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Feasibility of Green Bonds Issuance in Malaysia towards Financing a Sustainable Future – a Conceptual Review of Literatures

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Abstract

Green bonds issuance in recent years become a global increasingly attractive mechanism for both private and public sector organizations to raise capital for projects, assets or other activities that benefit the economy, environment and society as a whole. Inevitably in a fast-growing capital market in Malaysia, confusion and challenges may arise as organizations assess whether issuing a green bond is the right course of action for them and seek to understand the value creation from the process involved. By reviewing critically on the various literatures, this conceptual study aims to outline the possible costs, benefits and challenges for corporations in issuing the green bonds which could result in accelerating green investments, and the significant benefits in terms of company reputation, access to capital and internal legitimacy linked to the issuance of a green bond. Also, this study proposed the semi-structured interviews and survey in order to seek and highlight the possible challenges and opportunities in the green bond market and Social Responsible Investments (SRI) in Malaysia. From the retrospective reviews, this study shall provide conceptual perspectives and insights on the process of issuing a green bond, and thus delivering responsible and sustainable outcomes for nation.

Keywords: Green bonds, sustainable development, Socially Responsible Investment (SRI), Environmental, Social and Governance (ESG) issues

1. INTRODUCTION

A confluence of global events and two closely linked agreements: the Paris (Climate) Agreement and Sustainable Development Goals (SDGs) as well as growing awareness among institutional investors, has created both supply and demand for green bond issuance globally. Sean Kidney, co-founder and CEO of the Climate Bond Initiative (CBI) defines a green bond is a bond or an investment that earns a comparable interest rate at a comparable risk rating of other bonds, it is mainly investment graded; the proceeds will flow to assets and projects material to fixing climate change. Specifically, green bonds allow investors to employ their capital to fix the problems of environmental degradation that have led to climate change, while issuing companies get access to a new pool of money to address sustainability issues (Jacobs, 2017). There has been a growing interest in socially responsible and green investments following the signing of the Paris Agreement on 22nd April, 2016 in New York (dealing with reducing greenhouse gas emissions, adaptation and finance starting in the year 2020) and the Sustainable Development Goals (SDGs) (signed in September 2015 which aims to end poverty, protect the planet and ensure prosperity for all). All these portrayed a vital step in building investor confidence over the longer term. Socially

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responsible investment (SRI) is catching on slowly pace in ASEAN, particularly in Malaysia. However, green bonds issuers and investors in China, South Korea, India and Taiwan are growing. As China takes the lead in green issuances to fund its environmental projects, the rest of Asia is getting its act together and following suit. A remarkable incidence that the Asian Development Bank launched its first Green bond in March 2015, raising US\$500m. On 22nd December, 2016, the People's Bank of China published its green bond guidelines and encouraged banks to issue the green bonds. Concurrently in March 2017, the ASEAN Capital Markets Forum (ACMF) – a grouping of the region's capital market regulators chaired by the Securities Commission Malaysia – announced that Green Bond Standards was endorsing key initiatives under ACMF Action Plan 2016-2020. This includes cooperation with the International Capital Market Association (ICMA) to introduce ASEAN green bond standards. This initiative is supposed to facilitate ASEAN capital markets in tapping green finance, supporting sustainable regional growth and meeting investor demand for green investments. It is also part of the ACMF's broader efforts to develop green finance in the region. The ASEAN Green Bond Standards will be developed based on ICMA's Green Bond Principles (GBP). There are intended to provide additional guidance on the application of the GBP as well as to enhance transparency, consistency and uniformity of ASEAN Green Bonds, which will contribute to the development of the new asset class (Jacobs, 2017). Investors' growing concerns over sustainability issues, particularly related to the consequences and impact of climate change, form an important incentive for the development of the sustainable investment market and feasibility of the green bonds issuance in Asia and Malaysia (Robinson, 2015).

