

EXAMINERS' REPORT

May 2026 examinations

Subject F105 — *Finance and Investment* Fellowship Principles

INTRODUCTION

The attached report has been prepared by the subject's Principal Examiner. General comments are provided on the performance of candidates on each question. The solutions provided are an indication of the points sought by the examiners, and should not be taken as model solutions

QUESTION 1

i.

- Unit trusts are set up under trust law
- The assets within the trust will be a portfolio of equities
- Under a trust there is a division of ownership between legal and equitable/beneficial ownership resulting in a clear separation between the ownership of the assets and the benefits received from the assets.
- The trust will be managed by trustees who are the legal owners of the assets and have right to possession, privilege of use and the power to convey those rights and privileges
- They therefore hold assets on behalf of investors and have a fiduciary duty towards them
- Trustees must operate solely within the provisions of the trust deed
- In this case the fund manager, appointed by the trustees, has the power to manage the underlying portfolio of equities
- This fund manager must manage the portfolio within the investment mandate and trust deed
- Trustees must ensure that the investment manager adheres to the investment mandate and trust deed.
- The trust deed will specify the purpose of the fund and how it is to be administered – in this case the structure, investment mandate and governance of the unit trust
- The beneficial owner, in this case the investor, has the privilege of receiving all the benefits from the underlying shares
- The trustees charge a fee for the services provided
- The trustee must act in such a way as to benefit the beneficiary and must exercise proper care when investing trust funds (*related to fiduciary duty above*)
- Assets are held by an independent custodian to protect investors
- Custodians deal with a range of services e.g. verification of income/transactions, verification of unit pricing, compliance with legislation, ensuring internal controls etc.
- In this way, no single party has control over both the assets and their management

ii.

Advantages

- Factors affecting one company in an industry are likely to be relevant to other companies in same industry
- Much of the information will come from a common source and be presented in a similar way
- No single analyst can be an expert in all areas
- Gives structure to decision-making process – assists in portfolio classification and arrangement
- Certain industries require specific expertise to value (e.g. banking and insurance or property companies) which may not be part of every analyst's skillset

Disadvantages

- Many companies operate across sectors
- Analysts who only focus on a handful of companies may lack the broader view of the economy and other factors important to portfolio construction
- Portfolio construction – there may be better opportunities outside of sector the analyst focuses on, yet he/she is reduced to only including companies in their sector.
- Some asset managers may not be large enough to justify an industry specialist for each and every sector

iii.

Healthcare

- The companies most directly impacted will be pharmaceutical companies
- Those who produce this drug can expect increased demand for these drugs and hence increased profits
- Medical device companies that manufacture injectable pens could benefit
- Those companies first to market with more accessible forms of the drug are likely to see a particularly high spike in demand and profits
- Share prices for these companies should increase in anticipation of these returns, but this may have been priced in already
- Due to the patenting system applied in the pharma industry, as soon as the patent runs out many new players will enter the market with generic drugs and profit can be expected to decline significantly after this point in time, putting downward pressure on share prices
 - Depending on how difficult the drug is to formulate.
- Given that the drug is being used off-prescription and adequate testing for obesity treatment has not taken place, investors should be aware of potential lawsuits in the future should adverse reactions and side effects emerge
- In addition, poor publicity around the use of these drugs may damage their brand
- Regulation around the use of the drug may be tightened reducing the above potential benefits for these companies
- Companies which manage and administer medical schemes may also face reputational risk if they do not cover payment for this treatment.

