Unit 4: Bonds

Student Workbook

Unit 4

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

Relevance of this unit 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 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 student workbook

Throughout this student workbook, look out for the different icons to support your learning:

Understand and learn – these sections will help you to develop your knowledge and understanding of the assessed learning objectives.

Apply and practise – Practise and test your newly acquired learning by undertaking a range of activities to help you prepare for the multiple choice assessment at the end of the course.

Further your knowledge – Consolidate your understanding of key concepts by reading and interacting with current, credible resources to help further enhance your learning.

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

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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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	○	○

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.

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?

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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

Types of government bonds

Read the section about the different types of government bonds in chapter 4 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?

Example of a UK government bond

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?

Further your knowledge

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 rate Notes (FRNs)	
Convertible Bonds	
Preferred Bonds	
Zero Coupon Bonds	
Permanent Interest-Bearing Shares (PIBS)	

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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?

Eurobonds

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

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?

Asset-Backed Securities

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

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.

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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.

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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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?

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.

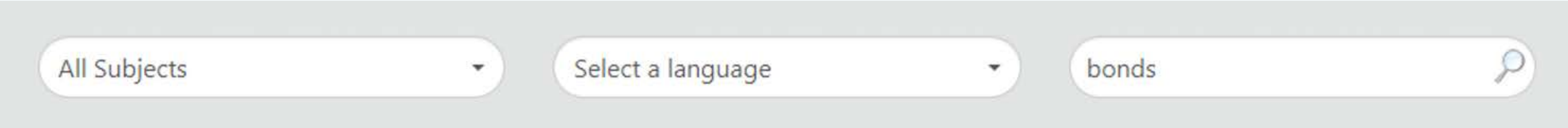
Further your knowledge – Bonds

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.

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



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

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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

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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

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

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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

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.

Answers

Page 7

1. Define a bond? A loan used by companies or governments to raise funds. The investor lends money in return for the promise to have the loan repaid on a fixed date plus (usually) a series of interest payments.
2. What are the reasons a bond might be issued? A company may need to raise money to finance investment or a government may issue bonds to finance spending and investment plans and bridge the gap between their actual spending and the tax alongside other forms of income that they receive.
3. What are the two main types of bonds? Corporate and government bonds
4. Do bonds or equities form a larger part of the market in terms of global investment value? Bonds

Page 8

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

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1. Why do governments issue bonds? Governments issue bonds to finance their spending and investment plans and to bridge the gap between their actual spending and the tax alongside other forms of income that they receive. Issuance of bonds is high when tax revenues are significantly lower than government spending.
2. Why are UK government bonds known as gilts? When physical certificates were issued, historically they used to have a gold or gilt edge to them, hence they are known as gilts.
3. When tax revenues are lower, are governments more or less likely to issue more bonds? More
4. When interest rates increase, what happens to gilt prices? When interest rates rise, gilt prices tend to fall

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- What does the title of the bond tell you? 0.375% is the coupon; issued by the Treasury (government bond); 2030 is the redemption date
- What does at par mean? At the face value

Label answers

- 0.375% = A – The coupon: The nominal interest rate payable on the stock. Rate is quoted gross and usually is paid in two separate and equal half-yearly interest payments
- £10,000 = C – The nominal value: The amount of stock purchased and should not be confused with the amount invested or the cost of purchase. This is the amount on which interest will be paid and the amount that will eventually be repaid (also known as the par or face value of the bond)
- 7 December 2030 = B – The redemption rate: This is the date the stock will be repaid. Repayment takes place at the same time as the final interest payment.
- TREASURY STOCK = D – The stock name: The name given to identify the stock

Answers

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Conventional Bond features:

- Simplest form of UK government bond
- Fixed coupon
- Single repayment date
- Represent approx 75% bonds in issue
- Can be stripped into individual cash flows
- Price quoted in terms of price per £100 face/par value/ nominal

Index-linked Bond features:

- Coupon and Redemption amount adjusted in line with UK RPI
- Single repayment date
- Attractive in periods when a government's control of inflation is uncertain
- Attractive long term investments eg pension funds
- Minority of gilts in issue

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1. Which type of gilt represents the majority of gilts in the UK? Conventional
2. How is the price of a conventional gilt quoted? Price per £100 face value
3. When might index linked bonds be more attractive to investors? When a government's control of inflation is uncertain because they provide extra protection to the investor
4. What does 'Stripping a gilt' mean? Stripping conventional bonds into their individual cash flows which can then be traded separately as zero coupon gilts

Page 18

1. Why do companies issue corporate bonds? To raise funds for investment
2. What terms (time to maturity) are corporate bonds usually issued with? Longer terms - usually more than 12 months
3. How are most corporate bonds traded? In the over the counter (OTC) market
4. Explain the 3 types of corporate bond discussed in the video. – Domestic, foreign, Eurobonds