Since Malaysia has been the world's biggest Islamic bond market, accounting for about two thirds of all Sukuk sold, green or SRI investments may complement the principles of Islamic finance, which call for money to be used for the protection and preservation of society. Among the projects deemed eligible for the SRI Sukuk are environmentally friendly based that promote renewable energy or reduce greenhouse gas emissions, or improve the quality of life for society. Educational projects on the other hand will fall under the community and economic development category. Both Malaysian issuers and investors can possibly consider engaging on these new financing alternatives when funding environmentally friendly based projects. As for the whole country wide, Malaysia can take advantage of 'green bonds' to fund its renewable energy (RE) infrastructure development, as the country has been very successful in promoting the size of the bond and Sukuk market. This could provide an avenue for future research and bridging the gaps of social responsible investing in ASEAN, particularly in Malaysia.

As Asia or Malaysia-based investors are mainly concern that the feasibility of green bond investment will be based on a number of factors including how investors identify and leverage the value of Environmental, Social and Governance (ESG) data to better understand the specific regional and country risks in the region. As for green bond investors outside the region, the green bonds investment is important to connect on-the-ground organizations and networks to better understand and appreciate the material ESG risks and opportunities at a country level, and stay informed on critical changes to the policy, regulatory and financial environment. Undoubtedly, the biggest future potential influence at both regional and national level will be climate change. It is clear that investors are looking for clarity and certainty in transparency requirements. The sooner this is in place, the better for Malaysia's investment industry to move forward on integrating ESG issues via the green bonds issuance. By reviewing critically on the various literatures, this conceptual study aims to outline the possible costs, benefits and challenges for corporations in issuing the green bonds which could result in accelerating green investments, and the significant benefits in terms of company reputation, access to capital and internal legitimacy linked to the issuance of a green bond.

2. REVIEW OF LITERATURES

Bond is a long-term financial tool in which the issuer is indebted towards a holder for the equivalent amount of money borrowed for a pre-determined amount of time. The issuer bond contract refers to a company that requires external capital and acquires the capital by an issuance of a bond. The holder of a bond is the investor (bondholder) that invests capital in the bond issued, i.e. lends capital to the issuer. Up to the date when the bond matures, the issuer will pay interest, the coupon payments, to the holder of the bond for fixed intervals. The coupon payments are similar with the interest payments on conventional bank loans. When the bonds are matured, i.e. when the pre-determined amount of time expires, the debt will be repaid to bondholders (Brealey, Myers, & Marcus, 2012). Green bonds work similar with conventional bonds, but these bonds are issued with the purpose to support green investments, i.e. to reduce environmental impact through e.g. climate change mitigation or increased energy efficiency. A green bond induces a reciprocal collaboration between investors and issuers towards enhancing the green investments financing (Kidney & Oliver, 2014). Over past few years, there has been a rapid growth in green bonds market (Bouille, Kidney, & Oliver, 2014). A set of voluntary process guidelines, the Green Bonds Principles (GBP) has been developed by the International Capital Market Association (ICMA) as to ensure

legitimacy and the green label of an issuance. To date, the GBP are the only considered guidelines used by issuers, investors, and third party reviewers. The GBP emphasizes that a green bond should have “quantitative and/or qualitative performance indicators which measure, where feasible, the impact of the specific investments” (ICMA, 2014). The purpose of the green bond issuance and financing is to gain trust from investors and ensure legitimacy that capital is earmarked for green investments. The legitimacy of an issuance is strengthened via a third party review (Climate Bonds Initiative, 2014). A third party review evaluates a fair credentials of the use of proceeds of the green bonds and provides a second opinion on the issuers (Climate Bonds Initiative, 2014). The third party reviewers of green bond issuances comprises a mixture of independent organisations such as environmental, social and governance research houses and scientific standards groups (Climate Bonds Initiative, 2014). The existence of third party reviewers is to provide investors with second opinions on the robustness and liability of issuers to meet certain environmental and social objectives (CICERO, 2013). Though this is not required by standards or regulations, it is believed that a second opinion will help to ensure legitimacy of the issuer (Bouille, Kidney, & Oliver, 2014).

