ACT
PAST PAPER

Diploma in Treasury Management (AMCT)

Unit 1: Corporate finance for treasury

November 2024

This is a past paper for Unit 1 of the Diploma in Treasury Management (AMCT)

Based on the syllabus assessed from 1 August 2022.

INTRODUCTION

This past paper has been produced by the Awarding Body at the Association of Corporate Treasurers (ACT) to assist students in their preparation for the Diploma in Treasury Management assessments. It is important to highlight that the answers provided in this paper are not exhaustive and that any other reasonable answers would be awarded marks where necessary in a marked assessment. It contains a past exam for the specified unit as well as past answers. Ideally, students should have completed the majority of their Diploma in Treasury Management studies for Unit 1 before attempting this past paper.

Students should allow themselves 180 minutes to complete the exam plus an additional 25 minutes reading time. They should then review their performance to identify areas of weakness on which to concentrate the remainder of their study time. Although the past exam in this guide is typical of a Diploma in Treasury Management assessment, it should be noted that it is not possible to test every single aspect of the syllabus in any one particular exam.

To prepare properly for the examination, candidates students make full use of the tuition options where available and read as widely as possible to ensure that the whole syllabus has been covered.

ASSESSMENT TECHNIQUE

This paper is a professional paper that as well as testing theory expects application to practice at a managerial level.

The best way to approach written assessments is to work methodically through the questions. You should not spend too much time on any one question if you are struggling to think of an adequate answer. Remember you can flag any question to come back to later should you want to continue your way through the exam.

When all of the questions have been answered, it is prudent to use any remaining time to go through each question again, carefully, to double-check that nothing has been missed. Altering just one response could make the difference between passing and failing.

Please ensure you show your workings within your answer when prompted as this means there are marks available for the workings out. You will be able to make rough workings on a piece of paper during the exam and on screen should you wish to, however these will not count towards your final mark.

ASSESSMENT INFORMATION AND TEST SPECIFICATION

The diploma in treasury management assessments for units 1 and 2 each have 4 written questions, of which you must answer 3, and will involve a pre-seen case study workbook that is released no later than two weeks prior to the assessment date. The papers will be split into sections a and b and can be made up of either one case study or two case studies; each unit exam is worth a total of 100 marks. For the purpose of this past paper the questions follow each case study.

Diploma in treasury management assessment test specification:

Section	Amount of questions	Marks available
Section A	1 case study based question	50
Section B	3 shorter case study based questions, of which candidates chose to only answer two	50
Total	**3**	**100**

Under exam conditions, **3 hours** (180 minutes) is allowed for the Diploma in Treasury Management assessments plus an additional 25 minutes reading time.

When you take your actual exam, you will be sitting online using your own PC/Laptop. You have access to an online scientific calculator, but for the purpose of this past paper, you may use a non-programmable scientific calculator.

In order for you to determine how well you have performed, sample mark schemes are provided after each question. Please note that these are mark schemes only and not model answers. They provide lists of points that are expected to be covered within answers, although the content of your answers must be much more detailed (satisfying the command word used in the question, for example 'analyse'). As with all mark schemes, the content is indicative only, i.e. the lists of points featured are not exhaustive. It is highly likely that there are other perspectives and, provided these are valid and supported fully, marks would be awarded for these in a live exam. There are also references to the relevant Learning Outcomes if you need to revisit the associated material.

SECTION A

1 long form question worth 50 marks based on a pre-seen case study. This question should test knowledge, analysis, application insight, evaluation and justification as appropriate to level descriptors. This is a professional paper and application to practice should be at 'management' level.

Total available for Section A: 50 marks

QUESTION 1: CASE STUDY

Kodiak Fisheries Inc (KFI) is a global seafood corporation headquartered in Anchorage, Alaska. KFI floated on the New York Stock Exchange in 2022. KFI's 2,000 employees process between 115,000 and 150,000 tonnes of seafood annually, which equates to roughly 1.2m meals every day. KFI boasts a vertically integrated value chain for red and whitefish, whilst also incorporating significant volumes of third-party products.

