non-profit organizations, often within the context of considerable state presence; and as a symptom of financialization – the growing role of financial motives, actors, markets, and institutions in the operations of the economy and society at large (Epstein 2005, 4; see also Thümller 2016; Dowling 2017). According to this interpretation, social purpose organizations are increasingly subjugated to the financial logic of the market while ‘positive impact’ is turned into a commodified investment opportunity; from a financing point of view, marketable solutions become preferred over alternatives for which it is difficult to present a profitable business case (Dadush 2015, 152-154; cf. The Economist 2006). For many philanthropists however this may be a desired development, as it allows them to use a philanthropic coin many times. At the moment the grant scheme is set up in a way, that a coin can be only spent once. When spent it is gone and it is not recuperated to be used again. So the grant scheme does not allow for an informed financial decision where to best spent the philanthropic coin. This is where it can be recouped after a certain time which make projects more transparent and accountable for their success and prevents the waste of grant money. The grant and not for profit scheme has been described as an dictator game in behavioural economics.⁵⁵

Another argument is the shift from traditional philanthropy to philanthro-capitalism (Bishop & Green 2015) may be ultimately followed by a shift from philanthro-capitalism to ‘quarterly philanthro-capitalism’ where entrepreneurial activity and managerial decision-making become increasingly affected by the dictates of investors and social finance institutions, including SSEs. This shift is driven by the often unshakable belief that the ‘forces of the market’ (including the financial market) can be successfully harnessed to tackle almost any social or environmental problem. Although this is certainly true in a number of areas, market fundamentalism combined with the mentality and methods borrowed from the world of finance may also lead to some negative consequences (see Jacobs & Mazzucato 2016) – in this sense, the ‘impact economy’ (Martin 2016) is no different from the rest of the economy. These potentially negative consequences represent legitimate threats to SSEs and avoiding them is a key challenge in the future development of these platforms, as well as social entrepreneurship and impact investing in general.

For example, just like traditional venture capital is often tempted to make speculative gains through a quick exit on a stock exchange (Lazonick & Mazzucato 2012, 13-15), assuming that the demand for impact assets continues to grow (see GIIN 2016b for an overview of recent market trends), venture philanthropists and other early-stage investors may become increasingly inclined to float impact companies on SSEs in ways that primarily benefit insiders. Strict regulation will be required together with regulating market access to create the respective governance and prevent insider trading. And similar to

⁵⁵<http://excen.gsu.edu/center/media/Razzolini.pdf>

conventional stock exchanges, regular reporting of both financial and impact data within the context of highly liquid secondary markets will inevitably create short-term pressures to meet the expectations of investors, analysts, and rating agencies, possibly at the expense of long-term goals and planning. As discussed above, such a system has a number of important strengths and benefits. It can create pressures to commercialize, rivalry between ownership and control, mission drift, and a variety of conflicts of interest, including those involved in underwriting and market making (see Ellis et al. 2000; Aggrawal 2002).

The degree to which these threats translate into actual practice depends on, first, whether there will be a ‘social innovation boom’ (Gläenzel et al. 2013), leading to a critical mass of profitable impact companies, and second, the evolution of the rules and regulations that are going to govern the operations of SSEs, and by extension, the activities of listed companies and their investors. As emphasized by Hartzell (2007, 4), SSEs must be “carefully crafted so that [they are] protected against the exploitation for private benefit, but still remain flexible enough to be treated as genuine exchanges by investors.” In other words, the hybrid nature of SSEs requires the development of innovative regulatory frameworks and principles of governance, the purpose of which would be to ensure that the investment and trading activity on SSEs does not become decoupled from the underlying purpose of the listed firms and that the rights and interests of other stakeholders are well-represented alongside those of investors and investees.

Dadush (2015) has offered a number of recommendations, such as careful design of listing and reporting requirements, explicitly identifying what constitutes malpractice, establishing procedures for the effective enforcement of rules of conduct, setting up safeguards to limit short term investor behavior and mission-diluting commercialization, and perhaps most importantly, adopting a definition of success for SSEs that includes the protection of beneficiary interests. SSEs are yet to prove their long-term viability and potential for funding impact companies in volumes that would have a noticeable effect on the real economy. However, the future trajectory of SSEs will be determined by decisions made during setup, some of which may become increasingly difficult to revise later down the road.