The green bond issuance is heavily linked with the cost of and access to capital. Few studies have been conducted to link the corporate environmental responsibility with the cost of capital and access to capital (Oikonomou, Brooks, & Pavelin, 2014). Investors are traditionally tend to maximize the return at a certain level of risk (Sethi, 2005). However, investors have recently shifted their focus on environmental protection, sustainability and corporate responsibility investing (Sethi, 2005). This development indicates that investors possess a multi-objective investment strategy which include other objectives (Bollen, 2007). Research done by Menz (Menz, 2010) suggests that little gap can be identified between conventional and responsible companies in risk perspectives. However, a large number of research studies indicate that companies with well-developed environmental management systems will receive lower cost of debt (Bauer & Hann, 2010; Sharfman & Fernando, 2008; Ghoul, Guedhami, Kwok, & Misha, 2011). A study done by Ge and Liu (Ge & Liu, 2012) indicates that bondholders are concerned on Corporate Social Responsibility (CSR) work, in which the companies with good Corporate Social Responsibility (CSR) performance can issue bonds with lower coupon rates. Regulatory, reputational and legal cost will therefore influence the credit rating of borrowing firms (Bauer & Hann, 2010). Particularly environmental practices such as innovative eco premium products, reductions of carbon emissions, clean energy use and energy efficiency were heavily linked to lower bond spreads (Bauer & Hann, 2010). There is an increasing demand for company to disclosure particularly on carbon footprint and other environmental impacts that may inflict a risk on invested capital (Alam & Nizamuddin, 2013; Hebb, 2012). More disclosure of environmental data will thus reduce the risk for bondholders (Schneider, 2011). Increased transparency and the integration of environmental considerations will thus reduce the uncertainty for investors (Hoffman, 2001). Environmental protection and community dialogue is also considered as a must to reduce the risk of community opposition to acquisition of production sites, or current expansion activities (Hoffman, 2001). Capital acquisition is therefore emphasized by the literature as an important driver for companies when exploring the field of sustainability (Weybrecht, 2014).

Responsible investment (RI) concept has seen a rapid growth over the past ten years (Sievänen, Hannu, & Scholtens, 2013). The post financial crisis 2007-2009 urge for greater overview of the financial market and resulted in a tremendous increase of investor concern of risk in their portfolios (Hebb, 2012). With respect to the financial crisis, Hebb (Hebb, 2012) researched on whether responsible investments could have predicted the crisis, and thus could protect the firms’ assets. The study from Nofsinger and Varma (Nofsinger & Varma, 2013) showed the broad who professionally their managed assets remained roughly flat during the financial crisis (2007-2009), while assets using SRI (socially responsible investment) strategies will enjoy healthy growth of more than 13%. Institutional investors who seek for long-term return and low risk portfolios have shift their focus in RI policy (Hebb, 2012). There are a growing demand from investors that shift focus to RI, this focus is believed to be possible if companies label their investments as sustainable (Hebb, 2012). The internal legitimacy of green investments could attract the interest of external actors in controlling large repositories of capital dedicated to green investments (Painuly, Park, Lee, & Noh, 2003). The largest investments portfolios are at the hands of institutional investors with an estimated 28 USD trillions of assets (Veys, 2010; Della Croce, Kaminker, & Stewart, 2011). Pension funds and the major shareholders in many OECD countries, have started to include environmental criteria in their investment decisions (Sievänen, Hannu, & Scholtens, 2013). RI is perceived by institutional investors to be a form of proactive investment strategies which emphasizes on opportunities that offer both strong financial performance and positive secondary benefits (Hebb, 2012). It is also shown that the previous short-term focus of investments might distract the investors from identifying long-term risks and hazards (Woods & Urwin, 2010).

Socially responsible investing (SRI) is rapidly gaining popularity in the West, but still faces huge challenges in Asia, which include Malaysia, according to March 2016 report by United Nations-backed Principles for

