

European Banks – Quarterly ESG Update (2Q22)

- In Europe, green bonds and SLBs help ESG market return to growth in 2Q22
- European energy policy could spur further growth of sustainable bonds. European Union firmly established as top-tier Euro issuer but pricing gap to Bunds widens year-on-year
- Negotiations over vital features of EU Green Bond Standard enter endgame
- Ongoing market volatility has led to further spread widening in both primary and secondary markets. Greenium likely to persist despite spread convergence to conventional bonds

William Hahn

Credit Analyst
 +44 20 7597 8321
William.Hahn@uk.daiwacm.com

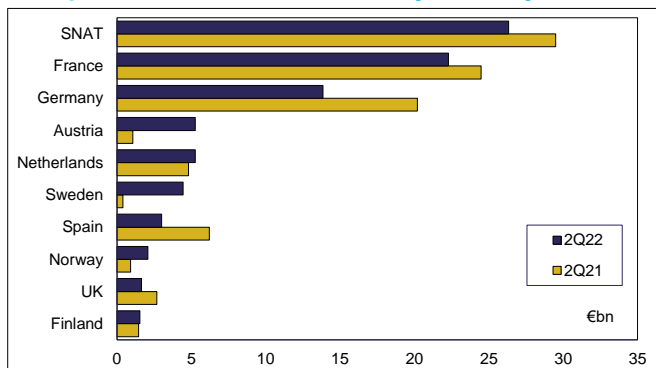
Overview: Select areas of growth give boost to ESG market in 2Q22

Issuance of ESG bonds – comprising green, social and sustainable bonds – grew again in 2Q22 against the previous quarter but still lagged last year’s volumes. Global ESG bond issuance in 2Q22 amounted to EUR200bn (2Q21: EUR220bn), down 9.4% yoy. Ongoing geopolitical risks in Europe paired with inflationary pressures and recession fears contributed to overall lacklustre market performance. The only observable pocket of strength was green bond volumes rising (+11% yoy) while social bonds (-52.8% yoy), sustainability bonds (-42.8% yoy) and sustainability-linked bonds (-49.4% yoy) all experienced strong declines.

In Europe, ESG-linked bond sales from SSAs and FIGs reached EUR89bn in 2Q22 according to Bloomberg data, down 16.7% yoy. Of that total, green bond sales amounted to EUR53bn (+13% yoy), social bond volumes stood at EUR23bn (-34% yoy), and sustainable bonds accounted for EUR19bn (-21% yoy). The fast-growing SLB segment totalled EUR2.5bn (+47% yoy) and we expect a further boost to issuance following ICMA’s recently [updated SLB guidance](#). The aim is to bolster transparency and enhance key performance indicators (KPI) to address concerns around greenwashing. Entities from France, Germany and the Austria led European ESG debt issuance in 2Q22 alongside Supras.

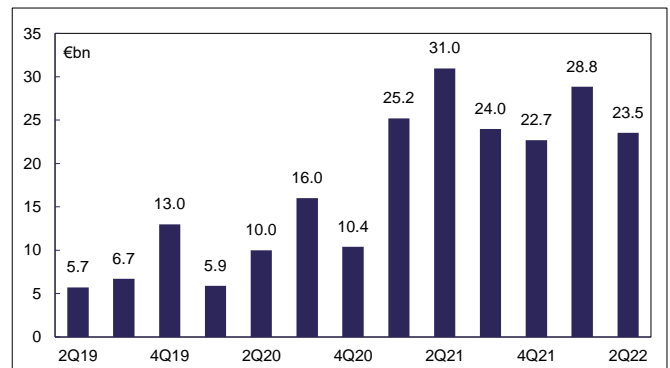
ESG-themed bonds issued by European financial institutions fell by EUR8.2bn from a year earlier to EUR27bn last quarter, while SSA volumes slumped even stronger by EUR43.5bn to EUR62bn. Within the euro-denominated space, ESG-themed debt issued by European entities as a share of total FIG and SSA issuance rose again compared to the previous quarter. Supras and sovereigns were the main drivers for this development, bringing several inaugural deals to market. While total volumes from SSAs have fallen recently, we expect a gradual pickup in the number of deals, particularly those with a social theme. SSAs will likely have to address a multitude of crises in the near term, ranging from the humanitarian fallout from the war in Ukraine, possible new Covid-19 related restrictions, cost-of-living pressures as well as continued food and supply-chain disruptions.

European ESG Bond Issuance by Country



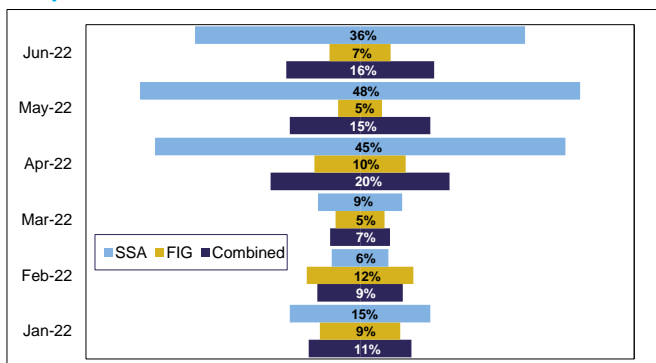
Source: Bloomberg; includes FIGs & SSAs; Daiwa Capital Markets Europe Ltd.

Quarterly ESG Bond Issuance: European FIGs*



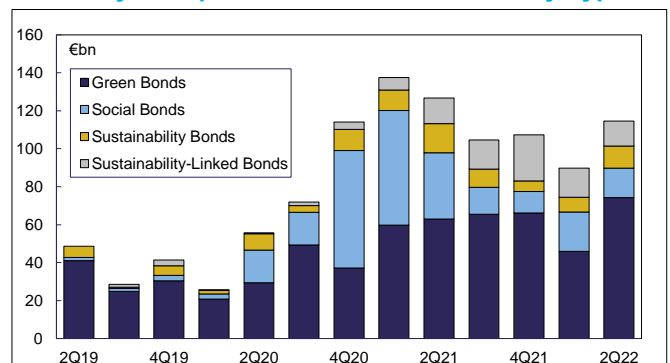
Source: Bloomberg and Daiwa Capital Markets Europe Ltd.; *Green, social and sustainability labelled bonds >€250m.

Proportion of ESG themed debt to total issuance*



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

Quarterly European ESG Bond Issuance by Type



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

European energy policy could spur further growth of sustainable bonds

Capital markets continue to endure the effects of the exceptionally high inflationary environment, Russia's war on Ukraine and the looming threat of a global recession. European energy policy in particular has been shaken by the invasion of Ukraine. We expect near-term efforts to curb carbon emissions to slow as immediate economic imperatives lead countries to prioritise energy security and affordability over decarbonisation efforts. However, increasingly ambitious long-term climate commitments, as well as the ambition to reduce dependence on fossil fuels, will ensure that plans for a greater drive towards sustainability remain intact.

