Unit 4: Bonds

Delivery Guide

Bonds

Unit Aim: To understand the different types of bonds, their characteristics and the advantages and disadvantages of investing in bonds.

Unit Relevance to the Course: Whilst this unit focusses on bonds, the concepts of potential investment yield and risks of investing are transferrable to units 5, 6, 7 and 10.

Learning Hours:

Scheduled – 0

Guided – 7

Independent – 3.5

Unit 4 Learning Outcomes

Learning Objective	Learning Outcomes	Chapter Section
4.1.1	Understand the characteristics and terminology of bonds • Coupon • Redemption • Nominal value • Yields (covered in section 4.4)	2
4.2.1	Understand the definition and features of government types: • Types	3
4.3.1	Know the definitions and features of the following types of bond: • Domestic • Foreign • Eurobond • Asset-backed securities including covered bonds • Zero cupon • Convertible • Preferred • Floating rate notes • Medium term notes • Permanent interest bearing shares	4
4.4.1	Know the potential advantages and disadvantages of investing in different types of bonds	5
4.4.2	Be able to calculate the flat yield of a bond	5
4.4.3	Understand the role of credit rating agencies and the difference between investment and non-investment grades	5

How to use this delivery guide

Throughout this delivery guide, look out for the different icons to support the learner experience:

Understand and learn – These **compulsory** sections will help learners to develop their knowledge and understanding of the assessed learning objectives. We have also integrated the CISI micromodules into this learning. These give learners key explanations of the themes in a short, digestible manner and can be found on the CISI learning platform.

Apply and practise – These sections allow the learners to practise and test their newly acquired learning by undertaking a range of **compulsory** activities to help them prepare for the multiple choice assessment at the end of the course.

Further your knowledge – These sections allow learners to consolidate their understanding of key concepts by reading and interacting with current, credible CISI resources to help further enhance their learning. These **optional** resources include the CISI professional refresher modules and CISI YouTube videos.

Extension Activities – Whilst these activities do not form part of the core learning, we have added lots of extension activities to enhance the learners understanding. These activities include videos and webinars from the CISI TV channel. These activities also provide help and support if learners feel that they might need an extra bit of guidance after completing the end of unit multiple choice assessments.

Introduction to bonds

Imagine you are going to borrow some money from a friend on the condition that you pay interest on the loan. Create an informal "IOU" (I owe you) agreement for both parties. What information would you want to include?

Module Learning Outcome 4.1 – Characteristics of bonds

4.1.1: Understand the characteristics and terminology of bonds

- Coupon
- Redemption
- Nominal value
- Yields (covered in section 4.4)

What are bonds?

Watch the CISI video explaining bonds and summarise the following key terms discussed:

Nominal value

Redemption date

Coupon rate

Bond characteristics

Watch the basics of bonds video and read the section about the characteristics of a bond in chapter 4 of the course workbook. Now answer the following questions:

1. Define a bond

2. What are the reasons for issuing bonds?

3. What are bonds also known as?

4. Do bonds or equities form a larger part of the market in terms of global investment value? Explain your answer.

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Further your knowledge – Bond types and characteristics

Complete the bond types and characteristics micromodule (6 mins) on the CISI learning platform in the professional refresher section.

Bond characteristics – True or false?

	True	False
Bonds are loans used to raise money from banks		
Bonds are tradable financial instruments		
Bonds can also be known as fixed interest securities		
A bond will always trade at its nominal or face value		
Investors need to always refer to the original borrower before making an investment in bonds		
Bond prices respond to changes in interest rates		
The nominal value of a bond is the amount that will be repaid on the bond's redemption date		

Example of a UK government bond

0.375% TREASURY STOCK, 2030

£10,000

Repayable at par on 7 December 2030
Coupons payable 7 June and 7 December

Price: £100.70
Value £10,070.00

1. What does the title of the bond tell you?
2. What does "at par" mean?
3. On the example of the bond to the left, highlight and label:
   A. The coupon
   B. The redemption date
   C. The nominal value
   D. The stock name

Module Learning Outcome 4.2 – Government Bonds

4.2.1 – Understand the definition and features of government types:

- Types of government bonds

Government bonds

Watch the CISI YouTube video introducing government bonds and answer the following questions:

1. Why do governments issue bonds?

2. Why are UK government bonds known as gilts?

3. When tax revenues are lower, are governments more or less likely to issue more bonds?

4. When interest rates increase, what happens to gilt prices?

Types of government bonds

Read the section about the different types of government bonds in chapter 9 of the course workbook and summarise the key features below

Conventional Bonds	Index Linked Bonds

Conventional and index linked bonds

UK government bonds are also know as 'gilts'. Read the section about different types of government bonds in chapter 4 of the course workbook and answer the following questions:

1. Which type of gilt represents the majority of gilts in the UK?
2. How is the price of a conventional gilt quoted?
3. When might index linked bonds be more attractive to investors?
4. What does 'Stripping a gilt' mean?

