Daiwa Capital Markets

European Banks – Quarterly ESG Update (1Q23)

- ESG bond issuance volumes in 2023 on track to eclipse previous years' volumes
- Social and sustainable bonds poised for growth as multitude of global social and economic challenges call for increased support programmes that will advance progress towards UN SDGs
- Primary market volumes of FIGs and SSAs set for growth. Combination of green and social themes will support FIG issuance while social mandates and inaugural transactions will boost SSA volumes
- Secondary market spreads and greeniums recovered in 1Q23 for the most part but also displayed sensitivity to the recent banking sector turmoil

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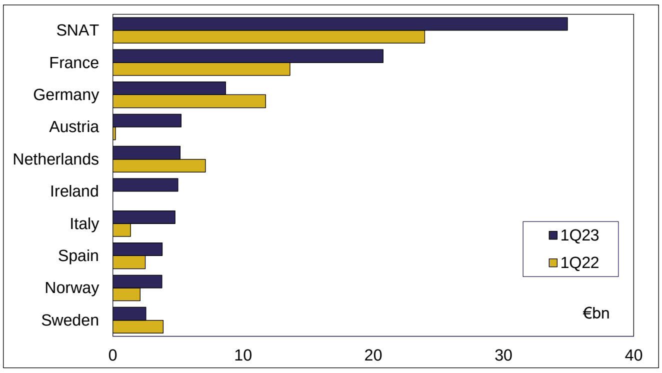
Overview: Sustainable finance market expected to recover in 2023

In 1Q23, ESG bond issuance across all sectors – comprising green, social and sustainable bonds – rose for the first time in five quarters. Global ESG bond issuance in 1Q23 amounted to EUR270bn (1Q22: EUR240bn), up 12.6% yoy. This was the second-strongest start to a new year in terms of ESG debt supply, driven by a strong return to markets by public issuers and Supranationals, as well as an acceleration of corporate decarbonisation plans. The better-than-expected first quarter figures have led us to revise upwards our 2023 total projection to EUR1.06tr, up 14% from our 4Q22 forecast. 1Q23 increases were registered among green (+33% yoy) and sustainability bonds (+2.4% yoy). Their combined 80% share of the total comfortably offset reductions among SLBs (-20.1% yoy) and social bonds (-16.5% yoy).

In Europe, ESG-linked bond sales from SSAs and FIGs reached EUR104bn in 1Q23 according to Bloomberg data, up 29% yoy. Of that total, green bond sales amounted to EUR51bn (+50.3% yoy), sustainable bond volumes stood at EUR31bn (+41.4% yoy) and social bonds accounted for EUR22bn (-3.4% yoy). Entities from France, Germany, Austria and the Netherlands led European ESG debt issuance in 1Q23 alongside Supranationals. ESG-themed bonds issued by European financial institutions fell by EUR4.4bn from a year earlier to EUR31.6bn (-12.2% yoy) last quarter, while SSA volumes drove the overall recovery, rising EUR27.5bn to EUR72bn (+61.4% yoy).

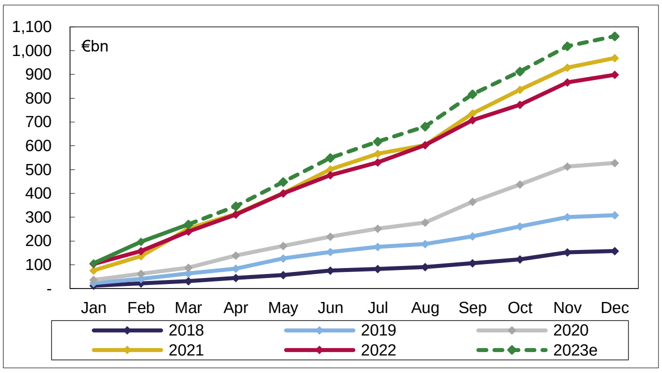
The improved 2023 outlook builds on the expectation of a continued rise in green bond issuance, the largest individual ESG component. In Europe alone, green bond issuance by SSAs rebounded strongly during the quarter, more than tripling compared to the same period last year, as investors and issuers alike focused on climate change mitigation. Social bonds are gradually recovering from post-pandemic declines and may continue to do so over the near term. Growth among FIG issuers highlights the increasing importance of social themes in private sector ESG agendas. We also expect these two developments to be reflected in the growing volume of sustainability bonds that combine green and social considerations, as the blended format may appeal to a broader investor base.

European ESG Bond Issuance by Country



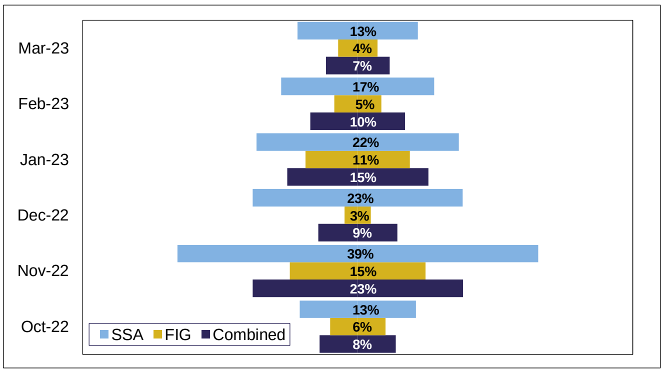
Source: Bloomberg; includes FIGs & SSAs; Daiwa Capital Markets Europe Ltd.

Cumulative annual sustainable debt transactions*



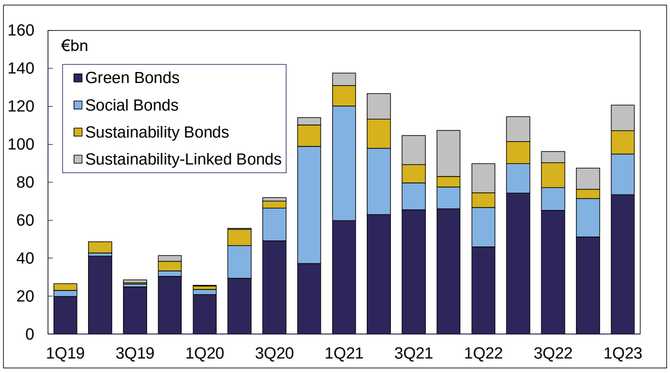
*Source: Bloomberg; FIG, SSA & Corporates; *excl. securitisations, green loans and sustainability-linked loans; Daiwa Capital Markets Europe Ltd.*

Proportion of ESG-themed debt to total issuance*



*Source: Bloomberg; *in EUR by European issuers; Daiwa Capital Markets Europe Ltd.*

Quarterly European ESG Bond Issuance by Type



Source: Bloomberg; FIG, SSA & Corporates; Daiwa Capital Markets Europe Ltd.

