Daiwa Capital Markets

European Banks – Quarterly ESG Update

- European issuers play key role in global ESG bond surge, likely to surpass EUR850bn in 2021
- Regulatory progress in Europe will set standards for transparency and define what is 'sustainable'
- The EU will provide a substantial boost to green bond supply following its social bond programmes
- Transition finance remains niche for now but could see wider adoption to support net zero goals
- 'Greeniums' at issue appear to be carried over and maintained in secondary market spreads

William Hahn
Credit Analyst
+44 20 7597 8355
William.Hahn@uk.daiwacm.com

Overview: ESG issuance accelerates in first quarter

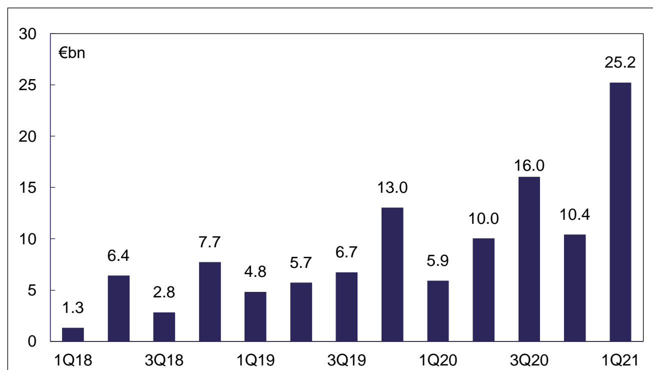
Issuance of ESG bonds – comprising green, social and sustainable bonds – continues to experience tremendous growth. After worldwide ESG issuance across SSAs, FIGs and Corporates reached EUR420bn (+74% yoy) in 2020, momentum carried forward into 1Q21 with volumes far exceeding those observed during the same period last year. Global ESG bonds in 1Q21 amounted to EUR231bn (1Q20: EUR56bn) and could reach up to EUR850bn in 2021 as global recovery plans, high investor demand and favourable funding conditions act as catalysts for growth.

European ESG-linked bond sales from SSAs and FIGs reached EUR113bn in 1Q21 according to Bloomberg data. This represented an increase of 533% yoy. Of that total, green bond sales amounted to EUR46bn (+231% yoy), social bond volumes stood at EUR59bn (+2122% yoy) and sustainable bonds accounted for EUR8bn (+500% yoy). As in 2020, by country, European issuance in the first quarter was led by France, with Germany, Italy and the Netherlands also generating large volumes.

ESG-themed bonds issued by European financial institutions reached EUR25bn last quarter compared to just EUR5.9bn in 1Q20, already matching 59% of total 2020 issuance and accounting for 45% of the global total in the sector. That surge in transactions stands in contrast to the broader trend in European FIG bond markets of lower volumes compared to previous years, in part due to generous central bank liquidity that crowded out covered bond supply in particular. Therefore, proportionally, ESG bonds are accounting for a larger share of the overall European FIG deal flow, rising to 19% in 1Q21 compared to just 4% one year prior.

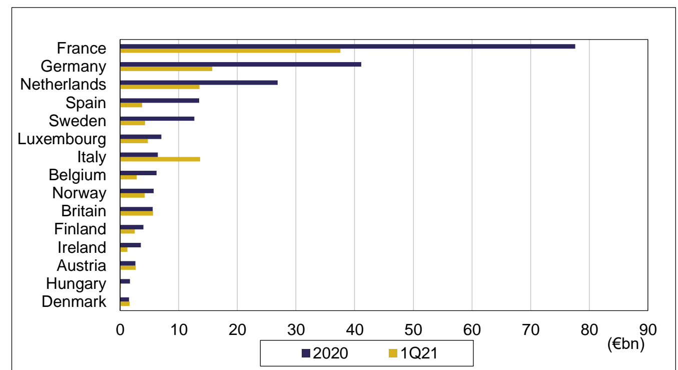
Looking ahead, as vaccination programmes put the prospect of economic recovery on the horizon, ESG themes are being integrated into post-Covid stimulus plans, not least with the aim of supporting long-term efforts to reduce carbon emissions and foster the creation of 'green' jobs. These measures will support increased ESG-related bond issuance – particularly of Green Bonds – but will also require greater transparency as market-deepening progresses.

Quarterly ESG Bond Issuance: European FIGs*



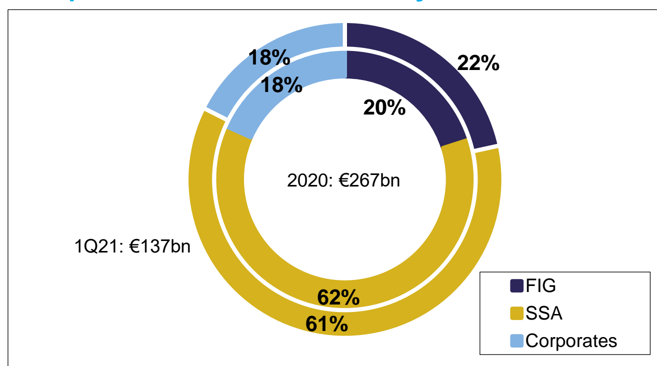
*Source: Bloomberg and Daiwa Capital Markets Europe Ltd.; *Green, social and sustainability labelled bonds >€250m.*

European ESG Bond Issuance by Country



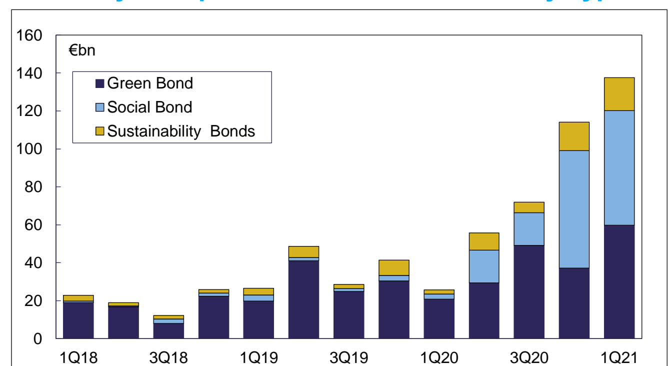
Source: Bloomberg; includes SSAs, FIGs & Corporates

European ESG Bond Issuance by Sector



Source: Bloomberg; Daiwa Capital Markets Europe Ltd.