Openness, honesty, responsibility and creativity are KFI's core values, and these underpin all its operations. It strives to achieve its goal of creating the world's most efficient and sustainable seafood value chain. Its target return on capital employed before tax (ROCE) is 20% per annum. The tax rate has been constant at 21% since 2021. KFI is also committed to sustainability, with a number of ambitious targets, including a 50% reduction in greenhouse gas emissions by 2030.

Share ownership programme for the local community in Alaska
Recognising the importance of community engagement and local empowerment, KFI launched a share ownership programme specifically designed for the local community in Alaska. This programme aims to create a sense of ownership and accountability among residents, ensuring that they benefit directly from KFI's success.

Under this programme, KFI has allocated a portion of its shares to be held by local community members. This not only provides financial benefits through dividends and potential capital gains but also gives the community a voice in KFI's governance. KFI's commitment to local share ownership fosters a symbiotic relationship between KFI and the communities it operates in, ensuring sustainable growth and mutual prosperity.

Reduced environmental impact on fish farms and wild fishing sustainability
Environmental sustainability is a core focus for KFI, guiding all its activities and is reflected in comprehensive efforts to minimise environmental impact across its operations. KFI's environmental policy is underpinned by an approach that seeks to:
utilise, harvest, and procure natural resources in a sustainable, efficient and environmentally responsible manner to assist KFI's strategic move towards sustainability
achieve compliance with environmental law, best practices and generally accepted industry standards in the operation of all businesses and, wherever possible, make a positive contribution to the formulation of such environmental legislation

- reflect national or international policies, regulations and targets to ensure alignment with broader environmental goals

- recognise the environmental risks arising from genetic modifications and their potential impacts on biodiversity, while minimising the use of genetically modified organisations (GMOs) in the supply chain
- reflect globally applicable and modern corporate operating standards and strive towards obtaining globally applicable product certification
- set quantitative objectives and targets for all key areas to measure and improve environmental performance
- contribute to research to enhance and disseminate knowledge of natural resources utilised or affected by corporate activity relevant to the fishing industry. Promote awareness of global warming and environmental respect among stakeholders and the public
- acknowledge the high climate change impact of its activities and implement relevant national and international strategies and initiatives as appropriate
- engage in initiatives to improve or upgrade the physical environment within which corporate activity is undertaken
- encourage the development and adoption of environmentally friendly technologies.

In its fish farms, KFI has implemented state-of-the-art technology and practices aimed at reducing waste, optimising feed efficiency and ensuring water quality. These measures not only enhance operational efficiency but also mitigate the ecological footprint of aquaculture activities.

In wild fishing, KFI adheres to stringent sustainability practices to preserve marine biodiversity and ensure the long-term health of fish stocks. KFI collaborates with scientific organisations and regulatory bodies to implement responsible fishing practices, including catch quotas and selective fishing techniques. KFI's commitment to sustainable fishing is further evidenced by its support for marine conservation initiatives and participation in industry-wide efforts to promote sustainable fisheries management.

The group is mindful of its obligations under relevant environmental legislation, particularly its statutory duty to take reasonable measures to prevent significant pollution or environmental degradation from occurring, continuing or recurring. KFI's dedication to these principles ensures that its operations not only comply with existing environmental standards but also contribute to the broader goal of sustainability and environmental stewardship.

Governance

As a newly listed company, KFI faced the challenge of adapting to comply with regulatory requirements for financial reporting imposed on listed companies. KFI recognised the importance of enhancing its internal controls and financial transparency to maintain investor confidence and comply with evolving regulatory standards.

In view of regulatory requirements and their significance, KFI took proactive steps to strengthen its internal controls and financial reporting practices. KFI implemented a robust system of checks and balances to ensure the accuracy and transparency of its financial disclosures. KFI also invested in training its finance team on the latest accounting standards and best practices.

As a result of these initiatives, KFI's share performance improved. The market responded positively to KFI's enhanced transparency and reliability in financial reporting, reflecting investor confidence in KFI's management and governance practices. Analysts noted KFI's commitment to maintaining high standards of corporate governance, which contributed to a more stable and efficient market for KFI's shares.

