

What is a Government bond, complex?

Government bonds are issued by sovereign states or state-guaranteed undertakings. Countries with unstable economies, political situations, etc. will basically have a lower credit rating, and therefore government bonds from these countries will entail a higher risk.

Government bonds may generally be divided into two types:

- Bonds issued in a currency other than that of the country of issuance. The currency is usually euros (EUR) or US dollars (USD), so called, hard-currency government bonds.
- Bonds issued in the local currency of the country of issuance, so called, local-currency government bonds.

Hard-currency government bonds

Hard-currency government bonds are most often bonds issued in EUR or USD. Emerging market countries in particular have issued hard-currency bonds, but for instance Sweden has EUR denominated issues.

For investors, these bonds involve an interest rate risk, a credit risk and an exchange-rate risk. Obviously, the exchange rate risk is eliminated if the investor only buys bonds issued in the same currency as the investor's currency base. The exchange rate risk is very low, if a DKK based investor buys bonds issued in EUR, but the risk is not eliminated.

Local-currency government bonds

Local-currency bonds are bonds issued in the country's own currency. For investors, these bonds involve an interest rate risk, a credit risk and an exchange rate risk as is the case for hard-currency bonds. Generally local-currency bonds are regarded as more risky than hard-currency bonds, since the exchange rate risk is generally higher, as reflected in the higher interest rate level.

Credit rating

All types of government bonds are generally assigned a credit rating, which depends on their creditworthiness. Credit ratings are assigned by a number of private credit rating agencies of which Standard & Poor's (S&P), Moody's and Fitch are the most important. These agencies analyse and assess the financial strength of the issuers as well as their ability to honour debts, and they subsequently assign appropriate credit ratings. These credit ratings take the form of letter combinations from AAA to C, and the overall structure is identical across the agencies, although there is some variation with respect to lower-case and upper-case letters.

| Moody's | S&P | Fitch | Meaning |
|---------|------|-------|--|
| Aaa | AAA | AAA | Prime |
| Aa1 | AA+ | AA+ | High Grade |
| Aa2 | AA | AA | |
| Aa3 | AA- | AA- | |
| A1 | A+ | A+ | Upper Medium Grade |
| A2 | A | A | |
| A3 | A- | A- | |
| Baa1 | BBB+ | BBB+ | Lower Medium Grade |
| Baa2 | BBB | BBB | |
| Baa3 | BBB- | BBB- | |
| Ba1 | BB+ | BB+ | Non Investment Grade Speculative |
| Ba2 | BB | BB | |
| Ba3 | BB- | BB- | |
| B1 | B+ | B+ | Highly Speculative |
| B2 | B | B | |
| B3 | B- | B- | |
| Caa1 | CCC+ | CCC+ | Substantial Risks |
| Caa2 | CCC | CCC | Extremely Speculative |
| Caa3 | CCC- | CCC- | In Default w/ Little Prospect for Recovery |
| Ca | CC | CC+ | |
| | C | CC | In Default |
| | | CC- | |
| D | D | DDD | |

The table above lists an overview of the types of credit ratings. It should be noted that, overall, bonds are divided into investment grade and speculative grade, also called junk bonds. Issuers of investment grade bonds are considered to have a good or

satisfactory ability to meet interest and repayment obligations.

Junk bonds have significant speculative elements, and the bond yield is generally higher to compensate

for the higher risk. Many investors may only invest in investment grade bonds, and therefore the most important credit rating distinction is generally between investment grade and speculative grade.

GOVERNMENT BONDS

Pros

- You may invest in state-guaranteed bonds.
- You may obtain low, but relatively secure returns by investing in government bonds with a high credit quality.
- You may obtain higher returns by accepting a larger risk when investing in government bonds with a low credit quality.
- You may obtain an exchange rate gain by investing in government bonds issued in another currency than your base currency.
- You may invest in government bonds with different maturities, which enables you to speculate in yield curve fluctuations in a country.