Quarterly European ESG Bond Issuance by Type



Source: Bloomberg; Daiwa Capital Markets Europe Ltd.

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

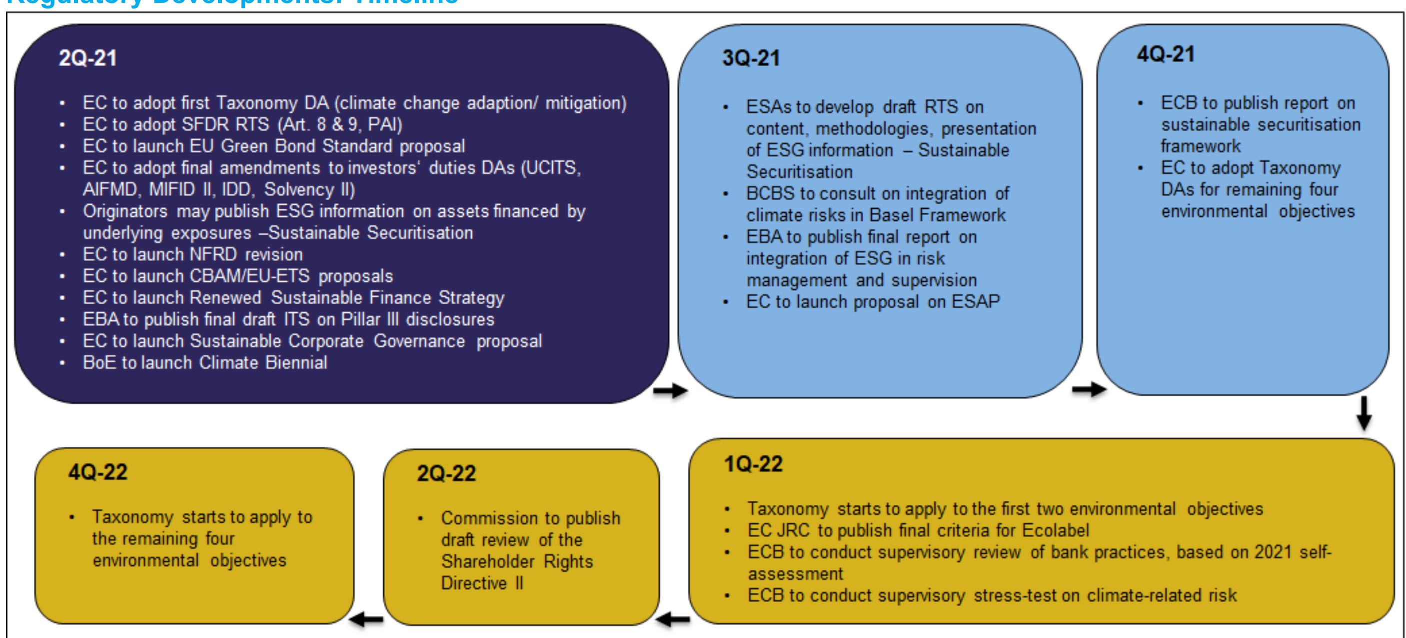
Regulatory Developments: EBA floats Green Asset Ratio for EU banks

On the regulatory front, in early March, the European Banking Authority (EBA) launched a consultation on proposed technical standards (ITS) on Pillar 3 disclosures relating to ESG risks. The draft ITS are intended to ensure financial institutions make disclosures comparable for investors and other market participants about ESG exposures and strategies so that they can make informed decisions and exercise market discipline. The European Commission (EC) called for such advice in September 2020 and in response the EBA proposed standards that include comparable disclosures and KPIs, most prominently among them the 'Green Asset Ratio' (GAR). This will measure the volume of financial assets of an entity's banking book (loans and advances, debt securities, equity instruments) used to fund sustainable economic activities according to the EU taxonomy. The GAR will exclude sovereign debt due to the lack of applicable taxonomy and standard disclosure obligations for these counterparties until alignment has been achieved. The EBA also considered extending the quantitative disclosure measures to banks' trading-book exposures, but given their inherently more volatile and temporary nature recommended against. Indeed, such exposures were not deemed compatible with the longer-term nature of taxonomy-aligned activities. However, FIGs will still need to disclose information on the sustainability, composition, trends and limits, and investment policy of their trading book.

The question remains how such KPIs should be applied to non-EU subsidiaries of affected banks, as the Non-Financial Reporting Directive (NFRD) and the EU taxonomy only apply at the EU level. For these entities, it is recommended that their respective Green Asset Ratios reflect exposures to EU counterparties in a separate 'non-EU GAR'. Currently, EU credit institutions' assets to counterparties with residence outside the EU account for some 38% of their total assets. As the sizeable exposures towards these subsidiaries are in a constant flux, we believe a separate 'non-EU GAR', which identifies lending and equity exposures on a best-effort basis, is a sensible recommendation. This will serve as a proxy measure and should be disclosed separately from the EU GAR and with appropriate caveats. Should the GAR proposal be adopted, credit institutions will need to start making the necessary disclosures as of January 2022. SMEs and retail counterparties not subject to the Non-Financial Reporting Directive (NFRD) will be given until June 2024 to do so.