Government bond activity

5% TREASURY STOCK, 2029

£10,000

Repayable at par on 7 December 2029
Coupons payable 7 June and 7 December

Price: £101.25
Value £10,125.00

1. Identify and label the name of the
   A. gilt
   B. coupon rate
   C. redemption date
   D. nominal amount

2. How often is interest normally paid on UK gilts?

3. How much interest does the bondholder receive on 7th June?

4. What is the convention for quoting prices of UK gilts?

5. What do you notice about the value of the bond?

Extension Activity

The Debt Management Office (DMO) issues UK government bonds on behalf of the government. To extend your learning and learn more about government bonds visit the DMO website:

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Module Learning Outcome 4.3 – Corporate Bonds

4.3.1: Understand the definitions and features of the following types of bond:

- Domestic
- Foreign
- Eurobond
- Asset-backed securities including covered bonds
- Zero coupon
- Convertible
- Preferred
- Floating rate notes
- Medium term notes
- Permanent interest bearing share

Corporate bonds

Watch the introduction to corporate bonds on the CISI YouTube channel and answer the following questions:

1. Why do companies issue corporate bonds?
2. What terms (time to maturity) are corporate bonds usually issued with?
3. Where are corporate bonds usually traded?
4. Explain the 3 types of corporate bond discussed in the video.

Corporate bonds

Read the introduction about corporate bonds in chapter 4 of the course workbook and answer the following questions:

1. What is a commercial paper?

2. How are most corporate bonds traded?

3. A bond can offer a fixed or floating security to investors. What is the difference?

4. Is a call provision of benefit to the bond's issuer or to the investor? Explain your reasons why.

Features of corporate bonds – True or false?

Read the section about the features of corporate bonds in chapter 4 of the course workbook and decide whether the statement is true or false.

	True	False
1. Security is not typically offered to investors when a company issues bonds		
2. Banks will act as a guarantee if the issuer defaults		
3. A sinking fund requirement is a type of call provision		
4. A floating charge implies that specific assets are charged as security for the loan		
5. Put provisions are attractive to investors because they increase the chances of selling a bond issue		

Types of corporate bonds

Using the section about different types of bonds in chapter 4 of the course workbook, list the key features in the table below.

	Features
Medium Term Notes (MTNs)	
Fixed Rate Bonds	
Floating Raye Notes (FRNs)	
Convertible Bonds	
Preferred Bonds	
Zero Coupon Bonds	
Permanent Interest-Bearing Shares (PIBS)	

Convertible Bonds

1. Describe an investor's choices when holding convertible bonds
   Choice 1:

   Choice 2:

2. Why are convertible bonds attractive to investors?

3. Why are convertible bonds beneficial for the issuer?

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Eurobonds

Using the section about different types of bonds in chapter 4 of the course workbook, answer the following questions:

1. Identify 5 features of Eurobonds

   1:

   2:

   3:

   4:

   5:

2. What is a 'negative pledge' clause?

3. What are the most common types of Eurobond issued?

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Asset-Backed Securities

Fill in the blanks using the following words; illiquid, mortgages, credit card debt, accounts receivable, balance sheet, financial institutions, Europe, mortgage, Collateralised priority.

Asset-Backed securities are made up of 'bundles' of ____________________ assets

Assets in the bundle can include ____________________ , ____________________ and ____________________

The largest market is for ____________________ backed securities

Covered bonds are a type of asset-backed security widely used in Europe. They are issued by _______________

Covered bonds are considered particularly safe because:

a) they remain on the issuer's ____________________

b) are ____________________ against a pool of assets that can cover claims at any point of time

c) give bondholders a ____________________ claim on the asset pool if the issuer defaults

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Comparing corporate bonds

Selima is considering investing in corporate bonds but she is not sure about her options.
She has £20,000 to invest and has asked you to recommend some options for her to consider.

