

**KING'S
BUSINESS
SCHOOL**

THE CAPCO INSTITUTE
JOURNAL
OF FINANCIAL TRANSFORMATION

ENVIRONMENTAL

Structuring sustainable finance products
VERONIQUE J. A. LAFON-VINAIS

ESG

a **wipro** company

#56 NOVEMBER 2022

THE CAPCO INSTITUTE

JOURNAL OF FINANCIAL TRANSFORMATION

RECIPIENT OF THE APEX AWARD FOR PUBLICATION EXCELLENCE

Editor

Shahin Shojai, Global Head, Capco Institute

Special Advisory Editor

Igor Filatotchev, Professor of Corporate Governance and Strategy, King's College London

Advisory Board

Michael Ethelston, Partner, Capco

Anne-Marie Rowland, Partner, Capco

Bodo Schaefer, Partner, Capco

Editorial Board

Franklin Allen, Professor of Finance and Economics and Executive Director of the Brevan Howard Centre, Imperial College London and Professor Emeritus of Finance and Economics, the Wharton School, University of Pennsylvania

Philippe d'Arvisenet, Advisor and former Group Chief Economist, BNP Paribas

Rudi Bogni, former Chief Executive Officer, UBS Private Banking

Bruno Bonati, Former Chairman of the Non-Executive Board, Zuger Kantonalbank, and President, Landis & Gyr Foundation

Dan Breznitz, Munk Chair of Innovation Studies, University of Toronto

Urs Birchler, Professor Emeritus of Banking, University of Zurich

Géry Daeninck, former CEO, Robeco

Jean Dermine, Professor of Banking and Finance, INSEAD

Douglas W. Diamond, Merton H. Miller Distinguished Service Professor of Finance, University of Chicago

Elroy Dimson, Emeritus Professor of Finance, London Business School

Nicholas Economides, Professor of Economics, New York University

Michael Enthoven, Chairman, NL Financial Investments

José Luis Escrivá, President, The Independent Authority for Fiscal Responsibility (AIReF), Spain

George Feiger, Pro-Vice-Chancellor and Executive Dean, Aston Business School

Gregorio de Felice, Head of Research and Chief Economist, Intesa Sanpaolo

Allen Ferrell, Greenfield Professor of Securities Law, Harvard Law School

Peter Gomber, Full Professor, Chair of e-Finance, Goethe University Frankfurt

Wilfried Hauck, Managing Director, Statera Financial Management GmbH

Pierre Hillion, The de Picciotto Professor of Alternative Investments, INSEAD

Andrei A. Kirilenko, Reader in Finance, Cambridge Judge Business School, University of Cambridge

Mitchel Lenson, Former Group Chief Information Officer, Deutsche Bank

David T. Llewellyn, Professor Emeritus of Money and Banking, Loughborough University

Donald A. Marchand, Professor Emeritus of Strategy and Information Management, IMD

Colin Mayer, Peter Moores Professor of Management Studies, Oxford University

Pierpaolo Montana, Group Chief Risk Officer, Mediobanca

John Taysom, Visiting Professor of Computer Science, UCL

D. Sykes Wilford, W. Frank Hipp Distinguished Chair in Business, The Citadel

CONTENTS

ENVIRONMENTAL

09 The impact of impact funds: A global analysis of funds with impact-claim

Lisa Scheitza, Research Associate, School of Business, Economics and Social Sciences, University of Hamburg

Timo Busch, Professor, Chair for Management and Sustainability, School of Business, Economics and Social Sciences, University of Hamburg, and Center for Sustainable Finance and Private Wealth, University of Zurich

Johannes Metzler, Graduate, School of Business, Economics and Social Sciences, University of Hamburg

15 Why Switzerland is one of the leading hubs for sustainable finance and how to support this further

August Benz, Deputy CEO and Head Private Banking and Asset Management, Swiss Bankers Association (SBA)

Alannah Beer, Sustainable Finance Associate, Swiss Bankers Association (SBA)

19 Towards net zero for APAC emerging markets: A problem-solving approach for financial institutions

Edwin Hui, Executive Director, Capco

Shelley Zhou, Managing Principal, Capco

28 Understanding the key challenges and opportunities in creating climate transition pathways

Rakhi Kumar, Senior Vice President of Sustainability Solutions and Business Integration, Office of Sustainability, and co-chair of the Climate Transition Center, Liberty Mutual Insurance

Kelly Hereid, Director of Catastrophe Research, Liberty Mutual Insurance

Victoria Yanco, Sustainability Consultant, Liberty Mutual Insurance

37 Seeing ESG through a U.S. Lens

Marina Severinovsky, Head of Sustainability – North America, Schroders

41 Structuring sustainable finance products

Veronique J. A. Lafon-Vinajs, Associate Professor of Business Education, Department of Finance, Hong Kong University of Science and Technology