The current quarter is set to be particularly eventful on the ESG regulatory front, especially with regards to the adoption of delegated acts under the Taxonomy. While the Commission is scheduled to adopt delegated acts describing disclosure obligations for companies in June 2021, member states have been embroiled in debates in recent months over various energy sources and practices and whether or not they should be considered sustainable and included in the Taxonomy. In an update to the draft delegated acts presented on 21st April, references to gas and nuclear power are expected to be omitted, which means the EU Parliament and member states need to decide on these energy sources in a separate legislative proposal later in the year, despite them being the subject of much of the debates. We also expect to see the legislative proposal on the EU's Green Bond Standard during 2Q21, which will include firm rules on what constitutes a green project and would make reporting on their environmental impact compulsory.

Regulatory Developments: Timeline



Source: Association for Financial Markets in Europe (AFME)
Glossary Regulatory Abbreviations: (EC): European Commission; (BCBS): Basel Committee on Banking Supervision; (ESAP): European single access point; (EU Platform): European Platform on Sustainable Finance; (RTS): Regulatory Technical Standards; (SFDR): Sustainable Finance Disclosure Regulation; (DA): Delegated Acts; (NFRD): Non-Financial Reporting Directive; (CBAM): Carbon Border Adjustment Mechanism; (EU-ETS): EU Emissions Trading System; (BoE): Bank of England; (JRC): European Commission Joint Research Centre; (PAI): Principle Adverse Impact; (ITS): Implementing Technical Standards

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

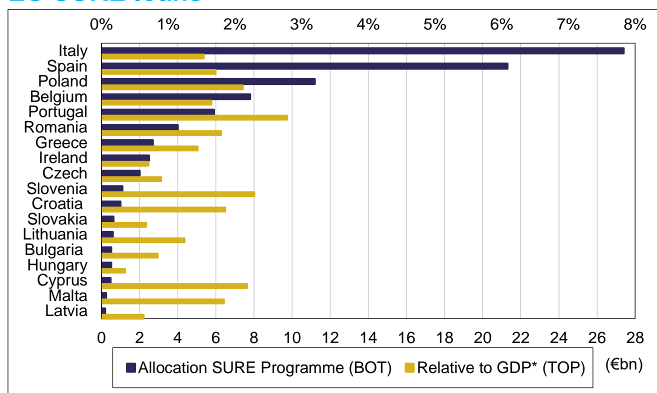
EU Green bond surge to follow social bond programmes

In response to the pandemic, the European Union is becoming a major bond issuer, with a particular aim of tackling environmental and social challenges. Its EUR100bn ICMA-compliant social bond programme (SURE), and the upcoming Next Generation EU recovery fund (NGEU), potentially worth up to EUR800bn (in current prices), represent a massive step change in EU-based bond issuance. Pandemic-related financing needs propelled social bonds to record highs in 2020 with EUR129bn of global issuance dwarfing 2019 volumes of just EUR15bn. The SURE programme was most notable in this context, being made available to member states to fight unemployment risks and other negative economic and social consequences of the coronavirus, in particular helping to fund the short-term working programmes that have successfully limited the rise in joblessness across the region. The scheme was launched in 4Q20 and accounted for 34% of all social bond issuance last year. With EUR32bn issued in the past quarter, the SURE programme helped social bonds to account for more than half of all ESG issuance by FIGs and SSAs during that period. But with issuance to date of EUR75.5bn, three quarters of the EUR100bn programme ceiling has already been funded with additional issuance of EUR13bn planned for 2Q21 and only a further EUR6bn either approved or proposed for future disbursement.

Looking ahead, green bonds are likely to account for a larger share of ESG issuance in Europe reflecting the impact of the NGEU as the EC intends to raise 30% of the EUR800bn recovery fund in this form. This amount would exceed 2019 global green bond supply and, with EUR100bn of the EUR240bn hoped to be issued by end-2021, would provide a significant boost to global volumes. The centrepiece of the NGEU will be the Recovery and Resilience Facility (EUR672.5bn) that will offer loans and grants to member states, which in turn must allocate a minimum 37% of funds accessed for climate investments and reforms and 20% towards digitalisation efforts. The Commission will assess national plans against these targets and distribute the funds over the next three to four years.

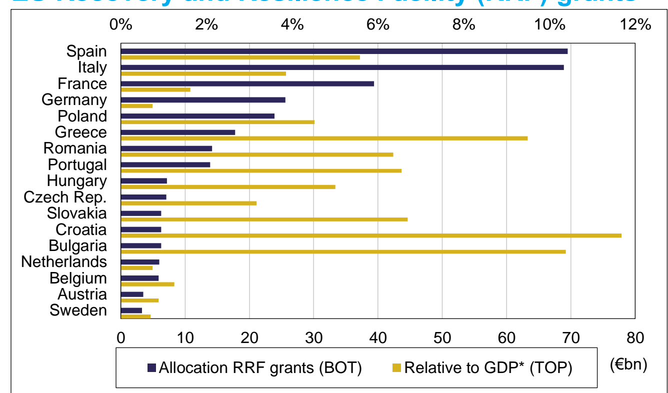
We note, however, that legal challenges to the NGEU may yet derail its timeline. The EU Parliament threatened to sue the Commission for waiving the conditionality that funds disbursed under the NGEU will be subject to the adherence of the rule of law. While this challenge is unfolding, the German Constitutional Court rejected an application for an injunction that would have prevented the German Parliament from ratifying the relevant EU Decision. While it will continue to consider the complaint, the Court allowed the approval of the legislation into national law, which should allow the NGEU to be launched by the summer. We do not expect any meaningful delays in the implementation of the programme, although the full EUR672.5bn RRF seems highly unlikely to be disbursed as member states seem reluctant to take advantage of the EUR360bn loan element of the programme, preferring merely to take the EUR312.5bn of grants.