Consumer non-durables

- The impact on food producers and retailers will not be as significant, but if use of the drug becomes widespread there may be a drop in food spending
- This may be more severe for certain food producers such as sugar-laden or processed foods as consumers become more health conscious while losing weight
- Companies in health, wellness and diet foods may benefit from increased consumer interest in weight management
- Additionally, the impact will be higher for food retailers and producers who operate in the higher income market, where most of their clients will be able to afford the drug
- This may be temporary as consumers may revert back to their old eating habits, or even worse, after discontinuing the drug

Financials

- Life insurance companies are likely to experience improvements in their mortality and morbidity experience if use of these drugs becomes widespread.
- Obesity is a leading cause of death and disease in developed countries, so the impact might be quite significant.
- Life insurers would generate additional profits from their life and dread-disease/critical illness policies which were sold before use of the drug was widespread
- But may also experience losses on their annuity policies if policyholders live longer as a result of improved health
- Again, the impact may be short lived- as described above. (when people go off the drug)
- On the other hand, if severe negative long-term side effects develop from taking these drugs, there may be increases in mortality and morbidity down the line

Examiner comments:

Part (i), a bookwork question, was generally poorly answered as candidates identified the main points but did not write enough for the required marks. Many candidates focused on the role of trustees rather than the legislative framework. Another common issue was discussing the regulatory framework, which is not the focus of the question.

For part (ii) many candidates did not read the question properly and discussed asset class specialists as opposed to equity market sector specialists. Candidates also confused appointing an analyst (by the fund manager) with appointing a fund manager. A discussion of active vs passive management was not relevant here.

Part (iii) was a higher order thinking question. Common sense coupled with knowledge of the characteristics of the market sectors should have enabled sufficient idea generation. Although the scope of the impact that the weight loss drugs could have is wide, the question required a discussion of the main impacts on each sector. Many candidates did not know the bookwork names of the equity sectors and did not cover the impact on life insurers.

QUESTION 2

i.

- A money market fund provides a diversified holding of money market instruments – this diversification reduces overall exposure to single counterparties or instruments
- Money market instruments are considered to be highly secure
- This is due to the short-term nature of the investment – investors are more confident that an issuer such as a corporate will be around to pay the debt
- Only more reliable short-term companies can borrow using short term instruments such as commercial paper
- Many money market instruments are also issued by banks which are usually well-capitalized and subject to strict statutory scrutiny
- and governments or local authorities which have adequate resources to repay these loans
- In addition, the short-term duration means that values are less sensitive to interest rate fluctuations.
- Short term interest rate fluctuations are generally quite small and, to some extent, predictable
- Money markets typically provide excellent liquidity, further reducing the risk associated with these instruments
- During a crisis, investors tend to flock to cash, and money-market funds, placing downward pressure on short-dated yields, which in turn supports capital values of short-dated instruments.

ii.

- The fact that the fund has delivered superior returns suggests that they may have more corporate credit/credit risk in their portfolio overall
- Or some exposure to higher-yielding instruments with poorer security or liquidity
- They are likely to have had more exposure to longer-dated instruments than their competitors
- The above positioning of the fund may have exacerbated the impact of the factors below:
- The fund itself may have had significant exposure to a single counterparty which defaulted as a result of the crisis
- Even if there was well-diversified exposure to corporate issuers, and no defaults, credit spreads may have widened significantly in the early stages of the crisis thereby lowering the value of some issues to below par
- During a crisis, short term interest rates/yields may increase sharply and quickly as instability and lack of confidence in financial markets rises
- Aside from credit spreads, a sudden sharp increase in interest rates/yields would also cause instrument prices to drop below purchase price
- Investors in money market instruments may have liquidated their holdings as the crisis develop due to fear of additional unexpected risk (e.g. banks failing). The banks themselves would also likely be facing liquidity challenges at the time.
- Although money markets are usually very liquid, this sudden demand for liquidity may have forced excessive selling at losses.
- The fund may have still been able to preserve capital under these circumstances on a gross of fees basis, but provided negative returns after fees.

- The fund may have invested in foreign currency instruments, which delivered positive returns in the issue currency but negative returns once converted to domestic currency due to currency fluctuations

Examiner comments:

For part (i) many candidates listed the investment characteristics of money market instruments without applying the characteristics to answer the question. Candidates did not consider the distinction between a money market instrument and a money market fund, which is managed by a fund manager and comprises a range of money market instruments.