Populating the Market of SSEs

As of April 2017, there are six SSEs under active development: BVSA, BRiiX, SVX, IX, GIIVX, and SSX. The first is the continuation of the initial BOVESPA project, making it essentially a donation platform. The second began as a consulting company, and now acts as an information portal for connecting impact investors with companies showcased on BRiiX, of which there are currently five. SVX is registered with the Ontario Securities Commission as a restricted dealer, making it a private placement platform that connects accredited investors with local impact ventures. A new SVX platform was

scheduled to open in early 2017, but this has been postponed to later in the year. Meanwhile, an affiliate of SVX was launched in Mexico in 2015, which is currently focused on offering educational services on impact investing. In terms of building a publicly accessible marketplace for securities issued by social or green enterprises, both BRiiX and SVX are still in the early stages of their development.

The Singapore-based organization IIX re-branded themselves in early 2017 and announced plans to expand globally (IIX 2017). The activities of IIX are built around four institutional structures. First, there is the IIX Impact Accelerator, targeting early-stage social enterprises in South and Southeast Asia, helping them with seed finance and capacity building. Second, IIX operates a private placement platform called Impact Partners⁵⁶that connects accredited investors with impact companies. Third, IIX manages an equity investment fund called IIX Growth Fund. And finally, there is the public trading platform IX, operating as a separate board of SEM. As of April 2017, there is very little activity on the IX, with only one product listed, the Women's Livelihood Bond,⁵⁷and the exchange does not seem to be a current priority of IIX (cf. Dadush 2015, 209-210).

The Vienna-based Global Impact Investing Foundation (GIIF), in collaboration with the United Nations Industrial Development Organization (UNIDO), is planning to launch a global impact investing platform GIIIX later in 2017. The investment themes on GIIIX are organized around the UN Sustainable Development Goals (SDGs), providing the platform with a wide but easy to understand categorization for the listed initiatives. Impact entrepreneurs will be able to showcase verified projects on the GIIIX website, while agreements are negotiated between investors and investees using the contract documentation and support tools provided by GIIIX. According to its website, GIIIX is also working on developing a new standardized tool for impact measurement that can be used by investors to evaluate the projects listed on GIIIX.

To date, the most highly developed and active SSE is the London-based SSX. The platform is open to impact companies from anywhere in the world, as long as they meet SSX's listing requirements. As of April 2017, SSX is registered as a UK Limited Company, making it a for-profit enterprise. In addition, SSX is a Recognized Investment Exchange, regulated by the UK Financial Conduct Authority (FCA). This was achieved through a partnership with NEX Exchange (formerly ISDX) which made it a segment of NEX where the securities of SSX-listed companies are now being traded. Alternatively, listed companies can have their shares traded either on the London AIM market or the London Stock Exchange (LSE) main market (All Street Research 2017, 15). Although the SSX lists about 50 companies, only 12 of those can be traded. The remaining are private businesses who are currently showcasing their activities

⁵⁶See <http://impactpartners.iixglobal.com>

⁵⁷<http://iixglobal.com/womens-livelihood-bond/>

through SSX, although they may issue tradable securities in the future. The SSX is also planning to open small localized exchanges, similar to that of their South West Social Stock Exchange, to enable more investment in impact companies that are operating at the community level. Pilot projects for such local exchanges have recently been launched in Wirral and Liverpool, with discussions underway in Edinburgh, Scotland (All Street Research 2017, 14).

Prognosis on the Development of SSEs

Given that several of the early SSE-type funding platforms have come and gone and most of the remaining ones are limited in size and activity, very little empirical research has been done specifically on SSEs. However, the recent growth of SSX in the UK, continued work on BVSA, IX, BRiiX, and SVX in Mexico, as well as the upcoming launch of the new SVX in Canada and GIIVX in Austria, may in the near- and mid-term future provide increasing opportunities for studying the nature and operations of these platforms and their relationship to the broader field of impact entrepreneurship and investing. At the same time the UN SDG may function as a game changer as they establish a vision, a tToC and a universally agreed impact goal endorsed by 194 member states, which helps in creating a level playing field in the financial sector at least for the impact investing segment.