EU SURE loans



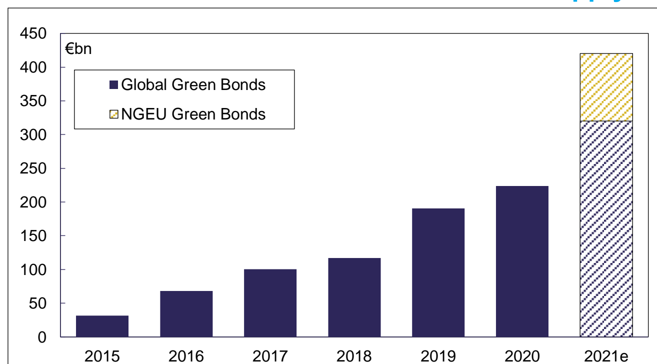
Source: Bloomberg; European Union; Daiwa Capital Markets Europe Ltd.

EU Recovery and Resilience Facility (RRF) grants



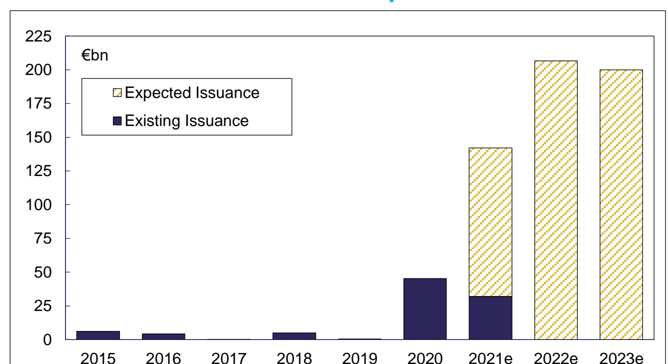
Source: European Commission; Daiwa Capital Markets Europe Ltd.
*Based on 2019 GDP; Showing grants >€3bn;

NGEU contribution to Global Green Bond Supply



Source: Bloomberg; Daiwa Capital Markets Europe Ltd.

Annual Bond Issuance – European Union



Source: Bloomberg; Daiwa Capital Markets Europe Ltd.

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

Transition bonds could see wider adoption further ahead

The ESG landscape is continually maturing and as the market evolves from familiar labels such as 'green', 'social' and 'sustainable' (GSS) we are likely to see more so-called 'transition' bonds in 2021 and beyond, following the publication of the International Capital Market Association's (ICMA) Climate Transition Handbook in early December 2020. These bonds target high carbon-emitting industries that otherwise do not qualify for green finance, allowing them to raise needed capital to transition from 'brown' or polluting business activities to more environmentally friendly, green business activities. However, while volumes of GSS bonds continue to hit new record levels, transition bonds in comparison are still considered niche with just over 11 deals finalised since 2017, notably Italian energy infrastructure firm SNAM in late 2020 and the European Bank for Reconstruction and Development (EBRD) with its inaugural transition bond issued in October 2019. The only European banks in this space so far have been Credit Agricole (Nov-2019) and BPCE (Dec-2020) which have conducted private placements of 'use-of-proceeds' transition bonds with Axa Investment Managers. Both banks issued a EUR100m, 10-year transaction for which the proceeds of the bonds are earmarked for loans made to companies that are transitioning towards a low carbon economy. In the case of BPCE, loans made by its corporate and investment bank Natixis were selected for the portfolio, according to its in-house green weighting factor methodology as well as a sustainability linked loan, bringing its internal capital management in line with goals for sustainability.

In order to meet the objectives enshrined in the Paris Agreement on Climate Change, ICMA published its Transition Finance Handbook to provide clear guidance and common expectations to capital market participants. Notably it points to 'science-based targets and pathways' and 'implementation transparency', referencing the Taxonomy alongside other sources of verification. With guidelines in place, the format received endorsement when the Bank of China (BoC) sold a debut, benchmark transition bond in January 2021, referencing the handbook. The senior unsecured transaction was split into a USD500m, 3-year tranche and a CNY1.8bn (USD280m equivalent) 2-year tranche and was reportedly 4x oversubscribed. It identified several projects eligible for funding under the transition framework that will support China's drive for carbon neutrality by 2060. Looking ahead, we believe that issuers of 'use-of-proceed' transition bonds may face the challenge of identifying a suitable number of transition projects to which they can allocate their capital, and instead opt for sustainability-linked instruments, which are linked to key performance indicators at the entity rather than the transaction level.

Use of Proceeds Transition Bonds

Date of issuance	Issuer	Region	Sector	Amount (m)	Use of Proceeds
May-17	Repsol S.A.	Europe	Oil and gas	€500	Energy efficiency projects and technologies reducing fugitive methane emissions from company's oil refineries.
Jul-17	Castle Peak Power Co. Ltd.	Asia-Pacific	Power generation	US$500	Funding natural gas plant that the company said was critical to Hong Kong's efforts to cut carbon emissions.
Jul-19	Marfrig Global Foods S.A.	South America	Beef processing	US$500	Purchase of cattle in the Amazon region from ranchers who comply with non-deforestation and other sustainability criteria.
Oct-19	EBRD	Supranational	Development bank	€500	Proceeds supported investment in "hard-to-abate" sectors to finance energy efficiency improvements.
Apr-20	Cadent Gas Ltd.	Europe	Gas distribution network	€500	Retrofit gas transmission and distribution networks, develop biomethane and bio-substitute natural gas plants, develop new sustainable transport infrastructure, and reduce buildings' energy consumption.
Jun-20	SNAM SpA	Europe	Gas transmission network	€500	Carbon and emissions reduction, renewable energy, energy efficiency, and green construction projects, as well as retrofit of gas transmission network.
Jun-20	Castle Peak Power Co. Ltd.	Asia-Pacific	Power generation	US$350	Construction of an offshore liquid natural gas receiving terminal in Hong Kong waters and its associated subsea pipeline and gas receiving station.
Nov-20	SNAM SpA	Europe	Gas transmission network	€600	Carbon and emissions reduction, renewable energy, energy efficiency, and green construction projects, as well as retrofit of gas transmission network.
Nov-20	Crédit Agricole	Europe	Banking	€100	Finance LNG-powered ships, investments in energy efficient industries as well as gas power assets in countries where power generation currently relies on coal.
Dec-20	BPCE	Europe	Banking	€100	Finance energy transition assets with high emissions reduction potential and contribution to a low-carbon economy.
Jan-21	Bank of China Ltd.	Asia-Pacific	Banking	US$780	Eligible transition projects (including natural-gas-based power generation, waste heat recovery, and power generation at cement plant) in line with China's goal to achieve carbon neutrality by 2060.
Feb-21	Castle Peak Power Co. Ltd.	Asia-Pacific	Power generation	US$300	Construction of a new combined cycle gas turbine unit at Black Point power station in Hong Kong.