For part (ii), candidates largely did not consider the fund's historical performance in their answer, missing possible points around the fund manager's specific positioning. Concerningly, many answers indicated a misunderstanding of the relationship between the value of a fixed interest instrument and movements in interest rates.

QUESTION 3

i.

- Liability Driven Investment (LDI) management is where the asset allocation is determined in whole or in part relative to a specific set of liabilities
- It is an approach to setting investment strategy rather than a strategy or product available in the market

Aims:

- LDI strategies typically aim to hedge:
 - Interest rate risk
 - Inflation risk
- They may also aim to hedge other non-investment risks e.g. longevity risk using products such as longevity swaps.
- It is expected under an LDI strategy that changes in the value of the assets would closely match changes in the values of the liabilities.

ii.

- Investors tend to focus on swap portfolios or long duration bond management to match their liabilities
- The priority can be cashflow matching...
- or balance sheet hedging (including techniques such as immunisation)
 - balance sheet hedging is likely to result in an investor accepting a degree of cashflow mismatch in return for lower basis risks

Considering the liabilities of the company:

- Medical/Health Insurance contributions are likely to increase with medical inflation, which is higher than price inflation
- The book of liabilities is closed and will run off over time as retirees pass away, with new retirees still eligible for the benefit feeding through.
- The liability is based on the life expectancy of retirees (and possibly spouses) as well as the number of existing active employees offered the benefit that remain at the company until retirement.
- Longevity products e.g. longevity swaps or longevity insurance can be used to manage/transfer the longevity risk of these employees/retirees

The approach - bonds:

- A portfolio of index linked bonds of appropriate duration could be constructed
- But the indexation may not align well with the liabilities i.e. inflation linked coupons are likely to be lower than medical inflation
- The term of the liabilities is likely to be long-term introducing interest rate risk to the value of the liabilities
- ...and bonds of appropriate duration may not be available to allow immunisation or duration matching, resulting in...
- ...reinvestment risk for bonds of shorter term that need to be rolled over
- ...and interest rate risk for bonds of term longer than the liabilities

- The company may not have sufficient cash available to purchase the required bonds
- Bond futures may be entered into instead, possibly introducing basis risk i.e. that the futures price does not move in line with the price of the reference bond
- And bond repos may be entered into to fund margin requirements
- Or synthetic index linked bonds, linked to medical inflation, may be constructed

The approach – swaps:

- Or over the counter swap arrangements (inflation swaps in combination with interest rate swaps) could be entered into to more easily match the liabilities where bonds of sufficient duration are not available or there is insufficient cash for bonds as swaps are geared
- Inflation risk could be hedged by swapping a series of fixed or RPI linked coupon payments for payments linked to medical inflation (a real rate swap)
- Liquidity and transaction costs would need to be considered relative to bonds e.g. a swap may be more difficult to unwind, or have higher transaction costs
- But swaps may be expensive, complex/administratively intensive to implement (ISDA agreements), resulting in operational risk
- ... and margin requirements or collateral requirements would need to be considered
- There may be basis risk relating to the swaps e.g. the reference rate does not match medical inflation, or the swap needs to be unwound before its expiration date
- Should the liability profile change, swaps may be more difficult, due to their OTC nature, to restructure or close out compared to bonds.
- The counterparty/credit risk of the bonds or swaps would need to be within the risk appetite of the investor.
- To the extent that synthetic bonds/swaps hedging medical inflation cannot be entered into cost effectively, a portion of the portfolio may need to be exposed to real assets, such as equity or property, for enhanced return.
 - Or possibly for assets in respect of tail liabilities where swaps or bonds of sufficient duration are not available.
- The insurance company could consider insuring/transferring the liability via a willing third party (this would depend on the cost/premium quoted for the transfer).

iii.

- Enhanced returns would need to come from the restructuring or active management of the bond portfolio
- and would need to factor in the cost...
- ...and tax implications of the restructure.
- Exposure to bonds with lower credit ratings offering higher yields to maturity could be increased (e.g. through corporate, agency/parastatal bonds)
 - This might include higher risk instruments such as convertible bonds, distressed debts, asset-backed securities.