Responsible Investing (PRI). Among the reasons cited are: a focus on short-term gains, high cost of SRI research, a lack of suitable investments, and very little backlash for inaction (Chew, 2016). For the case of Malaysia, being a leader and first mover for Green Bond issuance is hard in practice, but there are also advantages that accompany with it. The issues of sustainable development practices and solutions are difficult, complex and multidimensional. Specifically for renewables that often involves much higher upfront investments and longer payback periods for the cost of inputs. However, businesses that can develop the organisational capability to innovate and implement sustainable solutions can offer the services to others. If the payback periods for initial renewables investments are exceedingly low, these will give the business a huge cost advantage. As such, getting into sustainability early makes a lot of business sense (Leong, 2017). In addition, the understanding of ESG risks – and the integration of this analysis into core investment decision making – is still at the early stage of development. One of the most significant barriers to growth is the lack of ESG capability and expertise within the investment industry itself. In some countries, for instance in China and South Korea, progress is being made but the mainstreaming of sustainable investment requires closer collaboration between policy-makers, regulators and the investment industry. This collaboration can work towards creating a more conducive and supportive policy environment, prioritizing actions such as improving transparency and disclosure, standardizing the market and reducing transaction costs that will accelerate green bond issuance and sustainable investment practices thrive across Asia and ASEAN (Robinson, 2015). In order for this to realise, Malaysia government needs to create more assertive and ambitious policy framework that put sustainability priorities at the heart of new asset (green bond) growth models. The entire financial market reform needs to form part of the overall ‘sustainability infrastructure’ with regulatory actions required for addressing ever-apparent market failures. The world economic forum also indicates that the emergence of green bonds in financial markets might have a positive impact on the cost of capital for companies. The green label will enable firms to access investors with focus on sustainable investment and thereby broaden the investor base and connection. Furthermore, increased transparency on green bond will reduce the risk for investors and thereby reduce the overall cost of debt. Green bonds enable firms to access deep pools of low cost capital when funding green investment projects. (World Economic Forum, 2015). As such, lower cost of capital has been identified for firms that undertake proactive sustainability measures. Inclusion of responsible institutional investors enable the firms to access more capital from broad investor base and connection, this is also believed to be an important financial driver for companies to undertake such measures.

Based on the empirical study done by Falsen and Johansson (2015), they explained the motives for companies to undertake green practices are varies; which include their consideration on reputational benefits, legislation, stakeholder pressure and internal legitimacy (Hoffman, 2001; Paulraj, 2008; Walker, Sisto, & McBain, 2008; Bansal & Roth, 2000; Dechant & Altman, 1994; Weybrecht, 2014). These drivers enable firms to layout benefits which result from green bonds issuance. Company reputation improvement refers to company actions that align corporate actions with current societal norms and values (Bansal & Roth, 2000). The firm’s reputation is regarded as an important driver to increase the marketing value of the company (Jenck, Agterberg, & Droescher, 2004). A strong brand takes years to build, but can be ruined in a short period with current media coverage and social media campaigning (Weybrecht, 2014). Investor relation and the marketing departments within companies may perceive green practices as a communication channel in which they can display environmental initiatives (Ross, 2015). The increased amount of regulations and standards globally indicates that legislation has therefore become an important driver for green practices (Green, Morton, & New, 1996; Paulraj, 2008). Companies are perceived to obtain high value if they stay ahead of legislation or to be observant on new developments within the environmental field (Weybrecht, 2014; Dechant & Altman, 1994). Non-compliance with legislation are often results in legal costs, fines, additional inspections, monitoring and other effects on company reputation (Epstein & Buhovac, 2014). Companies that engage in legislative development are often gain their opportunity to lead, and to be viewed by governments as a frontrunner in environmental management and shaping strategic legislative development (Carter, 2001). Communication with stakeholders continues to raise its importance in firms (Weybrecht, 2014). NGO’s and other stakeholders are increasingly aware of the companies’ course of actions on society (Epstein & Buhovac, 2014). Employees and customers need to be well-educated and informed to take action against companies if the company actions are against with the customer values and beliefs (Dechant & Altman, 1994). Green bonds could be viewed as a package for environmental initiatives within companies under a common label or brand. The green package enable to raise the attractiveness of funding and communicates company efforts to external stakeholders (Mathews & Kidney, 2012). Legitimacy creation for environmental practices is another important driver for green practices. Legitimacy plays a vital role in creating growth of new initiatives within a company. Legitimacy is defined as the perception whether an initiative is necessary and appropriate (Ivory, 2013). Green bond issuance may able to link sustainability departments with financial departments by involving both departments in a combined effort to finance green initiatives. Specifically, finance department holds a historically strong internal position, and involvement from both functions may therefore increase the legitimacy of sustainability issues (Ivory, 2013). Retrospectively, sustainability issues are systematically less prioritized within companies as compared to financial targets (Hahn, Figge, Pinkse, & Preuss,