Source: S&P Global, Daiwa Capital Markets Europe Ltd.

Primary markets in 1Q21

During 1Q21, **SSAs** in particular gained additional traction from the surge in issuance of social bonds, which in many cases were designed to offset some of the adverse effects of the pandemic. First quarter SSA volumes reached EUR94bn of which 63% had social bond indicators, up from just 21% one year prior (and 55% in 2020). Issuer concentration in 2021 was noticeable among the few participants such as CADES, Unedic and the European Union through its ICMA-compliant social bond programme (SURE), which together accounted for 63% of all SSA volumes. They also accounted for 95% of all SSA social issuances this year

SSA - Top 10 European ESG Issuers		
Issuers	Total Issued (€m)*	Average Tenor (years)
European Union	75,500	14.7
CADES	37,917	7.6
France	35,874	22.8
EIB	28,781	10.2
KfW	24,658	6.8
UNEDIC	23,000	10.4
SGP EPIC	15,500	26.0
NWB	14,329	11.3
NRW	12,585	12.4
AIIB	10,862	4.6

*Source: Bloomberg, *Cumulative issuances between 2016-1Q21, >€250m;*

Green bonds from SSAs were mostly issued by sovereigns, as was the case in March when Italy issued its long anticipated debut green BTP. This was the longest dated and largest sovereign green bond issued so far at EUR8.5bn, reportedly gathering book orders in excess of EUR80bn (9.4x subscribed). It will contribute towards the Draghi government's environmental and climate strategy while also diversifying its investor base. Unbroken high demand for ESG-themed debt has also contributed to lower borrowing costs as reported by the Climate Bond Initiative. In particular, in 2H20, on average EUR green bonds achieved higher deal subscriptions than conventional bonds (4.2x vs 3.5x) with 57.5% pricing within their conventional yield curves (i.e. investors paid a premium or so-called 'greenium' to hold the bonds). Similar results were found for USD deal subscriptions (3.5x vs 3.3x) and the observed 'greenium' applied to 19% of transactions reviewed. This tightening against vanilla deals was also observed at the seven-day and 28-day observation points after pricing, thus extending into the secondary market. Looking ahead, primary pricing points may improve further following discussions around favourable capital treatment of green transactions, more favourable allocations in the ECB's asset purchase programme, lower repo haircuts and the above mentioned green-asset ratio.

FIG ESG supply has enjoyed a bumper year so far, with EUR25bn in 1Q21 outpacing any previous first quarter in terms of volumes. Primary market activity was somewhat back-loaded during the quarter with almost half of all deals taking place in March as issuers took advantage of calmer funding conditions following policy announcements by the ECB, Fed and BoE. Notable transactions include:

- **Intesa** - Green SP, sized at EUR1.25bn with a 7-year tenor. A strong order book (2.7x subscribed) saw the deal tighten by 27bps, pricing about 2bps through fair value. This was only the third bond issued under Intesa's green, social and sustainable bond framework.
- **Nordea** - Green SNP, EUR500m, 10Y WNG. This received strong book orders (3.3x), pricing at MS + 52bps. It was Nordea's third ESG offering to date under its green bond framework and its first SNP deal since June 2018. The transaction will support Nordea's MREL subordination requirement, which is not yet known but expected to be communicated during 2Q21.
- **Credit Mutuel Arkea** – Social SNP, EUR500m, a 12-year maturity. The final order book stood at EUR1.1bn allowing the lead managers to guide pricing 20bps tighter than IPT. The proceeds of the deal will be allocated to social projects, predominantly social housing in France under the bank's green, social and sustainability bond framework.
- **Deutsche Kreditbank (DKB)** – DKB stated that going forward it would only tap bond markets in green or social format having sold its first transaction, compliant with the latest draft of the EU Taxonomy and Green Bond Standard. The EUR500m, green SP, 5-year tenor was also the first SP bond issued at negative yield (-0.021%) after it had priced MS+35bps. The short tenor of the bond, the seniority of the payment rank, investor demand and the issuers strong credit profile were all contributing factors to final pricing.

FIG - Top 10 European ESG Issuers		
Issuers	Total Issued (€m)*	Average Tenor (years)
LBBW	6,287	5.93
Berlin Hyp	5,000	8.32
CaixaBank	5,000	7.05
DNB Boligkreditt	4,488	6.72
ING Groep	4,422	8.23
BBVA	4,000	6.33
BNP Paribas	3,250	6.10
Rabobank	2,931	6.00
SpareBank 1	2,815	6.33
Intesa	2,500	5.67

*Source: Bloomberg, *Cumulative issuance between 2016-1Q21, >€250m;*

ESG-themed **subordinated FIG** has traditionally been a rare sight with ongoing discussions whether Tier 2 subordinated debt is suitable to finance eligible pools of green assets. Green AT1s have been limited to BBVA's inaugural issuance in July-2020. Nevertheless, we increasingly observed issuers entering this space with the following notable transactions:

- **CaixaBank** - EUR1bn green Tier 2, 10.25NC5.25 priced at MS+163bps.This was the first such issuance by a Spanish bank and the issuer stated that due to strong demand the deal had priced 5-10bps inside fair value. 72% of the bonds were distributed among investors recognized as socially responsible investors, with 67% of them having the highest recognition in responsible investment.
- **Axa –** Inaugural green Tier 2 bond for EUR1bn, 20.5NC10.5 issued under its new sustainability bond framework. As one of the original members of the net zero asset managers imitative the French insurer is committed to reducing carbon emission in its portfolios to zero over the next 30 years, making it a desirable investment choice for ESG investors. Axa also hadn't issued a tier 2 bond in three years which further increased demand and helped it price 10bps within the yield curve of an equivalent conventional trade.

