

Date: December 6, 8 & 13, 2022 Time: 9:00 am to 10:30 am EST Organizers: : IDB Green Bond Transparency Platform (GBTP) Format: Virtual event

Panel I: Green Bond Transparency Platform - A Global Perspective Tuesday, December 6, 2022 - 9:00 am – 10:30 am EST

9:00 am - 9:05 am:	Welcome remarks: Alexander Vasa, Financial Institutions Senior Specialist,
	Inter-American Development Bank (IDB)
9:05 am - 9:10 am:	Agenda introduction: Caroline Harrison, Head of Research, Climate Bonds
	Initiative (CBI)
9:10 am - 10:25 am:	Paper presentations followed by a respective Q&A session

Paper I

Pricing of Green Bonds - Drivers and Dynamics of the Greenium Allegra Pietsch and Dilyara Salakhova - European Central Bank Questions & Answers session

Paper II

The Green Corporate Bond Issuance Premium Andreas Rapp and John Caramichael - Board of Governors of the Federal Reserve System Questions & Answers session

Paper III

The Pricing of Green and Sustainability-Linked Bonds María Gonzalez and John Wald – University of Texas Questions & Answers session

10:25 am - 10:30 am:

Closing remarks: Alexander Vasa, Financial Institutions Senior Specialist, Inter-American Development Bank (IDB)





Green Bonds in Emerging Market Economies

Panel II: Green Bond Transparency Platform - A Regional Perspective Thursday, December 8, 2022 - 9:00 am - 10:30 am EST

9:00 am - 9:05 am:	Welcome remarks: Andreas Kern, Teaching Professor at the McCourt School of Public Policy, Georgetown University
9:05 am - 9:10 am:	Agenda introduction: Omar Zulaica, Senior Asset Management Specialist, Bank for International Settlements (BIS)
9:10 am - 10:25 am:	Paper presentations followed by a respective Q&A session
9	ilian companies stopped issuing green bonds?

Evelyn Maria Boia Baptista - Financial system monitoring department, Central Bank of Brazil Questions & Answers session Paper II Different Shades of Green - Using Natural Language Processing to Estimate Green Bond Premium Emanuela Benincasa - University of Zurich Questions & Answers session Paper III Green Bonds and Nationally Determined Contributions in Latin America and the Caribbean Gabriel Thoumi, Steven Hyland, Matt Orsagh - Responsible Alpha Questions & Answers session

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Closing remarks: Andreas Kern, Teaching Professor at the McCourt
10:25 am - 10:30 am:
                        School of Public Policy, Georgetown University
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Panel III: Green Bond Transparency Platform - A Policy Perspective Tuesday, December 13, 2022 - 9:00 am - 10:30 am EST

9:00 am - 9:05 am:	Welcome remarks: Arturo Galindo, Principal Economist at the Research
	Department, Inter-American Development Bank (IDB)
9:05 am - 9:10 am:	Agenda introduction: Carmen Nuzzo, Head of Fixed Income, Principles
	for Responsible Investment (PRI)
9:10 am - 10:25 am:	Paper presentations followed by a respective Q&A session

Paper I

A Model of Green Bonds Sayantan Ghosal - University of Glasgow Questions & Answers session

Paper II

Green bond behavior during external shocks Erick Ramos - Techmmunity Questions & Answers session

Paper III

Investor preferences for green bonds - Conjoint Analysis Michaël Aklin, University of Pittsburgh (TBD) Questions & Answers session

10:25 am - 10:30 am: Closing remarks: Arturo Galindo, Principal Economist at the Research Department, Inter-American Development Bank (IDB)







Biography of workshop participants

Moderators, Researchers and authors, Welcoming and closing remarks

Moderators:



Caroline Harrison, Head of Research, Market Intelligence, Climate Bonds Initiative (CBI)

Caroline is a London-based research analyst with 25 years of experience in the financial services industry. At Climate Bonds Initiative, Caroline has developed, produced, and written an ongoing research series, 'Green Bond Pricing in the Primary Market'. The report series examines the behavior of green bonds in the prima-

ry and immediate secondary market to determine whether investors attach a value to the green label. This work began in 2017, with an introductory publication covering qualifying green bonds issued in 2016 and H1 2017 and was published quarterly until the end of 2017. Since 2018, it has been a semi-annual report, with each one covering bonds issued in the preceding half year. The work included the development of the concept of a 'greenium' which is now a broadly used term to describe a green bond receiving a new issue discount. The reports have been widely referenced in academic work, and the content is frequently cited in the press. Caroline also leads research on various stakeholder groups, beginning with the Green Bond European Investor Survey (November 2019), the Green Bond Treasurer Survey (April 2020), and Sovereign green bond issuers.