Social and sustainability bonds to benefit from UN SDG 2030 agenda

Within the ESG space, social bonds historically occupied a minor role, until the Covid pandemic necessitated widespread government response measures. Prominent examples include the EU's EUR100bn SURE programme or various vaccine initiates by the World Bank that were funded by IFFIm and implemented by Gavi. During this period, sustainability bonds also grew in popularity as they combine established environmental aspects with social themes. Today, the need for social bonds has remained high and arguably increased due to the impact of macroeconomic, geopolitical and financial risks stemming from the ongoing conflict in Ukraine, energy insecurity, stubborn inflation and recent banking sector turmoil. For 2023 and beyond, topics that are likely going to drive growth in social and sustainability bond issuance include affordable housing, affordable finance and gender equality.

Likely drivers of increased social and sustainability bond issuance

Issuance related to gender equality will benefit from the continued drive to empower women, particularly in the workplace, as pressure mounts on companies to disclose gender diversity information. Concerning social housing, soaring interest rates, limited growth in housing stock and high asset valuations have driven up the demand for affordable housing projects, while numerous mortgage lenders have been greening their mortgage portfolios with more energy efficient housing stock. We believe there to be scope to combine these two developments within the FIG and SSA space, which should lead to an increase in sustainability bond issuance. The high cost of living has also increased the need for affordable finance to underserved segments of the population and we believe banks and non-bank lenders will be the primary issuing vehicles for those types of social bonds. The rising cost of living carries elevated social risks as demands for higher wages may escalate to the point of sector disruptions. This might force governments to make a trade-off between providing assistance to vulnerable households and being fiscally responsible.

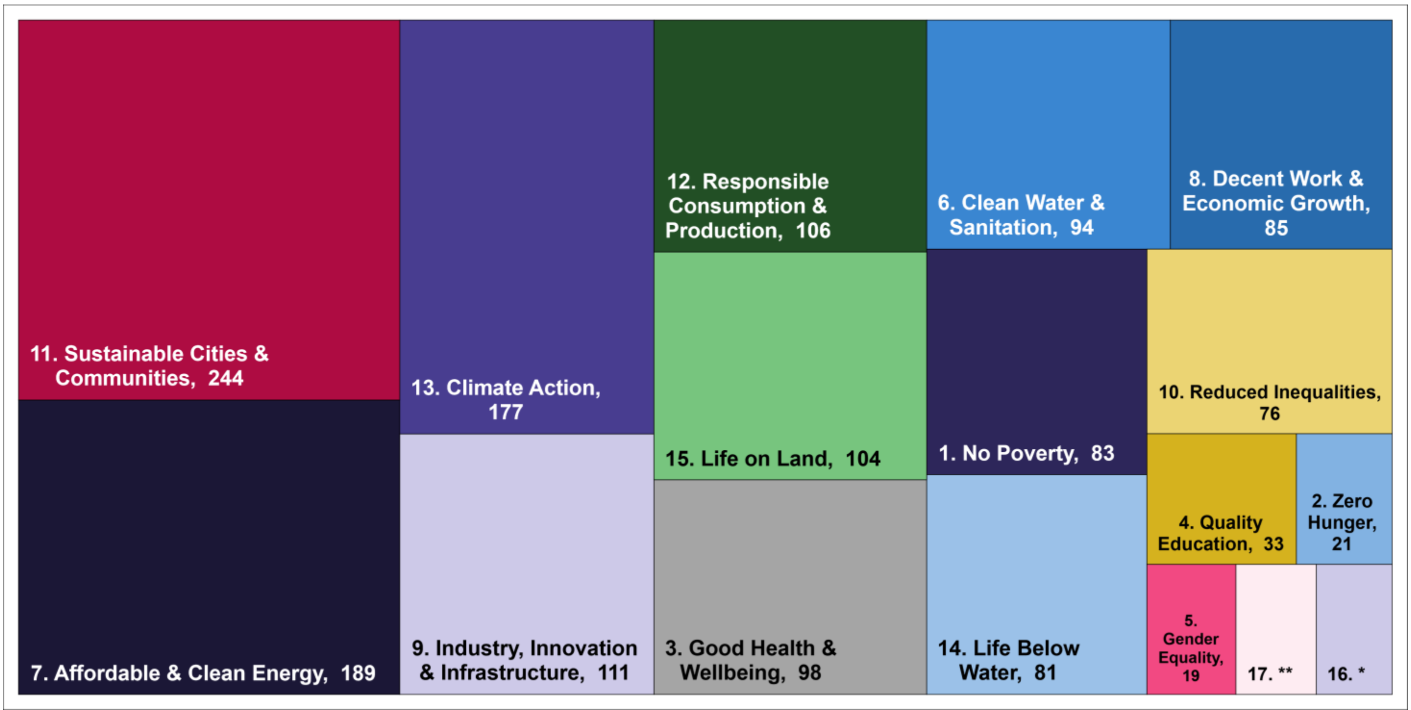
Identifying relevant SDGs for longer, better lives

In 2015, all United Nations member states adopted the 2030 Agenda for sustainable development, containing an implementation framework of 17 Sustainable Development Goals (SDGs). There was noticeable progress in the early years in areas such as poverty reduction, improving health, building renewable energy infrastructure or implementing sustainable urbanisation policies. However, the recent crises of the Covid-19 pandemic and military conflict in Ukraine have delayed progress on many targets. The market in Europe for ESG bonds referencing one or more SDGs is nevertheless sizeable, reaching EUR1.55tr in 2022 and was even greater the year before at EUR2.06tr. Headwinds to the 2030 agenda emerge from financing gaps that require renewed commitment by public and private-sector investors. But the plethora of recent crises has arguably also raised awareness and highlighted the importance of the successful implementation of the SDGs, not least those which lend themselves particularly to the mission of supporting longer, better lives, such as SDGs 2. Zero Hunger; 3. Good Health and Well-Being; and 5. Gender Equality.

