Development of a Digital Islamic Social Stock Exchange: A Legal, Regulatory and Shariah Review

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الملخص

تداول الأسهم من خلال أسواق الأسهم هو وسيلة شعبية للمستثمرين للحصول على مكاسب رأس المال والأرباح. ومع ذلك، فقد وجدت أيضاً بورصة أقل شهرة في الأسواق التقليدية المعروفة باسم البورصة الاجتماعية. وكانت مبادرات البورصة الاجتماعية التقليدية ناجحة بين عدد قليل من الاقتصادات التقليدية مثل البرازيل وكندا وسنغافورة/موريشيوس والهند مؤخرًا. تمكّن البورصة الاجتماعية المؤسسات الاجتماعية التي لها أسباب اجتماعية وبيئية تجارياً من سري مشاريعها أو أداولها للمستثمرين للاستثمار فيها. على عكس البورصات الهاشمة للربح، فإن هدف البورصة الاجتماعية ليس مكسباً نقدياً للمستثمرين ولكنه عائد من حيث مواجهة الاضطرابات الاجتماعية والحفاظ على البيئة. وبعبارة أخرى، فإن تأثير الاستثمار هو هدف المستثمرين. وبالتالي، يؤثر المستثمرون على العالم من خلال استثماراتهم في المؤسسات الاجتماعية في البورصة. يبحث هذا البحث في آفاق تطوير بورصة اجتماعية إسلامية رقمية ويقترح أن الاقتصادات الإسلامية يمكن أن تقود بورصة اجتماعية إسلامية لنشر الرؤية الشرعية للعمل الخيري والاستثمار والاستدامة. وعند شرح هذا الاقتراح، استعرض البحث البورصة الاجتماعية للبرازيل وكندا وسنغافورة/موريشيوس والهند وأجرى ثلاث مقابلات متعاقبة مع علماء بارزين في هذا المجال. وفي الوقت الذي يمهد فيه البحث الطريق لتمكين المؤسسات الاجتماعية التي تهدف إلى أسباب اجتماعية وبيئية من الحصول على التمويل والتعرض المناسب والروابط، فإن البحث يضع البورصة الاجتماعية بدقّة ضمن مبادئ الشريعة الإسلامية ويتؤكد من الحاجة إلى إنشاء بورصة اجتماعية إسلامية. وبناءً على ذلك، صاغ البحث اقتراحات حول العناصر القانونية والتنظيمية والشرعية اللازمة لإنشاء بورصة اجتماعية إسلامية رقمية وهياكلها التشغيلية.
Abstract

Equity trading through stock markets is a popular avenue for investors to obtain capital gain and profits. However, a much less known stock exchange has also existed in the conventional markets known as the social stock exchange (SSE). Conventional SSE initiatives have been successful among a few conventional economies such as Brazil, Canada, Singapore/Mauritius and recently India. An SSE enables social enterprises that have as their business social and environmental causes to list their projects or instruments for investors to invest in. Unlike for-profit stock exchanges, an SSE’s aim is not monetary gain for the investors but returns in terms of counteracting social upheaval and environmental conservation. In other words, impact investment is the aim of investors. Thus, investors impact the world through their investments in the social enterprises on the exchange. This research examines the prospect of developing a digital Islamic social stock exchange (ISSE) and proposes that Islamic economies can pilot an ISSE to deploy the Shariah vision of philanthropy, investment and sustainability. In expounding this proposal, the research reviewed the SSE of Brazil, Canada, Singapore/Mauritius and India and conducted three in-depth interviews with prominent scholars in this area. While paving the way to enable social enterprises whose goals are social and environmental causes to obtain funding, appropriate exposure and connections, the research neatly situates social stock exchange within the principles of Shariah and ascertains the need for establishing an ISSE. The research accordingly formulated suggestions about requisite legal, regulatory and Shariah elements for establishing a digital ISSE and its operating structures.

Keywords: Digital Islamic social stock exchange, Shariah compliant impact investment.
1.0 Introduction

In the United Nations (UN) Development Summit 2015, world leaders agreed to adopt the 17 Sustainable Development Goals (SDGs) as part of the 2030 Agenda for Sustainable Environment. Following the agreement, countries around the world are expected to take purposeful initiatives and create national frameworks to achieve the SDGs, even though they are not legally binding (UN, 2016). The UN stated that in materializing such goals, all parties need to take actions in building an inclusive, sustainable, and resilient future for the people and the planet (UN, 2016). Stock exchange is one of the ways through which attaining the goals can be facilitated. It is a platform where equity trading serves as a process and avenue for investors to make capital gains. By enabling the mobilisation of financial resources and connecting people who need capital with those who have the capital to invest, stock exchanges effectively promote economic development (Dupraz-Dobias, 2018). This is a stock exchange in its conventional essence and purpose.

There is, however, an exchange referred to as social stock exchange, which is different from and not as popular as the conventional stock exchange. Social stock exchange focus on listing and trading securities of enterprises that are considered to have a positive impact on society and the environment (Laul & Wendt, 2017; Wendt, 2017). These enterprises typically have a focus on sustainability and corporate social responsibility and may be involved in renewable energy, clean technology, and other socially responsible industries (Laul & Wendt, 2017). Furthermore, social stock exchange is interchangeably referred to as sustainable stock exchange and aims to promote responsible investing and encourage individuals and companies and other entities to prioritize social and environmental issues. The concept of sustainable stock exchange and the benefit that it brings to the world were further explained in a report made through collaboration between the United Nations Conference on Trade and Development (UNCTAD) and World Federation Exchanges on the establishment of Sustainable Stock Exchange (SSE). The SSE initiative is a UN partnership programme among the UNCTAD, the UN Global Compact, UNEP Finance Initiative, and the Principles of Responsible Investing (PRI) whose collective goal is to establish a
global forum for discussion to improve performance on ESG (environmental, social, and corporate governance) issues and promote sustainable investment, including the funding of the UN Sustainable Development Goals (Sustainable Stock Exchange Initiative, 2019).

As social companies develop, there is an uptrend in the society that shows investors looking for investments that carry objectives aligned with their beliefs other than profit motive (Calandra & Favareto, 2020; Laul & Wendt, 2017; Wendt, 2017). Interestingly, social stock market does not necessarily provide returns unlike the conventional stock exchange. The returns is simply designated as one that would be sufficient for the social enterprises to continue as a going concern and in form of impact that gives social and environmental benefits (Dadush, 2015). It is noteworthy that in the practitioner’s point of view, social stock exchange is similar to social crowdfunding platform (Calandra & Favareto, 2020). Nevertheless, the discussion in this research refers to social stock exchange as a platform designed to connect investors with social businesses in need of capital and allows them to buy shares in social enterprises vetted by the social exchange (Calandra & Favareto, 2020).

Apart from the conventional stock exchange, there is also an Islamic stock exchange, a market that operates in accordance with Islamic financial principles. Core principles of Shariah (Islamic law) prohibit involvement in interest, speculation, and subject matters such as gambling, alcohol and tobacco. Furthermore, the core principles focus on charity and philanthropy for social welfare (Shepard, 2020). Also, relevant to the discussion on this subject matter is Islamic social finance, which is currently on the rise, especially in response to the Covid-19 pandemic (Haji-Othman et al., 2020). To date, there is yet any Islamic social stock market that operates according to the Shariah core principles. As the Shariah principles fit perfectly into the ideals of social stock exchange, Andrew Sheng argued that there should be specific Islamic social stock exchange (Sheng, 2022). Such exchange would serve as a market that is interest-free and risks are shared among the investors (Sheng, 2022). It is on this note therefore that this research investigates and works out operational parameters of a digital Islamic social stock exchange. This is to determine its prospect and significance for sustainability in the long run. This prospect is
determined by having regard to viability of the institution and its structure in line with requisite legal and regulatory framework, as well as Shariah parameters and other relevant matters.