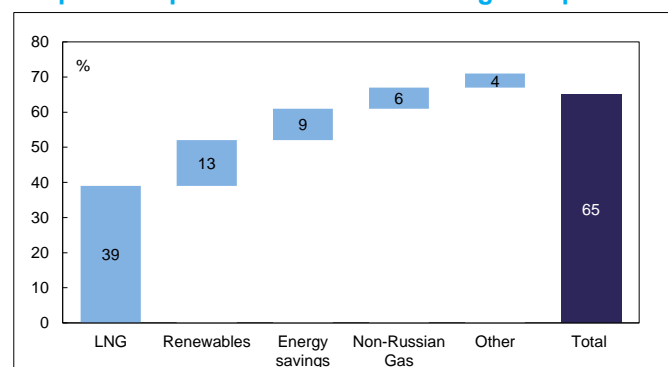
On 18th May, the European Commission (EC) presented its [REPowerEU energy plan](#), which aims to end the EU's energy dependency on Russian fossil fuels with two main justifications. First, the Commission argued that Russian fossil fuels are an economic and political weapon, costing European taxpayers EUR100bn per year. Secondly, the new plan will support efforts in addressing climate change by accelerating the phasing out of fossil fuels by increasing targets under other programmes such as the Fit for 55 package of the European Green Deal. In order to deliver this plan, the EC wants to focus on energy savings, diversification of energy supplies, and accelerated roll-out of renewable energy to replace fossil fuels in homes, industry and power generation. Long-term energy efficiency measures under Fit for 55 shall increase from 9% to 13% and the headline 2030 target for renewable energy is also set to increase to 45% from 40%.

Renewables alone won't be able to replace Russian gas

In 2021, the EU imported 44% of its total gas consumption, 27% of oil imports and 46% of coal imports from Russia. To reduce these dependencies, particularly on gas, REPowerEU elevates the role of liquefied natural gas (LNG) as the main short-term alternative to Russian imports. LNG shall replace 39% of Russian gas supplies while 13% will be replaced by front-loading wind and solar energy adoption. Energy-saving measures and alternative gas suppliers shall all contribute to a 65% reduction in Russian natural gas imports by the end of the year and phasing them out altogether before 2030. Additionally, the EC proposes a mandatory 80% filling target for gas storage facilities by 1st November 2022 and 90% by 1st November in subsequent years to avoid near-term shortages.

When looking at various energy sources and how they are utilised in the EU, it becomes clear that the increased production of solar or wind energy will hardly be able to replace gas as an energy source. Based on 2019 data from the International Energy Agency, 51% of energy was used for heating and came from gas and coal, 28% was used for transportation (oil) and only 20% was used as electricity (gas, coal, nuclear and renewables). Renewables are not a suitable energy source for heating or high-temperature processes in manufacturing. Fossil-fuel energy far outweighs power generation (electricity) in this capacity. Therefore, reducing European gas dependency on Russia is strongly linked to the continent's heating demand and less with overall power demand. It appears misleading in this context that the rapid roll-out of solar and wind energy projects, combined with renewable hydrogen deployment that the EC advocates, is a suitable like-for-like replacement of Russian gas imports. In the short term, the focus will need to remain on gas-supply alternatives such as LNG or the use of other suppliers.

Proposed replacements for Russian gas imports



Source: European Commission; Daiwa Capital Markets Europe Ltd.

Financing sources of new targets remain unclear

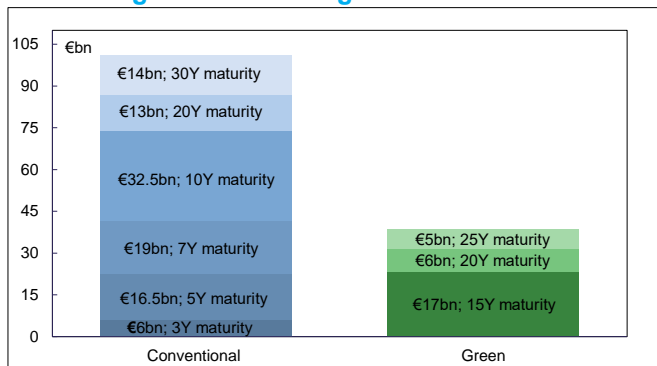
The Recovery and Resilience Facility (RRF), which accounts for 90% of the European Union's recovery plan, the NextGenerationEU (NGEU), will be at the heart of REPowerEU. It will support coordinated planning and financing of cross-border and national infrastructure as well as energy projects and reforms. The Commission proposes to make targeted amendments to the RRF regulation to integrate dedicated REPowerEU chapters into member states' existing recovery and resilience plans (RRPs). Based on this, we expect proportionally higher spending on sustainable activities within the RRF, and the Commission indeed has estimated an additional investment requirement of EUR210bn in order to fully deliver REPowerEU by 2027 and EUR300bn to cover the period until 2030.

NGEU currently foresees 30% of all bonds issued under its EUR800bn bond programme to carry a green label. We deem this to be a worthwhile investment as it would save EUR100bn per year in reduced fossil-fuel imports, achieving a significant structural cost reduction for EU member states. However, the details surrounding the financing of the plans remain somewhat more vague and are only articulated in a short [factsheet](#). The RRF is supposed to provide the majority of funding, drawing on the facility's currently unused loans that amount to EUR225bn. Other sources of funding include the European Investment Bank (EIB), private investment as well as national and EU funding, but these do not specify type and size of financial contributions.

The EU as an issuer

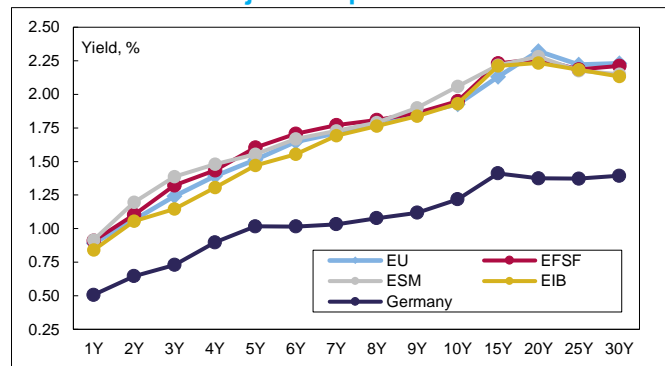
It appears that the NGEU is evolving into a European crisis tool with increasingly broad application. Initially it was set up to mobilise up to 5% of EU's GDP through borrowing to finance a collective response to the Covid-19 pandemic. It was intended to be temporary in nature and has now received a quasi-expansion with the above mentioned financing of REPowerEU. Since the start of 2022, it raised EUR58bn of long term funding for NextGenerationEU, through a mix of syndicated transactions (74%) and auctions (26%). These transactions have brought the total outstanding amount of NextGenerationEU bonds to EUR129bn of which 22% have been green bonds. Despite the challenging market environment of 1H22, NGEU bonds were oversubscribed between 6 to 16 times, demonstrating that the EC has firmly established itself among highly-rated Euro issuers. Nevertheless, there is still a pricing gap compared to so-called 'risk-free' assets such as German Bunds as yields to maturity widened on average 41% across the curve compared to the same period last year. The EC estimated that the cost of funding during the first half of 2022 was 1.24%, 110bps higher than last year. The EUR28bn in green bonds, issued across three transactions (incl. taps), are thought to have carried a 2bps greenium at issue and even went up to 4bps wide in subsequent trading. Since March, the EU has also enhanced its transparency on green investments, showing investors how proceeds are allocated across member states and where they are invested, all via the [EU's green dashboard](#).

