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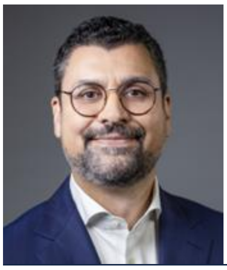
Marketing material

Covered bonds – the success story continues

Covered bonds may not only offer high security standards, but also attractive valuations.



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IN A NUTSHELL

- No defaults in a more than 250-year history – the high quality of covered bonds is impressive
- They can provide stability, too, even in times of increased market volatility
- In some jurisdictions and for selected maturities, covered bonds even offer higher yields with better ratings than comparable government bonds

Covered bonds: a potential anchor of stability in an uncertain market

Unlike almost any other financial instrument, covered bonds may offer stability and reliability. These characteristics are in great demand during periods of economic uncertainty and structural upheaval. As double-secured bonds they combine the issuer's creditworthiness with a separate pool of high-quality collateral. This unique structure can make them highly resilient, even in times of crisis, and less dependent on broader market fluctuations. They can offer banks reliable access to long-term refinancing and thus make a key contribution to the resilience of the financial sector. Given rising refinancing costs, tighter liquidity requirements and ongoing uncertainty, they proved themselves indispensable not only in the days and weeks following Liberation Day, but also during the recent political turmoil in France. In our view they can offer an attractive risk/return ratio, as well as the opportunity to diversify globally within an increasingly harmonised legal framework.

1 / Over 250 years of covered bonds

Covered bonds have a long history as a pan-European investment instrument. Their development gained momentum in the 18th and 19th centuries, with significant milestones in Prussia (1770), Denmark (1797), Poland (1825), and France (1852). The first issuers included both public institutions, such as the so-called "Landschaften," and private mortgage banks. The securities were originally used to finance agricultural businesses before increasingly being used for investments in residential and commercial real estate.[1] Covered bonds have now made a name for themselves around the world, with adopters embracing a concept that is perceived as attractive, primarily (but not exclusively) due to its sophisticated security architecture. By harmonising the legal basis for issuing these covered securities, regulators are attempting to improve them further. They are also establishing a fundamental structure that we think could potentially add to the attractiveness in terms of risk and return.

German mortgage bonds with a particularly long tradition

The Pfandbrief is considered groundbreaking in many respects for the development of the entire covered bond segment, based on its very high level of security, underpinned by the Pfandbrief Act. The Pfandbrief is a German success story with an

[1] ECBC Fact Book 2025, European Covered Bond Council as of September 2025

impeccable credit history to date (as is the case with all other covered bonds). As things stand today, the Pfandbrief is positioned to continue its dynamic development.

Its history is long and in 2019 the Pfandbrief celebrated its 250th anniversary, a remarkable milestone in a fast-changing financial world. On August 29, 1769, Frederick the Great signed a so-called Cabinet Order which is considered to have given birth to the Pfandbrief.[2] The main aim was to provide cash-strapped landowners with loans to resume and expand their agricultural production. As the model proved effective and sustainable, it spread beyond Prussia in the following decades and similar instruments were established in other European countries, such as Denmark and France.

At the beginning of 1900 the Mortgage Bank Act, passed the previous July, came into force, creating a uniform legal framework for the issuance of mortgage bonds in Germany for the first time. More than a century later, in 2005, the previous regulations, including the Mortgage Bank Act and the provisions governing public and ship Pfandbriefe, were consolidated and replaced by a new, comprehensive Pfandbrief Act.[3] In the years that followed this Pfandbrief Act was strengthened by several amendments and adapted to the prevailing market conditions. In particular, the quality assurance measures introduced by the Act laid the foundation for the Pfandbrief success story to continue.

1.1 Definition

Covered bonds are secured bonds issued by credit institutions. To secure the claims of covered bond creditors, the issuer's eligible assets (e.g., credit claims such as private and commercial real estate loans or claims against public authorities) are separated from its other assets and pooled.[4] This pool is dynamic and intended to ensure that only the highest quality claims are used to cover outstanding bonds. In most countries there are also legal regulations governing which assets qualify for use as collateral. In many jurisdictions monitoring of collateral assets provides an additional level of security.