Remuneration policy
KFI's remuneration philosophy is founded on the principle of fair and responsible pay. KFI is committed to improving employment conditions for all staff across KFI and may, from time to time, undertake and implement various initiatives to progressively realise the concept of fair and responsible remuneration. Some of the key principles underpinning this commitment include:
ensuring compliance with legislative requirements in terms of remuneration and benefits
conducting external benchmarking on remuneration packages across the various grades and job roles annually, which is a key determinant in setting pay levels across KFI.

Executives at KFI also have incentives linked to the share price and earnings per share metrics. This is intended to incentivise them to align their goals with those of KFI's shareholders.

Statement of financial position and statement of cash flows
KFI boasts a robust financial position, underpinned by an investment-grade rating of BBB+ from Standard and Poor's. As of 30 September 2024, KFI held book equity of USD1.13bn. Interest-bearing debt stood at USD360m in the form of a green term loan, attracting an annual interest rate of 7%. The debt was secured just prior to its listing, has a seven-year tenor, and is structured to pay interest only with a bullet principal payment when the term ends.

KFI enjoys, and expects to maintain, significant financial flexibility. This allows it to fund further organic growth, pursue strategic acquisitions and uphold its dividend policy. KFI's management team is particularly pleased with the consistent and predictable dividend payments since KFI's listing in 2022. These dividends have not only been in line with forecasts but have also maintained the projected annual dividend growth of 5%, as communicated when KFI was floated.

Cash management and investment review
Over the past three years, KFI has built up cash reserves. This is partly due to the divestment of a non-performing investment in Africa. KFI is currently conducting a review of certain other investments, most notably a European fisheries business acquired at the end of Q4 2022, after KFI's initial public offering (IPO). Some of the IPO proceeds were used to finance this acquisition. The treasury team has been tasked with assessing the performance of this European unit. This assessment will determine whether any impairments need to be recognised on the investment or whether it should be sold altogether.

The business was acquired on a purely equity basis, meaning it included assets but excluded all liabilities and cash. At the time of acquisition, the team valued the equity using a discounted cash flow (DCF) methodology, with KFI's cost of equity applied as the discount rate.

Forecast projections

	2023		**2024**		**2025**	**2026**	**2027**
European subsidiary projections in 2022 (EURm)	Forecast	**Actual**	Forecast	**Actual**	Forecast	Forecast	Forecast
Free cash flows	12.00	**9.60**	12.96	**10.76**	14.00	15.12	17.63
Revised European subsidiary projections in 2024 (EURm)					**2025**	**2026**	**2027**
Free cash flows		**9.60**		**10.76**	11.50	12.25	13.04

The business was acquired for USD481.92 when the euro (EUR) to US dollar (USD) exchange rate was EUR1:USD1.10. At the time of acquisition, the growth rate was forecast to be 8%. The treasurer has proposed a simplified method to assess potential impairment. This method involves retrospectively discounting the actual cash flows and updated forecast by the WACC at the time and assuming a cash-flow growth rate of 6.5%. This should provide an indication of what the fair value of the acquisition should have been at the time of purchase.

Shareholder information

On 30 September 2024, KFI had 10,653 shareholders and had 175,856,740 shares issued and all shares carry the same rights in KFI. The largest shareholder is a leading American pension fund.

Share performance

	2022				2023				2024		
	Q1	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**
End of Quarter closing share price (USD)	10.50	11.20	11.35	11.15	10.93	11.14	11.40	11.65	11.89	12.05	11.95
Dividend (USD)	-	0.20	0.19	0.20	0.21	0.22	0.20	0.21	0.23	0.22	0.22

Broker consensus

Sell	Hold	Buy
18%	30%	52%

Cash optimisation

At USD500m, KFI's cash reserves have seen a significant improvement. This is a turnaround from just 12 months ago, when KFI effectively operated with no net cash in hand. The current reserves are generating 5% interest income per year. There is consensus amongst the executive team that half of these reserves should be designated as a strategic reserve, unavailable for other purposes. The treasury department has been tasked with formulating a plan to optimise cash utilisation across the business, whilst also considering the potential for enhancing shareholder value.

Some executives have proposed a share buy-back programme, which could directly improve key performance indicators (KPIs) such as earnings per share (EPS) and share price. Conversely, operational staff favour reinvesting the funds in new fishing vessels, particularly those with a lower carbon footprint. It is worth noting that KFI's existing vessels currently generate an internal rate of return (IRR) of 17.5%.