NGEU long-term borrowing so far



Source: European Commission; Daiwa Capital Markets Europe Ltd.

Yield curves of major European institutions



Source: Bloomberg; Daiwa Capital Markets Europe Ltd.; As of 21st July 2022

Negotiations over vital features of EU Green Bond Standard enter endgame

The European Commission's plan to establish a voluntary, global gold standard for how companies and public-sector entities use green bonds is nearing its end. The distinct feature is the link with evolving and science-based EU Taxonomy that gives the EU Green Bond Standard its credibility, enabling it to meaningfully combat greenwashing. Negotiations entered the final stage between the co-legislators, the European Council and the EU Parliament. The foundation for these talks are built on the EC's proposal for a GBS from July-2021, which has three distinct features:

- Use of proceeds of the bonds should be aligned with the EU-Taxonomy regulation;
- Detailed allocation and impact reporting to be provided, enhancing transparency and minimising greenwashing;
- Third party reviewers need to be registered with the European Securities and Markets Authority (ESMA) and shall ensure compliance with the taxonomy regulation

Before the EU GBS can be adopted into legislation, the two co-legislators had to first agree on their own final positions regarding the standard, before attempting to reach a compromise. In 2Q22, negotiations entered the next phase when the Council reached an agreement on a joint response to the EC's proposal in April, while later in May the European Parliament's Committee on Economic and Monetary Affairs (ECON) adopted its own negotiation position. Both parties broadened the Commission's proposal in several key aspects, highlighting their diverging views. The trilogue between the EC, Council and Parliament that shall agree on the final text is expected to conclude by end-2022, meaning the legislative proposal could become effective by 2023 or 2024.

Summary positions

All parties agree that the EU GBS should remain voluntary, however there have been extensive discussions about the degree to which the existing green bond market should comply with the EU GBS. In brief, the Council is advocating for more flexibility for issuers and a less stringent interpretation of the EC's proposal, while Parliament is seeking to further strengthen GBS requirements by imposing mandatory disclosure requirements and substantially extending the coverage of the label to all types of bonds marketed in the EU as 'environmentally sustainable', including sustainability-linked bonds. We acknowledge that the parliament's position aims at limiting greenwashing while reflecting an issuer's commitment to the greenness of their activities however, the substantially broader application of the label with

Please note the disclaimers and disclosures on the last page of this document.

increasingly mandatory features runs counter to the original, voluntary nature of the EU GBS and could thus make the issuance of compliant sustainable bonds less attractive.

Audited transition plans

Parliament furthermore requested issuers of EU GBS and SLBs to provide audited transition plans on how they plan to achieve climate neutrality by 2050. The idea is that these transition plans shall form part of the pre-contractual disclosures and sustainability impact reports and include information on how and to what extent the issuance would increase the issuer’s proportion of taxonomy-aligned economic activities. We recognise the intention to create consistency between an issuer’s green bond issuance and their overall transition strategy but also believe this could lead to additional bureaucracy, while opening up issuers and auditors alike to litigation risk. It seems a near impossible task for auditors to certify with a positive opinion aspirational transition plans that are a relatively novel concept, especially as far out as 2050.

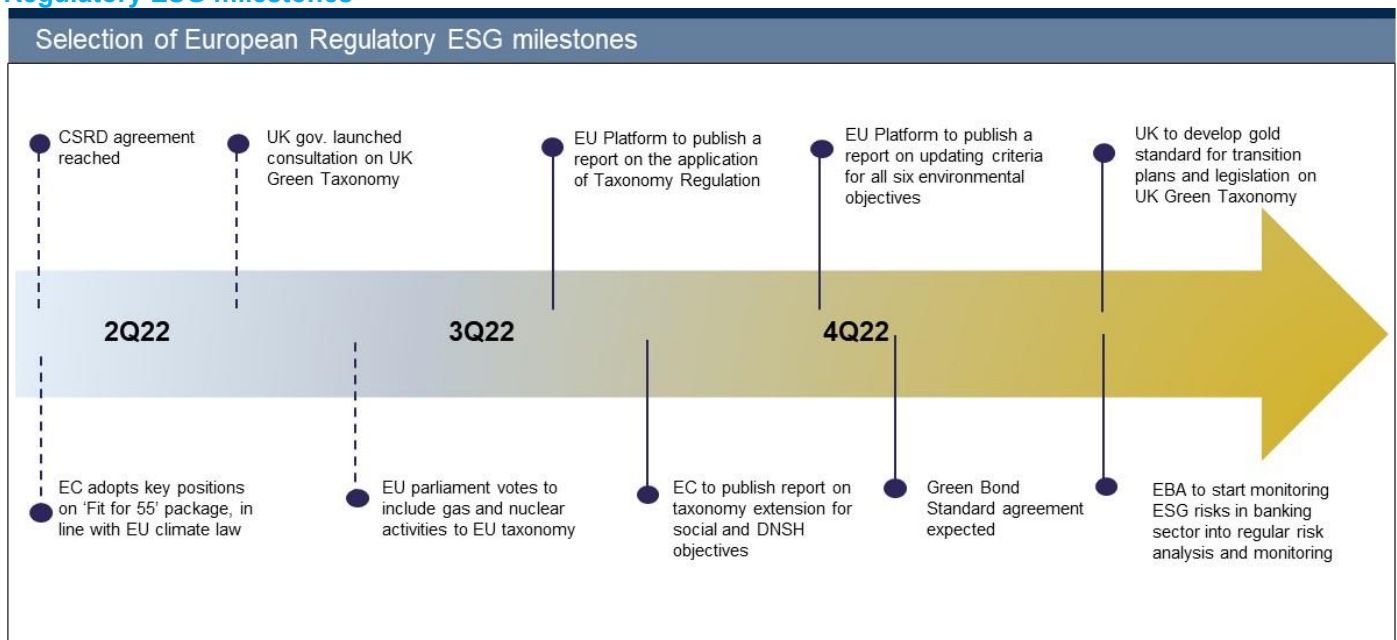
Flexibility pockets

The EU GBS is often understood to be 100% aligned with the EU Taxonomy and while this reflects the positions of the EC and Parliament, the Council is advocating for so-called ‘flexibility pockets’. Under this proposal, up to 20% of proceeds can be exempt from taxonomy compliance but under strict conditions. Activities must comply with ‘do no significant harm’ (DNSH) and minimum social safeguards but must not have technical screening criteria in place at time of issuance. The intention is for these pockets to be temporary in nature, in recognition of the potentially incomplete scope of the taxonomy in places. While this could broaden the overall scope of the GBS, attracting more issuers, it could also lead to market fragmentation where investors need to make the distinction between fully taxonomy aligned and partially aligned GBS bonds. The co-legislators will need to strike the right balance between encouraging near-term issuance and maintaining the standard’s credibility.