2010). This low priority of sustainability can be enhanced from the increasing needs of internal legitimacy for sustainability issues, and to ensure those initiatives can be regarded as vital company development (Ivory, 2013). The process of gaining legitimacy is well defined by Flynn and Du (Flynn & Du, 2012) “acquire the participation, enthusiasm and commitment from others is necessary to manage their activities effectively”. Some argued that legitimacy is as important as other resources such as capital, technology and personnel when it comes to the success of new ventures (Zimmerman, 2002). Starr and MacMillan argued that securing legitimacy is fundamental access to resources (Starr & MacMillan, 1990). If legitimacy is not acquired, the firm’s initiatives are thus most often been criticized to be unnecessary or irrelevant (Ivory, 2013). Literatures emphasize that implementation of green practices may benefit the firms. Five drivers from retrospective views could be linked to the issuance of a green bond and undertaking proactive sustainability measures: reputational benefits, legislation, stakeholder pressure, internal legitimacy and personal motives. A green bond could be described as a proactive sustainability measure as emphasized by the same drivers. Green investments can be accelerated if a green bond shows correspondence to some or all of the drivers as discussed in the literature reviews.

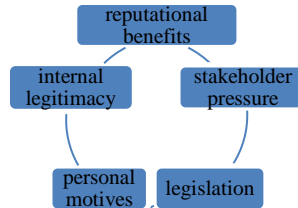


Fig.1. Five drivers of green bond issuance

3. PROPOSED RESEARCH METHODOLOGY FOR FUTURE RESEARCH

To benefit the future researchers, by obtaining quantitative data from the survey and qualitative data from the interviews, the future study may contribute the scientific field of green investments and green bonds. The following questions raised could be served as brief ideas when conducting interviews among the potential Malaysian issuers of green bonds and investors who concerned on green bonds development with their capital placed in green bonds and green investment:

1. Based on your opinion:
 - (a) How do the integration of both Socially Responsible Investment (SRI) and Environmental, Social and Governance (ESG) issues fit into the “values-based” portfolio selection and assets allocation decision?
 - (b) How do the integration of both SRI and ESG fit into the portfolio investing in Malaysia’s Sukuk market?
2. In line with the emergence of Malaysia’s Green Sukuk market, is it feasible to issue Green Bonds or Climate Bonds in Malaysia? In your opinion, what would be the possible value of accreditation for Green Bonds issuance?
3. In your opinion, how do the emphasis of both SRI and ESG will accelerate the green investments, Green Sukuk and possibly the Green Bonds issuance in Malaysia? Will the SRI/ESG and green investing drive the demand for green innovations/green technology solutions (renewable energy for instance)?
4. For your understanding in respect to current legislative development in Malaysia, how the regulatory bodies or government agencies can assist in developing the locally sustainable development agenda (particularly, in regards to SRI/ESG investing, Green Sukuk and possibly the Green Bonds issuance/investment in Malaysia)? How does value of accreditation and legitimacy of the accreditation make Green Sukuk and possibly Green Bonds more attractive to the mainstream investment community? How legitimate do you see the accreditation process as being?
5. Will the SRI, ESG and green investing continue to impose a growing force for positive/negative change in Malaysia’s mainstream businesses? Have you ever seen an increase in clients’ need in seeking green financing methods or green investments? Is the connection between environmental considerations and dollars invested becoming a consideration in your (or your clients) investment process?
6. For your opinion, is the Public Listed Companies (PLCs) and Small-Medium Enterprises (SMEs) aware and ready to adopt and implement the SRI/ESG and green investing? What would be the level of readiness and awareness for Malaysia’s PLCs and SMEs in implementing the SRI/ESG and green investing in their mainstream businesses?