This paper is divided into seven sections. Following the introduction, section two explains the objectives, research questions, problem statement and methodology of the research. Section three provides a review on existing literature about social stock exchanges from selected countries of Canada, India, Brazil, and Singapore/Mauritius. Next, section four analyses expert interviews on developing a digital Islamic Social Stock Exchange. Section five presents a discussion of proposed legal, regulatory and Shariah considerations for an Islamic social stock exchange (ISSE). The penultimate section discusses the operation of the proposed ISSE model while the last section concludes the research.

2.0 Research Objectives, Research Questions, Problem Statement and Methodology

The objectives of this study are twofold as follows:

1. To review existing SSEs in select conventional markets namely Canada, India, Brazil, and Singapore/Mauritius and study their benefits, challenges and issues.
2. To propose a viable model for a digital Islamic SSE from a legal, regulatory and Shariah point of view.

The research questions reflect the above research objectives as follows:

1. What are the existing models of SSEs in Canada, Brazil and India and how successful have they been?
2. What suitable model can be proposed for a digital Islamic SSE?

2.1 Problem Statement

The motivation to establish an ISSE is to provide funding for social enterprises that have, as their objectives, social or environment causes. Social enterprises usually have tremendous difficulty in getting enough funding to expand and provide relief for the social projects they are helming. Social enterprises also suffer hindrance in getting proper exposure to possible donors and getting connections for their
work. An ISSE is needed to address all these issues plaguing social enterprises. Obviously, to be listed on an ISSE, social enterprises need to have Shariah compliant objectives and possibly being built on the foundations of zakat (alms tax), waqf (endowment), sadaqah (charity) and related principles for investing in Islamic social finance (ISF) impact projects. Nonetheless, there are limited studies in this area generally (Moi, 2020; Sheng 2022) and especially on the legal, regulatory and Shariah considerations needed for the establishment and workability of a digital ISSE in contemporary Islamic economy.

2.2 Methodology of the Research
This is exploratory legal research that investigates questions on developing a digital Islamic Social Stock Exchange. The research is exploratory because of the innovative nature of it subject matter not having been previously studied in depth (Swedberg, 2020; Reiter, 2017). A qualitative research methodology with doctrinal approach is used in obtaining data and examining issues relevant to the subject. In addition, semi-structured virtual interviews were conducted with information-rich experts as a technique for collecting data in this research (Kumar et al., 2020). In the main, the nature of the inquiry of this research into obtaining accurate and in-depth insights about the subject informs the use of the qualitative methodology in conducting it (Hennink et al., 2020; Tyler, 2017). As for the doctrinal approach, it is a wide-ranging technique for undertaking research in law and regulatory matters (Cownie & Bradney, 2013) as well as in the application of Shariah via contemporary law-making (Zahraa, 2003). It is a technique that focuses on the letter and substance of law, regulations and the resultant action or conducts therefrom in order to provide practical solution to a problem (Cownie & Bradney, 2013). It involves analysing legal principles and their implication on the conduct of a particular business as dictated by law in order to provide a ready guide for all stakeholders in the business (Pradeep, 2019).

The doctrinal approach was particularly augmented with the semi-structured expert interviews used to collect data with practical relevance for the subject of the research (Hutchinson & Duncan, 2012). Three experts were specifically selected based on their specialisation and expertise in the subject of this research. The experts
and the respective dates they were interviewed are as follows: 1) Tan Sri Andrew Sheng, an academic, a former central banker (Malaysia and Hong Kong) and global financial commentator, on Wednesday 15th Feb 2023 at 11.30am; 2) Associate Professor Dr Ahcene Lahsasna, a Shariah expert at the International Centre for Education in Islamic Finance (INCEIF University), Malaysia, on Friday 10th Feb 2023 at 3.00pm; and 3) Mr Johnny Moi, a prominent private researcher and writer on Islamic social stock exchange, Malaysia, on Monday 13th Feb 2023 at 10.00am. The data obtained from these experts was examined alongside published information in literature relevant to the issues and subject (Mayer, 2015). For this purpose, doctrinal and content analyses were made in construing the data from the interview and published information (Kyngas, 2020). The analyses enabled proper identification and in-depth understanding of the legal, regulatory and Shariah issues in the subject of the research, i.e., developing and operating a digital Islamic Social Stock Exchange.

3.0 Literature Review

The emergence of Social Stock Exchange (SSE) is noteworthy in the global quest for sustainability (Wendt, 2017). Social stock exchanges are regulated platforms that aim to bridge the gap between the social sector and private capital by providing a platform via which donors/funders and investors can fund and facilitate the growth of organizations that have a social purpose. Brazil instituted the world’s first SSE in 2003, with the establishment of Bolsa de Valores Sociais (BVSA). Since then, several countries, including South Africa, Portugal, Canada, the UK, Singapore/Mauritius and India have instituted social stock exchanges. Note that, it is a limitation of this research that only four countries were selected, and the selection is based on the countries’ pioneer status in establishing social stock exchanges (Brazil and Canada) and as notable practitioners (India and Singapore/Mauritius) of the same.

SSEs aspire to harness the resources of financial markets and private capital to combat social and environmental issues (ICNL, 2021). Early on, Bugg-Levine et al. (2012) identified that social enterprises could attract a wide range of investors on an SSE “if they could structure their funding to treat charitable donations as a form of
capital that seeks social, not financial, returns” (Bugg-Levine et al. 2012, p. 6). The authors suggested types of financing which included charitable, and financing which provided financial returns such as quasi-equity debt and convertible debt. Chhichhia (2015) highlighted that SSE increases the visibility of social enterprises for impact investors. Moving forward, Chhichhia (2015) recommended four initiatives to ensure continued growth of SSE. Firstly, more education, awareness and training for all stakeholders on SSE, social enterprises and the standards for social investing; secondly, creating more social enterprises; thirdly have in place proper policies and regulations to support social finance markets; and lastly provide seed funding for research and development to further enhance and understand the needs of social enterprises, impact investors and SSEs.

Sheng (2022) highlighted that the existing infrastructure of stock market exchanges should be used for SSEs. Sheng (2022) also suggested that an Islamic Social Stock exchange should be created especially because of the values in Shariah which are congruent to the goals of SSEs. The principles of Shariah include the prohibition of interest, gambling and excessive uncertainty, the promotion of risk sharing between investors and issuers and the fulfillment of the objectives of Shariah. The objectives of Shariah referred to as *maqasid al-Shariah* have been classified by scholars into five broad categories; these are safeguarding religion, safeguarding life, safeguarding intellect, securing lineage and economic security to safeguard property and wealth (Kamali, 1999; Nyazee, 2016). These objectives are social in nature as they are all concerned with human dignity in its various aspects and culminate with economic security as one broad dimension of this dignity, thereby linking the social dimension of human beings with economic security (Atiq-ur-Rehman, 2019). In Islam, human life derives from these objectives, hence the imperative to understand and operationalize dealings in accordance with the *maqasid al-Shariah*. The bottom lines are to preserve order, establish equality among people, achieve benefit and prevent harm or corruption, ensure just and effective law that empowers people to become not only self-reliant but confident and respected (Mohammad, & Shahwan, 2013).

In light of these principles of Shariah, it is therefore understandable when scholars like Sheng (2022) and Moi (2020)
propose an Islamic SSE. Moi (2020) defined Islamic SSE as a Shariah ‘compliant trading, listing social development and impact investing businesses in approved Main Stock Exchanges.’ Moi (2020) recommended that the ISSE should be created using the latest technology, possibly blockchain. The author also proposed, *inter alia*, seed funding from a sponsor, creation of a proper regulatory framework, an ISSE advisory board and integration of Islamic finance with impact investment tools. However, beside these two very convincing proposals, no further work on developing an ISSE was obtainable. This is identified as a gap in literature which this research aims to fill.

Thus, going forward, the research reviews literature on the four selected countries’ SSEs in greater detail. These SSEs have been active in their respective jurisdictions. Moreover, their rules, selection criteria, benefits and challenges have already been identified.