Advantages:

- if the switched bonds are structured to match the cashflows of the liabilities, liquidity risk may not be a significant concern, allowing profit from liquidity premia.

Disadvantages:

- May be outside the risk appetite and risk budget of the company and may lead to increased defaults.
- If not cash flow matched, the switched bonds would need to offer similar liquidity to avoid increasing the risk of not being able to meet liabilities as and when they fall due, removing the possibility of profiting from any illiquidity premium.
- The bond portfolio could be reassessed to seek yield enhancement by identifying the “cheapest” bond from a group of similar bonds in issue (i.e. with similar credit ratings, liquidity, size and term)
- This may also take the form of anomaly switching i.e. moving between bonds of similar volatility (i.e. bonds of similar coupon rates and terms to maturity/duration) to take advantage of a temporary anomaly in price.
- Reversing the anomaly switch once conditions have normalised will allow a profit to be locked in and the company to maintain a less fragmented portfolio.

Advantages:

- An acceptable match to liabilities may still be possible

Disadvantages:

- The opportunities to identify significant anomalies between similar bonds are likely to be limited, requiring a variety of highly marketable bonds to be available
- Policy switching, taking a view on future changes in the shape or level of the yield curve (nominal or real) and moving into bonds with a different term to maturity and/or coupon...
- ...or even between types of bonds (e.g. conventional or index-linked)

Disadvantages:

- A riskier approach which may lead to a mismatch with the liabilities

Examiner comments:

Part (i) was a bookwork question which was reasonably well answered.

For part (ii), candidates who scored well demonstrated their understanding of the characteristics of the liabilities and generated sufficient depth and breadth of points related to asset allocations to bonds and swaps, and longevity products. Some candidates simply stated that the liabilities were real in nature, not considering the difference between medical inflation and consumer price inflation. Some candidates missed that the liability is the medical scheme contribution, not the actual medical expenses.

Many candidates struggled with part (iii) and did not mention or describe anomaly or policy switching, instead discussing gaining exposure to other asset classes or transition management. Advantages and disadvantages relating to risk often did not consider the risk in relation to meeting liabilities and whether cashflow matching was being pursued or not.

QUESTION 4

i.

- The total rate of tax on the investment
- How the tax is split between income (including dividends) and capital gains
- When the tax is paid
- Whether the tax is deducted at source or has to be paid subsequently
- The extent to which the tax deducted at source can be reclaimed by the investor
- The extent to which losses or gains can be offset between different investments or over different time periods for tax purposes

ii.

- The yields at all durations would be impacted by any change in demand for government bonds from different investor classes
- The change may lead to an increase in demand from individuals for government bonds in issuance, either directly or via retail collective investment schemes.
- Increasing the price of the bonds
- And lowering the yield to maturity
- The extent of the impact would depend on the mix between individual, corporate, institutional and foreign investors
- The change in shape of the yield curve would depend on the increase in demand for bonds at each duration
- As yields would lower, the coupon rates/yields offered on new bond issuances would come down accordingly, lowering the cost of future government borrowing.
- However, should the continued bond issuances lead to the government credit rating being downgraded, this may lead to decreased demand from investors (due to the risk premium required) leading to an offsetting rise in yields.
- For existing individual holders of bonds, should yields decrease, even though coupons are tax exempt, the rise in price may result in higher tax being paid on the total return/realised capital gain on sale of bonds prior to maturity.

Examiner comments:

Part (i) was a bookwork question, but some candidates did not generate sufficient points.

Some discussions for part (ii) did not address both parts of the question, or were overly convoluted, missing the core aspects of the answer. Many candidates missed that those existing bondholders, who are resident individuals, would continue to receive the same coupon, just exempt from tax. The capital gains tax implications on the early sale of bonds were seldom discussed, nor was the potential impact on credit ratings on the government and on risk premia.

QUESTION 5

i.