Based on qualitative research, semi-structured interviews and survey can be adopted by targeting among the potential Malaysian issuers and investors who concerned on innovative green financing methods with their capital placed in green projects, with the purpose of identifying the drivers and experiences of green bonds from both issuer and investor perspectives. The ideas and questions raised during the interviews can be used to create a questionnaire that forms the core of survey among Malaysian issuers. The results from both interviews and questionnaire can be used to answer on how green bonds can accelerate green investments and Social Responsible Investments (SRI) which incorporating the ESG issues. Semi-structured interviews will be conducted to layout

typical drivers and experiences from green bond issuances. The potential drivers and experiences can be compared relatively with the financial benefits for green practices as discussed in the literatures to evaluate on how green bonds accelerate green investments. The survey can be conducted in order to strengthen the results from interviews with quantifiable data. The survey can be send among the targeted or potential green bond issuers in Malaysian market. The ideas and questions raised during the interviews can be used as a frame for the survey. The purpose of the survey is to map drivers and experience from issuances of green bonds from a larger group or population. The results obtained from the survey could be used to evaluate how green bonds can accelerate green investments. For further suggestion and planning, the first part of the survey may aim to provide knowledge of drivers for a green bond issuance. The second part of the survey may design to address the benefits from green issuance and to provide other consideration in this issuance.

Cenergi Sea Sdn Bhd is the targeted potential green bond issuer in Malaysia market, it is a Malaysian company that currently exploring the possibility of issuing a green bond. As parts of Khazanah Nasional Bhd subsidiary, this company specializes in renewable energy and energy-efficiency projects which requires massive amount of capital to fund its planned expansion. The company, which was established in 2013, is said to be the foremost developer of biofuel projects in Malaysia. It owns and operates four biogas plants in the peninsula Malaysia, which generate renewable energy from organic waste streams such as palm oil mill effluent. Through their biogas plants, this company is initiated to generate clean energy and clean methane gas, which reduces the harmful components of wastewater effluents and cuts down on carbon emissions. As emphasized by the executive director, Mr. Ahmad Jauhari Yahya, their biogas projects make up the majority of their renewable energy portfolio, they are also considering to develop and invest in other renewable energy projects using proven technologies in solar, hydro and geothermal technologies and review these on a case-by-case basis. While looking around for solutions, the company stumbled upon the green bond concept. By tailoring into innovative financing mechanism for their energy-efficiency projects, the green bonds shall provide solutions to their financing hurdles and able to shorten the long process of conventional methods (Jacobs, 2017). Tenaga Nasional Bhd (TNB), Malaysia's main power provider can potentially leverage on the green bond issuance in accelerating its electricity "Smart Grid" modernisation. A "smart grid" uses technology to collect practical information about electricity use and supply – insights useful in improving the efficiency, reliability, economic and sustainability of electricity production and distribution (Goh, 2014). Innovative Malaysian companies such as MAEKO can capitalize on green bond in offering affordable modular solutions to the problem of food waste in order to meet the sustainable goal of responsible consumption and production. This company has been listed on the MyHIJAU list of the Malaysian Green Technology Corporation (Leong, 2017).

4. CONCLUSION

Many have seen a steady growth in sustainable investment assets across the Asia market and the indications are that environmental, social and governance (ESG) factors are increasingly on the agenda for mainstream investors. The feasibility of green bonds issuance in line with ESG disclosure can and must move from niche players to mainstream industry. Yet, progress is still limited and figures are slight in relative terms, with most markets in Asia, which include Malaysia, remaining in the early stages of development. However, many have witnessed some positive developments in areas such as sustainability-themed funds, renewable energy investments and a rapidly increasing interest in green bonds. Although much of the growth in these areas remain slight in relative terms, these emerging trends however clearly point to a dynamic market with huge potential. Hence, most of the reviews from literatures suggest green bonds issuance will substantially linked to proactive sustainability measures. By incorporating and corresponding to five important drivers for proactive sustainability measures: reputational benefits, legislation, stakeholder pressure, internal legitimacy and personal motives, green bonds will inevitably accelerate green investments in more attractive measure. To benefit the society as a whole, green bonds is a win-win solution for both the issuer and investor. As for prerequisite, a green bond must fund 'green projects', which typically include those relating to renewable energy, emission reduction and this could attract a large investor base. Green bonds study will benefit different types of investors - those who have a greater interest and focus on environmental, social and governance (ESG) issues, and those who are less focused on green concerns but want to ensure that their bonds portfolio meet their investment objectives by fully diversifying its holdings to meet its managers' and trustees' fiduciary requirements. The increased demand in green bonds internationally is likely to drive increasingly favourable terms and a better price for the issuer, compared to a regular bond from the same issuer. Another selling point of green bond is that it carries a lower risk profile than other (project-based) bonds. This is due to the proceeds raised for a specific green project is tied to the issuer and not to the success or completion of the project. Thus the project risk somehow stays with the issuer rather than the investor.