3.1 Bolsa de Valores Sociais (BVSA) - Brazil
Bolsa de Valores Sociais (BVSA) or Socio-Environmental Investment Exchange (PRI, 2018), was the first social stock exchange created and operated in the world (ICNL & Samhita, 2021). BVSA was launched by the Brazil Stock Exchange (B3) in 2003 as its subsidiary (Digigaps, 2018), and for CSR purposes (ICNL & Samhita, 2021). While its format was similar to a stock exchange, it was more of a fund-raising virtual platform (Brazil Foundation, 2017). Only Non-Governmental Organisations (NGOs) were allowed to list their projects after a screening process was carried out. Investors could invest in the NGO; however, returns were in the form of social benefit of furthering the sustainable development goals of Brazil, and not for a financial gain (Brazil Foundation, 2017). The investors could track the projects they invested in through the reports published on the BVSA (PRI, 2018). The funds obtained by the NGO was used to further the project listed and thus impact sustainable development goals in Brazil. An example of a project that benefited from the listing on BVSA was a shrimp farming school that trained future shrimp farmers to ensure sustainable farming of shrimps for the future of their community (PRI, 2018). For a person to invest they needed to register online with BVSA then
choose a ‘project theme, target audience or region’ (PRI, 2018) and start donation.

From 2015 onwards Brazil foundation, an NGO, started monitoring the impact of the listed projects (PRI, 2018). In 2016 the projects were chosen according to how they met the United Nations Sustainable Development Goals (Brazil Foundation, 2017). In December 2018 the BVSA ended its operations (ICNL & Samhita, 2021).

Selection and Regulatory Framework BSVA
The BVSA being a subsidiary of B3 was governed by a Board of Governors appointed by B3. The Board of Governors had representatives from UNICEF, UNESCO, the Brazilian government, and representatives from the education, environmental and cultural sectors of Brazil. ‘The Board of Governors provided the final round of approval for projects that could be listed on the BVSA and evaluated the projects, performance, operations, and legal status of applicant organisations’ (ICNL & Samhita, 2021, p. 39). BVSA itself had the power to prevent funds going to projects if there was breach by the NGO of governmental regulation or the partnership agreement signed by the NGO.

Each year twenty projects of NGOs were chosen out of around 650 applications (PRI, 2018) by a committee comprising of an Executive Officer a Superintendent of B3, and a representative of the United Nations Development Programme (UNDP). Projects were selected based on how they met Sustainable Development Goals (SDGs) and were listed for up to one year (Brazil Foundation, 2017). Once selected project received seed capital of R$50,000 and were able to raise an additional R$50,000 through the BVSA (PRI, 2018). To be eligible to be listed on the BVSA the investees had to be an NGO legally registered for three years in Brazil with a project focussing on social and or environmental purposes. Investors could be retail or institutional, they were allowed to make donations to projects on BVSA by bank transfer or card payment (ICNL & Samhita, 2021). Investors could check on their social investments through the BVSA’s website and progress reports were provided to investors semi-annually
by BVSA’s technical team. This included a summary report of the project once it had been implemented (ICNL & Samhita, 2021).

**Benefits, Challenges and issues in BVSA**

It is reported that the BVSA managed to raise R$19.1 million for 208 projects (PRI, 2018). The BVSA managed to create connections between NGOs who needed funds for social and environmental projects with investors who wanted to have a social or environmental impact (ICNL & Samhita, 2021). The BVSA was the first initiator of social stock exchange and its success prompted other countries to introduce their own version of SSEs. It is also reported that BVSA has been recognized by the ‘United Nations Global Compact (UN) as a case study and model to be followed by other markets’ (Brazil Foundation, 2017).

However, according to literature the BVSA closed down in 2018. No information of why exactly it closed can be found or the challenges faced. It is the opinion of the researchers that the closure could be due to sustainability issues. There may have been challenges of getting sustained donation for investors, since continued interest of investors who support social or environmental causes without the expectation of any return may be difficult.

### 3.2 Social Venture Connexion (SVX) - Canada

The Social Venture Connexion (SVX) Canada was registered as a social stock exchange in 2012 in Ontario, Canada and officially launched as an online database and platform of impact investment with 12 inaugural issuers in 2013. It was established out of a collaboration of MaRS Center for Impact Investing Toronto with the Toronto Stock Exchange (TSX). The Canada SVX has developed and scaled up to launch partnership and local operations with SVX Mexico and SVX USA in 2016 and 2019 respectively, following their establishment and adopting the model and strategy of the Canada SVX (DeveX, 2023; Social Venture Connexion US, 2022; Luis, 2022). The objective of SVX is to create a market for good, break the cycle of poverty, create opportunity and build environmental sustainability while supporting ventures to address these issues (Dadush, 2015; Social Venture Connexion, 2013).
The SVX platform catalyses financial services and impact investments through facilitating co-creation, evaluation and implementation of social and environmental impact of clients by aligning the same with the clients’ financial goals and values. SVX operates as a full-service social stock exchange platform. The platform showcases complete profiles of listed issuers which include key background information on the fund or organisation along with important documents that facilitate investment decision-making process. Securities issued on the SVX include promissory notes, common shares/stock, debentures, community bonds and mortgage among others (Social Venture Connexion, 2022a). The platform provides a digitally automated transaction system that facilitates equity and debt investments across a range of impact areas comprising of food, health, housing, equity, climate and community real estate (Social Venture Connexion, 2022a; Wendt, 2020). The platform also features a due diligence mechanism for market dealer to review governance, management, finances, impact and requisite details of offering through access to information on selecting quality impact investment reviewed by experts in mainstream and impact investing among internal and external advisors of the platform (Social Venture Connexion, 2022b; Logue & Grimes, 2022).

By the listing requirements on the SVX, an investee can be a for-profit, non-profit and charitable organisation, cooperatives with a social and/or environmental mission as part of its core purpose, incorporated and based in specific Canadian provinces. In addition, the investee must have a minimum of a year’s operating history; be on a start-up, growth or scaling stage and looks to raise $100,000 to $10 million; has existing revenue, customers/investment; be sustainable with reasonable profitability; has met industry requirements of investments offering exemptions by securities regulators where applicable. For-profit entity, it must be a certified B Corporation with a score of 80 on the B Impact Assessment (Social Venture Connexion, 2020a; 2013).

Legal and Regulatory Framework of the Social Venture Connexion Canada
SVX is registered as an exempt market dealer (EMD) in Ontario under section 5(1)(2) of Ontario Securities Commission Act 2021 (amendment) and section 1(1) Ontario’s Securities Act 1990. Its principal regulator is the Ontario Securities Commission. Under section 2.3(1) of National Instrument 45-106 (Prospectus and Registration Exemptions), the EMD describes a status accorded to a segment of Canada’s capital markets in which securities can be sold without the measures associated with a prospectus and all related requirements. The exemptions help eligible entities to raise capital without the expense and time for preparing a prospectus. The same status is accorded to the SVX by section 73.3(2) of the Ontario Securities Act 1990. The EMD status facilitates an enabling tax and regulatory environment for the development of impact investing. So, the relevant provisions of the laws on establishing and operating the SVX platform enable it to run and support social/environmental enterprises for impact investing. For this function, the SVX is granted offering memorandum exemption and accredited investor exemption (Social Venture Connexion, 2020b). These exemptions make it easier for social entrepreneurs, charities, non-profit funds and organisations listed entities on the SVX to run enterprises, generate revenues and implement their projects (Laul & Wendt, 2017; Dadush, 2015). The framework facilitates unlocking new sources of capital for socio-economic impact and public philanthropy, i.e., through social entrepreneurs, charities, foundation endowments, pension funds among others (Brouard, et al., 2015; Dadush, 2015).