QUESTION 1

a.	Analyse the impact of the Sarbanes-Oxley Act on KFI's financial transparency and investor confidence. You are also required to discuss how this relates to the Efficient Market Hypothesis in the context of KFI's performance.	10 marks
b.	Calculate the impairment in the retrospective fair value of KFI's European subsidiary using the treasurer's discounted cash flow (DCF) methodology. You are also required to discuss TWO assumptions you have made in undertaking this calculation and you must show your workings.	10 marks
c.	Analyse the potential for an agency problem to arise at KFI, specifically considering the interests of the shareholders and the KFI executives. You are also required to recommend measures that KFI could implement to better align the interests of these two groups.	10 marks
d.	Evaluate the options proposed by KFI for cash optimisation. You are also required to recommend and justify a potential solution.	10 marks
e.	Assess the relevance and suitability of KFI's credit rating and funding strategy to realising its ESG strategies.	10 marks
		Total: 50 marks

Mark scheme

Q1a

SOX Act: Passed to improve financial reporting accuracy and protect investors. **KFI Transparency:** SOX led to stricter reporting, making KFI's financials more transparent. **Investor Confidence:** Stricter rules boosted investor trust in KFI's financial reporting. **Efficient Market Hypothesis:** Theory suggesting share prices reflect all available information. **SOX & Share Price:** SOX's impact on transparency and confidence could positively affect KFI's share price (according to the Efficient Market Hypothesis). **KFI Share Performance:** KFI's share price trended positively from 2022 to Q3 2024, potentially reflecting market response to improved transparency and confidence. **Market Efficiency:** Based on available information, the market seems to have accurately reflected KFI's performance in its share price, supporting the Efficient Market Hypothesis. **SOX's Role:** SOX significantly improved KFI's financial transparency and investor confidence through stricter reporting requirements.	1 mark per relevant point.

Impact on KFI Operations: SOX also influenced KFI's operations by requiring them to establish internal controls for financial reporting.

Overall Impact: SOX significantly impacted KFI's transparency, investor confidence, operations, and potentially its share price and market efficiency.

Total marks: 10

Q1b

Step 1.
Determine Cost of equity at the end of Q1.
Use Gordon Growth Model.

Dividend Growth rate	5%
Share price at time of acquisition (Q4 2022)	11.15
Forecast dividend	0.84
Cost of Equity	**12.53%**

1 mark

Step 2.
Determine value of equity (Market Cap)
11.15 x 175,856,740 = **USD 1,960,802,651.00**

1 mark

Step 3.
Value of Debt = **USD360m**
Cost of Debt = 7%
Tax rate = 21 %

1 mark

WACC = 11.45%

1 mark

Revised European Subsidiary Projections in 2024 (EURm)	**Cash flow**	**Discount Factor**	**Retrospective PV**	
2023	9.60	0.897285587	8.61	
2024	10.76	0.805121424	8.66	
2025	11.50	0.72242385	8.31	
2026	12.25	0.648220508	7.94	
2027	13.04	0.581638919	7.59	
Perpetuity	13.89	0.049472376	280.79	
Value			**321.90**	EURm
			354.09	USDm

½ mark per line

1 mark per correct value

Impairment – USD127.83

1 mark

Assumptions can include any TWO of the following:
Uncertain Cash Flow Projections: DCF valuations rely on inherently uncertain future cash flow estimations, as past performance may not guarantee future outcomes.

Discount Rate Sensitivity: Selecting the discount rate materially impacts the valuation as it reflects both time value of money and investment risk.

Constant Growth Assumption: DCF may assume a constant growth rate for future cash flows, which might be unrealistic due to fluctuating internal and external factors.

Implicit Market Stability Assumption: DCF implicitly assumes relative stability in market conditions used for cash flow and discount rate estimations.

Data Quality Dependence: The DCF valuation's accuracy hinges on the quality and completeness of historical financial data and any forecasts employed.

Limited Scope Valuation: The DCF provides a single point-in-time valuation based on assumptions, offering a limited perspective and neglecting alternative scenarios.