Progress towards meeting SDGs related to longer better lives has slowed

The period between 2020 and 2030 was originally dubbed the 'decade of action' and was supposed to be dedicated to accelerating solutions to meet the 2030 agenda. However, the pandemic and subsequent turbulences caused

European issuance volume by UN SDGs at FY22



*Source: Bloomberg; in EURbn; Issued by European FIG & SSA referencing SDGs; *Peace, Justice & Strong Institutions (€17bn) **Partnerships For the Goals (€18bn)* investments to be diverted, resulting in a significant funding gap. The OECD estimated this to total USD3.9tr per year as of 2020 due to lower capital flows and lower available government revenue. Progress towards many SDGs has fallen behind schedule, including the three aforementioned SDGs related to longer better lives. According to the UN SDG report 2022, **SDG 2. Zero Hunger** is far from being achieved and more people are suffering from hunger, food insecurity and malnutrition than a decade earlier, a problem worsened by the war in Ukraine. **SDG 3. Good Health and Well-Being** has been severely disrupted by the pandemic and has in parts undone decades of progress in global health, for instance lowering immunisation coverage, which dropped for the first time in 10 years. **SDG 5. Gender Equality** is not on track to achieve targeted equality by 2030. Working women, have been disproportionately affected by the pandemic and their share in leading positions was unchanged from 2019 to 2020, the first year without an increase since 2013.

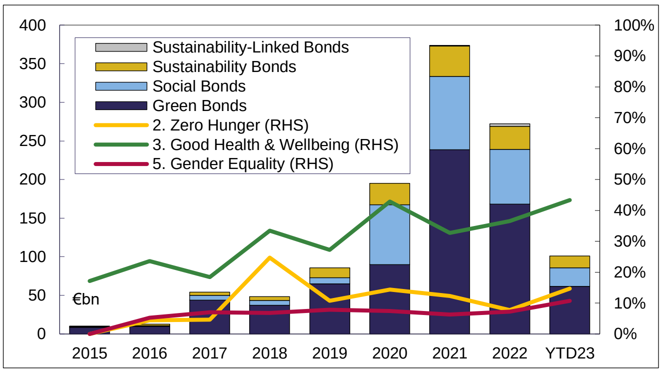
Volatile operating environment is significant headwind to meeting 2030 agenda

The OECD's Global Outlook on Financing for Sustainable Development 2023 warns that the ongoing tightening of global financing conditions, as central banks continue to respond to high inflation, may exacerbate the aforementioned funding gap. According to the report, projections by UNCTAD and the IMF suggest that the SDG financing gap could reach USD4.3tr per year from 2020 to 2025. External private flows to developing countries, such as foreign direct investment, remittances or official development finance, declined by 13% to USD148bn in 2020 and could fall further as they are typically vulnerable to adverse shocks to the global economy. Recent shocks also contributed to a slow recovery in developing countries' available government revenues (after debt service payments) that according to the OECD are likely to remain almost 20% below pre-pandemic projections into the foreseeable future. Indeed, in many cases debt servicing costs outpace expenditure on key SDGs, which may prevent effective investment towards a fair and sustainable recovery. Recognising these challenges, the UN recently called for an SDG stimulus to offset them, requesting at least USD500bn per year, to be delivered through a combination of tackling the high cost of debt and scaling up affordable financing by strengthening Multilateral Development Banks (MDB), among other things. To financially enable these calls to action, the Development Committee of the World Bank has been working on an 'Evolution Roadmap', which aims to enhance the capacity of the World Bank and other MDBs to respond to the overlapping crises that have been reversing progress towards achievement of the development goals.

SDG 5 has sizeable upside volume potential via social and sustainability labelled bonds

Green, social, sustainability and sustainability-linked bond (GSSS) issuance by European FIGs and SSAs referencing UN SDGs has mostly increased since 2015. In 2022, about EUR20bn in proceeds from GSSS were either fully or partially earmarked for projects related to achieving gender equality, and volumes for this SDG have grown steadily to a cumulative EUR83bn at 1Q23. According to Bloomberg data, we calculate that bonds citing SDG 5 averaged 6% of total ESG issuance between 2015 and 2022, while indicative 2023 figures show that the share has currently risen to 11%. SSAs are the main issuers for these types of bonds, accounting for approximately 75% of the total over the past two years. The high proportion of SSAs is not surprising as equality supports economic prosperity and mandates of public sector entities generally demand equal treatment of genders. However, looking ahead, we also anticipate that the share of private-sector entities within this space will grow over the near term. Just last year, ICMA updated its registry of KPIs to include eight that contribute to gender equality, mostly relating to higher female representation within firms. The new KPIs provide private-sector issuers with guidance across a variety of sectors on how to measurably affect change and integrate targets into their sustainability frameworks. We expect this to promote additional SLB issuance with gender-linked KPIs in addition to use-of-proceeds (UoP) bonds already finding their way to the market, such as the recent NatWest social bond, promoting female-led SMEs.

ESG bonds citing UN SDGs



Source: Bloomberg; European FIG & SSA ESG bonds referencing UN SDGs; multiple SDG per bond possible; Daiwa Capital Markets Europe Ltd.

ICMA also published a guide on the issue of gender parity with their report 'Bonds to Bridge the Gender Gap: A Practitioner's Guide to Using Sustainable Debt for Gender Equality'. Financed by the government of Japan, the guide outlines how UoP and SLB bonds can support greater equality. On this subject, Japan has been launching several initiatives as the country ranks below the global average on senior female representation in the workplace, increasingly making this a regulatory issue rather than a corporate governance one. For example, this time last year the legal act for the promotion and advancement of females in the workplace (APFPCA) was extended to companies with 100 employees or more (from 300), while the Tokyo Stock Exchange now requires listed companies to disclose gender ratios of their board. This should help improve women's advancement and participation in the workplace and improve diversity, starting at the top level. A recent example of how companies may increasingly combine environmental and social aspects was provided by Japanese corporate Shiseido Company. In December 2022, the company issued a YEN20bn SLB with two KPIs and SPTs each. The first was linked to greenhouse gas emission reduction targets and carbon neutrality, while the second referenced the ratio of females holding leadership positions within the organisation.