1. As her financial advisor, what further information and/or questions might you want to ask Selima?

2. What corporate bonds might you suggest she considers and why?

3. What alternatives to corporate bonds could Selima also consider?

The difference between gilts and corporate bonds

Consider the following statements and indicate the correct term.

1. Corporate bond prices are ____________________ volatile than gilt prices
2. Corporate bond yields tend to be ____________________ than gilt yields
3. The corporate bond market is ____________________ liquid than the gilt market
4. Corporate bonds are considered ____________________ risky than gilts?

   Can you explain why?

Further your knowledge – Bond essentials

Complete the bond essentials module (30 mins) on the professional refresher section of the CISI learning platform. This module explores the main types of bonds and key terminology.

Module Learning Outcome 4.4 – Bonds

4.4.1: Be able to explain the potential advantages and disadvantages of investing in different types of bonds

4.4.2: Be able to calculate the flat yield of a bond

4.4.3: Understand the role of credit rating agencies and the difference between investment and non-investment grades

Advantages and disadvantages of bonds

Watch the video about the advantages and disadvantages of bonds on the CISI YouTube channel and read section 4.4.1 in the course workbook. Answer the following questions:

1. Summarise the benefits/advantages and disadvantages when investing in bonds.
2. Explain the impact of a changing interest rate on bond prices.

Risks of investing in bonds

Write a brief description of each risk. See if you can think of an example for each.

Default Risk

Interest Rate Risk

Seniority Risk

Liquidity Risk

Currency Risk

Commercial Risk

Early Redemption Risk

Market/Price Risk

Inflation Risk

Yields

Read section 5.2 in chapter 4 of the course workbook about flat yields in the course workbook and fill in the blanks below.

Yields are a measure of ____________________ on bonds

A flat yield is also be known as an ____________________ yield or a ____________________ yield

Yields are expressed as ____________________

Returns from bonds are expressed in terms of ____________________ .

Yields are NOT the same as ____________________

The percentage interest paid on a bond is known as the ____________________ yield

The ____________________ yield measures both the income and the capital return of a bond held till it matures

Coupon or Yield?

Look at the statements below and decide whether they come under the heading - coupon or yield?

	Coupon	Yield
A rate that will change as bond prices change		
Usually paid in two equal, semi-annual instalments		
Represents investor's real return on their money		
Expressed as a percentage of a £100 nominal holding		
A fixed interest rate that applies to a bond throughout it's term		
Rate based on the face value of the bond		
Rate based on the actual buying/ market price of the bond		
Will usually reflect interest rates at time of first issue		

Flat Yields

A **flat yield** (also known as a running or floating yield) is a calculation of the interest paid on a bond as a percentage of its market price.

They are different from **redemption yields** whose calculation incorporates both the income and capital return of a bond, assuming that the investor holds the bond till its maturity.

Remember that a **coupon** reflects the interest rate payable on the **nominal** not the market price paid. A yield will only be the same as a coupon when a bond is bought at its nominal (face) value.

The formula for calculating flat yields is shown below

$$\text{Flat Yield} = \frac{\text{coupon}}{\text{market price}} \times 100$$

* The bond's market price is typically stated as the price payable to purchase £100 nominal/ face value

Calculating Flat Yields

Using the formula, calculate the flat yield for the scenarios below. Use the examples provided in chapter 4 of the course workbook to help.

1. A corporate bond issued by ABC plc has a 6% coupon and has a current trading price of £132.

2. A corporate bond issued by XYZ plc with a 2034 redemption date has a 2.6% coupon and a current trading price of £70.

3. 0.375% Treasury Stock 2035 is currently priced at £101.00.

4. A corporate bond issued by ZYX plc was priced last year at £125.00 with a coupon of 8%. Right now the bond is trading at £127.00 per £100 nominal.

Understanding credit ratings

Using the Bond Credit Table in chapter 4 of the course workbook, complete the following questions.

1. Using Standard & Poor's ratings, which bonds are considered investment grade?
2. What terms are used for bonds from companies rated between BB to D?
3. Will a downgrading in a bond's rating mean a rise or a fall in bond prices?
4. Will an upgrade in a bond's rating mean investors can expect higher or lower yields?
5. Which investment grade bonds offer the least risk and most liquidity?

Further your knowledge – Bonds

Complete the professional refresher modules on the CISI learning platform below to further your knowledge about bonds.

Economic factors and bonds module (2hrs 30 mins)

This module examines some of the economic factors that affect the bond market and its operation, the strategies and returns that exist within the overall marketplace.