SOCIAL

51 Bringing the “S” back to ESG: The roles of organizational context and institutions

Igor Filatotchev, Professor of Corporate Governance and Strategy, King's College London

Chizu Nakajima, Professor of Law, Institute of Advanced Legal Studies, University of London and ESG Integration Research and Education Center, University of Osaka

Günter K. Stahl, Professor of International Management, and Director, Centre for Sustainability Transformation and Responsibility (STaR), Vienna University of Economics and Business (WU Vienna)

61 How could social audits be improved? A problem with the “S” in ESG reporting

Minette Bellingan, Representative Director, CPLB

Catherine Tilley, Lecturer in Business Ethics & Sustainability, King's Business School

69 The rise of ESG and the impact on the trade lifecycle

Marcus Fleig, Senior Consultant, Capco

Vincent Schrom, Associate, Capco

79 ESG: Right thesis, wrong data

Jason Saul, Executive Director, Center for Impact Sciences, Harris School of Public Policy, University of Chicago, and co-founder, Impact Genome Project

Phyllis Kurlander Costanza, Former Head of Social Impact, UBS, and CEO, UBS Optimus Foundation

85 ESG – the good, the bad, the ugly

Sarah Bidinger, Senior Consultant, Capco

Ludovic Zaccaron, Consultant, Capco

93 Finding the Return on Sustainability Investments

Tensie Whelan, Clinical Professor for Business and Society and founder and Director, Center for Sustainable Business, Stern School of Business, New York University

Elyse Douglas, Senior Scholar, Center for Sustainable Business, Stern School of Business, New York University

Chisara Ehiemere, Senior Research Lead, Return on Sustainability Investment (ROSI™), Center for Sustainable Business, Stern School of Business, New York University

102 SEC human capital disclosures and DEI in financial services

Caitlin Stevens, Senior Consultant, Capco

Lindsay Moreau, Social Impact Advisor

110 Wealthy individuals: Not to be overlooked when thinking ESG investment strategy

Ylva Baeckström, Senior Lecturer in Banking & Finance, King's Business School

Jeanette Carlsson Hauff, Senior Lecturer, School of Business, Administration and Law, University of Gothenburg

Viktor Elliot, Senior Lecturer, School of Business, Administration and Law, University of Gothenburg

GOVERNANCE

119 Enabling systematic engagement through index investing

David Harris, Global Head of Sustainable Finance Strategy, London Stock Exchange Group

Arne Staal, Group Head of Indexes and Benchmarks, London Stock Exchange Group, and CEO, FTSE Russell

Sandrine Soubeyran, Director in Global Investment Research, FTSE Russell, London Stock Exchange Group

127 Implications of Sustainable Finance Disclosure Regulation (SFDR) in European private markets stakeholder conversations

Vincent Triesschijn, Global Head ESG and Sustainable Investing, ABN AMRO Bank N.V.,

Eric Zuidmeer, Senior Advisor Private Equity, ABN AMRO Bank N.V.

133 Climate conduct and financial services: Tomorrow's mis-selling scandal?

Lauren Farrell, Associate, Capco

141 Decentralizing sustainability – why and how to do it

Catharina Belfrage-Sahlstrand, Group Head of Sustainability and Climate Action, Handelsbanken

Richard Winder, U.K. Head of Sustainability, Handelsbanken

147 Redesigning data assimilation and sourcing strategies

George Georgiou, Managing Principal, Capco

157 The sustainability-linked loan – concept, development, outlook

Roland A. J. Mees, Professor of Practice of Business Ethics, University of Groningen

and Director of Sustainable Finance, ING Wholesale Banking

168 Insights into successful ESG implementation in organizations

Armando Castro, Associate Professor, The Bartlett School of Sustainable Construction, University College London (UCL)

Maria Gradillas, Senior Researcher, Department of Management, Technology and Economics, ETH Zürich

177 Engagement as a pathway to a healthier ESG outlook for financial institutions

Krishna Uttamchandani, Associate, Capco

182 How is ESG reshaping the alternative investment business?

Florence Anglès, Managing Principal, Capco



DEAR READER,

Welcome to edition 56 of the Capco Institute Journal of Financial Transformation, produced in partnership with King's Business School and dedicated to the theme of ESG – environmental, social and governance.

We all recognize that transformation towards a green economic system via sustainable finance is needed, welcome and inevitable. Our clients have a crucial role to play here. Acknowledging the scope and complexity of the evolving ESG landscape, we are perfectly positioned to prepare them for the ESG era.

With climate change accelerating and generating physical events on an unprecedented scale, governments and societies are considering measures to mitigate carbon emissions via net zero initiatives. The focus is firmly on greater sustainability and more equitable policies in response to shifting public attitudes. ESG considerations are reshaping investment risks on the one hand, and opening the way for green financing and sustainable technologies and innovations on the other.

This edition of the Journal examines all three pillars – environmental, social, and governance, highlighting efforts by regulators and practitioners to create a unified approach.