Benefits, issues and challenges of Social Venture Connexion Canada
The SVX works and engages with more than 500 impact-driven non-profit enterprises, social entrepreneurs, funds and charities; some of them provided with needed business advisory and training. With more than 1,200 investors, it has mobilised and/or enabled raising more than $350 million in capital via innovative impact capital products including microlending and community bonds (e.g., House of Friendship and Windmill Microlending Bonds) which it designed to raise capital and finance socially and environmentally impactful projects (Social Venture Connexion, 2022). The SVX has helped in the establishment of Ontario’s School for Social Entrepreneurs in 2012.
to run programmes that help people and enterprises to develop skills and networks needed to tackle societal problems (School for Social Entrepreneurs, 2022). The SVX has led an initiative for designing the Social Finance Forum of Canada from 2011-2017, a leading forum on impact investing and social enterprise in Canada (Social Finance Forum, 2023; Wendt, 2020).

However, certain issues are a setback to the SVX. Foremost is the nature of its uncoordinated marketplace. Inadequate capital and/or resources dedicated to and expended for social and environmental impact investment have limited the prospect of SVX operations. This makes it quite difficult to connect issuers directly with investors and amplifies social entrepreneurs' challenge about access to capital which makes the SVX operations costly (Wendt, 2021). The EMD status, too, has its challenges to the SVX. Thus, offerings in the SXV are made only via private placements, not under any prospectus. This limits disclosure needs of most investors and affects their investment decision-making (Farber & Reichert, 2021). Also, the social stock being an emerging niche with an uncoordinated marketplace has limited investors’ interest and restricted the SVX’s reach on diligence review and background checks on issuers. Similarly, with restricted period rules under section 2.5 National Instrument 45-102, no secondary trading of securities is allowed, making exit and disposal of the securities difficult on the SVX (Social Venture Connexion, 2020b).

3.3 Impact Investment Exchange (IIX) - Singapore/ Mauritius
Impact Investment Exchange (IIX) was launched in 2013, with the vision of providing an avenue where the public can invest in positive change to the society and environment (Dadush, 2015). Impact Investment exchange Asia based in Singapore, partnered with the Stock exchange of Mauritius (SEM) to form IIX (Dadush, 2015). The IIX provides opportunities for the commercialisation of entities that provide social betterment or furtherance of environmental causes (Dadush, 2015). It allows impact investors to efficiently invest in such entities and fulfil their needs for impact investing (IIXglobal, 2021). Unlike the Brazilian BVSA, IIX allows non-profit and for-profit social entities from Asia and Africa to be listed and provides investees social and environmental benefits in addition to an avenue for secondary
trading and possible capital gain if there are willing buyers (ICNL & Samhita, 2021). The IIX is operated by the SEM and is regulated by the Financial Services Commission of Mauritius (Dadush, 2015).

Selection and Regulatory Framework IIX
All the securities laws and reporting requirements of Mauritius and Operating Rules of SEM have to be complied with by the issuers (ICNL & Samhita, 2021), also known as impact enterprises (IE) (IIX & USAID, 2019). The IIX has a unique support system for IEs. The IIX recognised that early-stage IEs have challenges facing their resources from fundraising, to limited knowledge of the process and terms, to cash flow restrictions (IIX & USAID, 2019), thus, to support IEs the Acceleration And Customized Technical Services (ACTs) program was initiated with the support of United States Agency For International Development (USAID). The ACTs program provides investment readiness and capital raising services by providing technical assistance, impact assessment services, revolving credit facility, and ensures relevant stakeholders are collected together in the impact investing ecosystem (IIX & USAID, 2019). Once the IEs achieve investment readiness, IIX lists the IEs on its platform which ‘connect them with a global network of over 1,000 impact investors with USD11 billion dollars of assets under management. Through the ACTS program, IIX has managed to successfully raise capital for a striking 70 percent of the enterprises engaged.’ (IIX & USAID, 2019 p. 5).

IE’s can be ‘social enterprises, social investment funds, microfinance institutions, development finance institutions, social arms of inclusive businesses and NGOs’ (ICNL & Samhita, 2021, p. 64). Of these IEs, for-profit entities can list equity, preference shares or bonds; not-for-profit entities can list only bonds; and social investment funds can list either fund shares or units on the IIX platform (ICNL & Samhita, 2021, p. 64). Investors can be global institutional or retail (ICNL & Samhita, 2021).

As for listing guidelines there are three categories that have to be satisfied before an IE can be listed, namely the impact requirements, the financial requirements and the shareholder requirements (ICNL & Samhita, 2021). Before stating down the categories in greater detail, it
should be noted that these requirements were found in the technical report of ICNL & Samhita (2021) which referenced a 2017 listing guideline of IIX. However, that listing guideline could not be found by the authors, on the latest website of IIX.

Table 1: IIX listing Guidelines.

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<th>Impact requirements</th>
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<tr>
<td>The primacy of social or environmental mission and impact intent</td>
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<td>Well-defined theory of change</td>
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<td>Presence of impact monitoring and impact performance measurement systems</td>
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<tr>
<td>Agreement to annually report Impact</td>
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<td>Submission of independent impact certification</td>
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<th>Financial requirements</th>
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<td>Minimum market capitalization of USD 700,000 (or foreign currency equivalent)</td>
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<td>Published financial statements meeting internationally accepted standards for at least one year prior to listing</td>
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<td>Sustainable business model and demonstration of a market-based approach to achieve goals</td>
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<th>Shareholder requirements</th>
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<tr>
<td>Minimum of 100 shareholders and 10% in public hands for a class of equity securities</td>
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<tr>
<td>Minimum of 25 debt holders for a class of debt</td>
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</tbody>
</table>

*Source: ICNL & Samita (2021, p. 64)*

The impact requirements ensures that the IE is an enterprise with social or environment goals and committed to report its impact. The financial requirement ensures that the IE is of a substantial value with proper financial reporting and with a sustainable business model in place, while the shareholder requirements ensure the IE is of a substantial size. The SEM can give an exemption from any of these requirements.
Benefits, Challenges and issues in IIX
The IIX allows the secondary trading of the listed products and this it is opined caters not only investors who have philanthropic pursuits to invest in the IIX, but those who want to support social and environment causes and at the same time obtain modest financial gain. This work model allows a variety of investors to participate and thus ensures sustainability of funding. Another plus point of the IIX is the variety of products that can be listed, there are also financial products that are unique and innovative such as the Orange bond initiative (‘Women's Livelihood Bond™’ and the ‘Women’s Catalyst Fund™’). These products raise funds that target gender equality and promote Sustainable Development Goals (SDG 5) (IIXglobal, 2021, p. 4).

The IIX having developed later than other earlier SSE like Brazil’s has learnt from other SSE’s experiences. It is reported that the IIX is the only SSE which is truly ‘public’ and has the plus points of being transparent, efficient and liquid. The IIX also ensures that issuers are safeguarded and introduced to investors while their social and environment mission is maintained (Dadush, 2015, p. 208).

The IIX has to provide financial and social reports, while the financial reports must follow International Financial Reporting (IFRS) Standards, there are no standards mentioned by IIX for social reporting (Dadush, 2015). It is opined that the feedback of the beneficiaries (Dadush, 2015) of the social and environment projects should be necessary to be included in the social reporting for true reflection of the impact of the social and environment projects and better transparency for the investors.

Dadush (2015) notes there are no information on the consequences of the breach of the IIX rules, nor are there dispute resolution mechanism for disputes involving the IE, and investors.

3.4 Social Stock Exchange (SSE) - India
The Social Stock Exchange (SSE) of India was officially established in December 2022 following the approval of the Securities and Exchange Board of India (SEBI) for the National Stock Exchange of India (NSE India) to operate the SSE as a separate segment on the NSE (NSE, 2022; Sreedhar, 2022). The SSE was an initiative led by the National Stock Exchange of India that resulted from the Indian
government’s readiness for its implementation to support not-for-profit organisations in the development of the social sector (Sinha et al., 2022). The Indian Social Stock Exchange is a model established as a ‘donation-based’ funding platform and operates as a distinct segment within an existing stock exchange. Subscription to instruments on the SSE operates like a philanthropic donation and for this purpose, the SSE has a trading feature that links the ‘donations’ with zero coupon principal bonds or securities (Patel & Patel, 2022; Parekh et al., 2019).