Omar Zulaica, Senior Asset Management Specialist, Bank for International Settlements (BIS)

Omar joined the BIS in 2017. His responsibilities include providing reserve management advisory services to central bank customers, as well as supporting the Bank's asset management activities such as the strategic asset allocation of its own funds. He is also secretary to the Finance Committee of the Bank, which advises

the General Manager on banking- and risk management-related issues. Before joining the BIS, he spent six years at the Bank of Mexico in several positions, including Head of Strategic Asset Allocation. His academic credentials are a BSc in Actuarial Science from Instituto Tecnológico Autónomo de México, where he worked as part time professor, and an MSc in Financial Economics from the University of Oxford in the United Kingdom – he graduated from both with awards.







Carmen Nuzzo, Head of Fixed Income, Principles for Responsible Investment (PRI)

Carmen Nuzzo is responsible for the sovereign, sub-sovereign, securitised products and private debt workstreams, as well as the ESG in credit risk and ratings initiative, all parts of the PRI's flagship fixed income programme. Carmen works with investors, credit rating agencies, issuers, information providers and other

stakeholders to improve the understanding of how environmental, social and governance factors impact debt instrument pricing and how creditors can help fund the transition to more sustainable business and growth models.

Prior to joining the PRI in 2017, Carmen was an Executive Director at Morgan Stanley. She has over 20 years of experience in economic and market analysis research, working across different financial asset classes, after starting her career in 1993 at Salomon Brothers, subsequently working for Citigroup, with stints in the not-for-profit sector. Since 2014, her work has focussed on sustainable economics and finance. Carmen holds a Laurea cum laude in 'Political Science' (major economics) from La Sapienza University in Rome and a Ph.D. in 'Capital Markets and Business Finance' from the University of Bergamo. She was a visiting scholar at the N.Y.U Stern Business School, working on the Ho-Lee model for her dissertation.

Researchers and authors:

Panel I: Green Bond Transparency Platform - A Global Perspective



Dilyara Salakhova, expert on sustainable finance and financial stability with more than ten-years experience at the ECB and Banque de France

Dilyara Salakhova is an expert on sustainable finance and financial stability with more than ten-years experience at the ECB and Banque de France. At the ECB, she led the agenda on sustainable finance and worked extensively on green bonds, ESG investments

funds, funding of the transition as well as climate-related risks to financial stability. Dilyara helped to inform the policy debate on sustainable finance by contributing greatly to the ECB Opinion on EU Green Bond Initiative, NGFS report on enhancing market transparency in green and transition finance, Joint ECB/ESRB Reports on Climate-related risk and financial stability, ECB Financial Stability Reports. Dilyara has also written several academic publications on the topic.green bond issuers.





Green Bonds in Emerging Market Economies



Andreas Rapp, Senior Economist in the Global Capital Markets Section at the Board of Governors of the Federal Reserve System

Andreas C. Rapp is a Senior Economist in the Global Capital Markets Section at the Board of Governors of the Federal Reserve System. Before joining the Board, Andreas received a Ph.D. in Finance from Tilburg University (The Netherlands). His main area

of interest lies in the microstructure of bond markets. In his research liquidity, frictions, and trading intermediaries take center stage.



María Regina Gonzalez, second-year PhD student at the University of Texas at San Antonio

Maria Regina Gonzalez is a second-year PhD student at the University of Texas at San Antonio. She was born and raised in San Miguel de Allende (Mexico) and moved to San Antonio to pursue higher education. Maria holds a bachelor's degree in Finance and Risk Management and a Master's in Business Administration from St. Mary's University.

Her prior work falls under the field of banking and institutional investment. Her current research interests include fixed income securities, sustainable finance, and consumer finance. Maria is currently working alongside Dr. John Wald on her first-year research paper on the pricing of green and sustainability linked bonds.

She also serves as a research assistant to Dr. Wald and Dr. Ivalina Kalcheva and is set to begin teaching in the Fall of 2023.





Panel II: Green Bond Transparency Platform – A Regional Perspective



Evelyn Maria Boia Baptista, Analyst in the Central Bank of Brazil

Evelyn Maria Boia Baptista is an analyst in Central Bank of Brazil since 2011. Since 2014/2015, monitor portfolio foreign investment in Brazil, and non-banking financing of non-financial companies in the international bond market at Foreign Exchange Market Monitoring Division (Dicam), in Financial System Monitoring De-

partment (Desig). Doctor in Management (Area: Financing and Accounting), Federal University of Rio Grande do Sul, Brazil. Current research interest: sustainable investment, by portfolio investor perspective; and Latin American issuers' sustainable bond issuances.