Concerning the characteristics of SSEs compared to conventional stock exchanges, the only SSE active enough to allow for at least some meaningful comparison is the SSX in the UK. From a practitioner's point of view, SSX will certainly help inform the design of similar platforms elsewhere.

The study of impact investor behavior creates a bridge between the sociology and economics of SSEs. For example, what characterizes the investors who are attracted to SSE-type investment platforms (e.g. Millennials) and what prevents institutional investors (e.g. funds) from accessing impact investing? The analysis thus far shows that besides the SSX there has been little attempt to set up an SSE which is for profit. When continued successfully as the current volumes seem to suggest it can serve as a blueprint for other "for profit SSEs". ISSX solves the problem of retail investors that now for the first time have the chance to invest in impact, if they wish. An open issue is how pension funds can be attracted as they need higher lot sizes due to regulation and policy. Another open issue needing research is what are the corresponding implications for portfolio theory, social and sustainable investing in general, and the future development of the impact economy? In a similar vein, it would be interesting to know the profile of the ventures listed on SSEs and which of them are most successful, both financially and in terms of their social and environmental performance. A connected and potentially important sub-theme is the relationship between impact investing and innovation. In the future, SSEs could theoretically play a supportive role in mobilizing finance for growth companies in areas such as renewable energy, sustainable

engineering, electric mobility, green materials, and biotechnology all in line with the UN SDGs, which underscore the SSE market. Impact investing and SSEs could also play a considerable role in directing development finance and find models to enhance development aid through public private partnership schemes. It appears that this is the goal of GIIVX in Vienna who has UNIDO as a strategic partner⁵⁸. If SSEs indeed become a channel for cross-border investment for sustainable development, this in itself would open up a whole new area of GDP growth and empirical research.

Building on the early papers by Dadush (2015) and Burand (2015), more work could be done on the regulatory, legal and policy implications of impact investing and SSEs, including the assessment of existing regulatory gaps and potential policy incentives. There is also ample room for SSE-related theoretical research, especially when examined in the broader context of social and sustainable finance (see Lehner 2016b). For example, do SSEs represent a more fundamental shift in the relationship between business, investment and society – a prelude for a future in which most companies and investors combine the profit-motive with social and environmental objectives?

⁵⁸ <https://giivx.com/en/pages/industry-know-how/unido-and-the-sdgs/>

Conclusion

Impact investing is on the rise. Although still in the early stages of its development, the growing interest from mainstream financial institutions and the emergence of ‘100% impact’ movement are clear signs that the field is no longer merely an interesting idea in the minds of a few devoted enthusiasts. This trend is likely to become magnified by the ongoing global push for sustainable development, the endorsement of the UN SDGs by 194 member states and the likely growth in social and green entrepreneurship. As both the demand and supply increase, the case also grows for more widely accessible investment platforms. The success of SSX in the UK suggests that, under for profit circumstances, such platforms may indeed become increasingly important for connecting impact companies with potential investors.

Just as it is easy to overstate the potential of impact investing in solving the world’s problems, it is also easy to dismiss it entirely as yet another expression of market fundamentalism and financialization. As always, the reality is much more nuanced. It is certainly the case that impact companies and nonprofit organizations can make a positive contribution towards the goal of sustainable and inclusive development. These organizations require financing and SSEs are one tool among others to connect them with investors. However, SSEs are that proved successful were targeting the main stream traditional finance market and the mainstream investor, rather than looking for another bunch of charity money. For profit SSEs are by no means protected against the tendencies often associated with financial markets, such as short-termism, excessive speculation, or questionable accounting practices. Market pressure can lead to improved performance, but it can also lead to mission drift and the sacrifice of long-term goals for short- term profit. Well-developed regulation and rules of governance are thus essential for ensuring the integrity of SSEs, and by extension, the impact economy as a whole.

With regard to the future study of SSEs, when placed within the general context of social and sustainable finance, there is already considerable room for SSE-related theoretical, legal and policy research. Options for empirical research are currently limited, simply because most SSEs are still relatively small. However, there does exist a critical mass of impact investors and companies. Research focusing on their characteristics and activities is also relevant in the context of SSEs and may itself have an impact on their future growth and development.

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