European primary markets in 1Q23

SSA ESG issuance volumes in 1Q23 reached EUR72bn (+90% qoq) of which 40% had a sustainability bond indicator, 35% were green and 25% were labelled social bonds. Green and sustainability bonds both recorded significant gains during the quarter, helped by sizeable transactions from frequent issuers such as the IBRD, CADES or the EIB. Green-labelled bonds will continue to make up the majority of issuance in 2023. In part driven by the European Central Bank's (ECB) initiative to make its bond-buying program more environmentally friendly, the implementation of the EU Taxonomy, the EU green bond standards, and a growing emphasis on credible net zero plans by issuers. Sustainability bonds, which combine environmental and social projects, are also expected to gain traction with issuers seeking to complement their existing green frameworks with social initiatives. Meanwhile, SLBs are considered to be at a crossroads as there still appear to be concerns by investors and policymakers about the format's ability to meaningfully achieve sustainability targets. Recent declines in issuance volumes suggest that stakeholders are searching for the right balance between issuers' ambitions and the appropriate incentives to achieve them.

SSA - Top 10 European ESG Issuers 1Q23

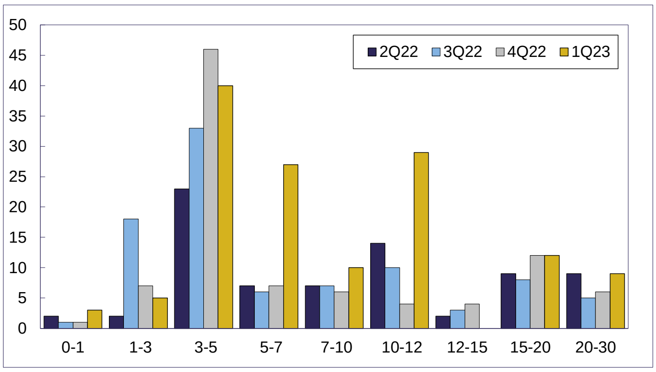
Issuers	Total Issued (€m)	Average Tenor (years)
IBRD	13,099	8.3
CADES	12,670	5.1
EIB	11,227	8.4
AIIB	4,847	8.3
Ireland	3,500	20.8
KfW	3,204	6.5
BNG Bank	1,500	10.0
AFD	1,500	7.0
Region Wallonne	1,500	15.2
Austria	1,320	0.2

Source: Bloomberg

SSA green bond volumes were up considerably during the quarter (+65% qoq) as several issuers opted to front-load their annual funding needs when conditions were conductive. We also saw a quarterly five-fold increase in the volume of sustainability bonds to EUR29bn, albeit from a low nominal base while social bonds experienced a minor dip to EUR18bn (-0.8% qoq). The proportion of sustainability-linked bonds (SLB) of the total was marginal with just EUR79m issued during the quarter. The overall number of SSA transactions increased noticeably to 135 from 93 back in 4Q22 and the average amount issued per transaction was also up to EUR536m (+31% qoq). 1Q23 SSA supply was focussed on the middle segment of the curve with the majority of deals carrying a 3-5-year tenor (30%) followed by 10-12 years (22%) and 5-7 years (20%).

For the year ahead, we expect further social and sustainable bond issuance from public sector entities, particularly as affordable and energy efficient housing remains in high demand. Rising interest rates, the challenging economic environment and resilient asset prices have arguably widened the affordability gap for many, thus increasing the need for more social housing. Several initiatives by European governments and agencies have already been launched, most recently in Spain, where the government announced its plan to repurpose 50,000 housing units that are partially held by the countries 'bad bank' Sareb. This should help lift the share of public housing in the country, which according to the [OECD's affordable housing database](), ranks among the lowest internationally.

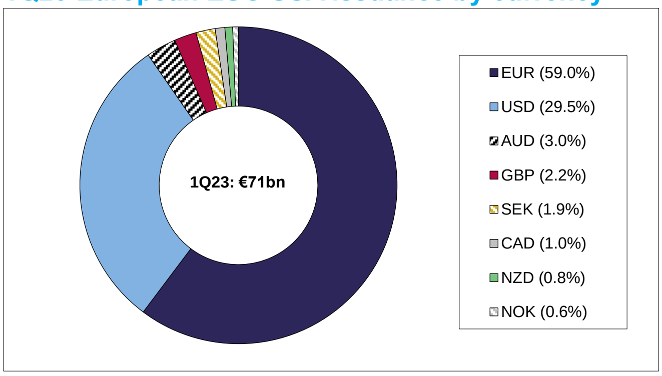
Number of SSA transactions per tenor bucket



Source: Bloomberg; Daiwa Capital Markets Europe Ltd.

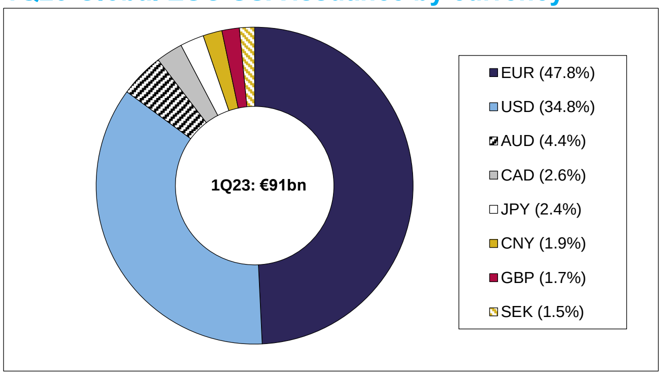
In February, the largest of the three Belgian regions, **Région Wallonne,** tapped markets for a dual-tranche social bond offering. The deal included a 10-year leg (EUR1bn) at OLO+44bps and a 20-year maturity (EUR500m) at OLO+45bp. The region benefits from good access to diversified funding and its benchmark bonds have been in high demand. It also has access to the EU's Recovery and Resilience Facility (RRF), from which it can expect some EUR1.5bn. However, this would only cover approximately 20% of the required funds for its green and social investments. In part, the two social bonds are thought to support measures introduced in January 2023 to improved access to social housing.

1Q23 European ESG SSA issuance by currency



Source: Bloomberg; Daiwa Capital Markets Europe Ltd.

1Q23 Global ESG SSA issuance by currency



Source: Bloomberg; Daiwa Capital Markets Europe Ltd.