Cons

- When investing in government bonds, you assume a credit risk in respect of the country's ability and willingness to service its debt.
- When investing in government bonds, you assume an exchange rate risk if you invest in a government bond issued in another currency than your own.
- When investing in government bonds, you assume an interest rate risk, which depends on the maturity of the bond. Further, there is an interest-rate risk relative to the monetary policy of the country in question.

Ability and willingness to service debt

Basically, the credit risk pertaining to hard-currency government bonds consists of two elements:

- 1) The country's ability to service foreign-currency debt
- 2) The country's willingness to service foreign-currency debt.

Often 1) and 2) are linked, but not necessarily.

The credit risk pertaining to local-currency bonds is largely identical with that of hard-currency bonds. The most important difference is that the debt is issued in the currency of the country of issuance. It is usually easier to service the debt in one's own currency than in a foreign currency.

Among other things based on the saying that a country may always print more money or impose higher taxes on its citizens in order to service its local-currency debt.

Therefore, countries generally have a higher credit rating for local-currency bonds than hard-currency bonds.

What is a credit spread?

Usually, issues denominated in USD are compared with US government bonds and EUR-denominated issues with German government bonds. A credit spread refers to the yield premium of bonds denominated in a hard currency to underlying AAA government bonds.

When an investor invests in hard-currency bonds, he should take into account whether the credit spread looks set to narrow or widen and whether the underlying yields on US government bonds, for instance, look set to move upwards or downwards.

Country risk and market risk

The credit spread depends on many different factors. The factors may roughly be divided into two groups:

- 1) Events related to a given country (country risk)
- 2) Global credit appetite, which affects all credits (market risk).

Country risk and market risk very often affect one another, especially when markets are turbulent.

Country risk covers many different risks. But it especially covers the development in the country's budget, public debt, current account, growth, inflation, and credit rating as they all indicate whether the country is able to service its debt. Economic indicators are highly affected by the political regime in a country. Therefore, we often see that countries with not very high political stability, weak growth and messy finances trade at very high credit spreads, and according to the market they are assigned a relatively large risk of collapse within a foreseeable future.

As regards the country risk and future credit spreads, a large number of factors play a role in the somewhat longer term. These factors are a well-functioning tax system, demographic developments, the competitiveness of the country, export composition, oil price, willingness to reform, etc.

Prices reflect local yields

As mentioned above, hard-currency bonds trade at a credit spread to the yield on the underlying government bond. The price of local-currency bonds usually reflects local yields. At any rate, at the short end of the yield curve. With the very low yields in the western economies, it is often possible to obtain a

considerable yield premium compared with hard-currency bonds.

The pricing of local-currency bonds is affected by other economic indicators than hard-currency bonds, which are mainly the country's debts and external balances. Local-currency bonds are generally affected by growth and inflation indicators, but also public finances and the current account. Further, political stability is also of importance for the pricing of local-currency bonds as well as central bank credibility.

Risk

When using benchmarks (e.g. interest rate benchmarks) in government bonds, you must be aware of the risk that these benchmarks are or can be subject to national, international or other initiatives, which may mean that the composition of the benchmark is changed or that the benchmark completely disappears.

Further information is available at:

trustednovusbank.gi/general-terms/fallback-plans

According to the risk classification, government bonds issued by the Danish government or countries in the euro zone in other currencies than DKK or EUR as well as government bonds issued by other sovereign states are classified as amber.

Read more about the risk classification of investment products at:

trustednovusbank.gi/investmentinformation

Tax

We do not give advice on tax issues in connection with specific transactions. If you wish to learn about the specific importance of the tax rules for you, we recommend that you consult your accountant.



What you should know before trading

We recommend that your investment profile is reviewed before you engage in transactions. Your relationship manager can help you with that. We also recommend that you contact your relationship manager if you have any questions in relation to anything described in this fact sheet, or if you would like to have some points clarified.

Most government bonds are fairly likely to be transferred in connection with a sale. However, investors should be aware that especially non-liquid government bonds may be hard to sell and that this risk is often increased by market unrest.