Grandfathering

The proposal of the European Commission specifies that in the event of changes to the Taxonomy’s technical screening criteria after a GBS bond is issued, issuers may still issue EU GBS bonds for five or more years under the pre-existing rule-set. This ‘partial grandfathering’ period was intensely debated. Parliament proposes up to 10-years grandfathering as opposed to Commission’s five-year proposal. Parliament argues that already allocated bond proceeds would not have to be reallocated within the grandfathering period, in case of changes to delegated acts. However, the Council goes one step further and wants full grandfathering to be granted to GBS bonds that experience changes in regulation. This approach appears more reasonable to us since the Taxonomy is designed to be a ‘living document’ that is regularly updated in line with technological and scientific advancements. Restricting issuers to relatively short grandfathering periods would likely create uncertainty, require constant regulatory monitoring, narrow investment horizons and leave issuers with un-reallocated funds potentially exposed to litigation risk at the end of the grandfathering period.

Regulatory ESG milestones



Source: Daiwa Capital Markets Europe Ltd.; AFME

Legend: (DA) Delegated Act; (CSR) Corporate Sustainability Reporting Directive; (DNSH) Do no significant harm; (EC) European Commission; (EBA) European Banking Authority

Primary markets in 2Q22

SSA issuance volumes in 2Q22 reached EUR62bn (+38.6% qoq) of which 52% had a green bond indicator, 25% were sustainable bonds and 23% were social. Green bond volumes in particular experienced significant growth (+432% qoq) on the back of several sovereign inaugural issuances. However, social bond volumes (-24.5%) and sustainability bonds (-21.4%) experienced noticeable declines. Compared to the same period last year, the overall picture is less favourable as the turbulent market backdrop undoubtedly contributed to a significant 41% decline in issuance volumes among SSAs. We link this to the reduced funding needs, in particular for sovereigns that tapped markets more frequently during the height of the pandemic. Although green and sustainable bond volumes broadly kept up or exceeded last year’s volumes, it was the strong drop in social bonds (-EUR43.2bn yoy) that led to the overall decline.

SSA - Top 10 European ESG Issuers 1H22		
Issuers	Total Issued (€m)*	Average Tenor (years)
CADES	19,458	8.5
IBRD	13,664	8.4
European Union	13,170	20.5
EIB	5,968	6.5
IDA	4,339	15.0
Austria	4,000	27.0
France	4,000	16.1
KfW	3,797	3.3
ADB	3,583	4.8
BNG Bank	3,525	9.6

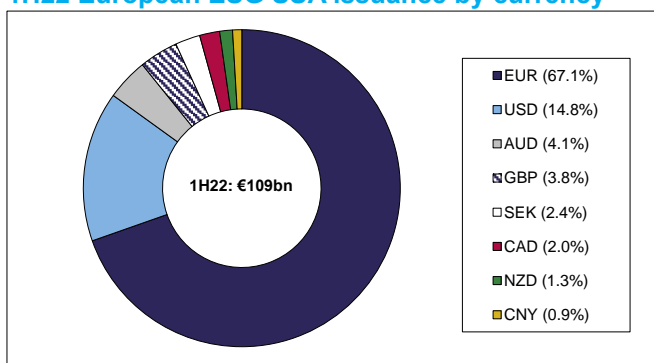
Source: Bloomberg, *Cumulative issuances 1H22

In 2Q22 we observed the return of sovereign issuers to capital markets following their absence throughout the previous quarter, driven mostly by volatile unfavourable market conditions. Consequently, 1H22 sovereign ESG issuance only amounted to EUR10.8bn compared to EUR40.8bn during 1H21. In late May, **Austria’s** government launched its debut green bond, which was also the first syndicated sovereign green bond of 2022. The bond was sized at EUR4bn with a May-2049 maturity, drawing strong interest from investors and a 6.25x subscription level. The Austrian treasury retained a small EUR250m amount, managing to reduce the spread by 3bps from IPT. According to the issuer, the deal priced with a 2.5bps greenium, while the bonds will finance most of the Austrian government’s EUR5bn eligible green expenditures. Furthermore, Austria is now the first sovereign issuer with a [green bond framework](#) that allows for short-term debt instruments in green format (i.e. green treasury bills or commercial paper), appealing to more short-term investors such as money market funds, central banks or bank treasuries.

Shortly after Austria’s transactions landed, the **French treasury** mandated for the world’s first green inflation-linked bond. The EUR4bn, Jun-2038 bond priced at OAT+12bps and tightened 3bps from guidance on the back of sizeable EUR27.5bn book orders (6.87x). This left just a small new issue premium (NIP) of 2bps on the table. The bond addresses two pressing issues at the same time, protection from inflation and the environmental transitions. The latter forms a key part of France’s recovery plan that foresees green bond funding of EUR15bn in 2022, unchanged from last year. The new green-linker slots into France’s green bond portfolio, launched in 2017. Outstanding ESG volumes stand at EUR51.4bn across three transactions. The new bond references the European harmonised index of consumer prices (HICP) excluding tobacco, and capital allocated to green expenditures are adjusted regularly to the inflation reference index. This bond not only underlines France’s role as one of the leading sovereign ESG issuers but also its ability and willingness to innovate in this market.