Emanuela Benincasa, 4th year PhD student in Finance at the University of Zurich (UZH) and the Swiss Finance Institute (SFI)

Emanuela Benincasa is a 4th year PhD student in Finance in the Department of Banking and Finance at the University of Zurich and Swiss Finance Institute. Emanuela worked as research consultant for the European Investment Bank (EIB) focused on a project in climate finance. Her research interests cover the intersection

of empirical banking and sustainability, with a focus on inequalities, access to finance, development, and green growth. Emanuela obtained a Master's degree (MSc) in Finance from the University of Siena and University of Ljubljana, School of Economics and Business.



Matt Orsagh, CFA, CIPM, Senior Consultant, Responsible Alpha

Matt is the ex-Senior Director, Capital Markets, CFA Institute. He is a global leader in the sustainability community and an award-winning writer concerning climate change analysis and education. He wrote Climate Change Analysis in the Investment Process which was voted best ESG Paper 2020 by Savvy Investor. He is adept at conducting ESG analysis, climate change integration, and equity

investment analysis and he hosts The Sustainable Story Podcast. Matt has an MBA in Finance from Georgia State University.





Green Bonds in Emerging Market Economies



Gabriel Thoumi, CFA, FRM, Certified Ecologist, CEO, Responsible Alpha

Gabriel Thoumi, CFA, FRM, Certified Ecologist, is CEO, Responsible Alpha, a global consultancy which enables institutions on their transition to a low-carbon, sustainable, and equitable future. He is a former investment research manager and commercial banker with over 15 years' experience as an award-winning research

manager (2014, 2015, 2020, and 2021). In 2014-2015, while at Calvert Investments, he co-developed the Agricultural Supply Chain Adaptation Facility with the Inter-American Development Bank.

He is a member of various Fortune 500, scientific, and financial technical committees including the S&P Sustainable Finance Scientific Council, and is former President, Board, 2 Degrees Investing Initiative U.S. He has published over 70 thematic investment reports covering many themes including sovereign debt, gender, deforestation, climate transition, financial accounting, nuclear energy, and other topics; edited textbooks on financing conservation of our forests and forests and reefs; published hundreds of finance articles; and frequently speaks globally.

He has led successful global ESG initiatives for mutual and thematic funds, ETFs, public finance and green bonds, corporate engagement, conservation finance, and carbon markets products. He lectures at Johns Hopkins University teaching Financing a Sustainable World. Gabriel has an MBA and Master of Science in natural resources from the University of Michigan. Finally, he is a LEED AP and has served as a political appointee to Washington DC regional urban planning and climate advisory commissions 2013-2021 and is a former Erb Institute, Rockefeller Natural Capital, and Consortium fellowship recipient.



Steven Hyland, Jr., Ph.D. Senior Consultant, Responsible Alpha

Steven is a tenured faculty member at Wingate University and has obtained the Sustainable Finance Certificate from the University of Cambridge Institute for Sustainability Leadership. He has eight years of leadership experience in the non-profit sector as a successful fundraiser, mentor, and program manager. He has received

numerous awards and grants for his thematic research at the intersection of political economy, governance, and history, including a Fulbright Fellowship, a National Endowment for the Humanities grant, the Alfred B. Thomas Book Award, and many others. His recent research has focused on capital markets, sustainable finance, and ESG integration in Latin America and the Caribbean. His writings have appeared in popular press outlets Value Walk, Yahoo Finance, the Huffington Post, and the Raleigh News and Observer, as well as academic journals and public affairs publications. He has lectured at various universities in the United States, Europe, and Latin America, including New York University, the University of Buenos Aires, and the Free University of Berlin.





Panel III: Green Bond Transparency Platform – A Policy Perspective



Sayantan Ghosal, Professor of Economics at the Adam Smith Business School, University of Glasgow

Sayantan is Professor of Economics at the Adam Smith Business School and Dean of Interdisciplinarity and Impact at the Colege of Social Sciences. He was a Professor of Economics at the University of Warwick from 2004 to 2013 where he was Research Director of the ESRC funded Centre for Competitive Advantage in

the Global Economy (CAGE). He also has a PhD from CORE, Universite Catholique de Louvain under the European Doctoral Program in Quantitative Economics. Sayantan undertakes several activities; he:

- co-ordinates the interdisciplinary network "Behavior, Structure and Interven tions" at the University of Glasgow
- is the academic lead for the ESRC funded Impact Acceleration Account at Glasgow
- is an academic ambassador for the research beacon "Addressing Inequalities"
- is a co-investigator on the ESRC funded "Rebuilding Macroeconomics Net work", and

• is the Principal Investigator in an ESRC-DFID funded project based in India starting in March 2018.