New business:

- To be competitive lending rates would be reduced in line with changes to the short term interest rate
- To maintain net interest margin, the rate on new fixed deposits would be adjusted to reflect the current term structure of interest rates
- A reduction in short term interest rates may make new deposits less attractive
- But would likely increase demand for loans
- This may create a funding gap which could be filled through borrowing from other banks or from the central bank
- Or if there is still sufficient interest margin following the reduction in the short term rate, rates on new fixed deposits may be maintained to attract funding.

Existing business:

- The lending rate on the floating rate loans would reduce accordingly
- But the interest paid on existing fixed deposits would not
- This would reduce the net interest margin for the bank and may even result in losses if interest rates drop substantially
- There will however be a reduction in bad debts as loan interest repayments become more affordable
- Liquid reserves held by the bank in short term assets may see reduced returns, reducing profit.

ii.

- Open market operations e.g. buying and selling of bills (quantitative easing or tightening) which will impact the amount of money in the banking system and the ability of the bank to lend.
- Changing fractional reserve requirements/minimum liquid reserve ratios which may impact the amount that banks may lend as proportion of their deposits
- The setting of interest rate ceilings on deposits may impact the attractiveness of deposits and the money from deposits available for the bank to lend
- Directives on the type of lending (e.g. affordability checks, collateral requirements) may be issued which may impact the extension of credit.

iii.

- An interest rate collar can be used to hedge interest rate exposure and ensure that floating rate payments remain within a minimum and maximum band. In the case of BWB the interest rate collar will be set up as a long position in an interest rate floor and a short position in an interest rate cap.
- An interest rate floor is a component of an interest rate collar which provides a payout if the reference rate falls below the strike rate.
- A lender of floating rate obligations will use an interest rate collar to ensure that loan income remains above a certain threshold.
- However, an interest rate collar will also limit upside potential. This occurs when the reference rate rises above the interest rate cap.

- An interest rate floor does not have the limitation of upside potential, but it does have the same downside protection.
- An interest rate collar will likely be set up so that the price of the long position on the floor is equal to the price of the short position in the cap.
- An interest rate floor on the other hand will come at a cost to the bank.
- A benefit to the bank of using an interest rate collar would be that earnings can be more accurately estimated which can aid in future capital allocation decision.

iv.

The value of an individual floorlet is given by:

$$p = L\delta_k P(0, t_{k+1})(R_X \Phi(-d_2) - F_K(\Phi(-d_1)))$$

Where:

- $L = R50m$
- $\delta_k = \frac{1}{4}$
- $R_X = 5\%$

For $k = 2$:

$$P(0,3) = \left(1 + \frac{5.5\%}{4}\right)^{-1} \left(1 + \frac{5.2\%}{4}\right)^{-1} \left(1 + \frac{5.1\%}{4}\right)^{-1} = 0.96152$$

The floorlet can be calculated as:

$$p = 50 \times \frac{1}{4} \times P(0,3) \times (5\% \times \Phi(-d_2) - 5.1\% \Phi(-d_1))$$

$$d_1 = \frac{\ln\left(\frac{F_K}{R_X}\right) + T \times \left(\frac{\sigma^2}{2}\right)}{\sigma\sqrt{T}} = \frac{\ln\left(\frac{5.1\%}{5\%}\right) + 0.5 \times \left(\frac{0.05^2}{2}\right)}{0.05\sqrt{0.5}} = 0.5778 \text{ and } d_2 = d_1 - \sigma\sqrt{T} = 0.5424$$

$$P_{Q2} = 50,000,000 \times 0.25 \times P(0,3) \times (5\% \times \Phi(0.5778) - 5.1\% \times \Phi(0.5424)) = R3,859.62$$

MS Excel:

	Q1	Q2	Q3
Strike Rate	5%	5%	5%
Forward Rate	5.50%	5.2%	5.1%
Interest rate volatility	5%	5%	5%
Term	0	0.25	0.5
d_1			0.5778
d_2			0.5424
Phi(-d1)			0.2817
Phi(-d2)			0.2938
Notional			50 000 000
			3 859.62

Examiner comments:

For part (i), candidates generally could name a range of impacts, but many answers lacked the crucial discussion element. Candidates also seemed to gravitate towards extreme outcomes in what would be a generally regular adjustment to short term rates.