Green bonds and asset-backed securities module (2hrs)

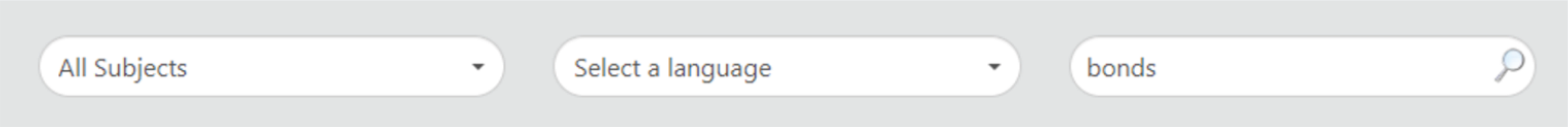
This module explores alternative bonds for investors concerned with the environmental impact and ethical, responsible investing.

CISI TV

Watch the CISI TV video about bonds, specifically produced for the 'Level 3 – Introduction to securities and investment' qualification to help prepare you for the multiple choice exam.

Extension Activity

Gender bonds, ESG bonds and much more…Take a look at the CISI TV channel to explore the diverse world of bonds.

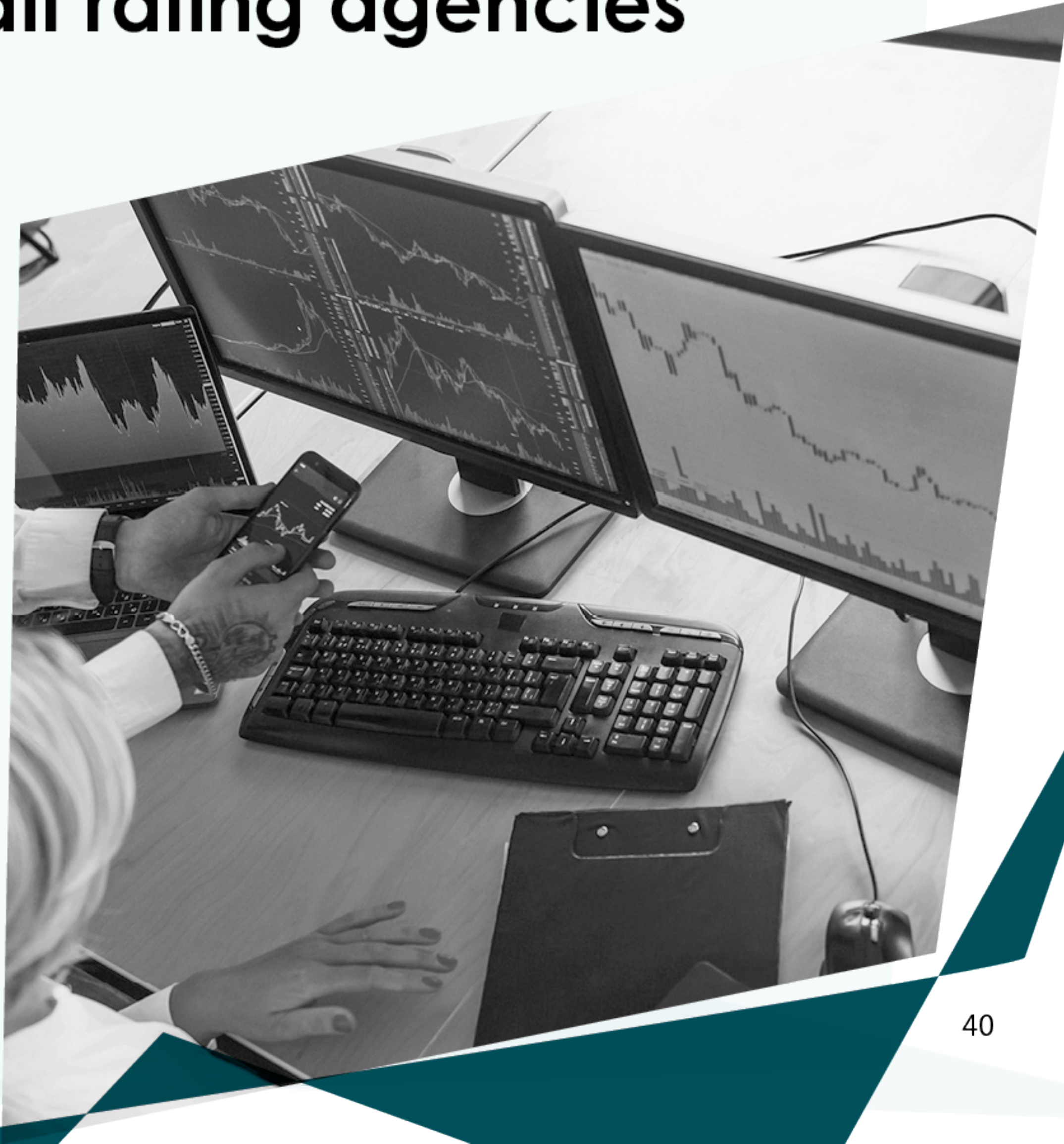


Extension Activity – The role of credit rating agencies

The price of a corporate bond is primarily determined by the issuer's credit rating. A credit rating offers an assessment of the probability of the issuer defaulting on their payment obligations.

Bonds are assessed and given a credit rating when they are first issued and reassessed if circumstances change. Their rating can be upgraded or downgraded which will impact their trading price. There are three most prominent credit rating agencies globally. Extend your learning by looking at their websites:

Standard and Poor
Moodys
Fitch Rating



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Movie time

Relax and put your feet up, it's time for a movie. Our unit 4 choice is **Wall Street** starring Charlie Sheen & Michael Douglas – A young and impatient stockbroker is willing to do anything to get to the top, including trading on illegal inside information taken through a ruthless and greedy corporate raider who takes the youth under his wing.

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End of Unit 4
Multiple Choice Assessment

Test your knowledge

1. Bonds are issues on behalf of the UK government by:

   A. The Financial Conduct Authority
   B. Debt Management Office
   C. Local Authorities
   D. Prudential Regulation Authority

2. Which of the following terms DOES NOT refer to the original value of a bond?

   A. Nominal
   B. Coupon
   C. Par Value
   D. Principal

Test your knowledge