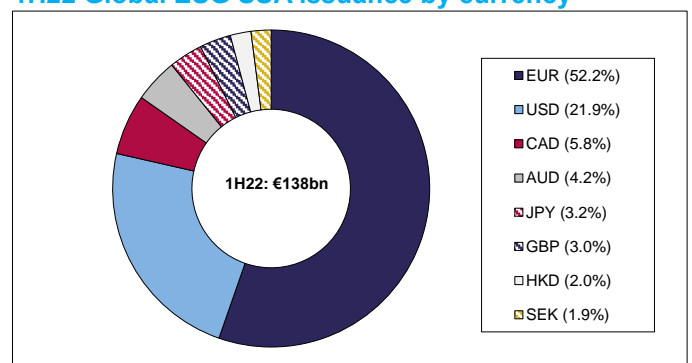
Another first in 2Q22 came from **The International Fund for Agricultural Development (IFAD)** that is part of the United Nations. IFAD specialises in supporting rural economies and food systems and made its capital markets debut in June. The USD100m private placement came in the form of a sustainable development bond. IFAD plans to be a regular issuer in capital markets and is eyeing a total issuance volume of some USD400m in 2022 and a further USD300m over the next two years, subject to market conditions. The bond is aligned to IFAD’s [sustainable development finance framework from 2020](#) and its proceeds are intended to help farmers adapt to climate change as well as provide food security, among other things. The war in Ukraine has led to record high prices for energy, food and fertilisers and much of Africa relies on imports of Ukrainian wheat and other produce. It is therefore IFAD’s goal to reduce this reliance, while strengthening rural farmers’ ability to cope with the adverse effects of climate change. Highly changeable market conditions have also led some key issuers to adjust their 2022 funding plans. The **EU** undershot market expectations by announcing a funding volume of EUR50bn for 2H22 (~EUR10bn below expectation), while **KfW** upsized its own plans to EUR90bn (+EUR5/10bn) due to additional demand to mitigate the socioeconomic fallout of the war.

1H22 European ESG SSA issuance by currency



Source: Bloomberg; Daiwa Capital Markets Europe Ltd.

1H22 Global ESG SSA issuance by currency



Source: Bloomberg; Daiwa Capital Markets Europe Ltd.

Total **FIG** ESG volumes in 2Q22 reached EUR27bn (-23.3% yoy). Issuance was broadly evenly distributed during the quarter with 40% of the total reaching markets in April, 29% in May and 31% in June. Issuers continued to respond to the challenging environment with mostly senior trades and short, defensive tenors. Despite the changeable conditions offering only narrow funding windows, we saw an increasing number of non-core issuers and subordinated trades returning to markets towards the end of 2Q22. We believe that this shows that issuers and investors alike are adjusting to the new status quo, which is characterised by higher new issue premiums and lower order books. Looking ahead at the traditionally quiet summer period, issuance volumes may receive a boost now that the ECB has outlined its new anti-fragmentation tool. Its design, aimed at keep government bond spreads in check, could provide primary market participants with the necessary confidence to place trades ahead of the busy period starting in September.

FIG - Top 10 European ESG Issuers 1H22		
Issuers	Total Issued (€m)*	Average Tenor (years)
Helaba	3,249	6.8
Vonovia	2,622	5.4
Deutsche Bank	2,292	7.5
DNB Bank	1,570	4.5
ABN Amro	1,500	7.5
ING Group	1,500	4.0
EQT	1,500	8.0
Berlin Hyp	1,346	6.0
SBAB Bank	1,250	4.3
Prologis	1,210	13.0

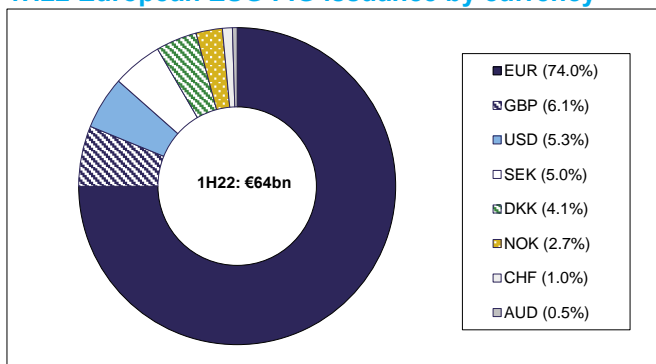
Source: Bloomberg, *Cumulative issuances 1H22

Sizeable green senior supply came from Dutch lenders ING and ABN, placing a combined EUR3bn across three deals. Ahead of its investor day in June, **ING Groep** launched a EUR1.5bn senior HoldCo with a short tenor of 4NC3. Demand was solid with a subscription level of 1.8x allowing the note to tighten by 25bps from IPT. This resulted in a surprisingly low concession of just ~5bps, considering the bail-inable nature of the bond and higher premiums paid on comparable transactions. The quality of the issuer, the short tenor and the ESG label are thought to have contributed to the positive outcome. ING guided for EUR8bn-10bn in senior HoldCo to be issued in 2022 of which EUR8.2bn has been reached to date. The above deal marks ING’s only green bond in this space. Given the size taken and having already met the lower end of its funding target, we don’t anticipate any further themed senior issuance from ING this year. **ABN Amro** was the other major Dutch bank featuring green bond supply in 2Q22 with a dual-tranche green SNP consisting of a 5-year and a 10-year leg, sized EUR750m each. The deal was launched shortly after ABN released rather underwhelming 1Q22 financial earnings that saw the bank register higher than expected costs, including new anti-money laundering provisions. Nevertheless, the majority state-owned bank registered solid interest in its green SNP offering, resulting in spread tightening and a new issue premium of some 20bps on both legs.

In June, **Caixa Geral** displayed funding access for lower-tier issuers, but at a price. Portugal’s second largest bank Caixa Geral, rated ‘BBB-/Baa3’, brought a small EUR300m green SP but couldn’t tighten spreads despite solid interest. The NIP was ~40bps. Later that month Spain’s **Unicaja Banca** also access markets with a rather short-dated green SP bond, carrying a 3NC2 maturity. Despite the defensive tenor and label the new deal concession was sizeable at ~55bps.

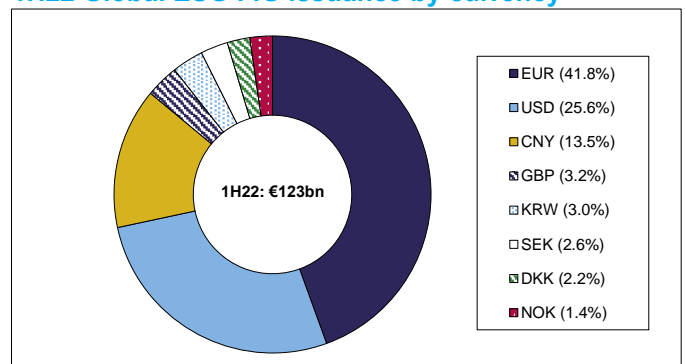
In 2Q22 we saw a number of themed subordinate transactions come to market as funding conditions somewhat improved towards the latter part of the quarter. Dutch lender **DeVolksbank** became the second European bank to issue a green AT1 after BBVA had already done so back in June of 2020. Despite the rarity of the labelled AT1, the EUR300m note struggled to build momentum with investors even when the coupon remained unchanged from guidance at 7%. According to Bloomberg data, the issuer has EUR6.9bn of benchmark-sized debt outstanding across 14 bonds. The green AT1 is the issuer’s only junior sub-debt deal, which may have contributed to the muted interest, leading to a 70-75bps new issue premium. In May, the issuer also launched a green SNP for EUR500m but the investor response was surprisingly low (1.3x subscribed). This contributed to the deal being unable to move from IPT, pricing with a new issue premium of ~25bps. The largest sub-debt deal from 2Q22 came from German reinsurer **Munich Re** looking to place a green Tier 2. Despite the issuer’s solid credit ratings (AA/Aa3/AA-) assigned by the three major agencies, interest in the deal appeared muted (1.5x subscribed). Munich re only has three other bonds outstanding (all junior subordinated and Euro denominated). The lack of familiarity with the name among the US investor base thus may have contributed to the coupon not tightening from its initial guidance of 5.875%.