½ mark per correct answer

Total marks: 10

Q1c

Potential Conflicts

Short-Term vs. Sustainable: Prioritising short-term profits could harm long-term sustainability, impacting Alaskan fisheries.
European Subsidiary Drain: Underperformance of the European subsidiary might lead to cost cuts impacting Alaskan operations.
Share Buyback Focus: Executives prioritising share buybacks could neglect reinvestment in Alaskan fisheries or communities.
Sustainability Goals vs. Practices: A disconnect between KFI's environmental goals and actual fishing practices could raise concerns.
Limited Community Voice: Lack of strong mechanisms for local shareholder input could lead to decisions that don't reflect their interests.

1 mark per valid point

Alignment Measures

Sustainability-Linked Incentives: Tie executive compensation to achieving environmental and social goals alongside financial targets.
Community Advisory Boards: Establish boards with local Alaskan shareholder representation for input on strategic decisions.
Impact Investing in Alaska: Allocate a portion of profits towards social and environmental initiatives that benefit Alaskan communities.

1 mark per valid point

Transparent Cash Allocation Reports: Publish detailed reports on cash flow allocation, including investments in Alaska. **Regular Sustainability Audits:** Conduct independent audits to assess environmental impact of KFI's operations and then publish the findings to shareholders, to increase transparency and lower asymmetry of info.	**Total marks: 10**

Q1d

1. **Impact on ROCE**: Share buybacks can boost Return on Capital Employed (ROCE) by reducing the number of outstanding shares, thus lowering the denominator in the ROCE ratio. 2. **EPS Boost**: Share repurchases reduce the number of shares, increasing Earnings Per Share (EPS), which can enhance company valuation and investor perception. 3. **Overall Impact**: With unchanged EBIT and fewer shares, ROCE typically improves post-buyback. However, this can be an artificial enhancement, not necessarily reflecting better capital efficiency. Candidates might also note the increase in equity risk as the gearing rises and equity cushion falls after share buybacks (increased WACC will lower equity value). 4. **Considerations**: Buybacks reduce cash reserves, potentially limiting future investment opportunities. It's important to assess the broader financial health and growth prospects. 5. **Recommendation**: KFI should adopt a balanced approach for its USD 500 million cash reserve, considering both buybacks and future growth investments. 6. **IRR on Vessels**: KFI's vessels generate a 17.5% IRR, suggesting investment in new, eco-friendly vessels could be highly profitable. 7. **Current Interest Income**: KFI's USD 500 million cash reserve earns 5% interest annually, providing steady income but lower returns compared to vessel IRR. 8. **Target ROCE**: KFI's target ROCE is 20% per annum. Buybacks could improve EPS and share price, enhancing ROCE but reducing capital, making the target harder to achieve. 9. **Dividend Payments**: KFI has consistently paid and grown dividends by 5% annually since 2022, boosting investor confidence and supporting share price. 10. The return on cash is lower than the cost of debt by a significant margin, so there is an argument for repaying debt to save interest, and also boost EPS, if early repayment of the term loan is possible and without paying significant early redemption charges. Alternatively, cash should be invested to generate a higher yield (taking into consideration liquidity and risk). **Recommendation** - Balanced Use of Cash Reserve: For the USD 500 million reserve, a balanced approach is recommended: investing in new vessels, executing a share buy-back, and maintaining dividend consistency. This aligns with KFI's strategic goals and sustainability commitments, promoting growth and shareholder value. health, providing potential for growth and shareholder value enhancement.	1 mark per valid point **Total marks: 10**

