An Understanding of Bonds

WARNING: This investment is not a deposit. This is an investment product which may involve derivatives. Do not invest in it unless you fully understand and are willing to assume the risks associated with it. If you are in any doubt about the risks involved in the product, you may clarify with the intermediary or seek independent professional advice.

The investment decision is yours and you are advised to exercise caution in making any investment decision, including understanding the extent of your exposure to loss of your initial investment with regards to your financial situation, investment experience and investment objectives.

This document contains a brief summary of some (and NOT ALL) of the structured product terms, features and risk disclosures and is not meant to be an exhaustive summary. You should refer to the relevant product documentation for complete details of the product. The terms of any transaction will be agreed with you and recorded in a post confirmation notice that Standard Chartered Bank provides to you. The contents of this document have not been reviewed by any regulatory authority.

If English is not your preferred language, please check with your Private Banker if this document and other product documentation relating to this product are available in your preferred language. Some product documentation is available only in English. If this is the case and you do not understand the contents of either this document or any other product documentation relating to this product, you should not invest in this product.

Any Chinese translations of product documentation are provided to you FOR REFERENCE ONLY, and where there is any inconsistency between the Chinese translation and original English version, the ENGLISH VERSION WILL PREVAIL. Where your Private Banker provides you with a copy of a Chinese translation of any product documentation, please ensure that you also receive a copy of the original English version.

What is a Bond?

If you are looking to build up a well-diversified portfolio, you will usually be advised to include both stocks and bonds among your investments. While stocks may offer you the potential for capital appreciation, bonds may provide a steady stream of investment income, and play an important role of potentially lowering your overall portfolio risks.

A bond is a debt security where the bond issuer (the borrower) issues the bond for purchase by the bondholder (the lender). It is also known as a fixed income security, as a bond usually gives the investor a regular or fixed return.

Typical bond issuers include:
- Sovereign entities
- Governments/Government agencies
- Banks
- Non-bank financial institutions
- Corporations

What is Bond Quality?

Before you make an investment decision to invest in a bond, it is important to consider the quality of the bond (or the creditworthiness of the issuer). You can do that by looking at its assigned bond rating. This is a credit rating given to the bond by specialised rating agencies, after they have reviewed the issuer’s financial condition and debt repayment ability.

Bonds assigned ratings above a certain threshold are considered investment grade, while bonds rated below the threshold are known as sub-investment grade or high-yield bonds.

When you invest in a bond, you are essentially lending a sum of money to the bond issuer. In return, you are usually entitled to receive:

(i) interest payments (coupon) at scheduled intervals; and
(ii) capital repayment of your initial principal amount at an agreed date in the future (maturity date).
### Credit Ratings by Specialised Rating Agencies

<table>
<thead>
<tr>
<th>Grade/Quality of Bond</th>
<th>Moody’s</th>
<th>Standard &amp; Poor’s</th>
<th>FITCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest</td>
<td>Aaa</td>
<td>AAA</td>
<td>AAA</td>
</tr>
<tr>
<td>High</td>
<td>Aa</td>
<td>AA</td>
<td>AA</td>
</tr>
<tr>
<td>Upper Medium/Medium</td>
<td>A</td>
<td>BBB</td>
<td>BBB</td>
</tr>
<tr>
<td></td>
<td>Baa</td>
<td>BBB</td>
<td>BBB</td>
</tr>
<tr>
<td>Speculative/Highly Speculative</td>
<td>Ba1</td>
<td>BB+</td>
<td>BB+</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>CCC</td>
<td>CCC</td>
</tr>
<tr>
<td></td>
<td>Caa</td>
<td>CC</td>
<td>CC</td>
</tr>
<tr>
<td>Default</td>
<td>Ca</td>
<td>C</td>
<td>D</td>
</tr>
</tbody>
</table>

**Which bond is suitable for you?**

Depending on your risk appetite, when making your investment decision you may choose to invest in either an investment grade bond, or a high-yield bond.

A **investment grade bond** is a more secure investment, and should give you a stable source of investment income. A **high-yield bond** pays a relatively higher return, but carries with it a higher risk of default – and will therefore require closer monitoring. However, in all cases, the repayment of bonds is always subject to the creditworthiness of the particular issuer.

**What Types of Bonds are there?**

Bonds are differentiated by their varying payment features:

- **Fixed-rate bond**
  The interest or coupon rate of the bond is fixed for the entire term (tenor) of the bond. If the bond comes with an embedded issuer call option, the bond issuer may prepay the bond at certain pre-determined dates.

- **Floating-rate bond**
  Unlike Fixed-rate bonds, the coupon or interest rate of a Floating-rate bond is variable. The interest rate is reset at each coupon payment date, in accordance with a pre-determined interest rate index. As in the case for Fixed-rate bonds, issuer call options may also be embedded.