5. FUTURE RESEARCH AND RECOMMENDATIONS

While the potential is obvious, SRI in Asia is very small relative to elsewhere in the world, with less than approximately 1 percent of assets being considered 'sustainable investment assets'. However, some Asia governments are becoming clearer about sustainability objectives. Some of the Asia countries have ministers of climate change. There are also stock exchanges with ESG disclosure rules. Malaysia for instance, in collaboration with the FTSE in December 2014, Bursa Malaysia had launched the FTSE4Good Index series, in which the constituent companies are chosen with leading corporate responsibility practices. Its launching is viewed as a right direction for the country in promoting and connecting enhanced ESG disclosure and practices in Malaysian capital market. All these have led to a rise in assets under management (AUM) since 2011. The key motivations for Green Bond or Climate Bond investors include both the financial opportunity associated with sustainable investment prospects and also about smart risk management. Given the complexity of the sustainability challenges facing the Asia and ASEAN region, these motivations are aligned with expectations and there is also an increasing concern over fiduciary duty. To a degree, both Asia and ASEAN are still stuck in a 'grow now, fix later' mentality, despite the increasingly significant problems associated with natural resources depletion, climate change impacts and environmental degradation, in addition to the empirical links between these issues and social instability. Undoubtedly, from the investor perspective, this dynamic brings both risks and opportunities with macro themes, such as changing demographics and urbanization, playing a significant role at both a regional and national level (Robinson, 2015).

In the past, the green bond concept was initially developed in 2007/2008 by Scandinavian bank SEB (Skandinaviska Enskilda Banken) and the World Bank as a response to increased investor demand for engagement in climate-related opportunities. Eight years ago, green bonds did not exist, but fast forward to 2014, the value of green bonds stood at over US\$53 billion dollars outstanding. The labelled green bond (i.e. where the issuers and/or indices label the bond as green) market tripled in size between 2013 and 2014, with US\$37 billion issued in 2014. Historically, supranational organizations such as the European Investment Bank and the World Bank, have been the most prolific issuers of green bonds, accounting for all labelled issues between 2007 and 2012. Malaysia is the world's biggest Islamic bond market, accounting for about two thirds of all Sukuk sold. According to the Asian Development Bank (ADB), Malaysia had M\$574bn (US\$161bn) of local currency Sukuk outstanding at the end of 2014. In Malaysia, the concept of Green Sukuk has received increasing attention in the finance community. Sukuk are "tradable Islamic finance instruments", consistent with the principles of Shari'ah. Sukuk represent an ownership in underlying assets or earnings from those assets. Just as green bonds are a subset of normal bonds with the difference being proceeds are used for green, Green Sukuk are a subset of Sukuk that finance green assets. The asset-focused nature of all Sukuk makes it a good fit with the green bonds concept, which is also asset-focused. For possible future research, it is vital to combine the momentum of Sukuk and green bond market growth. For Islamic investors they provide a means to more easily address Shari'ah concern for environmental protection in investment choices. For green investors in corporations, Green Sukuk and Green Bonds provide a new avenue to meet investment goals for green. The scientific value for this future study can be added from various case studies where the intra-corporate perception of green bonds will be investigated and consideration prior to an issuance will be analysed. The future research on this topic will add knowledge to the literatures of the early green bonds market development, particularly on the developing nations.

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