



SSA bonds: A sustainable route to institutional portfolio diversification?

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Key points

- The euro-denominated SSA bond universe – which often benefits from government guarantees – in our view currently offers an attractive spread pick-up over euro government bonds
- We believe SSAs present one of the best responsible investment profiles within the fixed income universe
- Adding allocation to SSA bonds could improve diversification and liquidity, in our view, and their predictable cashflows can complement both traditional credit and liability-matching portfolios

Supranational, sub-sovereigns and agency (SSA) bonds are a distinct but often overlooked sub-asset class within fixed income. We believe they can offer an attractive investment opportunity to institutional investors due to a potential improved yield over government bonds, their typically higher credit ratings and a diverse risk profile.

Many European pension funds and insurance companies invest in government bonds to match their liabilities and in corporate bonds as part of their growth allocation. But at 16% of a key euro market benchmark, SSAs are a sub-asset class in their own right.ⁱ They often enjoy the benefits of some government guarantees and can add diversification, while currently providing a spread pick-up over government bonds.

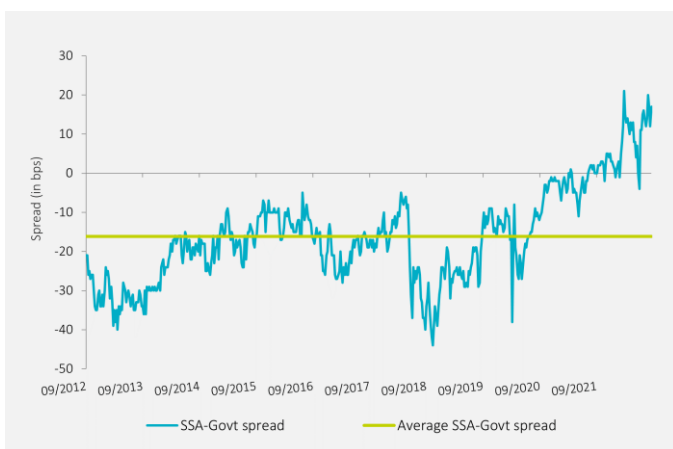
Supranational bonds also qualify as High-Quality Liquid Assets (HQLA) and can be used for portfolio liquidity enhancement and as collateral for repo and derivatives exposure.ⁱⁱ Further, due to the objectives of many SSAs, particularly supnationals, they can be prolific issuers of green, social and sustainability bonds and therefore, alongside their relatively low carbon emissions, can improve the responsible investment footprint of investor portfolios, in our view.

Spread turnaround

The higher relative ratings enjoyed by SSA bonds (set out in the table below) are partly a function of lower ratings among some key government bonds. The rating differential had been partly

responsible for the fact that in the 10 years before the COVID-19 crisis the average spread on the euro SSA universe was about 20 basis points (bp) lower than that of euro-denominated government bonds of the same maturity. Since the pandemic, however, this negative spread has turned positive with the spread widening to 20bp at the end of August 2022, meaning that SSAs now have both a higher spread and a higher rating than euro government bonds. One reason for this is the increased role of supranational institutions in supporting sovereign states – indicating, we think, a likely enduring trend.

Figure 1: SSA-government bonds asset swap spread evolution



Source: AXA IM, Bloomberg, ICE BofA Index, 31 August 2022

Table 1: Breakdown of the euro-denominated (EUR) investment grade bond market

Characteristics	EMU0 Index	Govt. bonds	SSA bonds	Corporate bonds
Yield (%)	2.4	2.1	2.2	3.2
Spread versus Euribor (bp)	104.0	71.9	90.6	197.7
Duration (years)	6.8	7.6	7.3	4.8
Number of issuers	1,046	21	149	783
Number of issues	6,908	447	1,396	3,964
Average rating	A+	A+	AA+	A-
% EUR Broad Market Universe	100.0%	55.6%	16.3%	21.4%

Source: Bloomberg, ICE BofA Index, 31 August 2022

Digging into the detail

In the euro-denominated SSA market there is a diverse range of issuing entities, from German states to the European Investment Bank and the French Rail network operator SNCF,

or even non-European entities like Canadian provinces issuing in euros.