Moving forward, compliance with emerging ESG standards will be a critical differentiator for long-term business success. Data will also play a critical role in delivering the transparency and

insights required to validate the ESG credentials of businesses, and investment strategies. Advances in areas such as machine learning, artificial intelligence and cloud technologies will be key to establishing a future model of sustainable finance.

This edition draws upon the knowledge and experience of world-class experts from both industry and academia, covering a host of ESG topics and innovations including the value of tracking Return on Sustainability Investment (ROSI) and the importance of moving away from purely external risks to addressing issues that can have positive commercial and societal impacts.

I hope that that the research and analysis within this edition will prove valuable for you as you shape your own ESG strategies, policies, and innovation.

Thank you to all our contributors and thank you for reading.

A handwritten signature in black ink, appearing to read 'Lance Levy', with a stylized, flowing script.

Lance Levy, Capco CEO

STRUCTURING SUSTAINABLE FINANCE PRODUCTS

VERONIQUE J. A. LAFON-VINAIS | Associate Professor of Business Education, Department of Finance,
Hong Kong University of Science and Technology

ABSTRACT

The sustainable finance market has expanded rapidly in the past 10 years, from a fringe “movement” to a sizeable market providing significant financing and investing opportunities. We provide a definition and overview of the sustainable finance markets and seek to understand the process by which traditional financial products and instruments can be financially engineered to become sustainable finance products through two main avenues: use of proceeds and performance-based pricing. We provide some recent examples of innovative structures and conclude by showing that the sustainable finance market will continue to develop once solid foundations have been set.

1. SUSTAINABLE FINANCE MARKET DEVELOPMENT AND KEY DRIVERS

1.1 Defining the sustainable finance market

Defining sustainable finance is not as easy as it seems. Some of the most commonly used definitions – for example, as defined by the World Bank,¹ the European Commission,² and the Harvard Business School³: “Sustainable finance is the process of taking due account of environmental, social and governance (ESG) considerations when making investment decisions in the financial sector” – are focused on investment decisions and ignore other aspects of finance such as derivatives. The Impact Investor uses a broader definition: “Sustainable finance is a subset of traditional financing and investing that seeks to place capital into projects that reinforce sustainable development. The objective is to enhance

mitigation and adaptation efforts to combat climate change by providing financial resources to opportunities in a variety of asset classes.”⁴ This broader definition is in our view more appropriate as it encompasses the whole universe of financial markets and not only the most visible part of the iceberg, capital markets. Depending on the definition, according to Refinitiv⁵ and Bloomberg,⁶ the size of the sustainable debt and credit finance market can be estimated to be between U.S.\$1 and U.S.\$4 trillion dollars, as of year-end 2021. Sustainable investing assets have been estimated to be approximately U.S.\$35 trillion globally as of 2021⁷ and U.S.\$9.2 trillion annually for net zero transition.⁸ While significant, this represents only a fraction of the universe of financial markets, and only a small part of the U.S.\$50 trillion climate financing needs identified by the World Economic Forum,⁹ which creates sizable opportunities.

¹ <https://bit.ly/3CzdMmT>

² <https://bit.ly/3fx1guT>

³ <https://bit.ly/3SWEafL>

⁴ <https://bit.ly/3EzqF1N>

⁵ <https://refini.tv/3MmxeGR>

⁶ <https://bit.ly/3CaTY71>

⁷ <https://bloom.bg/3ruAQwz>

⁸ <https://mck.co/3yicOZE>

⁹ <https://bit.ly/3yEr3s3>

1.2 Growth and development of the sustainable finance market

The accelerated development of the sustainable finance market has been driven by multiple factors, starting with increased acceptance of the climate change issues.

Long after Al Gore’s “An Inconvenient Truth” brought climate change into the public eye in 2006, the Paris Climate Agreement (COP21) in 2015 was the first legally binding international treaty on climate change, adopted by 196 parties.¹⁰ It boosted the growth of established organizations such as the Principles for Responsible Investing (PRI), which reached over 5,000 investors worldwide representing over U.S.\$20 trillion in assets.¹¹

Several countries have since announced “net zero” or “carbon neutrality” pledges, including, notably, China’s commitment to reach carbon neutrality by 2060.

Building on COP21, the Glasgow Agreement announced at the COP26 conference in Glasgow in 2021 led to more pledges and actions from governments and the private sector.

While the environmental considerations drove the public discussion, the advent of the COVID-19 pandemic forced social issues to the front of the agenda, while the new technological revolution and the digitalization of the economy

provided increased access to the information needed to develop databases.

New initiatives were announced to facilitate the development of the market.