The main permitted instrument/securities for raising funds by not-for-profit enterprises on the SSE is zero coupon principal bonds or securities, otherwise referred to as Zero Coupon Zero Principal Instruments (SEBI, 2022a). The Zero Coupon Zero Principal instruments guarantee neither interest nor the invested principal and constitute the main securities issued by not-for-profit enterprises on the SSE. The Zero-Coupon instruments have been recognised as ‘securities’ under Securities Contracts (Regulation) Act, 1956 vide notification F. No. 1/16/SM/2021 (SEBI, 2022b). By Regulation 292N under Securities and Exchange Board of India (Issue of Capital and Disclosure Requirements) (Third Amendment) Regulations, 2022, the Zero Coupon Zero Principal Instruments are issued only in dematerialized form.

For for-profit enterprises categorised as section 8 company (companies with social motive to advance art, charity, education, environment etc. and use income to promote the same), they raise fund by way of issuance of traditional equity shares or debt instruments and the trading is akin to that of the main stock exchange in which the SSE operates separately. Other instruments and securities on the SSE include structured development impact bonds and social impact funds (NSE, 2022). Also, the minimum issue size allowed is Indian rupees one crore (ten million) and minimum application size for subscription is Indian rupees two lakh (two hundred thousand) (Regulation 292N).

Legal and Regulatory Framework of the Social Stock Exchange India
The Legal and Regulatory Framework of India's SSE is primarily constituted by the relevant provisions under sections 11 and 11A (Chapter IV) of the Securities and Exchange Board of India Act, 1992. Pursuant to this law, further enabling provisions were made and/or
amended through the following SEBI regulations to provide the SSE framework: Issue of Capital and Disclosure Requirements Regulations, 2018 (ICDR Regulations), Listing Obligations and Disclosure Requirements Regulations, 2015 (LODR Regulations) and Alternative Investment Funds Regulations, 2012 (AIF Regulations).

For entities to be registered on the SSE, it has to be recognised as a Social Enterprise which can be either a not-for-profit organisation or for-profit enterprise. A for-profit enterprise does not need to register with the SSE where it is already registered on the main Stock Exchange. However, both the not-for-profit organisation and for-profit enterprise get identification as social enterprise and access funding on the SSE though to a different extent under the regulations (SEBI, 2022b). Regulation 292E, under Issue of Capital and Disclosure Requirements (ICDR) Amendment Regulations 2022, provides the criteria for an entity to be recognised and registered with the SSE as a Social Enterprise. The criteria require an entity to establish primacy of its social intent either as not-for-profit organisation (charitable trust, charitable society or social enterprise [as specified by SEBI]) or for-profit enterprise (company, corporate business entity). This primacy can be established through a record of indulging in one of the following eligible ‘social’ activities: hunger and poverty eradication, healthcare, education, employability, gender equality with LGBTQIA+ empowerment; incubating social enterprises; affordable housing; promoting livelihoods of rural poor; disaster management; financial inclusion among others. The entity must have targeted underserved or less privileged segment of the population that has little performance in development priorities of central or state governments. The entity must have at least 67% of its activities qualifying as eligible activities to the target population (SEBI, 2022b).

Listing requirements on the SSE: Under Paragraph 1A of the Framework on Social Stock Exchange 2022, an entity is eligible to be listed on the SSE where it satisfies requirements as follows. Registration of an entity as a not-profit organisation (e.g., charities, foundations and professional or trade associations for affordable housing), the registration must have remaining validity of not less than a year; eligibility to be a Social Enterprise under Regulation 292E of ICDR 2022; disclosure on structure of ownership; relevant Income
Tax authority registration as a not-profit organisation with an evidence of tax exemption; an entity must have been registered for a minimum of three years; annual spending for its activities in the past financial year must be at least 5 million rupees; funding in the past financial year must be at least 1 million rupees.

Benefits, issues and challenges of Social Stock Exchange India
The SSE platform provides financial edge to various stakeholders in impact investing including the governments, retail and institutional investors in India. It facilitates market access for non-for-profit organisations and charities through ease of capital inflow to impact investment. SSE’s robust due-diligence and performance mechanism adds transparency and accountability to social investment which safeguards investors against malpractices. SSE is transitioning impact investment space into a much more regulated space with focus on sustainable development, thereby reducing the Central and State governments’ task of achieving sustainable development goals. Despites its prospects, the SSE faces some issues and challenges being very recent and still a work in progress (Sivakumar et al., 2023).

There is low patronage and inadequate investment on the SSE to address the social financing gap in the Indian social sector. This coupled with the infancy of the Indian social sector makes investments on the SSE not up to scale to inadequately cater for the enormous social sector problems in India, particularly in education and health sectors. Also, by its listing requirements and business model, the SSE has favoured entities’ size rather than quality and importance of their work. It is thus biased against smaller local charities and enterprises such as weavers and craftsmen. This contributes to low awareness about impact investing by the majority of charities, small-scale and large-scale social enterprises (Inani, 2022; Patel & Patel, 2022).

Following the foregoing review of the four SSEs, a comparison is made among them for in-depth understanding of their operations.
<table>
<thead>
<tr>
<th>Countries Features</th>
<th>Brazil</th>
<th>Canada</th>
<th>Singapore</th>
<th>India</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of issuer</td>
<td>Non-governmental Organisations</td>
<td>All Ontario-based kind of social impact issuers accredited in Canada</td>
<td>Non-profit and for-profit social entities from Asia and Africa</td>
<td>Recognised not-for-profit and for-profit (section 8 company) Social Enterprises</td>
</tr>
<tr>
<td>Type of investor (motivation to invest)</td>
<td>Retail and institutional</td>
<td>Accredited impact-first retail and institutional investors</td>
<td>Retail and institutional</td>
<td>Retail investors (to invest only in for-profit entities’ securities) and institutional</td>
</tr>
<tr>
<td>Regulators</td>
<td>BVSA - subsidiary of Brazil Stock Exchange</td>
<td>Ontario Securities Commission and Toronto Stock Exchange</td>
<td>Impact Investment Exchange Asia, Singapore &amp; the Stock Exchange of Mauritius</td>
<td>Securities and Exchange Board of India and the National Stock Exchange of India</td>
</tr>
<tr>
<td>Listing guidelines</td>
<td>Investees had to be an NGO legally registered for three years in Brazil with a project focussing on social and or environmenta l purposes.</td>
<td>Impact entity with a year’s operating history &amp; existing revenue and investment; exemption (where applicable); 80 marks as certified B</td>
<td>Issuers have to comply with Impact requirements; financial requirements and shareholder requirements</td>
<td>Not-for-profit &amp; for-profit entities be recognised as Social Enterprise; Income Tax registration/exemption; minimum of 3 years’ operations; 5</td>
</tr>
<tr>
<td>Types of products</td>
<td>Projects of NGOs</td>
<td>Corporation (for-profit entity)</td>
<td>million rupees annual spending in past financial year; 1 million rupees funding in the past financial year</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Zero Coupon Zero Principal Instruments (not-for-profit entities); equity shares and debt instruments (for-profit entities)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Impact measurement (Reporting guidelines)</td>
<td>Progress reports were provided to investors semi-annually by BVSA’s technical team. This included a summary report of the project once it had been implemented</td>
<td>Annual statement within 120 days of year-end; financial statements within 60 days after a 6-month interim period; an update on issuer’s business activities, use of proceeds</td>
<td>IIX provides financial and social reports, while the financial reports must follow International Financial Reporting (IFRS) Standards, there are no standards mentioned by</td>
<td></td>
</tr>
<tr>
<td>Annual Impact Report (AIR) within 90 days from end of financial year, detailing entities/projects where fund is deployed in with social impact; disclose activities.scale of operations, donors /investors details</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
From the above table, the following findings are made and considered noteworthy for the purpose of the ISSE to be proposed by this research. First, all SSEs, except for the BVSA, allowed issuers to be both non-profit and for-profit enterprises. Second, all types of investors were allowed to invest in the SSEs. Third, all the SSEs were part of the existing stock exchanges of the respective jurisdictions. Fourth, listing guidelines of the SSEs varied but most had a minimum financial and impact requirement to enable listing of issuers. Fifth, except for BVSA, all the other SSEs allowed a variety of instruments to be listed. Sixth, all the SSEs required impact measurement of issuers, and lastly two out of the four SSEs allowed secondary trading.