For part (ii), candidates who knew their bookwork scored well.

For part (iii), many candidates lacked the basic understanding of an interest rate collar. Those who could effectively describe an interest rate collar and a floor scored well. A concerning number of candidates stated that an interest rate collar would be more expensive than an interest rate floor.

Part (iv) was poorly attempted by most candidates indicating a lack of familiarity with calculation-type questions. Many candidates did not correctly calculate the correct discount rate and very few candidates correctly identified that the second payment is calculated using the Q_3 forward rate. There is no payment at the inception of a forward contract.

QUESTION 6

- i. A put option – gives the holder the right to sell the underlying asset by a certain date (exercise date or maturity date) for a certain price (exercise price or strike price).

American options can be exercised at any time up to the expiration date and European options can only be exercised on the expiration date.

A call option – gives the holder the right to buy the underlying asset by a certain date (exercise date or maturity date) for a certain price (exercise price or strike price).

- ii. For the American put option:

- Can be exercised at any time during the 6-month period.
- As it is a put, the payoff is the greatest when the share price is at a minimum (15).
- Hence the payoff is $18 - 15 = 3$.

For the European put option:

- Can only be exercised at maturity.
- As it is a 30-strike put, the payoff is $30 - 26 = 4$.

- iii. For the Bermudan call option:

- Can be exercised at any time during the last 3 months of the contract.
- As it is a call, the payoff is greatest when the share price (X) is at its maximum during the exercisable term.
- The payoff will be $X - 24$.
- For it to exceed the strategies in part (ii): $X - 24 > 4$
- For this to be the most profitable strategy the option would need to be exercised when the share trades above 28 in the latter 3-months of the contract term.

Examiner comments:

Candidates generally scored well on the bookwork in part (i).

For part (ii), most candidates calculated the correct payoffs. Candidates are reminded to show workings to gain marks even if the final answer is incorrect.

Part (iii) was largely poorly answered. Candidates who correctly described how the payoff of the Bermudan call option would be calculated scored well.

QUESTION 7

i.

$$r_{NN} = 16.00\%$$

$$r_{AA} = 14.50\%$$

$$\text{Total profit/loss: } r_{AA} - r_{NN} = -1.50\%$$

$$r_{AN} = 15.65\%$$

$$\text{Selector Selection Profit} = r_{AN} - r_{NN} = 15.65\% - 16.00\% = -0.35\%$$

$$\text{Stock Selection Profit} = r_{AA} - r_{AN} = 14.50\% - 15.65\% = -1.15\%$$

Per sector stock selection profit

$$\text{Equity: } 45\% * (16\% - 18\%) = -0.90\%$$

$$\text{Bonds: } 35\% * (10\% - 13\%) = -1.05\%$$

$$\text{Offshore: } 20\% * (19\% - 15\%) = 0.80\%$$

ii.

- Money-weighted returns
 - reflect the return actually achieved
 - do not require fund/portfolio value data for every occasion that there is a cashflow
- Time-weighted returns are not affected by cashflow size or timing
 - can be used to compare performance of similar mandates given to different managers

iii.

- The Linked Internal Rate of Return (LIRR) approximates the time-weighted rate of return
- For each quarter, calculate the money-weighted rate of return (MWRR)
 - using start and end portfolio values and the exact cashflow data
- Link the inter-valuation MWRRs together to get the linked internal rate of return for the year.

iv.