In the table below, we have split the euro SSA market (represented by the ICE BofA Euro Quasi-Government Index) into four categories which are distinct in terms of their risks, level of guarantee and use of issuing proceeds.

Table 2: EUR SSA sector breakdown

Characteristics	Euro SSAs	Agency	Local authorities	Supra-national	Govt. guaranteed
Yield (%)	2.2	2.1	2.2	2.2	2.0
Spread versus Euribor (bp)	90.6	79.9	88.4	78.0	71.7
Duration (years)	7.3	6.3	8.1	8.2	6.2
Number of issuers	149	32	60	15	24
Number of issues	1,386	260	555	213	221
Average rating	AA+	AA	AA+	AAA	AA+
Outstanding amount (€bn)	2,198	331	503	643	544
% EUR Broad Market Universe	16.3%	2.5%	3.6%	4.7%	4.2%

Source: Bloomberg, ICE Index, 31 August 2022. The euro SSA market is represented by the ICE BofA Euro Quasi-Government Index (EQ00). The remainder of the index (1.3%) is made up by foreign sovereigns issuing in euros which we do not count as SSAs.

Assessing financial guarantees

By and large, SSA issuance falls into three camps. It is local or regional government debt (LRG), bonds issued by government-related entities (GRE) or bonds issued by supranational organisations (Supra). An assessment of the robustness of the financial guarantee is therefore based on any explicit or implicit support from the related sovereign or sovereigns.

An explicit guarantee would be a formal obligation set out in the legal system in which the entity operates. An implicit guarantee would be an analytical judgment, which depending on the strengths of argument may be assessed as strong implicit or weak implicit.

The operational activities of an SSA issuer (whether LRG, GRE or Supra) are determined by public administration authorities. We therefore believe their debt repayment capacity is rooted in the willingness as well as the capability of the public budget, rather than the pure financial flexibility of the entity itself. This gives SSAs a financial risk profile that can differ markedly from a traditional credit risk assessment approach.

We use a broad checklist to assess the nature of financial guarantees which may apply:

- A formal guarantee is classified as an explicit guarantee. This may be granted to an issuer itself or to the specific issuance taking place. A formal guarantee is ideally an unconditional, irrevocable, and first-call guarantee
- If there is no formal guarantee, our fixed income research team examines the strength of implicit support. Their detailed research determines our view on whether the entity/issuance enjoys strong implicit support or weak implicit support
- If the assessment finds no proof of support, the entity cannot be classified as a guaranteed entity.

Case study: European Union – Supranational

Credit assessment, guarantee, and financial objective

The European Union (EU) is one of the main European supranational institutions, rated AAA by rating agencies. We have a strong fundamental view on the issuer (that holds our highest internal credit score), relying on the average rating of supporting countries, which is assigned by the AXA IM Macroeconomic Research team. We outline below the key strengths of the EU credit profile:

- Strong commitment and political mandate of biggest and wealthiest budget contributors, which in our view is equivalent to a strong implicit guarantee
- Priority of debt service over operating expenditures in combination with multi-annual balanced budget principle creates implicit guarantee-alike transfer structure
- Very strong liquidity control
- Quasi-access to the Treasury of member states in an emergency

On the other hand, we identified the following weaknesses:

- We believe a significant amount of debt will be raised over the next few years
- A complete EU collapse is still only a tail-risk scenario, but frictional conflicts among member states could lead to withdrawal from the bloc of certain countries
- Deteriorating credit worthiness of member countries

Sustainability profile

The EU is one of the largest issuers of green and social bonds issuer through its NextGenerationEU (NGEU) at €750bn and Support to mitigate Unemployment Risks in an Emergency (SURE) programmes, with a firm issuance commitment of 30% into green bonds under NGEU by 2026. The institution is highly committed to fighting climate change and aims to ensure fair working conditions and the fostering of social protection and inclusion across EU member states. While the issuer has a strong environmental, social and governance (ESG) score, we have a neutral opinion on both the green and social bonds issued due to the lack of detailed breakdown of the allocation of proceeds for green bonds and due to the lack of exclusionary criteria for social bonds. Otherwise, we believe the project types, overall issuer strategy and impact reporting are good.