4.0 Analysis of Interviews

In this section, data obtained from the interviews of Dr. Ahcene Lahsasna (Shariah expert), Mr. Johnny Moi (Researcher and writer of Islamic Stock Exchange) and Tan Sri Andrew Sheng (an economist and former central banker) are presented and analysed. The semi-structured questions were asked centred around the development and viability of ISSE. The interview results are summarised below.

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2 The following questions were some of the main ones asked: 1. Do you think there is a need for a digital Islamic social stock exchange? Why? 2. What do you think of the existing social stock exchange? 3. Are there any challenges
Dr. Ahcene supported the idea of creating an Islamic SSE wholeheartedly. The scholar believed that having an ISSE would further the concept of *Maqasid Al-Shariah* and it is in line with the already existing Islamic social finance tools of *zakat* (alms tax), *waqf* (endowment), and *sadaqah* (charity). He also believed an ISSE would enable green ethical investments, champion the SDGs goals at a global level, and consolidate efforts for social welfare. He opined that by having an ISSE, impact enterprises and initiatives would be more visible, more accessible and more standardized.

Mr. Johnny, on his part, believed that having an Islamic SSE is essential because its faith-based foundation is different and preferable to that of the conventional SSEs. Mr. Johnny opined that faith-based investing is in line with all other monotheistic religions and Holy Books which are anchored on principles like prohibition of gambling, adult entertainment, tobacco and weaponry. These principles, Mr. Johnny affirmed, give an ISSE a conscience and spiritual nature and make it uniquely different from conventional SSEs. Mr. Johnny asserted that an ISSE would not just be about making money and a profit but would be about giving back in the form of *sadaqah*, *zakah* or even *takaful* (Islamic insurance).

Tan Sri Andrew Sheng on his part also agreed that an Islamic SSE was crucial. The prolific economist opined that, unlike the debt driven conventional market, Islamic finance is all about maintaining values, taking risk and sharing in profits and losses. Alluding to how risk-taking pays off, he referred to Prophet Muhammad (S.A.W) caravan trade expeditions and its highly risky venture and the resulting big profits where it succeeded. Andrew Sheng opined that risk taking and sharing in profits and losses were logical and they are principles the real economy should be based on. He also believed that risk taking and adhering to values could be the economic solution to tackle climate change and poverty. Andrew Sheng drew attention to the fact that the stock exchange is not accessible to Small and Medium
Enterprises (SMEs) and Micro Small and Medium Enterprises (MSMEs) to invest in or even be listed on, even though they generate the majority of the GDP in Asia. SMEs and MSMEs, Andrew Sheng asserted, were disadvantaged because they were lacking in branding ability, funding and talent. This is why an Islamic SSE is absolutely needed. An Islamic SSE would allow correct information to investors on impact enterprises, allow issuers to be accredited by the ISSE platform thus gaining the trust of investors. Further, the ISSE platform would ensure proper enforcement, organised clearing and settlement.

On whether the ISSE should be a private company initiative or part of the existing capital market stock exchange, Dr. Ahcene opined that the ISSE should be run by a private company but be part of an existing stock market. Mr. Johnny stated that the existing infrastructure and resources of the stock exchange can be shared and co-jointly used. He also mentioned that artificial intelligence and blockchain technology should be used and would really enhance the mechanism and processes of an ISSE. Andrew Sheng in his wisdom concurred by stating that the bourses are the ideal place to set up an SSE. He also elucidated and welcomed how the Indian SSE introduced the Zero Coupon Zero Principal Instrument which allowed non-profit organisations to sell instruments that did not promise dividend or capital but focussed on social benefit that would be obtained from the investment. This instrument, Andrew Sheng opined, could be used by non-profit enterprises that might not have any other instrument to offer.

On issuer (impact enterprise), Dr. Ahcene opined that they should include both conventional and Islamic for-profit and non-profit enterprises, where both the Shariah compliance and the social or environment goal of the enterprise would be vetted. The scholar opined that the criteria for selection and approval have to be clearly defined and could include qualitative and quantitative benchmarks similar to the Shariah stock screening guidelines, however Dr. Ahcene believed that flexibility is important to enable the growth of the number of Impact enterprises. Dr. Ahcene opined that there could be two types of vetting lanes, the first lane for Impact enterprises that are Islamic institutions or already have a Shariah advisor, for this lane the vetting would focus on the enterprise’s social or environmental goal.
While for the second lane the vetting would be on both Shariah compliance and the social or environment aspect of the impact enterprise. Mr. Johnny also agreed that there should be parameters that are implemented to filter or screen the social projects, products or Impact enterprises to make sure there no riba, no gharar, and no haram elements. Mr. Johnny added that other measuring systems or parameters can also be added for vetting purposes. Tan Sri Andrew Sheng believed that a Shariah body would be needed to ensure the values are adhered to by impact enterprises. This viewpoint was shared by Dr. Ahcene as well.

On investor side, Dr. Ahcene believed that secondary trading should be allowed upon receiving feedback from the investors in the market and other stakeholders on the pros and cons if such trading is carried out. Mr. Johnny agreed that secondary trading should be allowed and added that secondary trading could be conducted by connecting with existing stock market infrastructure through robust IT infrastructures as this would cut expenses and costs. Andrew Sheng too agreed that secondary trading should be allowed, he however cautioned that it was important to ensure enforcement.

With respect to challenges in relation to funding of a Social Stock Exchange, Mr. Johnny mentioned when it came to starting the ISSE itself, a sponsor was needed that could be from the private sector, from an individual, group, an entity, a company or an organization. Alternatively, there can be crowdfunding, or government grant.

On this note, Andrew Sheng concluded with a fundamental point that, in a situation of uncertainty, as is currently the case in markets around the world, only experimentation will allow one to know what is correct or wrong. He thus emphasized that risk should be taken, and that an ISSE should be created for it is worth the risk. He believed an ISSE could be more open, more ethical and more successful than conventional SSEs. From the totality of these analyses, the conclusion drawn is that ISSE is timely and would be a viable alternative to its conventional counterpart. It is as well the needed augmentation in public and private efforts towards sustainability drive.

Drawing an insight from the literature review and the analysis of interview data above, the next section therefore discusses the legal,
regulatory and Shariah considerations for an ISSE. This paves way to understand the workability of a digital ISSE as a viable proposal.

5.0 Discussion of Proposed Legal, Regulatory and Shariah Considerations for an ISSE

In establishing a social stock exchange, relevant enabling policies, process and institutional structures of market in its jurisdiction should be considered (UNCTAD, 2017). This is equally true in the case of an ISSE. The specific legal, regulatory and Shariah considerations that need to be addressed in an SSE framework for Islamic social finance are as follows:

- **Registration of entities as Impact Enterprise (IE)**
  An entity needs to register as an Impact Enterprise (IE) before it could raise any fund via an ISSE. The IE must be a separate legal entity or social enterprise and should follow the minimum governance standard required of an IE. This is important to protect investors by assuring them of the impossibility of an IE raising funds from an SSE to vanish with the raised funds and that the IE shall be accountable always. Further, each registered IE for this purpose should expressly state the social welfare objectives they intend to achieve. It is noteworthy that there is a general lack of clarity on what qualifies as a ‘social enterprise,’ more so for IE.

  Regardless, the definition of IE includes enterprises whose missions are profit-driven or revenue generating non-profits. The IE in this regard could be classified into private sector including corporates and financial institutions; public sector including governments and donors; and non-profit sector including foundations, trusts and government organizations. Further, a minimum capital requirement for IEs to be eligible for listing needs to be fulfilled to ensure that financial position of these IEs are up to the required prudential standard (Islamic Financial Services Board, 2019).