- **Subordinated bond**
  This type of bond has a lower repayment priority than other bonds issued by the same issuer in the event of liquidation or bankruptcy of the issuer. A subordinated bond has a lower credit rating because it carries higher risks, but pays higher returns than other non-subordinated bonds of the same issuer. These bonds are usually issued by banks.

- **Convertible bond**
  These bonds allow the bondholder and/or issuer to convert into shares of common stocks/shares in the issuing corporation at a pre-determined price in the future when certain conversion criteria are fulfilled. Such bonds are usually issued by companies, and tend to pay lower coupon rates than ordinary bonds of the issuer due to the attractiveness of the conversion feature.

- **TIPS (Treasury Inflation Protected Securities)**
  These bonds peg their principal amount to the inflation-index, therefore protecting the bondholder against inflation. Such bonds are issued by governments.

- **Zero-coupon bond**
  Also known as a discount or deep discount bond, this bond is bought at a price lower than its face value, with the face value repaid at the time of maturity. It does not make periodic interest or coupon payments, hence the term zero-coupon bond.
Buy, Hold or Sell?

After you invest in a bond, you can choose to hold on to the bond until maturity. You will receive all the scheduled coupon payments in the intervening period, and recover the principal repayment at the end of the term. The rate of return which you will earn from buying and holding the bond to maturity (expressed as a percentage) is referred to as the bond yield.

Alternatively, as bondholder you may choose to sell the bond in the open market prior to its maturity date. There are secondary bond markets, where - just as in the stock markets - you can monitor bond prices and trade them to try and realise capital gains. In order to do so, you will need to understand a key determinant of price movements in the bond market – interest rates.

What is the inverse relationship?

There is typically an inverse relationship between bond prices and interest rates. i.e. When interest rates rise, bond prices will tend to fall, and vice versa.

A simple way to understand this relationship is for you to look at various bonds (and their issuers) as competing recipients for your investment funds. When making your investment decision you will tend to invest in the option which earns you a higher return.

Consider a bond (Bond A) which is currently giving you a 5% rate of return.

(i) When the interest rate goes up, a newly issued bond (Bond B) will yield more than 5% in order to keep up with the market. The logical thing in this situation would be to sell the original Bond A, and buy the new Bond B to earn a higher return. Such selling pressure on Bond A will depress the price of the bond, causing it to trend downwards – in the opposite direction of interest rate. Alternatively, you could also view it as Bond A having to lower its price to make itself a sufficiently attractive investment for investors to own it.

(ii) Conversely, when the interest rate goes down, Bond A will seem a more attractive investment when compared to the newer Bond B which is being issued at a lower yield. The buying interest for Bond A will start to push up the price of the bond – causing it again to move in the opposing direction from the interest rates.

As illustrated in the above example, bondholders may potentially benefit in an environment of falling interest rates as the price of their bond holdings will tend to rise.

Why would you invest in a bond?

Higher returns than bank deposits
Bonds typically pay a higher yield (return) than bank deposits of a similar term (tenor).

Regular income
Bond issuers are bound by the terms of the bond to pay out regular coupon income to bondholders (subject to credit risk of the issuer).

Hedge against inflation
With proper bond selection, you may potentially earn an investment return which keeps pace with or even exceed the inflation rate.

Capital appreciation
Like all instruments traded in the secondary market, the price of bonds can appreciate (or depreciate) over and above (or below) the initial purchase price, and allow you to realise capital gains (or realise capital losses).
What are the Risks?

Credit or Default risk
This is the risk that the bond issuer or borrower is unable to meet the coupon or principal payments on any outstanding bonds or debt (not just the bonds you may be holding) when they fall due (for example, due to bankruptcy or insolvency), and go into default.

Interest rate risk
Interest rates and bond prices are inversely related. Should interest rates rise, the price of your bond will tend to fall (and vice versa). The longer the time to maturity of a bond, the greater the interest rate risk.

Foreign Exchange risk
Some bonds are denominated (and the issuer's payments made) in a foreign currency, which may fluctuate against your home currency. The impact of such foreign exchange movements may offset any interest or capital returns you may receive from the bond investment.

Liquidity risk
This is the risk of having to sell a bond at discounted prices due to the lack of a ready market or buyer. When a bond has a low credit rating, (for example, due to the fact that it is part of a small issue or that the issuer's financial situation is questionable), the liquidity risk will tend to be higher.

Event risk
Events such as leveraged buyouts, mergers, or regulatory changes may adversely affect both (i) the bond issuer's ability to make payments on the bond, and (ii) the price of the bond.

Sovereign risk
Payment of the bond may be affected by the political and economic events in the country of the issuer of the bond. For example, the issuer may be forced to make payments in the local currency of the issuer's country instead of the original currency of the bond.

If there is any discrepancy between the English and the Chinese versions, the English version shall prevail.