If an issuer becomes insolvent, the cover pool is available to covered bond creditors on a priority basis to satisfy their claims. But the so-called double recourse right also applies: it means that investors have recourse to both the cover pool and the issuer itself if the cover assets are insufficient to satisfy the claims, which is a unique feature to covered bonds.

Worldwide, no covered bond has ever defaulted.[5] In cases where funds have proven tight, the regulator has usually intervened to prevent default by ordering compulsory mergers of the issuing institutions or combining the respective cover pools.

1.2 The covered bond universe today spans the globe

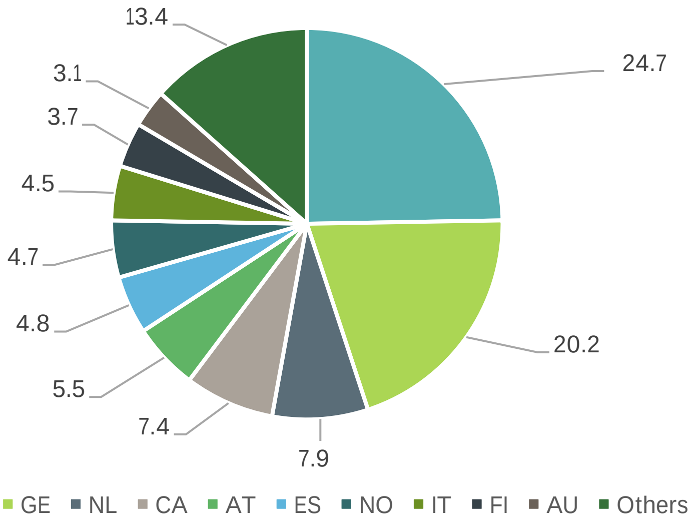
Over the past few decades covered bonds have become one of the most important segments of the European bond market. The outstanding volume now amounts to over €3.3 trillion.[6] Covered bonds are now issued in well over 30 different countries and issuance is growing rapidly outside Europe. Canada, Australia, New Zealand, and Singapore now play an important role and covered bonds are also gaining ground in Brazil, Croatia, Georgia, and Bulgaria. The total number of countries with outstanding covered bonds has more than doubled compared to 20 years ago. Several other countries are planning to create comparable legal frameworks to issue these securities in the short or medium term. The share of outstanding covered bonds outside Europe is now well over ten percent–and the trend is rising.

According to the European Covered Bond Council (ECBC), there were 333 active issuers of covered bonds worldwide at the end of 2024, 82 of which also issued sustainable covered bonds, a segment that is seeing particularly strong growth.[7] The

[2] Von den Anfängen bis zum Boom der Hypothekenbanken (From the beginnings to the boom of mortgage banks), Friederike Sattler as of June 2019
[3] 10 Jahre Pfandbriefgesetz – Textsammlung und Materialien (10 years of the Pfandbrief Act – collection of texts and materials) as of November 2015
[4] F.A.Z. Börsenlexikon (F.A.Z. Stock Market Dictionary) as of August 2025
[5] Nordea Asset Management, Covered Bonds: A Strong Contender in 2024's Uncertain Landscape as of 9/26/24
[6] Bloomberg Finance L.P.as of September 2025
[7] ECBC Fact Book 2025, European Covered Bond Council as of September 2025

number of issuing institutions has fluctuated over the years, with new issuers entering the market while others leave, mainly due to mergers and acquisitions.

Allocation of globally outstanding covered bonds in benchmark format (in percent)



Sources: NordLB, DWS Investment GmbH as of September 2025

1.3 Investors appreciate the security features, as do the rating agencies

Covered bonds' double recourse provision and strong legal framework result in consistently very good credit ratings from leading rating agencies. Pfandbriefe consistently receive top ratings in the investment grade range – predominantly AAA – with a largely stable outlook. Investors range from conservative private investors to large institutional ones, such as insurance companies and pension funds, as well as asset managers who appreciate the security features, and the European Central Bank (ECB). The treasury departments of banks are currently the most important single investor group. Their high liquidity and attractive returns play an important role. Covered bonds also offer regulatory advantages, for example in terms of capital adequacy under Basel III and Solvency II.