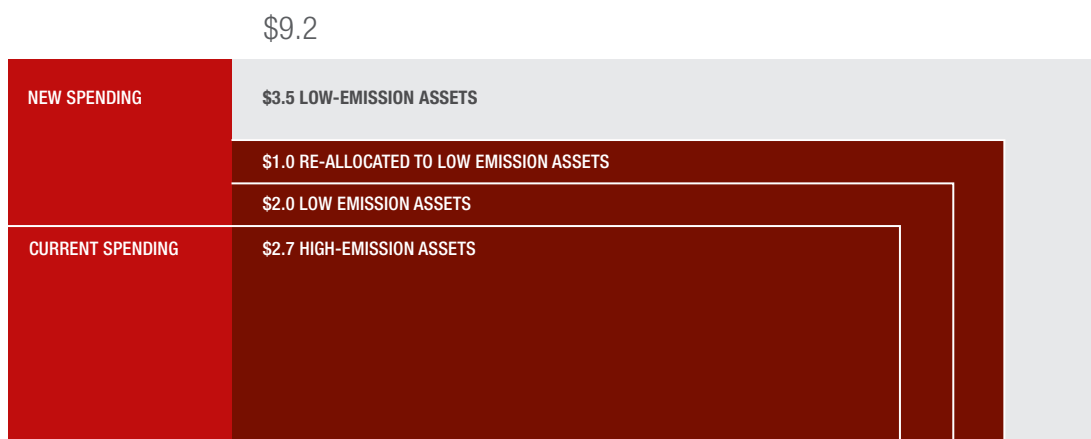
As the sustainability agenda took center stage, more developments in financial markets have helped build the momentum.

Academic and industry research have helped shift investor sentiment to positive views, with most retail and institutional investors thinking that ESG is having a positive impact on returns, according to DSW surveys.

Meanwhile, governments and corporate issuers have increasingly adopted a risk-based approach to sustainability, and regulators have pushed for a more comprehensive risk assessment reporting framework, driving firms to assess their exposure to climate change under the Task Force on Climate Disclosure (TCFD) approach. The establishment of the International Sustainability Standards Board (ISSB) announced in 2022 is a major step forward in standardizing reporting requirements.

The development of the sustainable debt and credit markets has been particularly significant, accelerating during the pandemic, reaching U.S.\$1,710 million as of year-end 2021.¹²

Figure 1: Average annual spending on energy, mobility, industry, buildings, agriculture, forestry, and other land use, 2021-50 (U.S.\$ trillion)



Source: McKinsey & Co.

¹⁰ <https://bit.ly/2EVSoXT>

¹¹ <https://bit.ly/3MmzSfL>

¹² Based on Bloomberg data, source Standard Chartered

Figure 2: COP26 key nature-related pledges and actions

<p>Nov 1: Ecuador opened COP26 by saying it would significantly extend the marine reserve around the Galapagos Islands in partnership with Colombia and Costa Rica, with a goal of reaching 30% marine protection by 2030.</p>
<p>Nov 2: More than 100 countries overseeing 85% of the world's forests agreed to reverse forest loss and land degradation by 2030. The pledge was backed by \$12 billion in public funds from 12 countries.</p>
<p>Nov 2: The private sector committed a further U.S.\$7.2 billion in funding to combat forest loss and more than 30 financial institutions managing U.S.\$8.7 trillion of assets agreed to phase out deforestation from their commodities portfolio by 2025. The main commodities targeted are beef, soy, palm oil, pulp and paper.</p>
<p>Nov 5: More than 10 new countries, including India, Sri Lanka and Saudi Arabia signed up to the "30 by 30" target to protect 30% of the world's oceans by 2030.</p>
<p>Nov 5: Belize, partnering with Credit Suisse, The Nature Conservancy and others, said it closed a U.S.\$36 million "blue bond" and would use the proceeds to help protect 30% of its ocean.</p>
<p>Nov 6: 45 governments pledged urgent action and investment to protect nature and shift to more sustainable farming methods. About 100 high profile companies including supermarkets and fashion brands, pledged to become "nature positive".</p>
<p>Nov 10: Fiji said it would issue its first sovereign "blue bond" in the summer of 2022. The proceeds will go to marine conservation.</p>

Credit: CatWeeks

Sources: S&P Global Sustainable; S&P Global Market Intelligence

Figure 3: Recent policy initiatives to develop the sustainable and green finance market