Erick Ramos Murillo, member of the Board of Directors at Techmmunity

Erick Ramos Murillo has extensive experience serving as a strategist and economist for more than 40 local governments around the world and multinational organizations (World Bank and Inter-American Development Bank). He published one of the first papers that documented a financial advantage for green bond issuers in the secondary market. He represented Mexico at the

Executive Board of the IMF, worked as an econometrician at the Central Bank of Mexico and as a strategist in financial markets. He is a PhD candidate at University of Loyola, holds a Master's in Economic Development at Harvard University, a postgraduate degree in Business Management from Boston University and a BS in Economics by Universidad Iberoamericana.





Green Bonds in Emerging Market Economies



Michaël Atkins, Associate Professor of Political Science at the University of Pittsburgh

Michaël Aklin is Associate Professor of Political Science at the University of Pittsburgh. He received his Ph.D. from New York University in 2014 and studied at the Graduate Institute for International Studies (Switzerland) and the University of Essex (UK). His research focuses economic and public policies that promote (or

not) sustainable development. The author of two books published by MIT Press and over 30 scientific articles, he regularly collaborates with policymakers, firms, and NGOs. In 2023, he will join EPFL (Swiss Federal Institute of Technology Lausanne) as an associate professor of economics and the holder of the Chair in Policy and Sustainability.

Welcoming and closing remarks:



Alexander Vasa, Financial Institutions Senior Specialist, Inter-American Development Bank (IDB)

Alexander Vasa is a senior specialist in capital markets and financial institutions at the IDB, where he developed and market-tested the recently launched Green Bond Transparency Platform to simplify and harmonize reporting. He supported National Development Banks across the Latin American and Caribbean region in

the design and implementation of green credit lines, de-risking instruments, and green bond strategies often with the cooperation of the Green Climate Fund, the International Climate Initiative, and the Danish Energy Agency. Before joining the IDB, he evaluated financial mechanisms at Climate Policy Initiative, co-authored EU-Emissions Trading market reserve relevant research at the German Institute for Economic Research (DIW Berlin) and co-developed the methodology for the carbon leakage sector list at the EU Commission.topics.





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Arturo Galindo, Principal Economist at the Research Department, Inter-American Development Bank (IDB)

Arturo José Galindo Andrade is a Principal Economist at the Research Department of the Inter-American Development Bank (IDB) in Washington, DC. Prior to joining the Research Department in 2021 he was a member of the Board of Directors of the Central Bank in Colombia. Arturo has also been a researcher at Fedesarrollo a Colombian think tank, Chief of the Strategic Plan-

ning and Monitoring Division at the IDB, Chief of the Strategic Development Division and Regional Economic Advisor for the Andean Region at the same institution. Previous roles include Chief Economic Advisor of the Banking Association of Colombia, Advisor to the Ministry of Finance, Advisor to the government of Colombia on Coffee Affairs, Professor of Economics at the Universidad de los Andes in Bogotá, Colombia, Research Economist at the IDB, and Economist at the Central Bank of Colombia. Arturo holds a PhD in Economics from the University of Illinois at Urbana-Champaign. His academic research includes macroeconomics, monetary policy, financial economics, banking, development banking, public finance, international economics, and development economics – fields in which he has published extensively.



Andreas Kern, Teaching Professor at the McCourt School of Public Policy, Georgetown University

Andreas Kern is Teaching Professor at the McCourt School of Public Policy at Georgetown University. His research concentrates on the political economy of global financial markets, emphasizing the importance of an interdisciplinary and evidence-based approach to mitigating political and economic risks in achieving sustainable

poverty alleviation. Dr. Kern works with leading policymakers and researchers on designing policy programs and initiatives concerning financial market development and monetary institution building. Before joining Georgetown University in 2010, he worked as a Senior Research Fellow at the Jean Monnet Centre of Excellence for European Integration at Freie Universität Berlin. Dr. Kern earned his Ph.D. in Political Economy from Freie Universität Berlin and holds an M.Sc. in Economics from Ludwig Maximilians Universität in Munich.