In general, covered bonds benefit from a very clear, strict regulatory framework and very high transparency requirements in most jurisdictions. Some of the legal provisions are listed here:

- The German Pfandbrief Act strictly regulates the requirements for cover pools, issuers, and monitoring. Among other things, it stipulates overcollateralization of at least two percent and regular external audits.[8]
- The EU Covered Bond Directive of 2019 harmonizes the minimum standards for covered bonds in the European Union. It promotes market transparency and facilitates cross-border investments.[9]
- Under Basel III, covered bonds receive preferential treatment in banking regulation, usually with a risk weighting of ten percent for high-quality issues. This enables favorable capital requirements for banks.[10]
- Under Solvency II, insurance companies benefit from favorable capital requirements for covered bonds, further strengthening demand from institutional investors.[11]

[8] Verband deutscher Pfandbriefbanken (Association of German Pfandbrief Banks) as of January 2024
[9] European Union Law (EUR-Lex) as of December 2019
[10] Risk weights and third country equivalence for covered bonds, pfandbrief.market as of April 2024
[11] Credit Views, BBVA as of March 2025

This strict regulation significantly reduces the default risk on covered bonds, leading to increased stability in this market segment overall.

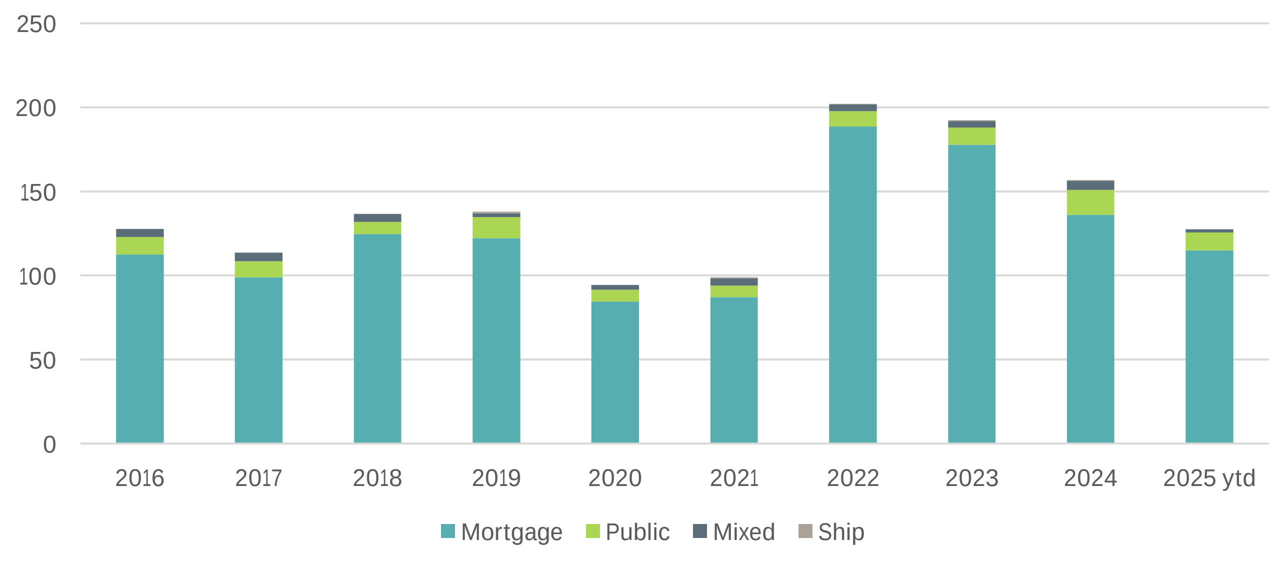
2 / Primary market – high demand and supply picked up significantly over the course of the year

2.1 Probably no issuance record in 2025, but strong activity, especially before and after the summer break

So far this year global primary market activity in the covered bond sector has not been able to match the volumes of the previous three years. Nevertheless, it is certainly positive that there was once again a significant increase in issuance activity, particularly in the months before the summer break. The resumption of issuance activity after the summer was also characterized by strong momentum – the second-highest weekly issuance volume since the beginning of the year was observed during this period.[12]

In 2024 issuance volumes fell short of the records set in 2022 and 2023 – a period when the European Central Bank was a major buyer on the primary market: covered bonds were the first product purchased by the ECB at that time). In both 2022 and 2023 the volumes for the full year were in the region of EUR 200 billion (based on euro-denominated benchmark issues). By mid-September this year approximately EUR 132 billion had been brought to market since the beginning of the year, suggesting that a record is unlikely this year. Our forecasts assume that the issuance volume at the end of the year is likely to exceed €140 billion.