Case study: Kuntarahoitus Oyj – Agency

Credit assessment, guarantee, and financial objective

Kuntarahoitus Oyj (which translates as Municipal Finance Plc) is a Finnish agency rated AA+ by rating agencies and is explicitly guaranteed by the Municipality Guarantee Board (owned by Finnish municipalities – over 50% – as well as local government pension institutions and the Republic of Finland). The issuer lends to the Finnish public sector and public housing sector. We have a positive fundamental view on the issuer given what we believe are its key strengths:

- Ultimate guarantee from Finnish municipalities
- Robust credit capacity of the guarantor to stand by the granted guarantee

- Low business risk based on very strong management of credit, liquidity, and funding risk backed by very strong capitalisation

Conversely, the issuer’s credit profile presents the below weaknesses:

- Dependence on wholesale funding (no deposits)
- Low loan book diversification due to the narrow scope of customer definition, limited to Finnish LRGs
- Operational complexity of the guarantee structure, requiring passing the guarantee claim pro-rata to 314 individual guarantors (Finnish LRGs).

Sustainability profile

We particularly like Kuntarahoytus Oyj for its strong environmental profile. We have a positive view on its green bond issuance, dedicated to public transportation, energy efficiency, water and waste management and renewable energy projects. We note that the institution offers a margin discount depending on the green rating of the projects.

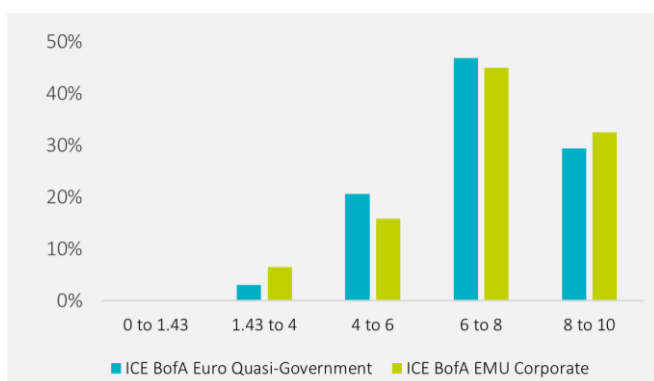
Sustainability in the SSA bond market

Many European asset owners have focused more keenly on the responsible investment profile of their investments due to an increasing regulatory burden, an acceptance that ESG is an important factor in asset pricing, and a drive to combat emerging social and environmental crises.

We believe that SSA bonds offer one of the most attractive sustainability profiles compared to almost any other asset class. They form one of the best-performing sectors for ESG scores, are major issuers of green, social and sustainability bonds and typically are low carbon emitters compared to high-emitting corporates.

Our AXA IM ESG scoring system uses MSCI methodology as a base and rates issuers on a scale of zero (lowest) to 10 (highest). The chart below shows the allocation to each ESG rating bucket for a euro corporate credit index and a euro SSA index. It shows the lower concentration of poor ESG scores in the SSA market and relative higher concentration in the mid-segment. Investing in the asset class can potentially lower the ESG risks of investor portfolios, in our view.

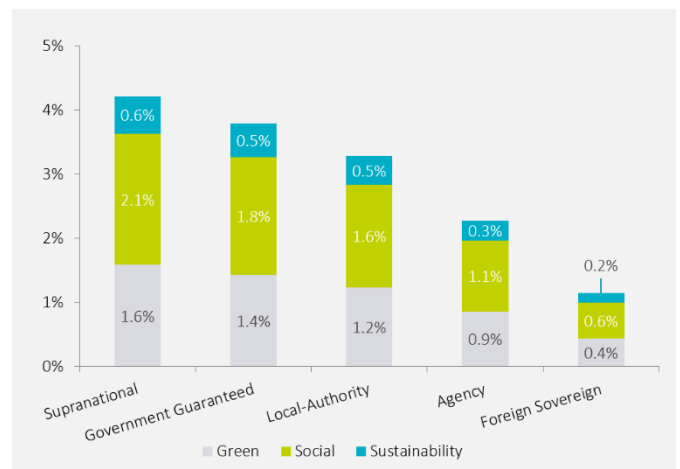
Figure 2: ESG scores distribution in an SSA index versus corporate credit



Source: AXA IM, 15 September 2022. The MSCI ratings system assigns scores in increments of 1.43.

