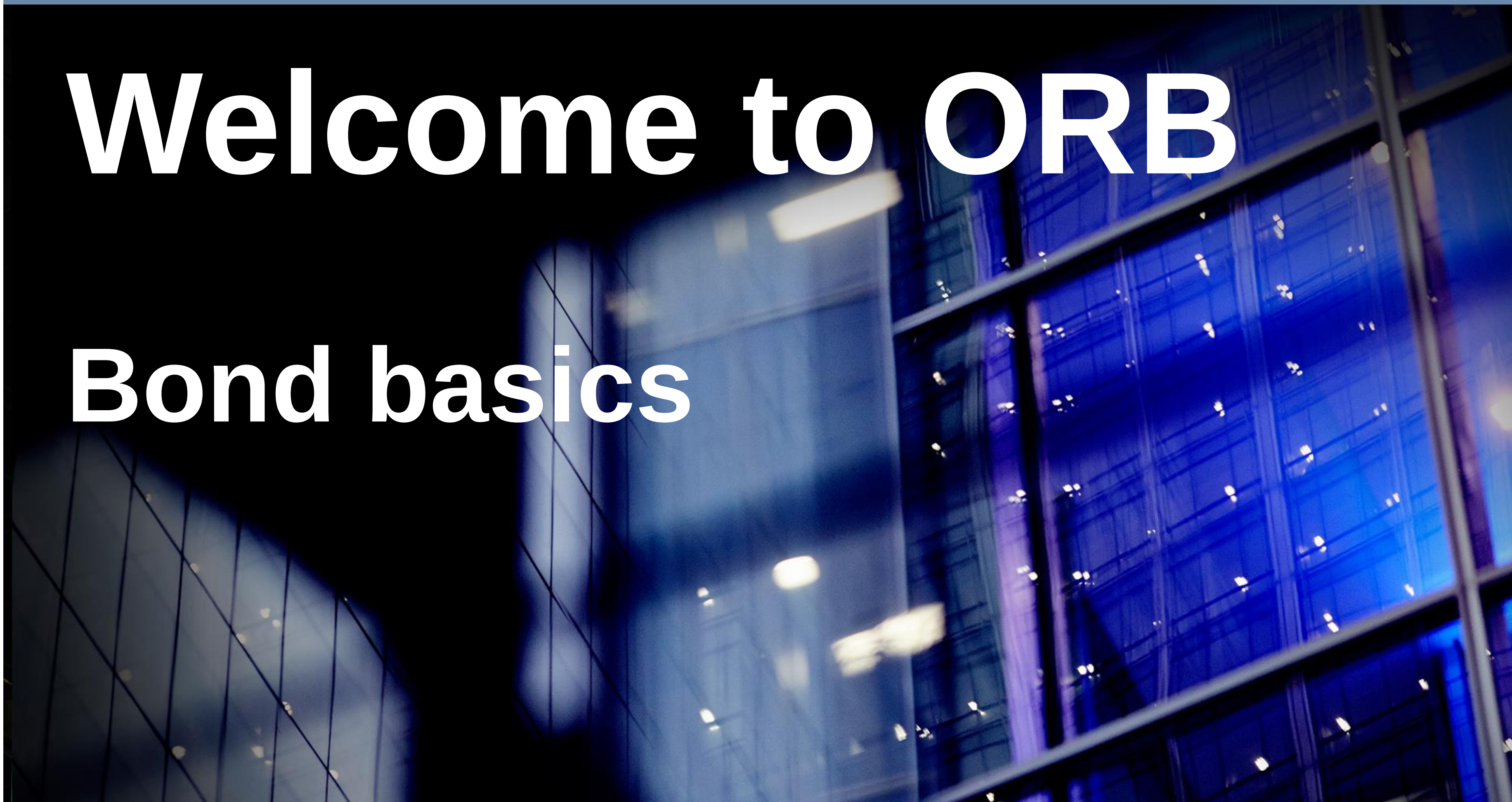
London Stock Exchange

Welcome to ORB

Bond basics



London Stock Exchange Group

Basic bond definitions

- **Bond** – a security issued by a borrower (bond issuer) representing formal agreement to repay the lender (the bond holder) the full amount plus interest over the lifetime of the bond
- **Issuer** – the organisation raising capital through the bond issue and which is borrowing money from bond investors
- **Principal / nominal value / par value** – amount borrowed on which interest is paid
- **Redemption / maturity** – date on which the issuer agrees to pay back the principal
- **Coupon rate** – annual interest rate paid, determines amount of interest paid by the borrower at regular intervals

Examples

Eros International Plc 6.50% 15/10/21

Redemption = 15 October 2021

Coupon rate = 6.50%

Interest paid semi-annually

e.g. holding of £10,000 nominal would generate two interest payments £325 each year