Slight decline in issuance volumes in the benchmark segment (in EUR bn)



Sources: Credit Agricole, DWS Investment GmbH as of September 2025

[12] Bloomberg Finance L.P. as of September 2025

According to a report by Deutsche Bank, the market breadth achieved since the beginning of the year is particularly noteworthy, eclipsing the previous record set in 2022. Twenty-four countries are reported to have been active on the primary market to date, compared to 22 in 2022, showing the attractiveness of covered bonds on the issuer side and investor side.[13]

For decades Germany and France have consistently topped the list of the most active countries. The two countries alternate irregularly in the lead. At the end of the first half of the year German Pfandbriefe were once again slightly ahead of their French counterparts. Somewhat surprisingly, Norway trails behind by some distance, followed by Australian and Canadian covered bonds. Italy, Austria, the Netherlands, and Finland appear to have particular potential for catching up, at least when measured against the previous year's activities. Canadian issuers have already shown high issuance activity in recent years. However, 2025 was not only record-breaking in terms of market activity in June and the general market breadth already described. At just under 60 percent, the share of the four- to six-year maturity range was higher than it had been for a long time. The previous flagship maturity of ten years accounted for only nine percent of the volume placed – one of the lowest figures ever recorded.

But there has already been one notable issue this year of a 20-year Pfandbrief from a German issuer. It is the first covered bond with such a long maturity in almost five years and ranks among the top 10 longest benchmark covered bonds ever issued. This shows that there is still interest in high-quality bonds with long maturities.[14]

Net view actually of significantly higher relevance

It is always useful to look at the primary market in net terms. Only this figure shows how much the global outstanding volume of covered bonds is growing – or indeed not growing. The €132 billion in newly issued covered bonds to date is offset by just under €110 billion in maturities. This results in net market growth of just under €22 billion. Excluding the coronavirus years of 2020 and 2021, this is the lowest figure since 2017, according to our calculations. However, maturities in the first half of the year were also historically high. The reason for this was the pronounced issuance activity in three- to five-year securities during and after the years of the coronavirus pandemic. In the remaining months of the year it is widely expected that outstanding repayments are likely to exceed the forecast new issues, and so the net issuance volume in the second half of the year is expected to be slightly negative. This should not prevent the year as a whole from being seen as positive. According to maturity data, exceptionally high repayments are also to be expected during at least the next two years, which will initially have to be offset by gross new issuance. However, if demand remains consistently high, this supply constellation is likely to support spreads in the secondary market.

3 / Secondary market – Attractive stable spreads

3.1 Covered bonds are usually assigned to the rates segment

The bond market is divided into two segments: a rates segment and a credit segment. Although covered bonds are technically a form of bank financing and therefore also involve issuer risk, most investors tend to classify them as belonging to the rates segment rather than the credit segment. This classification reflects their behavior and role in portfolio construction. Pfandbriefe, in particular, tend to show a high correlation with government bonds and swap curves, low spread volatility compared to swaps, and lower sensitivity to idiosyncratic credit events – especially when compared to primarily unsecured or subordinated bank debt instruments.