<p>ENCOURAGING CONVERGENCE OF INTERNATIONAL ESG PRACTICES</p>	<p>E.U.'s Sustainable Finance Taxonomy China's Green Industry Guideline Catalogue Regulators in Hong Kong explore developing a green classification framework for adoption in the local market with the aim of aligning with the Common Ground Taxonomy reported by the International Platform for Sustainable Finance</p>
<p>ENHANCING TRANSPARENCY AND DISCLOSURE</p>	<p>Certification schemes (Hong Kong Quality Assurance Agency's Green and Sustainable Finance Certification Scheme) Guidelines (U.S. SEC Climate Guidance, HKEX's ESG Reporting Guide) Platforms for ESG disclosure (Sustainable and Green Exchange established by HKEX)</p>
<p>CONSTRUCTING ESG INDICES</p>	<p>iBoxx Global Green, Social and Sustainability Bonds Index Bloomberg Barclays MSCI Green Bond Index</p>
<p>PROVIDING INCENTIVES</p>	<p>Hong Kong's Green and Sustainable Finance Grant Scheme US's Clean Renewable Energy Bonds and Qualified Energy Conservation Bonds programs The Netherlands' Green Fund Scheme</p>
<p>EXAMPLE SETTING</p>	<p>Carbon neutrality goals (Mainland China before 2060, Hong Kong before 2050) Government-affiliated asset managers prioritizing green assets (Hong Kong's Exchange Fund, Singapore's Temasek and Japan's Government Pension Investment Fund)</p>

Source: HKIMR

2. OVERVIEW OF FINANCIAL PRODUCTS LANDSCAPE

2.1 Defining the universe

Most academic textbooks have a rather narrow definition of financial instruments. For example, Mishkin and Eakins (2005) define a “financial instrument” as a security, defined itself as a “claim on the borrower’s future income that is sold by the borrower to the lender”¹³, a definition that would not include derivatives or foreign exchange for example. According to Viney (2019), “financial instruments” are “issued by a party raising funds, acknowledging a financial commitment and entitling the holder to specific future cash flows,”¹⁴ a definition narrowly focused on capital raising. Most academic books on financial markets focus quite narrowly on debt and equity capital markets.

The universe of financial instruments can be decomposed using a capital structure construct and looking at sources of capital ranging from common stock (plain-vanilla equity) to short-term liabilities including accounts payable and supply chain finance. We can also classify financial markets by distinguishing between capital markets, being financial markets where firms raise capital in the form of debt (debt capital markets) or equity (equity capital markets) and other financial markets such as commodities and currency markets. Contrary to popular perception, the debt capital markets are larger than the stock markets. Furthermore, the debt capital markets represent only a fraction of the universe of debt and credit markets, with private markets representing a large and opaque universe where firms can raise financing in many forms.

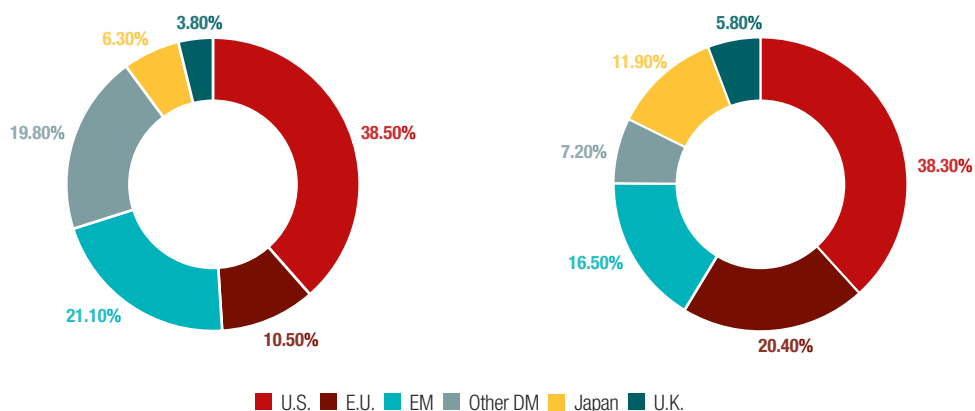
From a practitioner’s perspective, according to the CFI, “Financial instruments are contracts for monetary assets that can be purchased, traded, created, modified, or settled for. In terms of contracts, there is a contractual obligation between involved parties during a financial instrument transaction.”¹⁵ They further classify financial instruments into three categories: cash, derivatives, and foreign exchange. This provides a good basis for discussion but omits commodity markets and other asset categories such as real estate and infrastructure. Furthermore, their definition of “cash” includes securities, loans, and deposits, which is a broad definition of cash.

From a retail consumer’s standpoint, financial instruments can range from simple bank accounts and loans to investing products such as mutual funds and annuities and risk mitigating instruments such as insurance policies. The financial services industry, in its intermediation role, packages various products to allow retail customers to access wholesale financial markets through collective investment schemes (such as mutual funds and unit trusts) and insurance policies.

2.2 Basic asset classes and building blocks

In our view, most financial products can be decomposed into simple building blocks: basic asset classes (cash, debt, equity, currency, commodity, and real assets), derivatives (forwards and futures, swaps, options), and credit/liquidity enhancement (collateral, guarantees, SBLCs...). Insurance contracts can also be used for risk management or credit enhancement purposes.