1H22 European ESG FIG issuance by currency



Source: Bloomberg; Daiwa Capital Markets Europe Ltd.

1H22 Global ESG FIG issuance by currency



Source: Bloomberg; Daiwa Capital Markets Europe Ltd.

Key ESG Transactions 2Q22

Bank	Rank	Amount	Maturity	Final Spread (bps)	IPT (bps)	Book Orders
SSA						
European Union (NGEU)	Sr. Unsecured (Green)	EUR6bn	20Y	MS + 9	MS + 11	>EUR78.25bn
European Union (NGEU)	Sr. Unsecured (Green)	EUR5bn	25Y	MS + 28	MS + 30	>EUR34bn
CADES	Sr. Unsecured (Social)	USD3.5bn	3Y	SOFR MS+30	SOFR MS+31	>USD6.3bn
CADES	Sr. Unsecured (Social)	EUR5bn	10Y	OAT + 25	OAT + 27	>EUR25bn
EIB	Sr. Unsecured (CAB*)	EUR4bn	10Y	MS - 19	MS - 17	>USD23bn
Austria	Sr. Unsecured (Green)	EUR4bn	27Y	MS + 22	MS + 25	>EUR25bn
France	Sr. Unsecured (Green IL**)	EUR4bn	15Y	OAT + 12	OAT + 15	>EUR27.5bn
KfW	Sr. Unsecured (Green)	EUR3bn	10Y	MS - 21	MS - 19	>EUR34bn
NRW	Sr. Unsecured (Sustainable)	EUR2bn	30Y	MS + 35	MS + 37	>EUR3.3bn
IDA	Sr. Unsecured (Sustainable)	EUR2bn	15Y	MS - 18	MS - 16	>EUR1.45bn
Société du Grand Paris	Sr. Unsecured (Green)	EUR1.75bn	20Y	OAT + 33	OAT + 34	>EUR23bn
AFD	Sr. Unsecured (Sustainable)	EUR1.5bn	10Y	OAT + 33	OAT + 34	>EUR2.2bn
Bpifrance	Sr. Unsecured (Green)	EUR1.25bn	5Y	OAT + 33	OAT + 34	>EUR2.1bn
ALS	Sr. Unsecured (Sustainable)	EUR1.25bn	10Y	OAT + 42	OAT + 45	>EUR2.8bn
IADB	Sr. Unsecured (Sustainable)	USD1bn	5Y	SOFR MS+28	SOFR MS+28	n.a.
UNEDIC	Sr. Unsecured (Social)	EUR1bn	10Y	OAT + 23	OAT + 25	>EUR4.2bn
Aut. Community of Madrid	Sr. Unsecured (Sustainable)	EUR1bn	10Y	SPGB + 16	SPGB + 18	>EUR1.2bn
Council of Europe	Sr. Unsecured (Social)	USD1bn	3Y	SOFR MS+21	SOFR MS+23	>USD2.3bn
Council of Europe	Sr. Unsecured (Social)	EUR1bn	7Y	MS - 13	MS - 13	>EUR975m
FIG (Senior)						
ING Groep NV	Sr. HoldCo (Green)	EUR1.5bn	4NC3	MS + 110	MS + 135	>EUR3bn
ABN Amro	SNP (Green)	EUR750m	5Y	MS + 110	MS + 120	>EUR1bn
ABN Amro	SNP (Green)	EUR750m	10Y	MS + 135	MS + 150	>EUR1.2bn
AIB Group	Sr. HoldCo (Green)	EUR750m	4NC3	MS + 200	MS + 220	>EUR1.1bn
Unicaja Banco	SP (Green)	EUR500m	3NC2	MS + 305	MS + 325	>EUR1.2bn
Commerzbank	SNP (Green)	EUR500m	5.25NC4.25	MS + 62	MS + 80	>EUR1.3bn
Deutsche Bank	SNP (Green)	EUR500m	6NC5	MS + 193	MS + 215	>EUR3bn
DeVotksbank	SNP (Green)	EUR500m	5NC4	MS + 120	MS + 120	>EUR650m
Caixa Geral de Depósitos	SP (Green)	EUR300m	4NC3	MS + 140	MS + 140	>EUR580m
FIG (Subordinated)						
Munich Re	Tier 2 (Green)	USD1.25bn	20NC10	5.875%	5.875%	>USD1.9bn
De Volksbank	AT1 (Green)	EUR300m	PNC5	7.0%	7.0%	>EUR440m

Source: BondRadar, Bloomberg, Daiwa Capital Markets Europe Ltd.; *Climate Awareness Bond; **Inflation Linked

Secondary markets in 2Q22

Markets remained volatile and at times unpredictable throughout the second quarter of 2022. CDS price indices on European senior and subordinated financials remained at or near 52-week highs through most of 2Q22, while monetary policy responses to the elevated inflationary environment were expected to be increasingly hawkish. In July, the ECB's Governing Council agreed on a 50bps hike to its main interest rates, more than it had previously signalled, as it judged inflation risks to have worsened. It also agreed on a new Transmission Protection Instrument (TPI), giving the ECB scope to address widening sovereign bond spreads via potentially unlimited bond purchases if and when judged appropriate. This marked the first hike since 2011 and may be followed by a similar increase (presumably 50-75bps) in September should the medium-term inflation outlook not improve by then. The ECB is now taking a "meeting by meeting" approach to interest rate decisions, abandoning its previous 'modus operandi' of providing forward guidance. Meanwhile, in the UK the BoE's Monetary Policy Committee (MPC) raised the benchmark rate by 25bps for the fifth consecutive time to 1.25% in late June. The BoE noted that it would act forcefully if needed to prevent high inflation becoming more persistent. Despite an inflation-driven record drop in real wages in the UK, the BoE will consider a 50bps rate hike in August and begin quantitative tightening via active Gilt sales in September. In the US, the Federal Open Market Committee (FOMC) implemented a 75bps rate hike in the Fed Funds Rate target range to 1.50-1.75% and suggested that additional increases would be implemented in the months ahead. Chair Powell noted that changes of 50bps or 75bps are likely in July.