While SSAs represent 16% of the broad euro market index, they contribute 46.2% of the outstanding amount of impact bonds from the same market. Close to 15% of SSA market value outstanding is in green, social or sustainability bonds, according to our review of market data.

Figure 3: Impact bonds breakdown across the SSA market



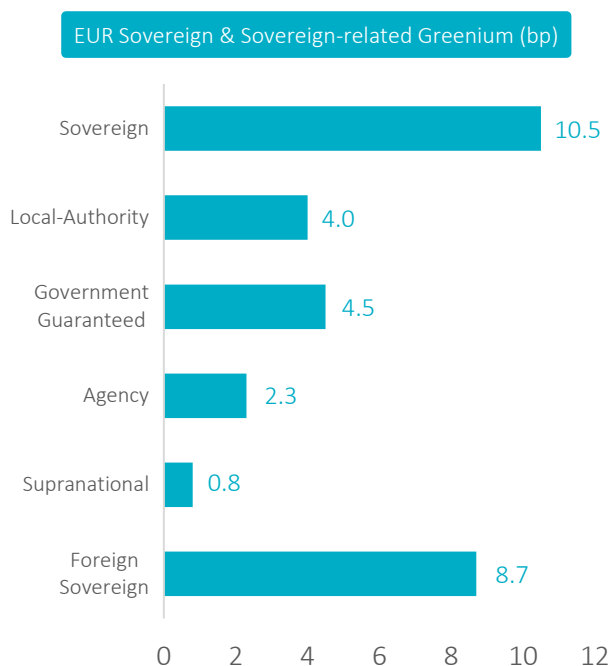
Source: AXA IM, 15 September 2022

The SSAs represent over 40% of the overall impact bond market and are the largest group of issuers among fixed income sub-asset classes (as of July 2022). This dominance is particularly true within social and sustainable bonds, where SSAs make up 64% and 76% of the market value respectively.ⁱⁱⁱ

While there are clear potential benefits to investing in use-of-proceeds bonds, we are careful to avoid overpaying for such assets as we, above all, remain conscious of clients’ financial objectives. As such, we monitor the so-called ‘greenium’, the additional cost of buying a green bond over a traditional bond from the same issuer, and its evolution over time.

At the end of June 2022, we observed an average 6bp greenium in the overall euro-denominated green bond market, using AXA IM’s proprietary valuation model. Here, we can see significant differences between sovereign, SSA and corporate credit, and within sub-sectors within those broad groups. For example, on the sovereign and SSA side, we observe the highest greenium for sovereign bonds (10.5bp), while it is negligible for supranational (0.8bp).

Figure 4: Sovereign and SSA greenium comparison



Source: AXA IM, Bloomberg, 1 July 2022. Based on AXA IM proprietary greenium valuation model using global aggregate bond universe. For illustrative purpose only.

Generally, we find that supply-demand imbalance is key driver in determining the greenium, perhaps explaining why SSAs – prolific issuers of green bonds – have smaller greeniums relative to their sovereign and corporate credit peers. Furthermore, we found the greenium is not structural and shifts over time – highlighting the importance of an active approach to bond selection.

Carbon emissions in the SSA market

Carbon emissions in the SSA market, depending on the methodology, can be considerably lower than those in the corporate bond market as they are not closely linked to the coal or to the energy and basic materials sectors.

To give one example, the European Investment Bank has a carbon intensity (Scope 1 and 2^{iv}) of less than one, while a typical utility company could easily have a carbon intensity of over 500.^v At an asset owner level, then, we think that adding an allocation to SSAs can reduce the carbon intensity of the portfolio.