4% Treasury gilt 07/03/22

Redemption = 7 March 2022

Coupon rate = 4%

Interest paid semi-annually

e.g. holding of £5,000 nominal would generate two interest payments £100 each year

Bond issuers

Sovereign Governments
- central governments, e.g. UK gilts issued through the Debt Management Office (DMO)

Supranational Entities
- international bodies comprising a number of sovereign member states, such as the European Investment Bank (EIB)

Local Government Authorities
- local government bodies such as borough councils

Corporates
- private and public companies

Bond structures

Fixed-rate bonds

- pay fixed coupons at regular intervals over the lifetime of the bond until maturity, when the principal amount is repaid

Floating-rate bonds

- the interest rate varies according to a particular reference rate, e.g. Libor or Euribor

Index-linked bonds

- the principal and coupon payments are linked to an index, e.g. inflation-linked bonds are linked to the consumer retail price index (RPI)

Zero coupon bonds

- no interest is paid, the return on the bond comes from the discounted value at which the bond is issued compared to the final redemption value

Convertible bonds

- offer an option to exchange the bond for a pre-determined number of shares of the issuer

Bond pricing

- Bond prices are expressed per 100 nominal, e.g. 101.25
- Prices are quoted on a ‘clean’ basis, i.e. exclusive of accrued interest
- Dirty price = clean price + accrued interest
- Accrued interest is paid to compensate the seller for the period during which the bond has been held but for which he or she will receive no coupon payment
- Various day-count conventions exist, such as ACT/ACT, ACT/360, 30/360 etc.
- The most important factor influencing the price of a bond is the prevailing interest rate
    - e.g. if interest rate on cash falls below coupon rate paid by particular bond, that bond becomes more attractive and its price rises

Day count conventions

- Basic calculation for accrued interest:

$$\text{Accrued interest} = (\text{interest days} / \text{annual basis}) \times \text{coupon}$$

- Different day count conventions are used to determine the number of days in both the numerator and denominator:

	interest days	annual basis
ACT / ACT	actual days between coupon payment and settlement date	Actual days in coupon period
ACT / 360	actual days between coupon payment and settlement date	360
ACT / 365	actual days between coupon payment and settlement date	365
30E / 360	days from coupon payment to settlement, assuming 30 days in month	360

Yield

- Yield is the return generated by investing in a particular bond

- Flat yield is a simple measure taking into account return from interest payments only

> flat yield = (annual coupon rate/current price) x 100

- There is an inverse relationship between price and yield
  - flat yield on a 4% bond priced at 102.50 = 3.9%
  - if the bond price rises to 105.75, flat yield falls to 3.78%

- Gross redemption yield (GRY) takes into account capital gain or loss from holding the bond and allows comparison of yields for bonds of different maturities

Risks

- **Credit risk**
  - ➢ also known as ‘issuer risk’ or ‘default risk’
  - ➢ risk that the issuer may not be able to meet its obligations in terms of coupon payments or may not be able to pay the principal amount back to the bondholder at maturity
- **Market risk**
  - ➢ risk that the price of the bond may fluctuate away from the price at which the investor bought it
- **Interest rate risk**
  - ➢ specific form of market risk
  - ➢ risk that the value of the bond may be adversely affected by the prevailing direction of interest rates

Risks

- **Issue-specific risk**
  - ➢ relates to special features that a particular bond may have embedded within its structure, e.g. call option
- **Currency risk**
  - ➢ relevant where an investor holds a bond which is denominated in a currency other than his or her own domestic currency
  - ➢ the value of such an investment may be adversely affected by fluctuations in the foreign currency exchange rate
- **Inflation risk**
  - ➢ risk that the value of a bondholder's investment will be eroded by the effects of inflation
  - ➢ fixed rate coupon and principal amount will end up being worth less in real terms if inflation is high during the bond's lifetime

Useful links

Retail bond search:

http://www.londonstockexchange.com/exchange/prices-and-markets/retail-bonds/retail-bonds-search.html

Advanced bond search:

http://www.londonstockexchange.com/exchange/prices-and-markets/retail-bonds/advanced-search/advanced-search.html

New and recent issues on ORB:

http://www.londonstockexchange.com/prices-and-markets/retail-bonds/newrecent/newrecent.htm

Private broker list:

http://www.londonstockexchange.com/prices-and-markets/retail-bonds/broker-list/broker-list.htm

Further information

Retail bond search:
www.londonstockexchange.com/retail-bond-prices

Advanced bond search:
www.londonstockexchange.com/advbond

New and recent issues on ORB:
http://www.londonstockexchange.com/newissues

Private broker list:
www.londonstockexchange.com/broker-list

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