Continued narrowing of ESG and non-ESG bond spreads

Market volatility and the increasing prospect of a global recession have resulted in somewhat unpredictable market conditions and spread movements. This is reflected in the spread development between the option-adjusted spreads (OAS) for ESG and non-ESG themed indices. In the second quarter, the median negative OAS differential between the Barclays MSCI Euro-Corporate ESG Index and Barclays Pan-European Aggregate Corporate Index was just -2.32bps compared to -4.11bps one year prior. Inversions of the greenium continued in 2Q22 and occurred on five separate occasions compared to two during the previous quarter. The indices reacted strongly to periods of stress and market sell-offs, caused mostly by higher than expected inflation data, in turn sparking fears of a more assertive monetary policy response by central banks. This narrowing of ESG and non-ESG bond spreads is also a reflection of the convergence of new issue premiums at issue, highlighting greater ESG bond supply and a deeper understanding of ESG bond pricing.

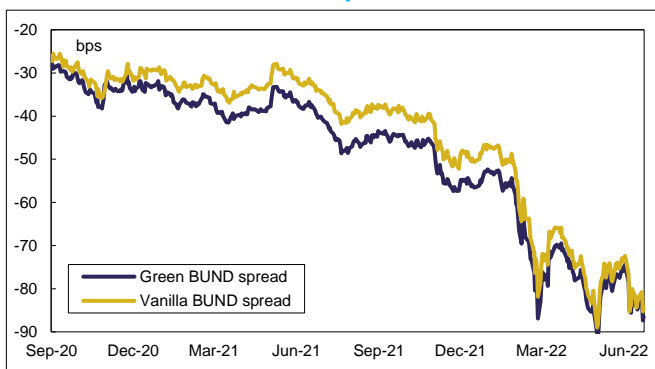
Greenium likely to persist despite spread convergence to conventional bonds

Since the third quarter of last year, average NIPs have risen for ESG and non-ESG bonds in line with the gradual decrease of cover levels for deals. 2Q22 average NIPs for themed SSA remained below those of conventional SSA trades at 3.7bps and 7.4bps respectively (1Q22: 3.9bps and 3.1bps). For FIGs the NIPs were 10.7bps and 11.2bps respectively (1Q22: 7.6bps and 8.1bps). Thus, in recent quarters the average spread differential at issue appeared marginal and considerably narrower than its peak in 2Q20 when the difference was ~12bps. The substantial increase in sustainable bond supply is likely a major factor contributing to the narrowing. However, we still expect greeniums to persist, at least in the near to medium term, as demand is expected to outstrip supply. Data from EPFR shows net inflows into ESG bond funds remained positive in 2022 (+USD3.6bn by end-May) compared to net outflows of USD242bn for non-ESG funds. In Europe, the EU’s Sustainable Finance Disclosure Regulation (SFDR) will further encourage demand as it requires asset managers to disclose whether they promote environmental or social characteristics (Article 8: “Light green”) or if they invest in economic activities that contributes to environmental or social objectives (Article 9: “Dark green”). Products that have neither of these purposes fall under Article 6 of the SFDR regulation (“Non-green”). We believe that fund managers will likely aim to classify most of their funds in line with the sustainability Articles 8 & 9, giving the demand side a boost.

Greenium for German Bunds at all-time low

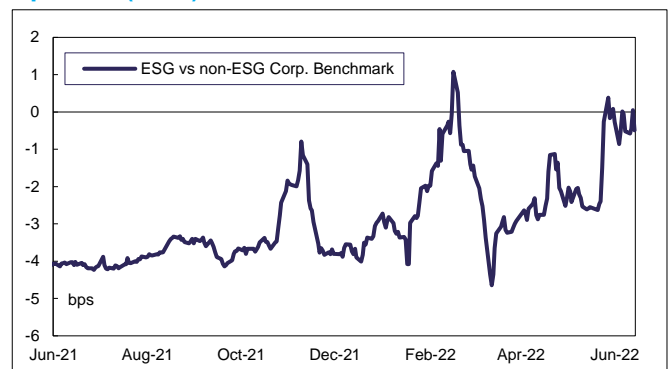
The greenium for liquid sovereigns such as German Bunds reached all-time lows and the aforementioned narrowing and spread reversal is also observable here. Twice in June the Z-spread differential briefly turned positive. The 2Q22 median spread differential was -2.45bps compared to the -5.24bps one year prior. (1Q22: -5.06bps; 4Q21: -5.55bps; 3Q21: -6.02bps; 2Q21: -5.24bps; 1Q21: -4.39bps).

Green vs Vanilla BUND Z-spreads



Source: Bloomberg; Daiwa Capital Markets Europe Ltd.

Spreads (OAS) of ESG vs non-ESG benchmarks



Source: Bloomberg; Barclays MSCI Euro-Corporate ESG Index vs Barclay Pan-European Aggregate Corporate Index

Credit Research

Key contacts

London

Head of Research

Financials, Supras/Sovereigns & Agencies, ESG

Chris Scicluna +44 20 7597 8326

William Hahn +44 20 7597 8321

Head of Translation, Economic and Credit

Research Assistant

Mariko Humphris +44 20 7597 8327

Katherine Ludlow +44 20 7597 8318

Tokyo

Domestic Credit

Chief Credit Analyst, Financials, Power, Communication, Wholesale Trade, Air Transportation

Local government, Government agency

Electronics, Non-Banks, Real Estate, REIT, Retail trade, Chemicals, Iron & Steel, Marine

Transportation, Pulp & Paper, Oil, Land Transportation

Automobiles, Foods, Heavy equipment, Construction, Machinery

Toshiyasu Ohashi +81 3 5555 8753

Koji Hamada +81 3 5555 8791

Takao Matsuzaka +81 3 5555 8763

Kazuaki Fujita +81 3 5555 8765

Ayumu Nomura +81 3 5555 8693

International Credit

Non-Japanese/Financials

Non-Japanese/Financials

Non-Japanese/Corporates

Fumio Taki +81 3 5555 8787

Hiroaki Fujioka +81 3 5555 8761

Stefan Tudor +81 3 5555 8754

ESG

Chief Securitisation Strategist

Strategist

Strategist

Koji Matsushita +81 3 5555 8778

Shun Otani +81 3 5555 8764

Takao Matsuzaka +81 3 5555 8763

DAIR <GO>

All of the research published by the London and New York research teams is available on our Bloomberg page at DAIR <GO>.