However, calculating and reporting on carbon emissions in the SSA market is a complex topic for three reasons:

- [1] Carbon emissions data can be limited compared to corporates and sovereigns as this has been a smaller focus for data providers and can be difficult for some issuers to calculate
- [2] Policy makers and industry bodies have focussed first on corporate issuers, with limited detail on how sovereign and SSA carbon emissions should be measured and reported
- [3] The SSA market is a heterogenous market and is split between issuers that have a profile more closely aligned with governments (we estimate this includes about 60% of the ICE BofA Euro Quasi-Government Index) and those that operate more like corporates (the remaining 40%). This creates complexities in terms of calculating portfolio-level carbon emissions metrics which may have different denominators.

Having said this, we believe that the following steps, undertaken by AXA IM in our ongoing management of client assets, achieve best practice in reporting carbon emissions in SSAs:

- [1] Provide clear and detailed explanations of how portfolio carbon emissions have been calculated
- [2] Undertake detailed fundamental research to measure how aligned issuers are to the goals of the Paris Agreement^{vi}
- [3] Monitor the latest policy and industry developments and update any calculations and reporting as required.

Summary

We think the market characteristics and our experience analysing issuers and delivering SSA portfolios shows how this segment of the fixed income universe can be used to help achieve investment objectives. It is not a homogenous asset class, and therefore, those objectives can determine how a portfolio of SSAs is constructed and managed. There is potential, we believe, to make liability hedging more efficient, to build a stand-alone portfolio aimed at providing regular and predictable cashflows, or to use SSAs as a sub-portfolio of a traditional credit mandate as a source of liquidity or a de-

risking option. There may also be an argument for using non-euro-denominated SSAs where it can increase the investible universe and regional diversification.

Furthermore, due to the relatively ‘clean’ nature of the SSA universe and our efforts to provide extensive coverage and capabilities in responsible investment, we think there is potential here to help clients meet sustainability, regulatory,

and philosophical requirements. We use [AXA IM's Sustainability Bond framework](#) requirements to aim to minimise the risk of ‘greenwashing’ – where verifiable actions fail to live up to the stated goals.

Contact your local office for a full version of this paper, including a client case study and an exploration of trading trends and transaction costs.

Glossary

Yield	A measure of return from interest or dividend income expressed as a percentage of an asset's price. In bond markets, the yield would tend to be higher for debt deemed to be a higher risk. The yield moves in the opposite direction to a bond's price.
Spread	The amount of extra yield a bond offers investors over and above the current yield on that country's government debt. Normally expressed in basis points, with one basis point equalling 0.01%. The term can also refer to the difference between the bid and the ask price of a single security.
Liquidity	This refers to cash flow, or how easily an asset can be converted into cash. Shares which can be bought or sold rapidly on the stock market are considered a liquid asset whereas a commercial property would be considered more illiquid as it is much more cumbersome to sell.
Derivatives	Investments whose value depends on the changes in the price of an underlying asset or security. For example, instead of holding a stock directly, a derivative is a contract to buy or sell a stock at a set price in the future, and investors seek to profit from the difference between the predicted and actual outcome. The use of derivatives can result in greater fluctuations of a fund's value and may cause the fund to lose as much as, or more than, the amount invested if the price moves sharply against them.
Hedging	A transaction involving derivatives that aims to reduce a particular financial risk. For example, buying assets in another currency to offer mitigation for an unfavourable move in foreign exchange markets.

ⁱ ICE BofA Euro Broad Market EMU0

ⁱⁱ HQLA are defined by the Bank for International Settlements as assets that can be easily and immediately converted into cash at little or no loss of value.

ⁱⁱⁱ Source: Bloomberg 15 September 2022

^{iv} **Scope 1:** All direct greenhouse gas (GHG) emissions linked to a company's own operations. **Scope 2:** Indirect GHG emissions stemming from the consumption of purchased electricity, heat or steam. **Scope 3:** Other indirect emissions coming from the supply chain of a company and from its customers (i.e. before and after its own operations).

^v Weighted Average Carbon Intensity (WACI) is expressed as tonnes of CO₂ equivalent produced per million euros of revenue)

^{vi} The 2015 Paris Agreement called for limiting global warming to well below +2°C above pre-industrial times, and ideally +1.5°C

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