Page 19

1. What is a commercial paper? A shorter term debt instrument (usually less than 12 months)
2. How are most corporate bonds traded? In the over the counter (OTC) market
3. A bond can offer a fixed or floating security to investors. What is the difference? Fixed securities play that specific assets (eg a building) of the company are charged as security for the loan. A floating charge means that the general assets of the company are offered as security for the loan - this might include cash at the bank, trade debtors and stock
4. Is a call provision of benefit to the bond's issuer or to the investor? A call provision is attractive to the issuer as it gives the option to refinance the bond (ie replace it with one at a lower rate of interest) when interest rates are lower than the coupon that is being paid. This is a disadvantage to the investor who will probably demand a higher yield as compensation.

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1 – false
2 –true
3 – true
4 – false
5 – true

Answers

Page 21

Medium Term Notes:

- Standard corporate bonds with maturities up to 5 years
- Also applied to instruments with maturities as long as 30 years
- Offered to investors continually over a period of time by an agent of the issuer, instead of in a single tranche of one sizeable underwritten issue
- Market originated in the US to close a funding gap between commercial papers and long term bonds

Floating Rate Notes:

- Usually referred to as FRNs
- Bonds with variable rates of interest
- Rates of interest will be linked to a benchmark rate such as the Sterling Overnight Index Average (SONIA) in the UK and Secured Overnight Reference Rate (SOFR) in the US.
- A FRN will usually pay interest at the benchmark plus a quoted margin or spread

Convertible Bonds:

- Issued by Companies
- Give the investor holding the bond 2 choices:
  - o To simply collect the interest payments an then the repayment of the bond on maturity
  - o To convert the bond into a predefined number of ordinary shares in the issuing company, on a set date or dates, or between a range of set dates, prior to the bond's maturity
- Attractions to the investor are:
  - o If the company prospers, the share price will rise and, if it does so sufficiently, conversion may lead to capital gains
  - o If the company hits problems, the investor can retain the bond - interest will be earned and, as bondholder, the investor will rank ahead of existing shareholders if the company goes bankrupt
- For the company, relatively cheap finance is acquired
- Investors will pay a higher price for a bond that is convertible because of the possibility of capital gain
- Prospect of dilution of current shareholder interests, as convertible bond holders exercise their options, has to be borne in mind

Preferred Bonds

- Known as 'preferreds'
- Similar characteristics to shares and bonds and have potential to offer investors higher yields than holding the company's ordinary shares or bonds
- Bonds that have equity-like features
- Generally issued by large banks and insurance companies
- Usually undated/perpetual
- Usually carry callable rights for the issuer within first 5-10 years
- A specific equity-like feature is the fact that they pay dividends as opposed to coupons
- Within the issuer's capital structure preferreds rank lower than senior debt but higher than equity

Zero Coupon Bonds

- Bond that pays no interest
- Issued at a discount to their par value
- Repay/ redeem at par value
- All return is provided in the form of capital growth rather than as income - may be treated differently for tax purposes

Answers

Permanent Interest-Bearing Shares

- Peculiar to UK Sterling Market
- Issued by Building Societies
- Carry fixed coupons
- Irredeemable - have no redemption date - so do not have to be repaid
- Name 'shares' is a misnomer - it is a bond, pays interest, and is taxable as a bond

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Choice 1: Simply collect the interest payments and then the repayment of the bond on maturity
Choice 2: Convert the bond into a predefined number of ordinary shares in the issuing company, on a set date or dates, or between a range of set dates, prior to the bond's maturity

Why is this attractive to an investor?

Attractions to the investor are:

- If the company prospers, the share price will rise and, if it does so sufficiently, conversion may lead to capital gains
- If the company hits problems, the investor can retain the bond - interest will be earned and, as bondholder, the investor will rank ahead of existing shareholders if the company goes bankrupt

Why is this beneficial for the issuer?

Relatively cheap finance is acquired

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5 features of Eurobonds:

1. Eurobonds are large international bond issues often made by governments and multinational companies. The eurobond market developed in the early 1970s to accommodate the recycling of substantial OPEC (Organization of the Petroleum Exporting Countries) US dollar revenues from Middle East oil sales at a time when US financial institutions were subject to a ceiling on the rate of interest that could be paid on dollar deposits. Since then it has grown exponentially into the world's largest market for longer-term capital, as a result of the corresponding growth in world trade and even more significant growth in international capital flows. Most of the activity is concentrated in London. Often issued in a number of financial centres simultaneously, the defining characteristic of Eurobonds is that they are denominated in a currency different from that of the financial centre or centres in which they are issued. An example might be a German company issuing either a euro or a dollar or a sterling bond to Japanese investors.