Figure 4: Equity capital markets (ECM) versus debt capital markets (DCM) (2020)



Source: SIFMA

¹³ Mishkin, F., and S. Eakins, 2005, Financial markets and institutions, 5th edition, Addison Wesley

¹⁴ Viney, C., and P. Phillips, 2019, Financial institutions, instruments and markets, 5th edition, McGraw-Hill

¹⁵ <https://bit.ly/3SZK13l>

Figure 5: Capital markets innovation

PLAYS ON MATURITY	INCORPORATING VARIOUS OPTIONS
<ul style="list-style-type: none"> • Perpetual FRNs • Extendable notes • Callable/puttable bonds • Variable coupon renewable notes 	<ul style="list-style-type: none"> • Dual currency bonds • Index linked bonds • Dual coupon bonds • Pay-in-kind debentures and variable duration notes
EVENT DRIVEN STRUCTURES	PROCEEDS BASED
<ul style="list-style-type: none"> • Credit sensitive notes/bonds • Catastrophe bonds • Sustainability-linked bonds 	<ul style="list-style-type: none"> • Green/blue bonds • Social impact bonds

Source: author

The basic components of each financial instrument can be tailored to reflect the specific needs of the parties. Financial engineering is the process of combining different building blocks to reflect the needs of the parties. For example, if we look at the basic components of any debt/credit contract, we can decompose as follows:

- **the parties to the contract:** the borrower (issuer), the lender (investor), and any other parties involved (guarantor?)
- **the length of the contract:** the maturity (term)
- **the amount borrowed:** principal, face value, notional, par value
- **when and how the amount borrowed will be repaid:** repayment or amortization schedule
- **how much the debt costs and when it is paid:** interest/coupon bearing or discount-to-yield/zero coupon; interest rate, coupon (includes reference rate and credit spread, how is it calculated and when paid – interest periods, coupon payment dates); fees to be paid and how they are calculated
- **other conditions of the contract:** representations and warranties, covenants, etc.; collateral, security, etc.; and use of proceeds.

We can then adapt each of the main components according to the needs of the parties and incorporate other financial building blocks. For example, a syndicated loan can be tied with a cross currency swap to allow the borrower the choice of currency to use. A bond can be designed with a put or call option to allow the issuer or the investors to redeem the funds early.

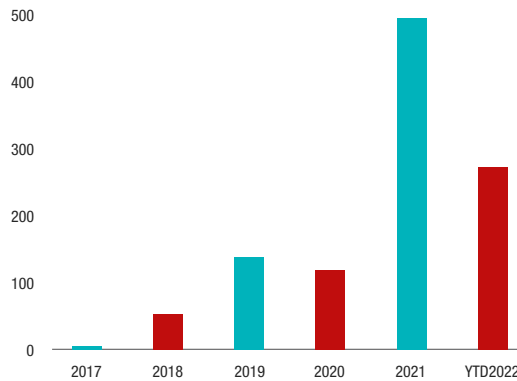
It is also important to realize that financial products can be used to raise sources of funds or invest funds (debt/equity), to manage/create risk (derivatives/insurance), and to exchange currencies or commodities today or in the future (derivatives). As such, a bond is a source of funds for the issuer, but from an investor the same bond is an investment, thus a use of funds.

3. STRUCTURING AND OVERLAYING ESG

Applying the basics of financial engineering to ESG, we can overlay any financial instrument with sustainability principles. Basically, we consider sustainability as one more ingredient in designing our financial products.

When considering the universe of sustainable finance products so far, we have identified many examples:

- **debt capital markets:** (1) green/blue/orange/social/transition bonds and convertible bonds and sukus; and (2) sustainability-linked bonds and convertible bonds and sukus

Figure 6: Global sustainability-linked loans sales

Note: All full-year volumes except for YTD2022
Source: Bloomberg

- **loan/private debt markets:** (1) green/blue/orange/social loans/project/structured finance and private placements; and (2) sustainability linked loans
- **trade and supply chain finance:** sustainable trade finance
- **derivatives markets:** ESG derivatives, green interest rate swaps; debt-for-nature swaps
- **credit enhancement:** green sustainability-linked guarantee facility
- **insurance:** sustainable/green insurance
- **deposits:** green/sustainable deposits
- **funds and collective investment schemes:** ESG funds.

There are broadly two main ways to overlay ESG to financial instruments: use of proceeds and performance.

3.1 Use of proceeds approach

In the use of proceeds approach, the funds raised are exclusively used for ESG projects. For example, “green” bonds are those bonds where the proceeds are exclusively invested in environmental projects, such as building renewable energy projects, “greening” buildings, etc. Similarly “blue” bonds will be invested in water sustainability and ocean preservation.

Frameworks have been designed by industry associations to help guide the structuring of use of proceeds transactions, such as Green Bond Principles (GBP)¹⁶ and Green Loan Principles (GLP).¹⁷

In fund management, investments are selected according to the use of investors’ money. For example, an equity portfolio will be composed of stocks of companies invested in ESG such as renewable energy producers.