Inflation plus 4%

- This benchmark may align with member aspirations for those members who require a high level of real capital growth over the medium to long term and who can accept/tolerate capital volatility
- This is not an investable fund
- No information is given on asset class allocations
 - It is hard to monitor and appraise a fund manager in the short/medium term
 - But the manager may have increased flexibility to structure the fund/portfolio to achieve/outperform the benchmark
- The inflation linkage of most assets is weak in the short to medium term
 - Short-dated ILB's and cash might be an exception although would not be expected to provide an inflation plus 4% return
 - The fund/portfolio might only aim to achieve the target over a rolling 3- or 5-year period which would need to be communicated to members to ensure alignment with expectations

- The 4% real return might need to be adjusted from time to time, e.g. if the long-term risk premium outlook changes

Specified percentages per asset class

- This is an investable fund
- Load differences would specify permissible deviation from the benchmark allowing some flexibility for the fund manager to make tactical decisions to increase return
- Top-down asset allocation can be performed
- Performance attribution can be done meaningfully
- The asset class percentages can be reviewed regularly after structural changes in the market.
- The performance objective of the fund/portfolio may not be clear to members aiming to meet real liabilities

Examiner comments:

Part (i) was well done by many candidates.

Part (ii), a bookwork question, was well answered.

Most candidates scored well in part (iii) which was also a bookwork question, although some candidates did not give the required detail.

Generally, answers for part (iv) were not broad enough. Many candidates wrote in depth about only one or two important points, for example, writing at length about the stochastic modelling.

QUESTION 8

i.

- fundamental risks of the company's industry
- competitive position (relative to peers)
- downside risk vs. upside potential
- quality of profitability vs. EPS growth
- cashflow generation vs. book profitability
- forward looking analysis
- strategy, management track record and risk appetite
- capital structure and financial flexibility

ii.

Consequences of the downgrade to investors:

- Investors holding on to the debt may face a reduction in the overall investment returns (at least on a mark to market basis) as a result.
 - Both in the present year,
 - and a higher probability of later default
- Investors who hold short positions in the bond (e.g. via OTC derivatives) may in turn profit.
- Forced selling: Institutional investors (e.g., pension funds) with mandates to hold only BBB (or higher) rated bonds (or very limited allowance on BB+ holdings) may divest, further impacting the price.
- The downgrade may deter potential investors who have credit rating criteria above BB+ but may attract new potential investors seeking out higher credit spreads.
- If the bonds are used as collateral for repo transactions, they may no longer qualify as high-quality collateral, which may increase the collateral requirements.
- Any premiums for new Credit Default Swaps (CDS) based on the bonds would likely increase to reflect higher perceived default risk.
- New investors who hold a different view of the issuer, may purchase the bond cheaply (in their view).

Consequences to the issuer:

- Access to capital: XYZ Corp may face reduced overall appetite for new bond issuances.
- Cross-default triggers: Downgrade could breach covenants in other debt agreements.
- Equity markets may react negatively, resulting in a decrease in the share price, amplifying overall financing challenges.
- Yield Spread Widening: BB+ bonds typically trade at higher yields vs. BBB, increasing XYZ's borrowing costs.

iii.

Limitations:

- Issuer pay model (conflict of interest) – the fact that an entity has to pay the rating agency gives rise to potential conflicts of interest.
- Herding behaviour – rating agencies sometimes align ratings to avoid giving ratings that would differ too much from consensus, creating a herding effect.

- Over-reliance on relatively few rating agencies – the existence of very few major global rating agencies, with the remainder only taking up a small role, can result in over-reliance on them.

Suggestions:

- Implementation of laws that facilitate the creation and use of alternative rating agencies
- A requirement for the detailed disclosure of rating methodologies by each rating agency (independent industry standards)
- The introduction of penalties for misconduct & negligence by rating agencies
- Requiring regular independent audits of awarded ratings
- Requiring investors to conduct their own independent credit analysis where credit exposure exceeds a specified threshold

Examiner comments:

Although part (i) is a bookwork question, many candidates did not know or recognise the relevant part of bookwork and gave a broad answer which only covered some of the important points.

Part (ii) was reasonably answered, although many answers lacked breadth.

Part (iii) was not well done. The answer required practical, actionable regulations, whereas many candidates proposed broader government interventions that were less directly implementable.