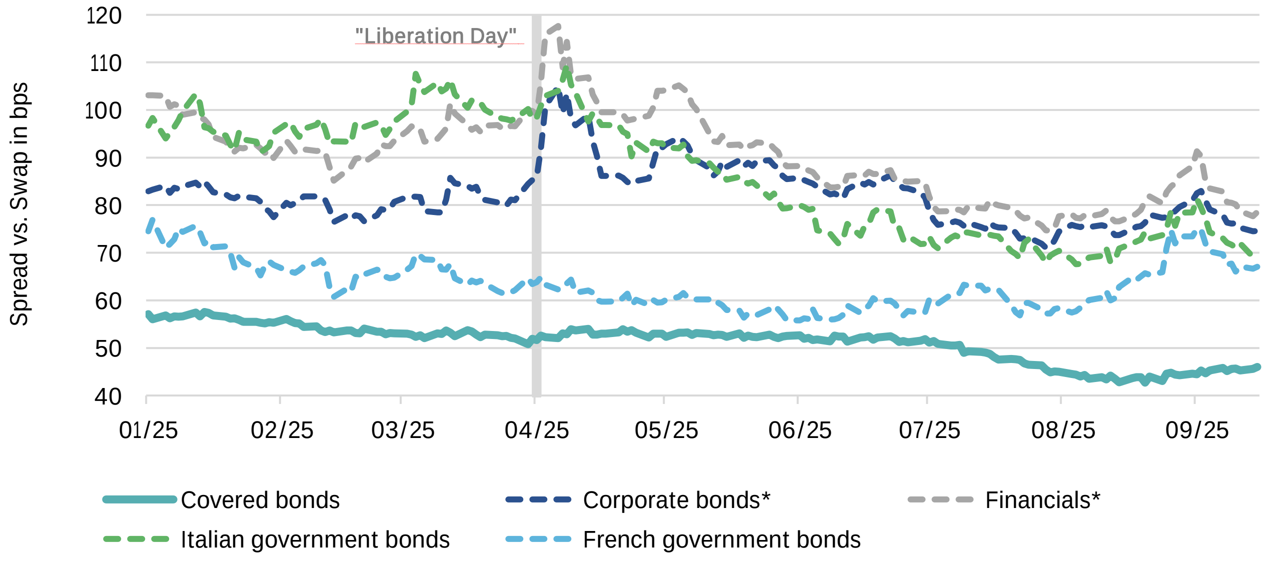
The yields on covered bonds are primarily determined by macroeconomic factors and monetary policy expectations. In essence, we believe they function as a high-grade spread product, with a risk/return profile closer to that of government bonds or government-related issuers than to that of corporate bonds or financials.

[13] Covered Bonds and SSA Update, Deutsche Bank as of August 2025
[14] Deutsche Kreditbank (DKB) as of June 2025

3.2 Strong performance in the first weeks after issuance

In addition to the general spread development of individual bonds and the entire segment, many investors analyze the performance of newly issued covered bonds within the first few trading days. This is because the early developments can determine whether it is still worthwhile investing in a particular covered bond at a later date if, for example, an investor did not receive a full allocation at the time of issue.

Covered bonds with significantly lower volatility in turbulent times



Sources: iBoxx, Bloomberg Finance L.P., DWS Investment GmbH as of 9/16/25
* Rating range AAA – A, the decisive factor is the lowest rating from Moody's, Fitch, and S&P

According to an analysis by NordLB, almost every issue has had a narrower swap spread in the first few days of trading than at the time of issue so far this year.[15] This means that the securities have been in high demand on the secondary market. Of course, this is partly due to how tightly or generously the covered bonds were originally priced. However, the fact that this trend has been evident in recent months almost independently of the original (whether generous or ambitious) issue spread can be interpreted as a sign of a very robust secondary market. Another sign of this is the fact that for almost every issue during the "books open" period, the indicative spread offered was significantly reduced – in other words, the covered bonds were sold at a higher price than indicated in the initial published price range. Almost regardless of the size of the book, most issues this year were oversubscribed many times over.