2. The term 'eurobond' is a bit of a misnomer, as eurobond issues, and the currencies in which they are denominated, are not restricted to those of European financial centres or countries. For example, a dollar-denominated bond sold outside the US (designed to borrow US dollars circulating outside the US) would typically be referred to as a eurodollar bond. The 'euro' prefix simply originates from the depositing of US dollars in the European eurodollar market, and has been applied to the eurobond market since. So, a euro sterling bond issue is one denominated in sterling and issued outside the UK, though not necessarily in a European financial centre.

Answers

3. Eurobonds issued by companies often do not provide any underlying collateral, or security, to the bondholders but are almost always credit-rated by a credit rating agency (see section 5.3). To prevent the interests of these bondholders being subordinated (made inferior) to those of any subsequent bond issues, the company makes a 'negative pledge' clause. This prevents the company from subsequently making any secured bond issues, or issues which confer greater seniority (ie, priority) or entitlement to the company's assets, in the event of its liquidation, unless an equivalent level of security is provided to existing bondholders.
4. The eurobond market offers a number of advantages over a domestic bond market that make it an attractive way for companies to raise capital, including:

- a choice of innovative products to more precisely meet issuers' needs
- the ability to reach potential lenders internationally rather than just domestically
- anonymity to investors as issues are made in bearer form
- gross interest payments to investors
- lower funding costs due to the competitive nature and greater liquidity of the market
- the ability to make bond issues at short notice, and less regulation and disclosure.

5. Most eurobonds are issued as conventional bonds (or 'straights'), with a fixed nominal value, fixed coupon and known redemption date. Other common types include floating rate notes, zero coupon bonds, convertible bonds and dual-currency bonds – but they can also assume a wide range of other innovative features.

What is a negative pledge clause? To prevent the interests of bond holders being subordinated to those of any subsequent bond issues, the company makes a 'negative pledge clause' to prevent the company from subsequently making any secured bond issues which get priority or entitlement to the company's assets, in the event of its liquidation, unless an equivalent level of security is provided to existing bond holders. A negative pledge clause is part of the loan contract.

What are the most common types of Eurobond issued? Most eurobonds are issued as conventional bonds. Other common types include FRNs, Zero Coupon Bonds, Convertible bonds and dual-currency bonds.

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Asset-Backed securities are made up of 'bundles' of **illiquid** assets

Assets in the bundle can include **mortgages, credit card debt** and **accounts receivable**

The largest market is for **mortgage** backed securities

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

Covered bonds are considered particularly safe because they remain on the issuer's **Balance sheet** are **collateralised** against a pool of assets that can cover claims at any point of time give bondholders a **priority** claim on the asset pool if the issuer defaults

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Corporate bond prices are more/less volatile than gilt prices **More**

Corporate bond yields tend to be higher/lower than gilt yields **Higher**

The corporate bond market is more/less liquid than the gilt market **Less**

Corporate bonds are consider more/less risky than gilts? Can you explain why? **More.** There is more risk that the company will not be in a position to repay the loan than there is with the government and gilts. Corporate bonds generally have a default risk and price risk. Highly rated government bonds are said to have only price risk as there is little or no risk that the government will fail to pay the interest or repay the capital on bonds.

Answers

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Advantages

Their main advantages are:

- for fixed-interest bonds, a regular and certain flow of income
- for most bonds, a fixed maturity date (but there are bonds which have no redemption date, and others which may be repaid on either of two dates or between two dates – some at the investor's option and some at the issuer's option)
- a range of income yields to suit different investment and tax situations, and
- the relative security of capital for more highly rated bonds.

Disadvantages

Their main disadvantages are:

- the 'real' value of the income flow is eroded by the effects of inflation (except in the case of index-linked bonds)
- bonds carry various elements of risk (see section 5.1.3).

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Yields are a measure of **returns** on bonds

An flat yield can also be known as an **Initial** yield or a **Running** yield

Yields are expressed as **Percentages**

Returns from bonds are expressed in terms of **Yield**

Yields are NOT the same as **Coupons**

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

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Initial Yield

- A rate that will change as bond prices change
- Represents investor's real return on their money
- Rate based on the actual buying/market price of a bond

Coupon

- Usually paid in two equal, semi annual instalments
- Expressed as a percentage of a £100 nominal holding
- A fixed interest rate that applies to a bond throughout its term
- Rate based on the face value of a bond
- Will usually reflect interest rates at time of first issue

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1. 4.55%
2. 3.71%
3. 0.36%
4. 6.30%

Answers

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

Test your knowledge

1B
2B
3A
4C
5C
6B
7D
8A
9B
10B
11A and B
12B
13B
14A
15B
16A
17B
18A
19C
20D
21B
22A
23C
24C
25C
26D
27A
28B
29B
30B