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

(Table 1) Key ESG Transactions – 1Q21

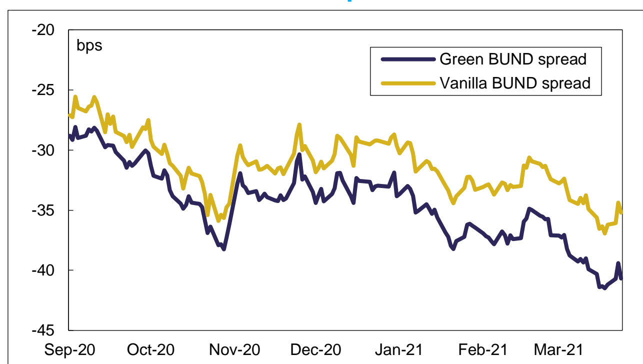
Bank	Rank	Amount	Maturity	Final Spread (bps)	IPT (bps)	Book Orders
SSA						
EIB	Senior Unsecured (Sustainability)	EUR1.5bn	20Y	MS - 7	MS - 5	>EUR22bn
Cades	Unsecured (Social)	EUR4bn	10Y	OAT + 16	OAT + 18	>EUR9.3bn
Italy Government	BTP (Green)	EUR8.5bn	24Y	BTPS + 12	BTPS + 15	>EUR80bn
France Government	OAT (Green)	EUR7bn	23Y	OAT + 18	OAT + 20	>EUR34.5bn
European Union	Senior Unsecured (Social)	EUR4bn	30Y TAP	MS + 5	MS + 7	>EUR49bn
European Union	Senior Unsecured (Social)	EUR10bn	7Y	MS - 16	MS -13	>EUR83bn
European Union	Senior Unsecured (Social)	EUR9bn	15Y	MS - 4	MS - 2	>EUR61bn
FIG (Senior)						
LBBW	SNP (Social)	EUR750m	10Y	MS + 63	MS + 80/85	>EUR50bn
CaixaBank	SNP (Green)	EUR1bn	8NC7	MS + 90	MS + 115	>EUR3.7bn
BayernLB	SNP (Green)	EUR500m	7Y(WNG)	MS + 53	MS + 75	>EUR2.1bn
DKB	SP (Green)	EUR500m	5Y	MS + 35	MS + 55	>EUR1.2bn
Rabobank	SNP (Green)	USD1bn	6NC5	T + 55	T + 70/75	n/a
ING	Senior HoldCo (Green)	GBP800m	8NC7	G + 95	G + 110/115	>GBP1.25bn
Credit Mutuel Arkea	SNP (Social)	EUR500m	12Y	MS + 80	MS + 100	>EUR1.1bn
Bank of Ireland	Senior HoldCo (Green)	EUR750m	6NC5	MS + 77	MS + 100	>EUR2.25bn
Intesa	SP (Green)	EUR1.25bn	7Y	MS + 93	MS + 120	>EUR3.4bn
Nordea	SNP (Green)	EUR500m	10Y	MS + 52	MS + 75	>EUR1.65bn
BPER	SP (Social)	EUR500m	6NC5	MS + 175	MS + 200	>EUR1.25bn
Standard Chartered	Senior Unsecured (Sustainability)	USD500m	4NC3	T + 88	T + 115	>USD1.7bn
Deutsche Bank	SP (Green)	USD800m	5Y	T + 87	T + 110	>USD2.7bn
FIG (Subordinated)						
ANZ Bank	Tier 2 (Sustainable)	EUR750m	10.25NC5.25	MS + 112	MS + 135/140	>EUR2.3bn
CaixaBank	Tier 2 (Green)	EUR1bn	10.25NC5.25	MS + 163	MS + 195	>EUR2.2bn
Axa	Tier 2 (Green)	EUR1bn	20.5NC10.5	MS + 140	MS + 170	>EUR1.85bn

Source BondRadar; Bloomberg; Daiwa Capital Markets Europe Ltd.

Secondary markets in 1Q21

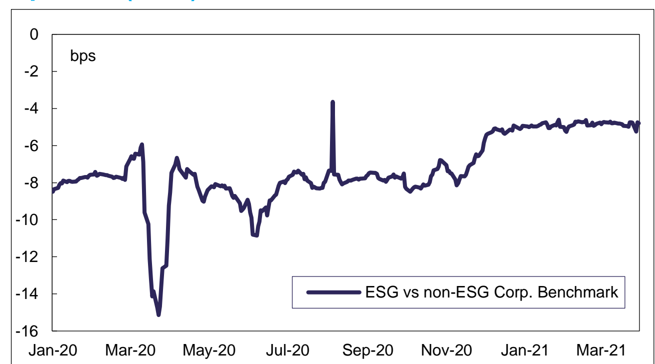
Based on observed spread developments, greeniums at issue appear to have been carried over and maintained in the secondary market. This was exemplified when Germany issued a twin BUND structure in 2H20 with the notes sharing almost all characteristics while one was green and the other conventional. The large deal size and high liquidity of German government bonds allows onlookers to form an opinion whether or not investors assign value to green labels. Indeed, the green bond priced with a slight premium of 1bp and has consistently exhibited a lower yield since (with a median spread difference of -3.1bps). In 1Q21, the median spread differential for green EUR and USD bonds compared to their vanilla counterparts was 4bps and 2.4bps respectively, taking into account bonds sized at least EUR250m. Historically, option adjusted spreads (OAS) for ESG and non-ESG themed indices have moved more or less in line, the notable exception seen in March-2020 with differentials being most pronounced when market volatility was particularly high. The median negative OAS between Barclays MSCI Euro-Corporate ESG Index and Barclays Pan-European Aggregate Corporate Index over the observation period was -7.6bps. It is difficult to assess whether the negative option adjusted spread differential is due to mechanical supply and demand mismatches, or other factors such as their perceived lower risk due to the higher underlying asset values that they help fund.