3.3 Relative value in the covered bond market – attractive valuations

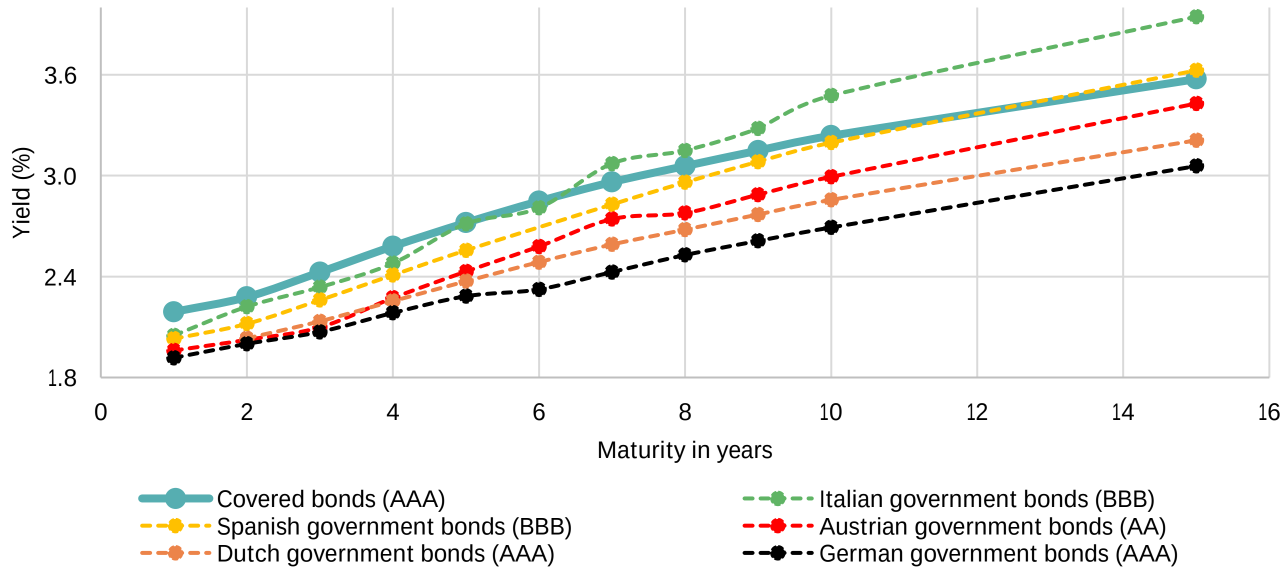
The shockwaves of Russia's attack on Ukraine in March 2022 also reached the covered bond market at the time, leading to wider spread levels in individual segments and jurisdictions. This general trend could be observed for around a year and a half, with the Targeted Longer-Term Refinancing Operations (TLTRO) repayment wave and associated additional issues playing a particularly important role. Since around August 2023, however, a gradual counter-movement has been observed, with the entire covered bond market appearing to undergo sustained compression. In most segments spreads have returned to their February 2022 levels.[16]

Compared to other market segments such as sovereign, supranational, and agency bonds (SSAs) and senior unsecured bank bonds, covered bonds have proven to be relatively resilient to the highly volatile news during much of the year to date. For

[15] Covered Bond & SSA View, NordLB as of July 2025
[16] Bloomberg Finance L.P. as of September 2025

example, during the first few months of 2025, when political and fiscal uncertainty dominated the headlines, especially in France and Germany, SSAs were significantly more affected. U.S. import tariff announcements and the associated volatility were more of an issue for unsecured debt instruments. Even in the wake of the recent renewed nervousness about the political situation in France, covered bonds once again lived up to their reputation as a safe haven[17] in turbulent market times.

Compared to other bond segments, covered bonds offer higher yields at sometimes even better ratings



Sources: Bloomberg Finance L.P., DWS Investment GmbH as of 9/16/25

Over the summer months covered bond swap spreads in most jurisdictions narrowed a little further. In our view, this was triggered not only by the stabilization of the Bund/swap spread, which largely halted its narrowing trend, and the continued tightening of SSA spreads. The calm on the primary market probably also played a part. At present, the levels achieved appear to be largely stable, and covered bonds still look attractive from a relative value perspective, both against German government bonds and against swaps. With regard to possible spread widening in the months leading up to the end of the year, we consider the risk to be rather limited – even if the market's absorption capacity could be put to the test once again, as some covered bonds from the ECB portfolio are still due to mature, while the central bank is no longer a buyer of any new bonds.

4 / Outlook

4.1 In volatile markets covered bonds are likely to continue to attract widespread interest

Thanks to their sophisticated security architecture, enshrined in various legal frameworks, covered bonds are in a league of their own. Their risk/return profile is also likely to appeal to investors looking for an attractive valuation as well as a very good rating in the bond segment. In many Eurozone and European countries, covered bonds may offer a combination of a better rating and yield that is quite unusual compared to government bonds, at least in certain maturity bands.

As covered bonds have developed into a global product with issuers from around the world, they may offer diversification while maintaining high quality standards. Analyzing existing similarities and differences with regard to the underlying housing

[17] Financial safe havens are investments or assets that are expected to retain or increase in value during times of market turbulence.

markets, the composition of the cover pools and the underlying legal framework enables investors to select the most suitable bond from this segment. The unique selling points of covered bonds are unlikely to change in future; instead regulators are actively working on enhancing their unique features, particularly those relating to security.