Access our research at:

<http://www.uk.daiwacm.com/ficc-research/research-reports>

This document is produced by Daiwa Securities Co. Ltd and/or its affiliates and is distributed by Daiwa Capital Markets Europe Limited. Daiwa Capital Markets Europe Limited is authorised and regulated by The Financial Conduct Authority, is a member of the London Stock Exchange and an exchange participant of Eurex. Daiwa Capital Markets Europe Limited and its affiliates may, from time to time, to the extent permitted by law, participate or invest in, or be mandated in respect of, other transactions with the issuer(s) referred to herein, perform services for or solicit business from such issuer(s), and/or have a position or effect transactions in a particular issuer's securities or options thereof and/or may have acted as an underwriter during the past twelve months in respect of a particular issuer of its securities. In addition, employees of Daiwa Capital Markets Europe Limited and its affiliates may have positions and effect transactions in such securities or options and may serve as Directors of a particular issuer. Daiwa Capital Markets Europe Limited may, to the extent permitted by applicable UK law and other applicable law or regulation, effect transactions in securities of a particular issuer before this material is published to recipients.

This publication is intended for investors who are MiFID 2 Professional (or equivalent) Clients and should not therefore be distributed to such Retail Clients. Should you enter into investment business with Daiwa Capital Markets Europe's affiliates outside the United Kingdom, we are obliged to advise that the protection afforded by the United Kingdom regulatory system may not apply; in particular, the benefits of the Financial Services Compensation Scheme may not be available.

Daiwa Capital Markets Europe Limited is part of Daiwa Securities Group Inc. Daiwa Securities Group Inc., its subsidiaries or affiliates, or its or their respective directors, officers and employees from time to time have trades as principals, or have positions in, or have other interests in the securities of the company under research including market making activities, derivatives in respect of such securities or may have also performed investment banking and other services for the issuer of such securities. Daiwa Securities Group Inc., its subsidiaries or affiliates do and seek to do business with the company(s) covered in this research report. Therefore, investors should be aware that a conflict of interest may exist.

Daiwa Capital Markets Europe Limited has in place organisational arrangements for the prevention and avoidance of conflicts of interest. Our conflict management policy is available at <http://www.uk.daiwacm.com/about-us/corporate-governance-regulatory>. Regulatory disclosures of investment banking relationships are available at <http://www.us.daiwacm.com/>.

Please note the disclaimers and disclosures on the last page of this document.

Explanatory Document of Unregistered Credit Ratings

This report may use credit ratings assigned by rating agencies that are not registered with Japan's Financial Services Agency pursuant to Article 66, Paragraph 27 of the Financial Instruments and Exchange Act. Please review the relevant disclaimer regarding credit ratings issued by such agencies at: <https://lzone.daiwa.co.jp/l-zone/disclaimer/creditratings.pdf>

IMPORTANT

This report is provided as a reference for making investment decisions and is not intended to be a solicitation for investment. Investment decisions should be made at your own discretion and risk. Content herein is based on information available at the time the report was prepared and may be amended or otherwise changed in the future without notice. We make no representations as to the accuracy or completeness. Daiwa Securities Co. Ltd. retains all rights related to the content of this report, which may not be redistributed or otherwise transmitted without prior consent.

Ratings

Issues are rated 1, 2, 3, 4, or 5 as follows:

- 1: Outperform TOPIX/benchmark index by more than 15% over the next 12 months.
- 2: Outperform TOPIX/benchmark index by 5-15% over the next 12 months.
- 3: Out/underperform TOPIX/benchmark index by less than 5% over the next 12 months.
- 4: Underperform TOPIX/benchmark index by 5-15% over the next 12 months.
- 5: Underperform TOPIX/benchmark index by more than 15% over the next 12 months.

Benchmark index: TOPIX for Japan, S&P 500 for US, STOXX Europe 600 for Europe, HSI for Hong Kong, STI for Singapore, KOSPI for Korea, TWII for Taiwan, and S&P/ASX 200 for Australia.

Target Prices

Daiwa Securities Co. Ltd. sets target prices based on its analysts' earnings estimates for subject companies. Risks to target prices include, but are not limited to, unexpected significant changes in subject companies' earnings trends and the macroeconomic environment.

Disclosures related to Daiwa Securities

Please refer to https://lzone.daiwa.co.jp/l-zone/disclaimer/e_disclaimer.pdf for information on conflicts of interest for Daiwa Securities, securities held by Daiwa Securities, companies for which Daiwa Securities or foreign affiliates of Daiwa Securities Group have acted as a lead underwriter, and other disclosures concerning individual companies. If you need more information on this matter, please contact the Research Production Department of Daiwa Securities.

Explanatory Document of Unregistered Credit Ratings

This report may use credit ratings assigned by rating agencies that are not registered with Japan's Financial Services Agency pursuant to Article 66, Paragraph 27 of the Financial Instruments and Exchange Act. Please review the relevant disclaimer regarding credit ratings issued by such agencies at: <https://lzone.daiwa.co.jp/l-zone/disclaimer/creditratings.pdf>

Notification items pursuant to Article 37 of the Financial Instruments and Exchange Law

(This Notification is only applicable to where report is distributed by Daiwa Securities Co. Ltd.)

If you decide to enter into a business arrangement with our company based on the information described in this report, we ask you to pay close attention to the following items.

- In addition to the purchase price of a financial instrument, our company will collect a trading commission* for each transaction as agreed beforehand with you. Since commissions may be included in the purchase price or may not be charged for certain transactions, we recommend that you confirm the commission for each transaction. In some cases, our company also may charge a maximum of ¥2 million per year as a standing proxy fee for our deposit of your securities, if you are a non-resident.
- For derivative and margin transactions etc., our company may require collateral or margin requirements in accordance with an agreement made beforehand with you. Ordinarily in such cases, the amount of the transaction will be in excess of the required collateral or margin requirements**.
- There is a risk that you will incur losses on your transactions due to changes in the market price of financial instruments based on fluctuations in interest rates, exchange rates, stock prices, real estate prices, commodity prices, and others. In addition, depending on the content of the transaction, the loss could exceed the amount of the collateral or margin requirements.
- There may be a difference between bid price etc. and ask price etc. of OTC derivatives handled by our company.
- Before engaging in any trading, please thoroughly confirm accounting and tax treatments regarding your trading in financial instruments with such experts as certified public accountants.

* The amount of the trading commission cannot be stated here in advance because it will be determined between our company and you based on current market conditions and the content of each transaction etc.

** The ratio of margin requirements etc. to the amount of the transaction cannot be stated here in advance because it will be determined between our company and you based on current market conditions and the content of each transaction etc.

When making an actual transaction, please be sure to carefully read the materials presented to you prior to the execution of agreement, and to take responsibility for your own decisions regarding the signing of the agreement with our company.

Corporate Name: Daiwa Securities Co. Ltd.

Registered: Financial Instruments Business Operator, Chief of Kanto Local Finance Bureau (Kin-sho) No.108

Memberships: Japan Securities Dealers Association, The Financial Futures Association of Japan, Japan Investment Advisers Association, Type II Financial Instruments Firms Association, Japan Security Token Offering Association