Green vs Vanilla BUND Z-spreads



*Source: Bloomberg; *incl. FIG, Corp & Utilities*

Spreads (OAS) of ESG vs non-ESG benchmarks



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

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

Daiwa Capital Markets

Credit Research

Key contacts

London		
Head of Research	*Chris Scicluna*	+44 20 7597 8326
Financials, Supras/Sovereigns & Agencies	*William Hahn*	+44 20 7597 8355
Research Assistant	*Katherine Ludlow*	+44 20 7597 8318
Tokyo		
Domestic Credit		
Chief Credit Analyst	*Toshiyasu Ohashi*	+81 3 5555 8753
Electronics, Automobiles, Non-Banks, Real Estate, REIT	*Takao Matsuzaka*	+81 3 5555 8763
Chemicals, Iron & Steel	*Kazuaki Fujita*	+81 3 5555 8765
International Credit		
Non-Japanese/Samurai, European Sovereigns	*Hiroaki Fujioka*	+81 3 5555 8761
Non-Japanese/Samurai	*Fumio Taki*	+81 3 5555 8787
Non-Japanese	*Jiang Jiang*	+81 3 5555 8755
London Translation		
Head of Translation, Economic and Credit	*Mariko Humphris*	+44 20 7597 8327

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

Follow us _

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/.

The statements in the preceding paragraphs are made as of April 2021.

Explanatory Document of Unregistered Credit Ratings

In order to ensure the fairness and transparency in the markets, Credit Rating Agencies became subject to the Credit Rating Agencies' registration system based on the Financial Instruments and Exchange Act. In accordance with this Act, in soliciting customers, Financial Instruments Business Operators, etc. shall not use the credit ratings provided by unregistered Credit Rating Agencies without informing customers of the fact that those Credit Rating Agencies are not registered, and shall also inform customers of the significance and limitations of credit ratings, etc.

■ The Significance of Registration

Registered Credit Rating Agencies are subject to the following regulations:
1) Duty of good faith.
2) Establishment of control systems (fairness of the rating process, and prevention of conflicts of interest, etc.).
3) Prohibition of the ratings in cases where Credit Rating Agencies have a close relationship with the issuers of the financial instruments to be rated, etc.
4) Duty to disclose information (preparation and publication of rating policies, etc. and public disclosure of explanatory documents).

In addition to the above, Registered Credit Rating Agencies are subject to the supervision of the Financial Services Agency ("FSA"), and as such may be ordered to produce reports, be subject to on-site inspection, and be ordered to improve business operations, whereas unregistered Credit Rating Agencies are free from such regulations and supervision.

■ Credit Rating Agencies

[Standard & Poor's]

The Name of the Credit Rating Agencies group, etc

The name of the Credit Rating Agencies group: S&P Global Ratings ("Standard & Poor's")
The name and registration number of the Registered Credit Rating Agency in the group: S&P Global Ratings Japan Inc. (FSA commissioner (Rating) No.5)

How to acquire information related to an outline of the rating policies and methods adopted by the person who determines Credit Ratings

The information is posted under "Unregistered Rating Information" (http://www.standardandpoors.co.jp/unregistered) in the "Library and Regulations" section on the website of S&P Global Ratings Japan Inc. (http://www.standardandpoors.co.jp)

Assumptions, Significance and Limitations of Credit Ratings

Credit ratings assigned by Standard & Poor's are statements of opinion on the future credit quality of specific issuers or issues as of the date they are expressed and they are not indexes which show the probability of the occurrence of the failure to pay by the issuer or a specific debt and do not guarantee creditworthiness. Credit ratings are not a recommendation to purchase, sell or hold any securities, or a statement of market liquidity or prices in the secondary market of any issues.

Credit ratings may change depending on various factors, including issuers' performance, changes in external environment, performance of underlying assets, creditworthiness of counterparties and others. Standard & Poor's conducts rating analysis based on information it believes to be provided by the reliable source and assigns credit ratings only when it believes there is enough information in terms of quality and quantity to make a conclusion. However, Standard & Poor's does not perform an audit, due diligence or independent verification of any information it receives from the issuer or a third party, or guarantee its accuracy, completeness or timeliness of the results by using the information. Moreover, it needs to be noted that it may incur a potential risk due to the limitation of the historical data that are available for use depending on the rating.