Furthermore, we would expect the Eurozone bond market to be supported if capital flows shift from the U.S. to Europe in coming months, in which case covered bonds would also benefit. The euro is by far the dominant currency for issuance in this segment.

We believe the appeal of covered bonds is greatest in the five-year maturity range. While longer maturities are not necessarily unattractive, SSAs appear better at longer maturities. For many investors stable spread development is the key factor in their investment decisions. But liquidity also plays a significant role. It should be noted that in our opinion secondary market liquidity is generally good for covered bonds and very good for investors wanting to sell. Since the ECB stopped buying bonds, liquidity has improved significantly across the board. Generally speaking, however, it is lower for older bonds that have been outstanding for longer than for issues which have come onto the market since the ECB stopped buying bonds.

Even after more than 250 years, the success story of covered bonds shows no sign of ending. We expect their unique characteristics could mean that investors continue to enjoy their security and performance for the next 250 years.

Glossary

The Basel Committee on Banking Supervision's revised international standards, called Basel III, on capital adequacy, as adopted at the G20 summit in November 2010.

Bunds is a commonly used term for bonds issued by the federal government with a maturity of 10 years.

Collateral refers to an asset that a lender accepts as a security for a loan.

Covered bonds are securities similar to asset-backed securities (ABS) which are covered with public-sector or mortgages loans and remain on the issuer's balance sheet.

The credit market is the market for corporate bonds

Default is the failure to meet the legal obligations of a loan, for example when a corporation or government fails to pay a bond which has reached maturity. A national or sovereign default is the failure or refusal of a government to repay its national debt.

Diversification refers to the dispersal of investments across asset types, geographies and so on with the aim of reducing risk or boosting risk-adjusted returns.

The European Central Bank (ECB) is the central bank for the Eurozone.

The Eurozone is formed of 19 European Union member states that have adopted the euro as their common currency and sole legal tender.

Idiosyncratic risk is a risk which is related solely to the individual company and has no correlation with the general market risk.

Investment grade (IG) refers to a credit rating from a rating agency that indicates that a bond has a relatively low risk of default.

Liquidity refers to the degree to which an asset or security can be bought or sold in the market without affecting the asset's price and to the ability to convert an asset to cash quickly.

The final payment date of a financial instrument is its maturity.

Monetary policy focuses on controlling the supply of money with the ulterior motive of price stability, reducing unemployment, boosting growth, etc. (depending on the central bank's mandate).

A mortgage loan is used to finance the purchase of real estate.

The Pfandbrief (plural Pfandbriefe) is a mostly triple-A-rated German bank debenture that has become the blueprint of many covered bond models in Europe and beyond.

Primary issuance is the sale of newly issued debt securities by borrowers to lenders.

A Primary Market is where new securities are issued for the first time to raise funds, typically through investment banks. It enables companies and government to raise capital.

A rating is a standardized assessment of the creditworthiness of the issuer and its debt instruments by specialized agencies. The main three rating agencies are the Moody's (Aaa over Baa1 to C, best to worst), S&P (AAA over BBB+ to D, best to worst) and Fitch (AAA over BBB+ to D, best to worst).

Refinancing refers to the replacement of an existing financial obligation with a new obligation.

A safe-haven investment is an investment that is expected to retain or even increase its value in times of market turbulence.

On the secondary market, securities or assets are purchased from other investors, rather than from issuing companies themselves.

The Solvency II directive codifies and harmonizes EU insurance regulation, with a particular focus on the amount of capital an insurance firm must hold.

The spread is the difference between the quoted rates of return on two different investments, usually of different credit quality.

Subordinated bonds rank below other loans and securities with regard to claims on a company's assets or earnings.

A swap, a type of derivative, is an agreement between two parties to exchange sequences of cash flows for a set period of time.

Targeted longer-term refinancing operations (TLTROs) refer to the ECB's providing of financing to Eurozone banks.

Valuation attempts to quantify the attractiveness of an asset, for example through looking at a firm's stock price in relation to its earnings.

Volatility is the degree of variation of a trading-price series over time. It can be used as a measure of an asset's risk.

Yield is the income return on an investment referring to the interest or dividends received from a security and is usually expressed annually as a percentage based on the investment's cost, its current market value or its face value.

Important information – EMEA, APAC, LATAM & MENA