Similarly, ESG deposits can be used only to finance ESG investments – a bank can isolate a portion of its deposit base to use for ESG loans, for example. ESG insurance contracts will only cover ESG projects.

This approach is popular as it is relatively easy to implement and monitor. Use of proceeds financial instruments dominate the market with green bonds representing 38 percent of total issuance in 2021, and a 100 percent increase compared to 2020.¹⁸ As of Spring 2022, green bonds represented 42 percent of total issuance of sustainability labeled debt, followed by sustainability-linked loans at 21 percent.

3.2 Performance approach

In the performance approach, a list of indicators [key performance indicators (KPIs)] will be agreed upon, related to various aspects of ESG. These KPIs become part of the conditions of the contract between the parties, and performance is generally tied to the pricing, similar to grid-based pricing in syndicated loans that are tied to ratings or leverage ratios. Thus, if the issuer or borrower meets or exceeds the relevant KPIs, the cost of the financing becomes cheaper. In the bond and loan markets, frameworks have been designed by the relevant industry bodies, which help guide the structuring of the sustainability linked bonds and loans, such as the Sustainability-Linked Bonds Principles (SLBP)¹⁹ and the Sustainability-Linked Loans Principles (SLLP).²⁰ The flexibility afforded by this approach has made it increasingly popular.²¹ This approach requires two steps: first, negotiate and agree the targets or KPIs and then negotiate and agree the pricing impacts. While the performance approach provides greater flexibility, it is also more controversial.²² One of the controversies relates to the pricing impacts: critics contend

¹⁶ <https://bit.ly/3EilmDr>

¹⁷ <https://bit.ly/3rx4Zve>

¹⁸ Source: Standard Chartered presentation, 2022

¹⁹ <https://bit.ly/3SvEr9D>

²⁰ <https://bit.ly/3fMA0sk>

²¹ <https://bloom.bg/3rth30G>

²² <https://bit.ly/3UX2IXT>

they are negligible and call for higher differentiation to incentivize issuers/borrowers to exceed their KPIs.²³ Other critics have also pointed out issues of timing (“sleeping” sustainability linked loans).²⁴

However, the greater flexibility afforded by this structuring approach explains that the rise of sustainability-linked loans has been faster than its use of proceeds counterpart. For example, in APAC, sustainability-linked loans issuance increased 700 percent in 2021 compared to 2020,²⁵ fast outpacing green loans.

4. CASE STUDIES

4.1 Green bond

In April 2022, the Hong Kong SAR government issued its first retail green bond under its Retail Green Bond Program. This was the first Asian sovereign retail green bond. The issue raised HKD20 billion (approximately U.S.\$2.55 billion) over three years. The coupon is the highest of 2.5 percent per annum or the six-month average CPI, providing investors with a welcome inflation protection. The issue circular²⁶ specifies that the bond’s proceeds will be “used to fund projects that fall under one or more of the ‘eligible categories’ defined in the Green Bond Framework,” and provides examples of projects in waste management and resource recovery, water and wastewater management, and green buildings. The bond was very well received by investors, triggering the increase from the initial issue size of HKD15 billion to HKD20 billion.

4.2 Sustainability-linked loan (SLL)

In September 2022, Bank Rakyat Indonesia launched a U.S.\$1 billion multi-tranche sustainability-linked loan in compliance with the SLL framework of the LMA²⁷/APLMA²⁸/LSTA²⁹. It includes a U.S.\$200 million one-year tranche A, a U.S.\$300 million three-year tranche B, and a U.S.\$ 500 million four-year tranche C. The spreads over SOFR are 50bp for tranche A, 75bp for tranche B, and 95bp for tranche C, with all-in pricing of 75, 100 and 110bp respectively. The spread will reduce by 2bp (step-down) if it can achieve its sustainability

performance target, which is related to the percentage of micro-finance loans in the total loan book of the borrower. If the borrower cannot meet the target, the spreads will increase by 2bp (step-up).

4.3 Sustainable securitization

In June 2021, Bayfront Infrastructure Management issued the world’s first public sustainable securitization deal. The Reg S-U.S.\$401 million transaction consisted of five classes of notes: a U.S.\$ 176.9 million Class A bonds, a U.S.\$120 million Class A1-sustainability tranche, a U.S.\$33 million Class B, a U.S.\$ 22.1 million Class C, and a U.S.\$8.8 million class D, with an additional U.S.\$40.1 million preference shares retained by the sponsor. The Singapore listed bonds are backed by cash flows from a portfolio of 27 project finance and infrastructure loans for 25 projects across emerging markets.