This information is based on information Daiwa Securities Co. Ltd. has received from sources it believes to be reliable as of March 7th, 2017, but it does not guarantee accuracy or completeness of this information. For details, please refer to the website of S&P Global Ratings Japan Inc. (http://www.standardandpoors.co.jp)

[Moody's]

The Name of the Credit Rating Agencies Group, etc

The name of the Credit Rating Agencies group: Moody's Investors Service ("MIS")
The name and registration number of the Registered Credit Rating Agency in the group: Moody's Japan K.K. (FSA commissioner (Rating) No.2)

How to acquire information related to an outline of the rating policies and methods adopted by the person who determines Credit Ratings

The information is posted under "Unregistered Rating explanation" in the section on "The use of Ratings of Unregistered Agencies" on the website of Moody's Japan K.K. (The website can be viewed after clicking on "Credit Rating Business" on the Japanese version of Moody's website (https://www.moodys.com/pages/default_ja.aspx)

Assumptions, Significance and Limitations of Credit Ratings

Credit ratings are Moody's Investors Service's ("MIS") current opinions of the relative future credit risk of entities, credit commitments, or debt or debt-like securities. MIS defines credit risk as the risk that an entity may not meet its contractual, financial obligations as they come due and any estimated financial loss in the event of default. Credit ratings do not address any other risk, including but not limited to: liquidity risk, market value risk, or price volatility. Credit ratings do not constitute investment or financial advice, and credit ratings are not recommendations to purchase, sell, or hold particular securities. No warranty, express or implied, as to the accuracy, timeliness, completeness, merchantability or fitness for any particular purpose of any such rating or other opinion or information, is given or made by MIS in any form or manner whatsoever.

Based on the information received from issuers or from public sources, the credit risks of the issuers or obligations are assessed. MIS adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MIS considers to be reliable. However, MIS is not an auditor and cannot in every instance independently verify or validate information received in the rating process.

This information is based on information Daiwa Securities Co. Ltd. has received from sources it believes to be reliable as of April 16th, 2018, but it does not guarantee accuracy or completeness of this information. For details, please refer to the website of Moody's Japan K.K. (https://www.moodys.com/pages/default_ja.aspx)

[Fitch]

The Name of the Credit Rating Agencies group, etc

The name of the Credit Rating Agencies group: Fitch Ratings ("Fitch")
The name and registration number of the Registered Credit Rating Agency in the group: Fitch Ratings Japan Limited (FSA commissioner (Rating) No.7)

How to acquire information related to an outline of the rating policies and methods adopted by the person who determines Credit Ratings

The information is posted under "Outline of Rating Policies" in the section of "Regulatory Affairs" on the website of Fitch Ratings Japan Limited (https://www.fitchratings.com/site/japan)

Assumptions, Significance and Limitations of Credit Ratings

Ratings assigned by Fitch are opinions based on established criteria and methodologies. Ratings are not facts, and therefore cannot be described as being "accurate" or "inaccurate". Credit ratings do not directly address any risk other than credit risk. Credit ratings do not comment on the adequacy of market price or market liquidity for rated instruments. Ratings are relative measures of risk; as a result, the assignment of ratings in the same category to entities and obligations may not fully reflect small differences in the degrees of risk. Credit ratings, as opinions on relative ranking of vulnerability to default, do not imply or convey a specific statistical probability of default.

In issuing and maintaining its ratings, Fitch relies on factual information it receives from issuers and underwriters and from other sources Fitch believes to be credible. Fitch conducts a reasonable investigation of the factual information relied upon by it in accordance with its ratings methodology, and obtains reasonable verification of that information from independent sources, to the extent such sources are available for a given security or in a given jurisdiction. The assignment of a rating to any issuer or any security should not be viewed as a guarantee of the accuracy, completeness, or timeliness of the information relied on in connection with the rating or the results obtained from the use of such information. If any such information should turn out to contain misrepresentations or to be otherwise misleading, the rating associated with that information may not be appropriate. Despite any verification of current facts, ratings can be affected by future events or conditions that were not anticipated at the time a rating was issued or affirmed.

For the details of assumption, purpose and restriction of credit ratings, please refer to "Definitions of ratings and other forms of opinion" on the website of Fitch Rating Japan Limited.

This information is based on information Daiwa Securities Co. Ltd. has received from sources it believes to be reliable as of September 27th, 2019, but it does not guarantee accuracy or completeness of this information. For details, please refer to the website of Fitch Rating Japan Limited (https://www.fitchratings.com/site/japan)

February 2020

Daiwa Capital Markets

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.

Conflicts of Interest: Daiwa Securities Co. Ltd. may currently provide or may intend to provide investment banking services or other services to the company referred to in this report. In such cases, said services could give rise to conflicts of interest for Daiwa Securities Co. Ltd.

Daiwa Securities Co. Ltd. and Daiwa Securities Group Inc.: Daiwa Securities Co. Ltd. is a subsidiary of Daiwa Securities Group Inc.

Other Disclosures Concerning Individual Issues:
1) As of 26 April 2016, Daiwa Securities Co. Ltd., its parent company Daiwa Securities Group Inc., GMO Financial Holdings, Inc., and its subsidiary GMO CLICK Securities, Inc. concluded a basic agreement for the establishment of a business alliance between the four companies.
As of end-December 2017, Daiwa Securities Group Inc. owned shares in GMO Financial Holdings, Inc. equivalent to approximately 9.3% of the latter's outstanding shares. Given future developments in and benefits from the prospective business alliance, Daiwa Securities Group Inc. could boost its stake in GMO Financial Holdings, Inc. to up to 20% of outstanding shares.

2) Daiwa Real Estate Asset Management is a subsidiary of Daiwa Securities Group Inc. and serves as the asset management company for the following J-REITS: Daiwa Office Investment Corporation (8976), Daiwa Securities Living Investment Corporation (8986).

3) Samty Residential Investment became a consolidated subsidiary of Daiwa Securities Group Inc. effective 10 September 2019.

4) On 30 May 2019, Daiwa Securities Group Inc. formalized an equity/business alliance with Samty, and as of 14 June 2019 it owned 16.95% of shares outstanding in Samty along with convertible bonds with a par value of Y10bn. Conversion of all of said convertible bonds into common shares would bring the stake of Daiwa Securities Group Inc. in Samty to 27.28%.

5) Daiwa Securities Group Inc. and Credit Saison Co., Ltd. entered into a capital and business alliance, effective 5 September 2019. In line with this alliance, Daiwa Securities Group Inc. is to acquire up to 5.01% of Credit Saison's total common shares outstanding (excl. treasury shares; as of 31 Jul 2019).

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