- **Minimum Shariah governance requirements for IE to adopt.**
  An IE registering with an ISSE should follow minimum Shariah governance requirements to ensure that the enterprise adheres to Shariah rules not only at the time of registration but perpetually. In this regard, some propositions were put forth by different scholars (Hassan
& Muneeza, 2022a; Hassan & Muneeza, 2022b). For this purpose, Hassan & Muneeza, (2022a) and Hassan & Muneeza (2022b) outlined 10 key areas as follows: achieving the objectives of the institutions; employing Islamic leadership in decision making; adopting human governance standards; uphold integrity by ensuring ethical principles are followed; implementing internal control mechanisms such as risk management; internal review; and audit from conventional and Shariah perspective; implementing measures to ensure Shariah board effectiveness; adopting equality, diversity and sustainable practices; putting in place policies to ensure transparency and accountability via a systematic and continuous way of disclosing material information related to the funds received, managed, disbursed and invested to the stakeholders; having proper mechanisms to discharge fiduciary duty with due diligence and care; and having adequate policies and mechanisms to manage information technology risk and protection of data privacy.

It is imperative to adopt policies that ensure elimination of any chance to commit fraud in the institution. Besides outright fraud, a pertinent consideration in the context of social enterprises is the potential for greenwashing or impact washing whereby companies exaggerate their social or environmental impact to attract investment under the banner of social financing (Pimonenko et al., 2020). Fraud triangle theory is developed by Williams (2006) where he states that opportunity, pressure and rationalization lead a person entrusted with a responsibility to breach the trust. What he meant by pressure is the incentive that motivates the individual to commit fraud, and this could be the consequences of the personal issues of the individuals that is not only limited to financial pressures or addiction pressures. The pressure that motivates to commit leads to the second element which is opportunity that will allow the person to commit fraud without getting caught by having general information (the knowledge that the employee’s position of trust could be violated) and technical skills (the abilities needed to commit the violation). The final factor in the fraud triangle is rationalization which means the justification of the fraud which has already been committed by the perpetrators so that they could still be believe as responsible and trusted persons. Wolfe and Hermonson (2004) extended this fraud triangle theory to a fraud
diamond theory where they stated that an additional element must be added to the fraud triangle theory and that is ‘capability’ that allows the person to commit the fraud due to his position or the task he performs in the company that provide him the unique opportunity to commit fraud which is not available to a person not in that position. Therefore, in order to prevent a person from committing fraud, check and balance mechanisms need to be imposed on all persons working in the IE.

According to Swandaru and Muneeza (2022), a centralized high-standard Shariah governance framework prevents fraud by providing better Shariah supervision and risk management measures. As such, it is recommended for IEs to follow high level of Shariah governance. From a conventional point of view, every public listed company or a company raising funds from capital markets is required to follow a minimum corporate governance standard. Therefore, imposing minimum Shariah governance standards on IEs is practical. However, in determining the minimum standard in this case, regard should be given to existing IEs in the market and ensure they could participate in an ISSE with efficiency as to their operation cost. Therefore, considering the nature of IEs in accordance with jurisdiction, the minimum Shariah governance standards to be imposed should be specified. These requirements could disqualify some IEs from listing financial products/securities in an ISSE.

- Disclosure to be provided by IEs for raising funds through the issuance of Shariah compliant Islamic finance securities/instruments.

It is imperative to provide standardized disclosure requirements for IEs raising funds via an ISSE, having regard to the challenge they generally face in balance their financial needs with their social goals. From a conventional point of view, various type of innovative social finance securities have been issued such as the IIX Women’s Livelihood Bond (WLB) known as Orange Bond (IIX, n.d.) and Vaccine Bonds (Saraka-Yao and Lay, 2021). In this regard, for each and every type of Islamic social finance securities/instrument issued in an ISSE, the disclosure requirements shall be laid down from both legal and Shariah perspective. In this regard, Zero Coupon Zero Principal (ZCZP) instruments, based on the concept of qard
(benevolent loan), can be developed. This instrument is in line with the kind of instruments obtainable in a proposed waqf social capital market that uses fintech for delivery of products/services (Mustapha & Muneeza, 2020). Table 3 below shows the basic types of Islamic finance securities/instruments that could be listed in SSEs and their minimum Shariah disclosure requirements that should be made.

Table 3: Basic types of Islamic finance securities/instruments listed in SSEs and their minimum Shariah disclosure requirements that should be made.

<table>
<thead>
<tr>
<th>Type</th>
<th>Details</th>
<th>Minimum Shariah Disclosure Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Shares</td>
<td>These are IE’s who passes the Shariah screening and is eligible to offer shares.</td>
<td>From a Shariah perspective, periodic shariah screening and their result must be disclosed apart from the prudential requirements that need to be made under the law. For mixed businesses, shariah screening needs to be conducted (Islamic Financial Services Board, 2019).</td>
</tr>
<tr>
<td>Waqf Shares</td>
<td>These are endowment shares offered on a specific project.</td>
<td>The performance and social impact of the underlying project performance shall be disclosed.</td>
</tr>
<tr>
<td>Qard Sukuk</td>
<td>This is a zero-return sukuk.</td>
<td>The way how the sukuk proceeds are used and its impact should be disclosed. Further, it should not be tradable in the secondary market.</td>
</tr>
</tbody>
</table>
Social Impact Funds are managed investment schemes that seek opportunities to make investments that create positive and measurable social or environmental change alongside appropriate financial returns. Investments in this space can include property, infrastructure, corporations or private equity. Shariah compliant instruments and underlying assets must be used in these funds.

Social Impact Sukuk is a type of financial security that provides capital to the public sector to fund projects that will create better social outcomes and lead to savings. Shariah complaint parameters to structure sukuk and use of sukuk proceeds including the post sukuk accountability mechanism needs to be formulated.

Donations via Unit Trust/ETFs can give their units as donation. A shariah compliant mechanism to do the donation needs to be formulated. For instance, it could be via sadaqah (charity) or waqf (endowment).

### Source: Authors own

- Annual disclosures to be provided by an IE

An annual report disclosure is an important periodic but continuous disclosure obligation upon IEs who raise funds from SSEs. However, in addition to the general information disclosed in an annual, it is imperative to submit an Annual Impact Report (AIR). Further, a declaration should be submitted annually on utilization of funds, as per issuance documents of securities, for the purpose stated therein. In this
regard, Dadush (2015) observed that SSEs should require issuers to report not only on financial and social performance metrics, but also on substantive feedback from beneficiaries. There is no doubt that having substantive feedback from beneficiaries and recording them properly would improve governance and also boost the confidence of stakeholders.

- Representative of investors and beneficiaries on the Board of IE
  It is imperative to select or elect a representative on the Board of the IE to ensure that the concerns of the investors and beneficiaries are heard, and they could participate in making decisions. In this regard a similar idea has been proposed by Dadush (2015), who states that the Board of Issuers of SSEs should also be required to have a Social Director whose job is to ensure compliance with social mission and to link beneficiaries to management.

