#### "Green Finance Development in Japan and Korea"

### Proposal for Joint Collaboration between Japan and Korea to Achieve Green Society

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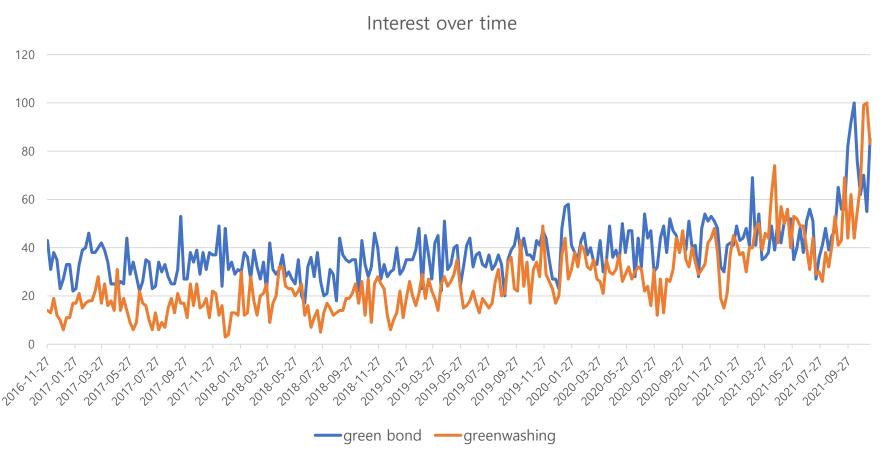
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# How Can Korea and Japan Achieve Green Society?

- A new economic system and movement to fight against climate change is rapidly spreading in Europe and other major countries, and Korea and Japan also must prepare for the future in this stream.
- However, the environmental issue cannot be solved by Korea and Japan respectively, and it but must be overcome together. Therefore, it is the right time for green finance experts from Korea and Japan to facilitate the joint collaboration to achieve green society in Asia.
- In order to solve the environmental problems and realize the sustainable development goals in the region, it is necessary for Korea and Japan to make joint efforts and to expand these efforts to other neighboring economies in the region.

#### "Green Bonds" and "Greenwashing"



Suk Hyun et al (2022), "The price of frequent issuance: the value of information in the green bond market"

#### Environmental Integrity of Green Bonds

- In recent years, green bonds have become an increasingly important financing instrument to fund projects with positive environmental impacts as well as to respond to climate change risks. In fact, the amount and number of green bonds have been increasing globally over time.
- As this trend is expected to continue in the future, it is important to disclose information on whether proceeds are being used as originally intended and are effective in improving the environment.
- The green bond market's development still faces key challenges. One of the most pronounced challenges is the information asymmetry associated with environmental performance, which directly links to possible reputational risks in the form of greenwashing and undermines investor confidence.

#### Environmental Integrity of Green Bonds

- Shapiro (2021) reviewed green bonds listed in the Climate Bonds Database issued between November 2017 and March 2019 and found that only 77% of green bond issuers published information on the allocation of proceeds and only 59% quantified the environmental impact of the financed projects.
- Deng et al. (2020) explored the People's Republic of China's green bond market in which part of the proceeds from a green bond can be used for non-green projects. They find that green bonds with more proceeds used for green projects are sold at a lower yield (greenium).
- Given such potential needs on the part of investors, institutional arrangement and mechanism that provide information on environmental improvement effects are more important.

## The Value of Information in the Green Bond Market: The Price of Frequent Issuance

- Exploring global green bond issuance data from Bloomberg from 2014 to 2019, this study utilizes Blinder–Oaxaca decomposition approach to determine to what extent common bond pricing factors—such as issuance size, credit rating, maturity, coupon rate, liquidity, and green label—help explain the yield difference between frequent and infrequent green bond issuers, and to what extend the unobserved factors beyond existing bond pricing can explain the yield difference.
- Empirical evidence shows that, on average, infrequent green bond issuers pay 114–177 basis points more on their bond issuance relative to frequent green bond issuers, which can be attributed to existing green bond pricing factors such as maturity, credit rating, liquidity, and green label.
- More importantly, the evidence reports a 8-basis-points bond yield difference between frequent and infrequent issuers that cannot be explained by the aforementioned common bond pricing factors.