The Class A1 was the issuers’ first sustainability tranche, backed by sustainable assets. The proceeds from this tranche will be used for solar, wind, and hydropower energy as well as affordable basic infrastructure. There was strong demand from the investors, resulting in favorable pricing for the Class A1 notes, which had a weighted average life early call of 3.9 years and priced at 120bp over Libor, 5bp inside the Class A notes.³⁰

4.4 Blue loan and debt for nature swap

The government of Barbados (Caa1/B-) has worked with Credit Suisse and CIBC on a U.S.\$146.5 million blue loan and debt liability management exercise signed in September 2022. The loan benefits from a U.S.\$100 million guarantee from Inter American Development Bank (AAA) and a U.S.\$50 million guarantee from The Nature Conservancy (AA). The proceeds of the loan are used to call (prepay) a U.S.\$72.9 million 8 percent local 2043 bond at par, and repurchase over U.S.\$77million of the 6.5 percent international bonds at 92.5 cents to the dollar, saving U.S.\$50 million annually over five years, which will be used to fund the Barbados Environmental Sustainability Fund. The funds will be used for marine conservation.^{31,32}

²³ <https://bit.ly/3e7S8ww>

²⁴ <https://bit.ly/3SK8Ktu>

²⁵ Source: Standard Chartered presentation, 2022

²⁶ <https://bit.ly/3Ee8fmV>

²⁷ Loan Market Association

²⁸ Asia Pacific Loan Market Association

²⁹ Loan Sales and Trading Association

³⁰ Source: Global Capital Asia

³¹ Source: Global Capital Asia

³² <https://bit.ly/3EzACMH>

5. CONCLUSION

ESG and sustainable finance markets have experienced substantial growth during the past five years, and the bubble has started to deflate with accusations of “greenwashing” and the rise of regulation. As the excesses of the past few years are weeded off, the markets are developing solid foundations with increased standardization and the convergence of taxonomies. Reporting requirements are being developed and implemented in most developed markets, and the upcoming standards under development by the International Sustainability Standards Board will provide a sound basis for the regulatory framework. The notable increase in frequency and severity

of natural catastrophes resulting from climate change being felt around the world results in significant material impacts on businesses, communities, and governments. For example, the insurance market in Florida is reeling from the repeated flooding brought about by a succession of storms, with the most recent hurricane, Ian, leading to loss of lives and significant damage. Businesses and governments can no longer ignore the cost of externalities, and a reassessment of materials risks arising from environment and social issues is firmly under way. Financial markets can provide the capital necessary to finance the transition to a more sustainable world through financial engineering designed to reflect the cost of externalities until now ignored by old models.

© 2022 The Capital Markets Company (UK) Limited. All rights reserved.

This document was produced for information purposes only and is for the exclusive use of the recipient.

This publication has been prepared for general guidance purposes, and is indicative and subject to change. It does not constitute professional advice. You should not act upon the information contained in this publication without obtaining specific professional advice. No representation or warranty (whether express or implied) is given as to the accuracy or completeness of the information contained in this publication and The Capital Markets Company BVBA and its affiliated companies globally (collectively "Capco") does not, to the extent permissible by law, assume any liability or duty of care for any consequences of the acts or omissions of those relying on information contained in this publication, or for any decision taken based upon it.

ABOUT CAPCO

Capco, a Wipro company, is a global technology and management consultancy specializing in driving digital transformation in the financial services industry. With a growing client portfolio comprising of over 100 global organizations, Capco operates at the intersection of business and technology by combining innovative thinking with unrivalled industry knowledge to deliver end-to-end data-driven solutions and fast-track digital initiatives for banking and payments, capital markets, wealth and asset management, insurance, and the energy sector. Capco's cutting-edge ingenuity is brought to life through its Innovation Labs and award-winning Be Yourself At Work culture and diverse talent.

To learn more, visit www.capco.com or follow us on Twitter, Facebook, YouTube, LinkedIn Instagram, and Xing.

WORLDWIDE OFFICES

APAC

Bangalore
Bangkok
Gurgaon
Hong Kong
Kuala Lumpur
Mumbai
Pune
Singapore

EUROPE

Berlin
Bratislava
Brussels
Dusseldorf
Edinburgh
Frankfurt
Geneva
London
Munich
Paris
Vienna
Warsaw
Zurich

NORTH AMERICA

Charlotte
Chicago
Dallas
Hartford
Houston
New York
Orlando
Toronto
Tysons Corner
Washington, DC

SOUTH AMERICA

São Paulo

[WWW.CAPCO.COM](http://www.capco.com)



CAPCO
a wipro company

ABOUT KING'S BUSINESS SCHOOL

King's Business School, the ninth and newest faculty at King's College London, opened in 2017. It is accredited by AACSB and EQUIS and was rated one of the top 10 business schools for research in the U.K. based on the Research Excellence Framework 2021. It is rated fifth in the U.K. for Business Studies by the Times and Sunday Times Good University Guide. Based in the heart of London, the School is part of an internationally renowned research-intensive university with a track-record of pioneering thinking and the limitless energies of the city's businesses, policy-makers, entrepreneurs and change-makers to draw on. The School's commitment to drive positive change is at the heart of its research and education.

**KING'S
BUSINESS
SCHOOL**