3. If the market interest rate for a bond is higher than the coupon, the bond will sell at:

   A. a discount

   B. a premium

   C. par

   D. either a discount or a premium

4. Which of the following statements is NOT TRUE:

   A. Eurobonds have a par value and a redemption date

   B. Eurobonds are long term, interest bearing bonds

   C. Eurobonds can be traded at any time but their price is set

   D. Eurobond issuers can chose a currency appropriate for their needs

Test your knowledge

5. Permanent Interest-Bearing Shares (PIBS) are peculiar to which market?:

A. The US dollar market

B. The OTC (over the counter) market

C. The UK sterling market

D. The secondary market

Test your knowledge

6. When a bond is 'stripped' or broken down into its individual cash flows, which can be traded separately as zero-coupon bonds, the process is known as which of the following:

A. Single Trading of Registered Interest and Principal

B. Separate Trading of Registered Interest and Principal

C. Selective Trading of Registered Interest and Principal

D. Split Trading of Registered Interest and Principal

Test your knowledge

7. The UK Government issues '2% CPI 2040'. Which of the following statements is NOT true?

   A. This bond will appeal to long term investors such as pension funds
   B. This bond has a set redemption date
   C. Both the coupon and the redemption amount are uplifted by the CPI
   D. Only the coupon is uplifted by the CPI

8. A British company issuing bonds to Japanese investors in Japanese yen would be known as a:

   A. Eurobond
   B. Domestic Bond
   C. Foreign Bond
   D. Convertible Bond

Test your knowledge

9. Fluctuations in interest rates cause bond prices to change. What is this known as:

   A. Inflation Risk
   B. Market Risk
   C. Seniority Risk
   D. Liquidity Risk

10. Company XYZ plc issues a bond priced £75 with a coupon of 2.5% and a 2029 redemption date. What is the flat yield of the bond:

    A. 5.37%
    B. 3.57%
    C. 3%
    D. 1.87%

Test your knowledge

11. Standard & Poor's ratings have given a country's bonds a 'B' rating. Which of the following best describes this bond?