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Total **FIG ESG** volumes in 1Q23 reached EUR31.6bn (-12.2% yoy). Primary market activity was almost evenly spread across January (36% of all deals), February (33%) and March (31%). Throughout the quarter, conditions became increasingly challenging for issuers, with spreads rising to elevated levels. Toward the end of the quarter, primary market activity almost came to a standstill as markets absorbed the fallout of the collapse of SVB, Signature Bank and Credit Suisse. As markets slowly came to terms with the shock, issuers opted to stay away from new deals in the second half of March as they also awaited difficult monetary policy decisions by the Fed and other central banks. Earlier in the quarter, market sentiment had been relatively upbeat as hopes of a gradual slowdown in the pace of rate hikes were conducive for activity. From a credit perspective, the collapse of the above-mentioned institutions highlighted that the main threats to the banking system currently stem from funding and liquidity conditions and not necessarily from credit and capitalisation as was the main supervisory concern of the past decade. Prompt initial responses by regulators and policymakers arguably limited contagion, but regulatory revisions of risk assessments and frameworks are now likely.

FIG - Top 10 European ESG Issuers 1Q23

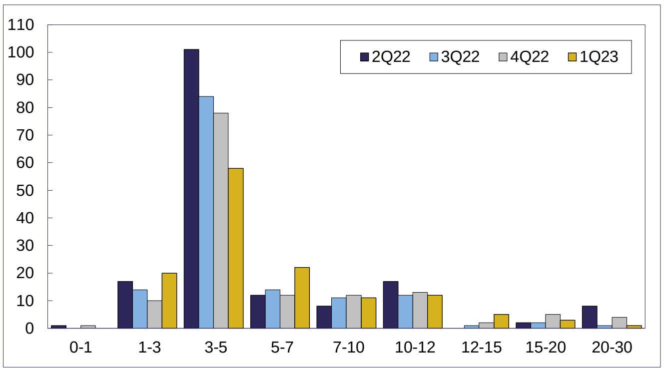
Issuers	Total Issued (€m)	Average Tenor (years)
Intesa	2,930	7.0
DNB Bank	2,000	5.0
ABN Amro	1,919	5.0
La Banq. Post. SFH	1,250	8.0
Danske Bank	1,225	4.8
Berlin Hyp	1,166	7.8
DZ Hyp	1,000	6.4
SpareBank 1	1,000	4.8
BNP Paribas	1,000	6.0
Banco BPM	750	4.0

Source: Bloomberg

Senior bonds with shorter tenors continued to be a theme in 1Q23 while longer-maturity trades were in low supply, particularly as the number of subordinated deals was limited to just one. Average bond maturities were mostly concentrated in the 3-5 year maturity bucket (44% of total), followed by 5-7 years (17%) and 1-3 years (15%). In our last report, we flagged that the treatment of subordinated debt would likely be a key theme in 2023. The decision by Swiss banking regulator FINMA to write-down Credit Suisse's AT1s certainly put that topic at the forefront of investors' minds and means that additional risk premiums will remain priced into the category, at least for the near term. Although the actions taken by Swiss authorities may have ensured financial stability domestically, European and UK supervisory entities were quick to try to undo the uncertainty created around AT1 instruments. A joint-statement by the SRB, EBA and ECB and a statement by the BoE sought to affirm the loss- absorption hierarchy established in their respective resolution frameworks, stating that AT1 instruments still rank ahead of common equity and behind Tier 2 instruments in their jurisdictions. Nevertheless, we expect the recent turmoil around AT1 to at least temporarily curtail ESG-themed subordinated issuance until spreads and prices normalise for a period of time.

In January, **NatWest Group** issued a social-themed Sr. HoldCo transaction. The 5NC4 bond stood out not just for its low NIP of 5bps but also for linking its use of proceeds specifically to women-led SMEs. The bond was placed on the same day that the EBA published its report on diversity practices and the gender pay gap. This was NatWest's third social bond since 2019 and so far, each bond has addressed different social aspects, such as social housing or loans to SMEs in the 30% most deprived areas in the UK. Furthermore, NatWest established a target that 25% of group senior debt issuance in 2023 will be in green or social format. It currently has five ESG bonds outstanding totalling GBP3.5bn (6.3% of its total debt securities issued), which were issued in GBP, EUR and USD and comprised three green and two social-labelled bonds. In 2022, NatWest provided GBP24.5bn in climate and sustainable funding taking the cumulative amount since July 2021 to GBP32.6bn. Senior management have pledged an overall funding target of GBP100bn by end-2025. Given NatWest's prominent role in the UK mortgage market it has committed to providing at least GBP10bn in lending for EPC A and B rated residential properties.

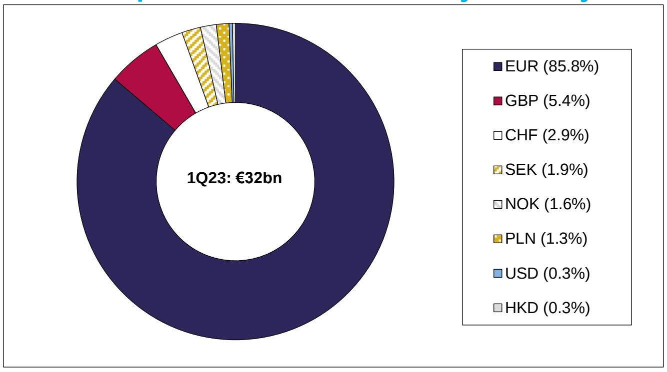
Number of FIG transactions per tenor bucket



Source: Bloomberg; Daiwa Capital Markets Europe Ltd.