- Screening the eligibility of Investors via registration
  Investing in listed securities on an SSE is not for all types of investors due to the unique risk taken by such investors - being ready to forgo their capital investment, experience a lower or no return from the investments in some cases (Financial Conduct Authority, n.d.). Due to this fact, it is compulsory in some countries for the investors to even make declarations in writing stating that they are aware of the risks associated with investing in such securities (Financial Conduct Authority, n.d.). As such, it is important to have a mechanism in place to screen the investors and this could be made through prior registration of them. Apart for the general checks made pursuant to money laundering and terrorism financing laws, it is imperative to put in place a mechanism to find out who are the true impact investors, Dadush (2015) states two ways in which the true impact investors are being screened: first is by using the approach of SVX Investor Agreement where it is required to for the investors to acknowledge that what they have invested might not yield any return; and the second approach is by having a “Patient Investor Code of Conduct” to which every investor will subscribe prior to the investment. A Patient Investor Code of Conduct has been explained as a kind of soft law that would explain what it means to be a patient investor by providing a behaviour guide using a list of things that could be done or abstain.
from with substantive commitments (Dadush, 2015). Therefore, it is recommended the ISSE to perform the task of screening of investors to ensure that those who invest are impactful investors who understand the consequences of their involvement in SSEs. This could also be achieved from a practical perspective by stating certain limits for different categories of investors for the investors to realise their limits by taking into consideration the risks. This is not an uncommon practice in the market as when dealing with risky financial securities, it is only angel or sophisticated investors who will be eligible to participate. For instance, the Securities Commission Malaysia has imposed certain limits on those investors participating in Equity Crowdfunding (ECF) platforms by stating that for a retail investor it is maximum RM5,000 for retail investors for a single investment and, no more than RM50,000 within a 12-month period while for angel investors it is up to RM500,000 for angel investors within 12 months; and there is no limit prescribed for sophisticated investors (Paragraph 13.24 of Guidelines on Recognized Markets of Securities Commission Malaysia (2019).

- Enforcement Mechanisms
As John Austin stated, law shall be backed by a threat of sanction (Tapper, 1965). Therefore, it is imperative to device mechanisms to penalise those who breach the rules of an ISSE. This will deter misbehaviours in the market. However, to do this, the first step would be to clearly specify the legal obligations of all stakeholders in the exchange and define how these obligations could be breached with consequences against such breach. In this regard, Dadush (2015) observed that investors could push and pressurize an issuer to commit breach. One example is where investors put pressure on an issuer to depart from its mission in order to increase profitability. Dadush (2015) also observed that this type of pressure-dynamics could be difficult to detect. However, by having three-way accountability mechanism, this could be mitigated. The three-way accountability mechanism here refers to a mechanism through which the SSEs, issuers and investors are held accountable for their actions. In this regard, it is recommended to leverage on the existing enforcement mechanisms, including the three-way accountability, in the capital markets. Another of these mechanisms is imposing fines for breaching
the rules and blacklisting offenders and making the market aware about the offenders and their conducts.

- **Listing and Selection Committee**

  There should be a proper criterion for selecting and listing IEs and their projects/instruments or securities on an ISSE. This should be handled by a committee of experts whose diversity should be considered in terms of age, gender, competency and professionalism of its composition. The criteria to be used in this regard shall include ascertainment and identification of eligible groups for whom the proceeds shall be expended; project impact assessment; capability and capacity to manage proceeds received and implement the project as represented; and the adoption of high Shariah governance standards.

- **Handling of Grievance via Hisbah (ombudsman)**

  There should be a mechanism within an ISSE to handle grievances from stakeholders. In this regard, Hisbah mechanism could be internally established to handle them. Hisbah is an Arabic word whose root is “hasaba” which means to measure or compute (Bashar & Dutsin, 2018). Hisbah technically means an institution that promotes what is good and forbids what is wrong (Muneeza, 2010). In this instance, a hisbah institution needs to be established to hear grievances and complaints about the ISSE, IEs, investors and beneficiaries as well. Further, the Hisbah should have power on its own initiative to check whether ISSE is operated in accordance with its objectives and requisite rules of Shariah (Hassan & Muneeza, 2022a; Hassan & Muneeza, 2022b). It can be observed that in the securities markets, there are existing independent bodies formed by regulatory authorities to hear disputes related to capital markets. A similar model could be followed in this case. For instance, Securities Industry Dispute Resolution Center (SIDREC) is a body approved by the Securities Commission Malaysia with the objective of handling capital market-related disputes involving monetary loss between individuals or sole proprietors and SIDREC members (SIDREC, n.d.). There is also Shenzhen Securities and Futures Dispute Resolution Centre. Considered the first dispute resolution institution that combines arbitration with mediation via a unique dispute resolution mechanism using "mediation + arbitration + self-discipline + administrative
regulation," it is established by the China Securities Regulatory Commission (CSRC), Shenzhen Regulatory Bureau and Shenzhen Court of International Arbitration (SCIA) (Shenzhen Court of International Arbitration, n.d.). Therefore, it is recommended for SSEs to adopt a similar approach to handle disputes.

6.0 Proposed ISSE Model

Based on the details expounded in the foregoing discussions, the model ISSE proposed by this research is illustrated and explained hereunder:

Flowchart 1: Proposed Islamic Social Stock Exchange

From the above illustration, the ISSE model has four main components: the issuer, the digital platform operator, the impact investor, and the regulator. These, and their respective roles, are explained as follows:

1. The issuer, who is the Impact Enterprise, will need to apply to register with the digital platform operator (ISSE). The issuer
would provide information on the type of entity it is, its social welfare objective, compliance with any minimum capital requirement and minimum Shariah compliance/governance requirement. The issuer would also prepare a white paper which will be available to impact investors with the following minimum information – legal and Shariah compliance disclosure, type of instrument, social welfare objective and amount of fund needed.

2. The Digital Platform Operator will operate with the stock exchange; it would possibly be a subsidiary of the stock exchange. Its main obligations will be reviewing applications and screening issuers, registering impact investors, monitoring performance of impact enterprises and preparing an annual impact report. Their role and requirement would be firstly to have an advisory board, which could be a listing committee with Shariah advisor(s). The ISSE platform operator should be locally incorporated, it should perform due diligence on Impact enterprises and have a fit and proper Board. It should have in place clearance and settlement mechanisms.

3. The Impact Investors are required to comply with the rules of the ISSE, seek dispute resolution through established enforcement mechanisms made available by the regulator, and have the ability to trade in the secondary market where there are willing buyers.

4. The Regulator (not shown in the diagram) would have an oversight role of the ISSE and would be the capital market regulator of the jurisdiction. Its main role is to supervise the ISSE platform and ensure the ISSE’s proper conduct through rules and regulation.

7.0 Proposed ISSE Model

Today, certain investors whose number is growing want their investments to provide positive social impact beyond monetary gain, i.e., they want impact investment. This trend is the result of, inter alia, better awareness of local and global social and environmental challenges, the international push for funding UN Sustainable Development Goals, and recognition of the positive role of businesses towards the society. However, there is a dearth of avenues and reliable information on where to do the impact investment. The idea to develop an ISSE is premised on the quest to factor in Islamic social finance in
global sustainability drive and the need for an avenue to coordinate efforts to fund/sponsor projects towards impact investment. Fashioned after and adequate understanding of the structure and operations of conventional social stock exchanges (SSEs) around the world, this research proposes a model for the development of a digital ISSE that would serve as a regulated platform to bring together impact investors and entities with social objectives and environmental cause in line with the Shariah principles.

This ISSE model could readily address the dearth of appropriate avenues and reliable information for impact investment. The model was proposed with four main components, i.e., digital platform operator, issuer(s), impact investor(s) and regulator, each with designated roles and functions. The digital ISSE platform would essentially vet issuers, projects and/or products before they are listed, ensuring genuine social and environmental cases are listed on the SSE and offered to impact investors. The model was developed on general and specific considerations of the legal, regulatory and Shariah matters required in order to establish requisite ISSE framework for Islamic social finance. Therefore, for the purpose of establishing an ISSE, there is need for some amendments in existing market rules and regulations as a matter of law and Shariah. As literature establishes, finance is the bane of most social and environmental enterprises in their pursuit of awareness and action towards addressing the contemporary global menace of climate change, poverty and exclusion. In this regard, the model ISSE is recommended to offset this issue as it would provide the needed coordination for the mobilization of public and private funds to address the said menace, thereby facilitating and fostering inclusive economic growth and development.

This research establishes that the ISSE model, based on the specified legal, regulatory and Shariah framework, is a workable, viable and timely innovation with great prospect to develop social and environmental cause in furtherance of SDGs. It is therefore anticipated that the findings of this research will assist market stakeholders and policymakers in paving the way to establish and operate an Islamic social stock exchange.
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