   A. Non investment grade
   B. Junk
   C. Medium grade
   D. Investment grade

12. Which of the following is NOT a characteristic of a Eurobond:

   A. They are denominated in a currency different from that of the financial centre(s) in which they are issued
   B. They provide fixed or floating security to bond holders
   C. They are often issued in a number of financial centres simultaneously
   D. They can take the form of convertible bonds

Test your knowledge

13. Which of the following statements is NOT TRUE about index linked bonds:

    A. Their coupons can be linked to inflation indices
    B. Only coupons are uplifted by the related index
    C. The nominal is adjusted upwards to reflect inflation between the issue and redemption dates
    D. Both the coupon and the redemption amount are increased by the amount of inflation

14. When interest rates rise:

    A. Bond prices fall and yields rise to attract investors
    B. Bond prices rise and yields rise to attract investors
    C. Bond prices rise and yields fall to attract investors
    D. Bond prices and yields tend to stay the same

Test your knowledge

15. What is the only way to increase the yield of an issued bond:

    A. To increase the price
    B. To reduce the price
    C. To change the nominal
    D. To change the redemption date

16. The convention in bonds markets is to quote prices:

    A. per £100 nominal of stock
    B. per £1000 nominal of stock
    C. per £10 nominal of stock
    D. per £1 nominal of stock

Test your knowledge

17. 2% (RPI) Treasury Stock 2030' is an example of which type of bond:

   A. Conventional
   B. Index-linked
   C. Perpetual
   D. Corporate

18. A company issues a bond using specific assets as security. This is an example of a:

   A. Fixed charge
   B. Floating charge
   C. Third party guarantee
   D. An invisible charge

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Test your knowledge

19. When a corporate bond has a call provision written into it, which of the following is NOT true:

    A. There is more flexibility for the issuer
    B. The investor is disadvantaged and will likely demand a higher yield
    C. The bondholder is able to require the issuer to redeem earlier
    D. The issuer has the option to buy back all or part of the bond issue before maturity

20. A bond which is offered to investors continually over a period of time by an agent of the issuer is known as which of the following?

    A. An ETF
    B. A PIBS
    C. A FRN
    D. A MTN

Test your knowledge

21. Which type of corporate bond have variable rates of interest, linked to a benchmark rate:

    A. Permanent Interest-Bearing Shares
    B. Floating Rate Notes
    C. Fixed-Rate Bonds
    D. Zero Coupon Bonds

22. Permanent Interest-Bearing Shares are issued by:

    A. UK Building Societies
    B. UK Banks and Building Societies
    C. The Debt Management Office
    D. Corporations

Test your knowledge

23. Which of the following is a unique feature of Permanent Interest-Bearing Bonds?

   A. Pays dividends
   B. No set redemption date
   C. Are irredeemable
   D. Issued at discount to their par value

24. Which of the following is a unique feature of Preferred bonds?

   A. Variable rate coupons
   B. Are irredeemable
   C. Pay dividends
   D. Issued at discount to their par value

Test your knowledge

25. Which of the following is a feature of Zero Coupon bonds?

A. They are issued above their par value

B. They can be converted to preference shares on a specified date

C. They are issued at discount to par value

D. They are repaid below par value

Test your knowledge

26. Which of the following is NOT a feature of a covered bond?

A. The asset pool must provide sufficient collateral to cover bondholder claims throughout the term
B. They remain on the issuer's balance sheet
C. Holders of covered bonds have a priority claim on the cover if the issuer defaults
D. They are generally regarded as a less safe investment when compared to traditional Asset-Backed securities

Test your knowledge

27. A company issues a bond priced £90, paying 3.5% coupons half yearly with redemption in 2027. What is the flat yield of the bond?

    A. 0.39%
    B. 3.89%
    C. 38.90%
    D. 0.039%

28. Generally speaking, the greater the level of security provided for a bond should result in which of the following:

    A. A higher coupon paid to investors
    B. A lower cost of borrowing for issuers
    C. A higher cost of borrowing for issuers
    D. A shorter maturity date for the bond

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Test your knowledge

29. Which of the following is an advantage for a company issuing convertible bonds?

A. Share prices could rise

B. Finance might be raised relatively cheaply

C. If it is wound ups the bondholder will possibly get some or all of his money back before the shareholders

D. If the company has problems, the investor can retain the bond and may still receive coupons

Test your knowledge

30. 30. A bond issued by a German company to German investors in Euros is known as which of the following:

A. A foreign bond

B. A domestic bond

C. A Eurobond

D. A covered bond

Monitoring my progress – Unit 4

My multiple choice assessment mark is ___ / 30

I am happy with the progress that I made on the multiple choice assessment

___ Yes ___ No

To improve my knowledge and understanding, I now need to….

1.

2.

3.

Need more help?

If you feel that your multiple choice score can be improved further, complete the end of unit 4 multiple choice questions in the course workbook.