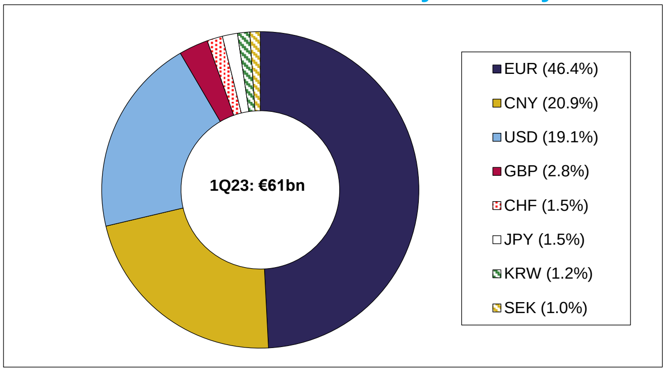
La Banque Postale (LBP) group has gradually undergone a transformation of its business by embracing its commitment to environmental and sustainable issues. It has committed to being a regular issuer of green and social bonds. Early last year it adopted the status of a 'mission-led' company, confirming that it strives to ensures a 'just transition' by including social and environmental targets in its governance. This formally binds executives and shareholders to allocate the necessary resources to carry on this mission. The implementation is internally monitored by a dedicated committee and the achievement of these objectives is audited by an independent third party. LBP was also the first European bank to have its decarbonisation trajectory validated by the Science Based Targets initiative (SBTi), meaning it ensured that its targets are credible and science-based. In 2019, 2021 and 2022, the group issued EUR750m in ESG-labelled debt annually, across a variety of formats and labels. It issued its inaugural green bond (SNP) in 2019 to finance renewable energy projects. In 2021, it launched its inaugural social bond for affordable housing and access to essential services and in May 2022 a green covered bond was placed to fund green residential buildings. Underscoring its new mission and purpose, the group already issued EUR1.35bn in 2023 across two entities. Its largest ESG bond was issued in January, a social covered bond for EUR1.25bn, supporting social home ownership loans. We expect LBP to further ramp up ESG issuance in order to meet its 2025 target of financing EUR6.5bn in renewable energy project finance, social housing, healthcare and sustainable loans.

1Q23 European ESG FIG issuance by currency



Source: Bloomberg; Daiwa Capital Markets Europe Ltd.

1Q23 Global ESG FIG issuance by currency



Source: Bloomberg; Daiwa Capital Markets Europe Ltd.

Key ESG Transactions 1Q23

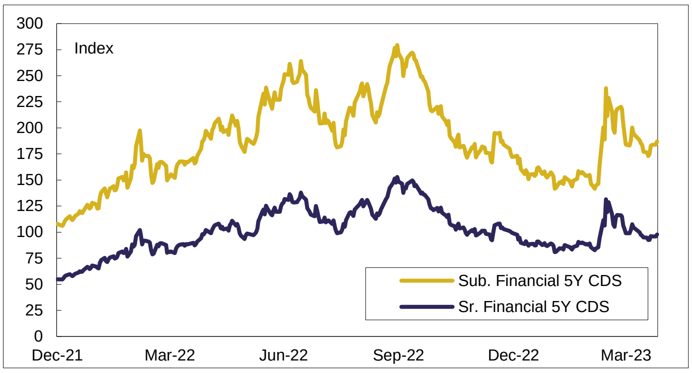
Bank	Rank	Amount	Maturity	Final Spread (bps)	IPT (bps)	Book Orders
SSA						
Land Berlin	Sr. Unsecured (Sustainable)	EUR750m	10Y	MS - 2	MS + 1	>EUR3.6bn
AIIB	Sr. Unsecured (SDB)	EUR1.5bn	5Y	MS + 13	MS + 15	>EUR2bn
AIIB	Sr. Unsecured (SDB)	USD2bn	5Y	SOFR MS + 64	SOFR MS + 65	>USD2.6bn
AIIB	Sr. Unsecured (SDB)	USD2bn	5Y	SOFR MS + 64	SOFR MS + 65	>USD2.6bn
EIB	Sr. Unsecured (CAB)	USD5bn	10Y	SOFR MS + 48	SOFR MS + 50	>USD19.6bn
EIB	Sr. Unsecured (CA)	EUR5bn	5Y	MS - 9	MS - 7	>EUR30.5bn
EIB	Sr. Unsecured (CAB)	AUD1.5bn	5.5Y	ASW + 40	ASW + 41	n.a.
IBRD	Sr. Unsecured (SDB)	USD5bn	7Y	SOFR MS + 47	SOFR MS + 49	>USD8.4bn
IBRD	Sr. Unsecured (SDB)	EUR3bn	10Y	MS + 11	MS + 12	>EUR4.3bn
IBRD	Sr. Unsecured (SDB)	USD1.75bn	4Y	SOFR MS + 37	SOFR MS + 37	>USD1.95bn
ADB	Sr. Unsecured (Gender)	AUD700m	3Y	ASW + 20	ASW + 20	>USD1.25bn
IDB Invest	Sr. Unsecured (Sustainable)	USD1bn	5Y	SOFR MS + 59	SOFR MS + 59	>GBP850m
Land Berlin	Sr. Unsecured (Sustainable)	EUR750m	10Y	MS - 2	MS + 1	>EUR5.25bn
Region Wallone	Sr. Unsecured (Social)	EUR1bn	10Y	OLO + 44	OLO + 45	>EUR1.7bn
Region Wallone	Sr. Unsecured (Social)	EUR500m	20Y	OLO + 45	OLO + 45	>EUR875m
KfW	Sr. Unsecured (Green)	EUR3bn	10Y	MS – 4	MS - 1	>EUR34bn
Action Logement	Sr. Unsecured (Sustainable)	EUR1.2bn	20Y	OAT + 56	OAT + 58	>EUR2.7bn
IADB	Sr. Unsecured (SDB)	GBP400m	7Y	G + 47	G + 47	>GBP750m
CADES	Sr. Unsecured (Social)	EUR4bn	7Y	OAT + 31	OAT + 31	>EUR25.6bn
CADES	Sr. Unsecured (Social)	EUR5bn	5Y	OAT + 42	OAT + 45	>EUR31bn
CADES	Sr. Unsecured (Social)	EUR4bn	3Y	SOFR MS + 39	SOFR MS + 42	>EUR11.5bn
Galicia	Sr. Unsecured (Sustainable)	EUR500m	6Y	SPGB + 25	SPGB + 30	>EUR1.55bn
Junta de Andalucia	Sr. Unsecured (Sustainable)	EUR600m	10Y	SPGB + 29	SPGB + 32	>EUR1bn
European Union	Sr. Unsecured (Green Tap)	EUR6bn	Feb-2048	MS + 68	MS + 70	>EUR73bn
SDGP	Sr. Unsecured (Green)	EUR1bn	30Y	OAT + 52	OAT + 53	>EUR1.8bn
SDGP	Sr. Unsecured (Green)	EUR1bn	20Y	OAT + 51	OAT + 53	>EUR3.5bn
NRW Bank	Sr. Unsecured (Social)	EUR1bn	10Y	MS + 3	MS + 3	>EUR1.25bn
Ireland	Sr. Unsecured (Green)	EUR3.5bn	20Y	MS + 43	MS + 46	>EUR35bn
AFD	Sr. Unsecured (Sustainable)	EUR1.5bn	7Y	FRTR + 51	FRTR + 53	>EUR2.1bn
BNG Bank	Sr. Unsecured (Social)	EUR1.5bn	10Y	MS + 11	MS + 12	>EUR2.3bn
NIB	Sr. Unsecured (Environmental)	EUR500m	7Y	MS - 5	MS - 3	>EUR875m
NWB	Sr. Unsecured (Social)	EUR500m	7Y	MS + 5	MS + 5	>EUR425m
FIG (Senior)						
BayernLB	SNP (Green)	EUR500m	6Y	MS + 95	MS + 120	>EUR1.16bn
DNB	SP (Green)	EUR1bn	4NC3	MS + 63	MS + 90	>EUR2.9bn
Hypo Voralberg	SP (Green)	EUR500m	3Y	MS + 105	MS + 120/125	>EUR950m
De Volksbank	SNP (Green)	EUR500m	7Y	MS + 160	MS + 170	>EUR850m
NatWest	Sr. HoldCo (Social)	EUR500m	5NC4	MS + 120	MS + 145	>EUR1.4bn
DNB Bank	SP (Green)	EUR1bn	6NC5	MS + 65	MS + 90	>EUR1.6bn
Intesa	SNP (Green)	GBP600m	6NC5	G + 285	G + 300/310	>GBP1.2bn
Volksbank Wien	SP (Green)	EUR500m	4Y	MS + 135	MS + 145	>EUR650m
BNP Paribas	SNP (Green)	EUR1bn	6NC5	MS + 145	MS + 175	>EUR2bn
Danske	SP (Green)	EUR1bn	8NC7	MS + 125	MS + 145	>EUR1.55bn
ABN Amro	SNP (Green)	EUR1bn	5Y	MS + 115	MS + 140/145	>EUR1.95bn
Banco BPM	SP (Green)	EUR750m	4Y	MS + 205	MS + 230	>EUR1.25bn
Bank of Ireland	Sr. HoldCo (Green)	EUR750m	5.5NC4.5	MS + 205	MS + 245	>EUR5bn
Swedbank	SNP (Green)	EUR750m	5.5Y	MS + 135	MS + 150	>EUR900m
Erste Group	SP (Green)	EUR750m	8NC7	MS + 125	MS + 150	>EUR1.5bn
FIG (Subordinated)						
ANZ Bank	Tier 2 (SDG)	EUR1bn	10NC5	MS + 215	MS + 255	>EUR2.95bn

