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Research article

Assessing investor preferences for environmental and sustainability bonds in Japan: A discrete choice experiment approach

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Appendix A.

Description of the three ESBs

Green bond: A bond issued to promote the resolution of environmental issues such as greenhouse gas reduction, forest conservation, the spread of renewable energy, and air pollution control.

Sustainability bond: A bond issued to promote the resolution of more comprehensive social issues. This includes not only the environmental issues covered by green and blue bonds but also the infrastructure development, public infrastructure like healthcare, support for education and research leading to sustainable development, and job creation, which are typically addressed by social bonds.

Blue bond: A bond issued to promote the resolution of marine environmental issues such as marine pollution control, marine resource preservation, marine biodiversity conservation, and climate change measures.

Appendix B.

Estimation results of the main attributes for the cross effects model

Table 7(c). Estimation results of the main attributes for the JPY cross effects model.

Mean	RP			WTP space			GMNL		
	SRAS	Env	Sustain	SRAS	Env	Sustain	SRAS	Env	Sustain
esb	−1.220*	−1.880***	−1.685**	−1.001***	−0.939***	−0.249	−0.978	−3.073***	−1.149
	(−1.78)	(−2.73)	(−2.46)	(−6.90)	(−5.43)	(−1.07)	(−1.21)	(−3.01)	(−1.36)
gb	−0.160	−0.162	−0.162	−0.164**	−0.178**	−0.136*	−0.734	−0.981*	−0.494
	(−1.03)	(−1.05)	(−1.04)	(−2.05)	(−2.16)	(−1.66)	(−1.48)	(−1.73)	(−1.24)
bb	−0.0530	−0.0539	−0.0527	−0.0236	−0.0345	−0.0181	−0.368**	−0.444**	−0.242*
	(−1.05)	(−1.07)	(−1.04)	(−1.01)	(−1.36)	(−0.74)	(−2.24)	(−2.31)	(−1.89)
rating	0.130***	0.130***	0.130***	0.0611***	0.0578***	0.0608***	0.445***	0.575***	0.486***
	(7.71)	(7.71)	(7.72)	(8.98)	(8.67)	(8.46)	(4.50)	(4.62)	(5.00)
local	0.0161	0.0169	0.0164	0.0262	0.0214	0.0174	0.329**	0.393**	0.313**
	(0.43)	(0.45)	(0.44)	(1.35)	(1.07)	(0.88)	(2.21)	(2.26)	(2.38)
certify	0.100***	0.100***	0.0999***	0.0525***	0.0459**	0.0622***	0.297**	0.432***	0.299**
	(2.68)	(2.69)	(2.68)	(2.84)	(2.41)	(3.21)	(2.22)	(2.72)	(2.57)
report	0.141***	0.141***	0.141***	0.0581***	0.0558***	0.0617***	0.386**	0.545***	0.396***
	(3.77)	(3.78)	(3.77)	(2.71)	(2.63)	(2.84)	(2.05)	(2.59)	(2.91)
interest	1.946***	1.946***	1.946***	0.672***	0.677***	0.688***	6.703***	8.992***	6.723***
	(25.40)	(25.67)	(25.53)	(10.03)	(10.90)	(11.46)	(4.95)	(4.77)	(5.44)
SD									
esb	0.574*	0.383	0.564**	−0.0464**	0.390***	0.201***	0.309**	−3.990***	0.379**
	(1.81)	(1.41)	(2.29)	(−2.16)	(9.94)	(6.28)	(2.00)	(−4.06)	(1.99)
Interest				1.312***	1.203***	1.120***			
				(11.34)	(10.12)	(10.36)			

Note: ***, **, and * denote significance at the 1 %, 5 %, and 10 %, respectively. RP and GMNL represent the results of the random parameter and generalized multinomial logit model estimations. The values in parentheses denote the z-score.

Table 8(c). Estimation results of the main attributes for the USD cross effects model

Mean	RP			WTP space			GMNL		
	SRAS	Env	Sustain	SRAS	Env	Sustain	SRAS	Env	Sustain
esb	−3.114***	−2.974***	−2.889***	−11.13***	−10.53***	−10.70***	−7.068***	−5.773***	−8.373***
	(−4.89)	(−4.67)	(−4.72)	(−4.51)	(−6.62)	(−6.21)	(−4.07)	(−3.70)	(−3.04)
gb	−0.144	−0.151	−0.154	−0.842	−0.747	−1.161**	0.256	−0.689**	−0.670**
	(−0.94)	(−0.99)	(−1.01)	(−1.54)	(−1.39)	(−2.06)	(0.74)	(−2.07)	(−2.02)
bb	−0.233***	−0.234***	−0.233***	−0.800***	−0.876***	−0.960***	−0.267**	−0.491***	−0.329**
	(−4.69)	(−4.72)	(−4.70)	(−3.68)	(−4.42)	(−4.33)	(−2.22)	(−3.28)	(−2.54)
rating	0.159***	0.159***	0.159***	0.604***	0.578***	0.625***	0.396***	0.442***	0.450***
	(9.50)	(9.48)	(9.51)	(8.20)	(9.69)	(10.14)	(4.57)	(4.08)	(3.34)
local	0.0373	0.0383	0.0383	0.415**	0.336**	0.341**	0.506***	0.440**	0.550**
	(1.02)	(1.05)	(1.05)	(2.13)	(2.30)	(2.35)	(3.07)	(2.51)	(2.34)
certify	0.104***	0.104***	0.104***	0.569***	0.597***	0.582***	0.576***	0.610***	0.659***
	(2.83)	(2.84)	(2.84)	(3.18)	(4.01)	(3.79)	(3.72)	(3.24)	(2.92)
report	0.0232	0.0235	0.0238	−0.0603	−0.0364	−0.0431	−0.145	−0.344**	−0.255*
	(0.63)	(0.64)	(0.65)	(−0.37)	(−0.24)	(−0.25)	(−1.32)	(−2.44)	(−1.82)
interest	0.246***	0.245***	0.245***	−1.535***	−1.506***	−1.595***	0.840***	0.896***	0.897***
	(16.70)	(16.72)	(16.72)	(−14.57)	(−17.57)	(−16.65)	(4.51)	(3.95)	(3.46)
SD									
esb	0.422**	−0.680***	−0.236	−4.463***	0.190	0.763***	−0.349**	0.664***	−0.530*
	(1.99)	(−2.72)	(−0.81)	(−6.79)	(1.12)	(2.78)	(−2.39)	(2.75)	(−1.83)
Interest				1.171***	1.178***	1.289***			
				(5.65)	(9.79)	(10.43)			

Note: ***, **, and * denote significance at the 1 %, 5 %, and 10 %, respectively. RP and GMNL represent the results of the random parameter and generalized multinomial logit model estimations. The values in parentheses denote the z-score.