## BO decomposition of the yield differences between infrequent/frequent issuers

Panel A Expla		plained		Unexplained			Unexplained (Infre- quent issuers)		Unexplained (Frequent issuers)	
Number of Issu- ances	Co	efficient	S.E	Coefficient	S.E	Coe		E	Coefficien	t S.E
overall	1	.1441	0.3661	0.1016	0.1188	0.0	0777 0	.0000	0.1220	0.1512
amt_ issue	-0	0.0184	0.0171	-3.7973	9.9080	-5.0	0081 9	.4673	1.2108	1.1749
cpn	0	.7937	0.2953	1.8583	1.2438	1.0	0081 1	.0166	0.8502	0.4059
sp_score	0	.4730	0.2284	-4.7849	3.7509	-2.5	5602 2	.4381	-2.2247	1.6781
usd	-0	0.0528	0.0351	-0.2488	0.4900	-0.1	1595 0	4779	-0.0893	0.0444
Panel B		Explaine	d	Unexplain	ned		Unexplair (Infreque ers)		Unexplained issuers)	d (Frequent
MTN Issu	ers	Coeffi- cient	S.E	Coefficie	nt S.E		Coeffi- cient	S.E	coefficient	S.E
overall		1.7656	0.315	7			-0.0646	0.0620		
amt_issue		0.0035	0.0113	3 2.6649	3.2	886	1.2550	2.5321	1.4099	1.5886
cpn		1.5629	0.3949	9 1.2907	0.6	653	0.6561	0.4138	0.6346	0.3351
sp_score		0.4267	0.192	6 -5.0038	2.7	386	-1.7636	1.2021	-3.2402	1.7515
cpn_fixed		-0.0289	0.020	4 -0.8522	0.59	921	-0.4300	0.4352	-0.4222	0.2389

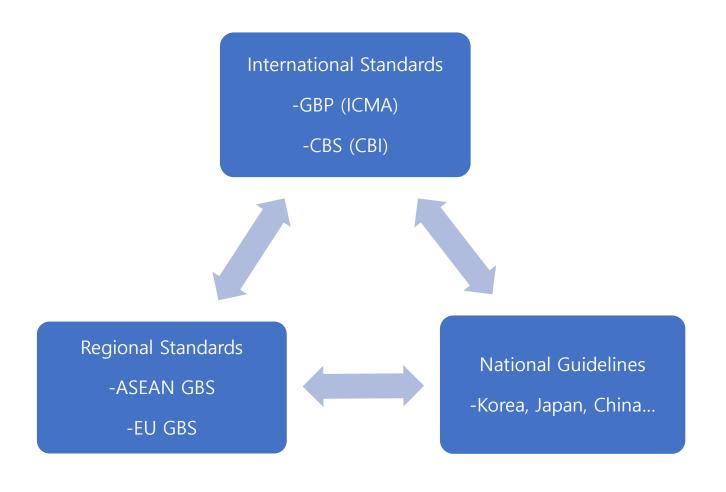
EUR = euro, S.E. = standard error, USD = United States dollar

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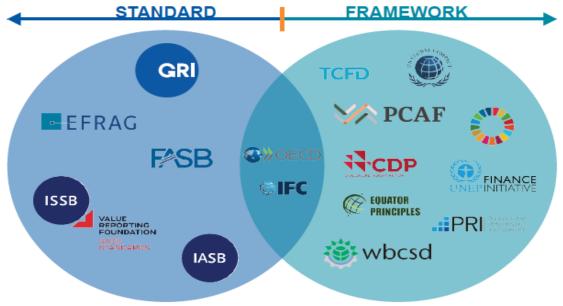
#### Policy Implications

- These new findings offer useful policy implications. While it is important to further develop the green bond market ecosystem and reduce information asymmetry via disclosure requirements, information-enhancing financial services, intermediaries, and policy makers should encourage existing green bond issuers to continue issuing green bonds.
- Frequent green bond issuance not only lowers information asymmetry, thereby boosting investor confidence, but it also reduces issuer financing costs in a relatively cost-efficient manner.
- From a market development perspective, encouraging frequent green bond issuance can boost the supply of and demand for green bonds, benefiting market depth and liquidity.

### Competing Standards/Guidelines for Green Bond Standards



## Competing Standards/Framework for ESG Disclosure



**RANKERS & RATERS** World Benchmarking S&P Dow Jones MSCI (%) M RNINGSTAR Fitch Ratings Indices A Division of S&P Globe ecovadis **ISS** ⊳ REFINITIV -**GGEI** GLOBAL100 Moody's **CSRHUB®** Corporate

- So many reporting frameworks, raters and rankers, certifications, data aggregators, and regulatory authorities
- Reduce the burden on both individual reporting organizations and companies
- -> a common framework with a single set of global reporting standards

### Building Ecosystem for Green Bond Market in Asia

#### Harmonization/ Standardization of Green Bonds (Finance) in the Asia-Pacific

- compare their different initiatives
- identify barriers and opportunities of green finance
  - promote best practices

Availability of Information

Certification & Verification

Tax & Subsidy

Green Bond Standard Monitoring & Reporting

#### Mitigating Information Asymmetry

- → Standardized (harmonized) ESG reporting mechanism
- → Building regional platform for green (bond) finance

### Comparative Study

	Korea	Japan
Taxonomy		
Green Bond Guideline		
Transition Finance Guideline		
ESG Disclosure	-Listed companies (more than 2 trillion won in assets) from 2025 -All KOSPI-listed companies from 2030	-Listed companies required to disclose from 2021 under the revised Corporate Governance Code

### Working Group

Green Finance Network Japan

Finance for the Earth



Working group



 Implement a comparative study on taxonomy, green bonds, transition finance, and etc in Korea and Japan

• Establish the network for green finance institutions/associations in Asia

- Standardize what, where, and how companies report ESG & green finance-related information
- Develop Asian standards for green finance

3