Source: BondRadar, Bloomberg; SDB=Sustainable Development Bond; CAB=Climate Awareness Bond; CA=Climate Awareness; Daiwa Capital Markets Europe Ltd.

Secondary markets in 1Q23

After a benign start to the year, markets experienced turmoil following the bank failures in the US and Europe. The turbulence in mid-March was relatively short-lived as supervisory interventions on both sides of the pond ensured that contagion risk was limited, but the subsequent takeover of First Republic Bank by JP Morgan has raised concerns once more about the health of US regional banks. In late April, senior risk indicators gradually recovered to pre-SVB levels, while subordinated risk indicators remained elevated near end-2022 highs. Bar any unforeseen events, we expect CDS prices to slowly trend downwards, in part helped by mostly better than expected 1Q23 FIG earnings reports.

iTraxx Financials Index

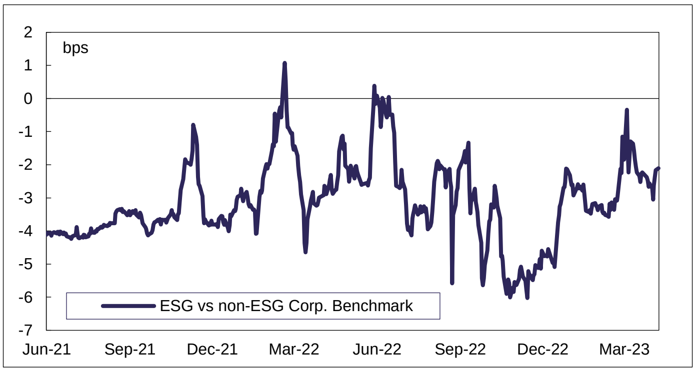


Source: Bloomberg; Data until 25.04.2023; Daiwa Capital Markets Europe Ltd.

ESG bond spreads tighter on the back of new-found stability

Demand for sustainable debt as a proportion of total debt issued was broadly in line with the same period last year. March volatility and lower bond supply saw the option-adjusted spread (OAS) between the ESG and non-ESG themed indices narrow temporarily before easing again somewhat towards the end of the quarter and into April. The median negative OAS differential between the Barclays MSCI Euro-Corporate ESG Index and Barclays Pan-European Aggregate Corporate Index was -2.90bps (from -5.07bps in 4Q22; -3.66bps in 4Q21; -2.70bps in 3Q22). In our view, the observable greenium remains a function of higher demand and reduced liquidity for ESG-labelled debt as the investor base remains predominantly institutional buy-and-hold managers. While primary market activity can be described as robust, secondary markets in 1Q23 are characterised by their new-found stability. We observed that ESG-bond spreads on new deals are generally trading marginally tighter against their spreads at issue.

Spreads (OAS) of ESG vs non-ESG benchmarks

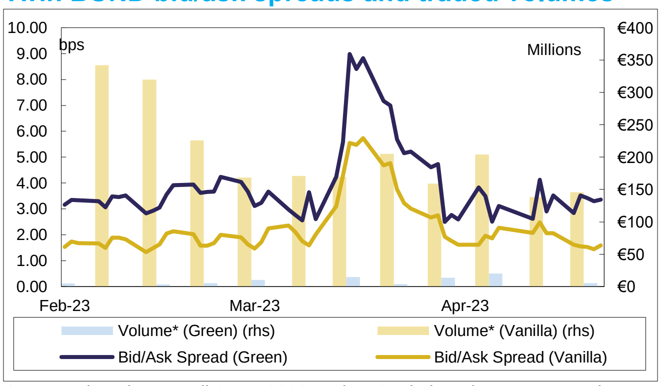


Source: Bloomberg; Barclays MSCI Euro-Corporate ESG Index vs Barclay Pan-European Aggregate Corporate Index; Data until 25.04.2023; Daiwa Capital Markets Europe Ltd.

Greenium improves for green Bunds

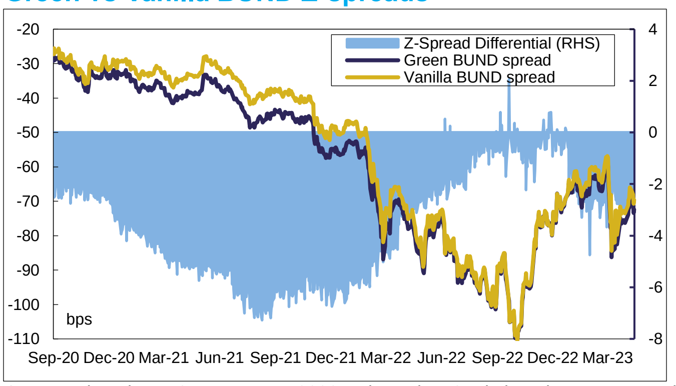
The average greenium for liquid sovereigns such as German Bunds retreated from their path towards spread equilibrium. The 1Q23 median spread differential of the German Twin Bunds was -2.49bps compared to -5.06bps one year prior. However, on a quarterly basis, spreads widened considerable to their widest level since 2Q22. (4Q22: -0.50bps; 3Q22: -0.76; 2Q22: -2.45bps; 1Q22: -5.06bps). Demand for German Bunds remained elevated during most of 1Q23 and when comparing the liquidity of the green to non-green Bund, two observations stuck out. Firstly, the traded volumes of the green twin were significantly lower in terms of absolute volume and overall activity when compared to their vanilla counterparts, underlining our assumption that the dedicated long-term institutional investor base limits liquidity in the market. Secondly, we analysed the bid-ask spreads of both bonds as an additional measure of liquidity and found that the green twin was consistently wider. Based on Bloomberg data, we calculate that the 3-day rolling average over the past three months was 3.93bps for the green Bund against 2.29bps for the conventional. We also observed that this development worsened as market volatility increased. At the height of the recent banking sector turmoil, bid-ask spreads of the green Bund widened by a larger margin than their vanilla twins. They reached just under 9bps compared to a peak of 5.55bps while at the same time, the greenium narrowed to its lowest point during the quarter.

Twin BUND bid/ask spreads and traded volumes



Source: Bloomberg; until 21.04.2023; Daiwa Capital Markets Europe Ltd.

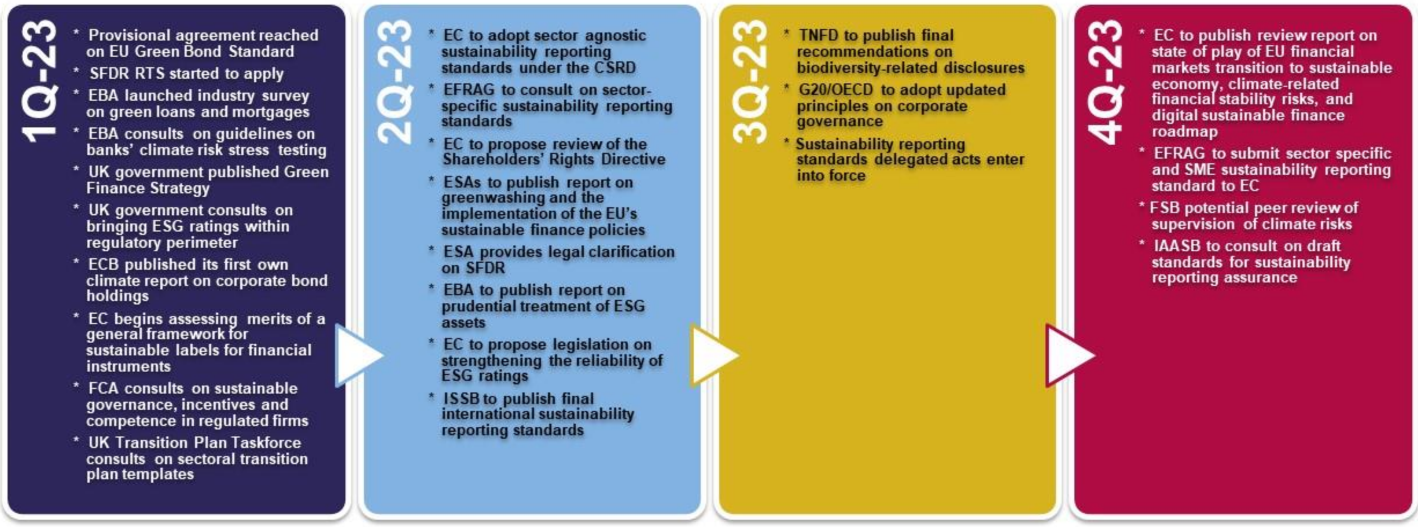
Green vs Vanilla BUND Z-spreads



Source: Bloomberg; Germany Aug-2030 Twin; Daiwa Capital Markets Europe Ltd.

Appendix:

Regulatory Timeline



Source: Association for Financial Markets in Europe (AFME)
Glossary Regulatory Abbreviations: (EC): European Commission; (EFRAG): European Financial Reporting Advisory Group; (ESMA): European Securities and Markets Authority; (ISSB): International Sustainability Standards Board; (SRB): Sustainability Reporting Board; (SDR): Sustainability Disclosure Requirements; (RTS): Regulatory Technical Standards; (TSC): Technical Screening Criteria; (SFDR): Sustainable Finance Disclosure Regulation; (CSRD): Corporate Sustainability Reporting Directive; (IAASB): International Auditing and Assurance Standards Board; (TNFD): Taskforce on Nature-related Financial Disclosures; (FCA): Financial Conduct Authority; (DA): Delegated Acts; (NFRD): Non-Financial Reporting Directive; (PAI): Principle Adverse Impact;

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