Q1e

ESG Approach: KFI is committed to Environmental, Social, and Governance (ESG) criteria, shown by their sustainability targets and community engagement. **CSR Strategy**: KFI's Corporate Social Responsibility (CSR) strategy focuses on sustainable fishing and community development. **Credit Rating**: KFI's investment-grade credit rating indicates strong financial health and low default risk, attracting investors and lenders. **Green Loans**: KFI's use of green loans shows their commitment to environmental sustainability, funding projects with positive environmental impacts. **Financial Strategy**: KFI maintains a strong balance sheet, invests in growth, and returns capital to shareholders through dividends. **Sustainability Commitments**: KFI aims to reduce greenhouse gas emissions, invest in sustainable technology, and promote responsible fishing. **Benefits of ESG and CSR**: Aligning with ESG and CSR principles can enhance KFI's reputation, strengthen stakeholder relationships, and improve financial performance. **Challenges**: KFI faces challenges in ESG and CSR, such as balancing short-term costs with long-term benefits, managing stakeholder expectations, and navigating regulations. **Impact on Share Performance**: KFI's ESG and CSR efforts, credit rating, and green loans could boost share performance by increasing investor confidence and attracting socially responsible investors. **Conclusion**: KFI's ESG, CSR, credit rating, and green loans are crucial to their financial strategy and sustainability, potentially creating significant value for the company and its stakeholders. *This mark scheme is not exhaustive – all valid points within answers will be awarded marks.* **Syllabus Refs: 1.1.1, 1.1.2, 1.1.3, 1.1.13, 1.2.1, 1.2.2, 1.2.3, 1.2.4, 1.3.4, 1.4.3, 1.5.1, 1.5.2, 1.5.4**	1 mark per valid point **Total marks: 10**

Total: 50 marks

SECTION B – 50 MARKS

Answer TWO of the following THREE questions. (2 x 25 marks).

Questions test knowledge, analysis, application, insight, evaluation and justification as appropriate to level descriptors. This is a professional paper and application to practice should be at 'management' level. Candidates are expected to be able to synthesise knowledge from different elements of the syllabus rather than be tested on discrete areas.

Total available for Section B: 50 marks

QUESTION 1: CASE STUDY

Sterling Treasury Advisors (STA) is a UK-based treasury consulting organisation renowned for providing strategic financial advisory services. One of its prominent clients is a third-generation family-owned manufacturing company (the client). This client, rooted in tradition but forward-looking in its operations, has experienced significant growth, leading to an increase in its book size. As the client evolves, it is considering selecting a new banking partner to better align with its expanding financial needs. Additionally, the client is contemplating an Initial Public Offering (IPO) on the London Stock Exchange's Alternative Investment Market (AIM). a route proposed by STA, to support its ambitious expansion initiatives.

Choosing a new banking partner is a critical decision for the client. STA's role in this process is to ensure that the client selects a banking partner that not only meets its current financial needs but also supports its long-term strategic goals. The right bank can offer more than just financing; it can provide valuable market insights, introduce efficiency in cash management and offer advisory services that are crucial during periods of rapid growth.

STA's advisory role extends to evaluating the implications of the client's financing options on its capital structure. The client is considering raising GBP20m, either through equity financing via the IPO or through debt financing with a new banking partner. The client has operated debt free since its inception, having only been funded by the family's equity.

Opting for equity financing through the IPO would involve issuing an additional two million shares, increasing the total shares to seven million from the current five million held by the family. This approach could provide the manufacturing company with substantial capital without adding to its debt load. The funds raised could be used for various expansion activities, such as upgrading manufacturing facilities, investing in new technology or expanding the product line.

Given the client's strong expected earnings before interest and taxes (EBIT) of GBP5m after the GBP20m injection, and a cost of debt at 6% per annum, a debt option also seems financially viable. The corporate tax rate is 20%.

As the client's treasury advisor, STA plays a pivotal role in guiding the client through these complex decisions. This includes conducting thorough financial analysis, stress-testing different scenarios and providing a clear comparison of the potential outcomes of each financing option.

STA's expertise ensures that the client understands the trade-offs between maintaining control and ownership versus optimising the capital structure for growth.

The family-owned manufacturing company stands at a crossroads, with significant opportunities for growth and expansion. By carefully considering the advantages of an AIM listing, meticulously selecting a banking partner and weighing the implications of equity versus debt financing, STA aims to position the client for sustained success. The strategic decisions made today, with STA's guidance, will shape its client's financial health and operational capabilities for years to come.

QUESTION 1

a.	Evaluate the potential advantages and disadvantages for STA's client of opting for an AIM listing on the London Stock Exchange.	8 marks
b.	Calculate, showing your workings, and discuss the impact on the client's earnings per share (EPS) if the GBP20m is raised through equity rather than debt. You are also required to recommend the optimum structure.	8 marks
c.	Recommend and justify the process and criteria that would lead to the appointment of an ideal banking partner tailored to meet STA's client's needs.	9 marks
		Total: 25 marks

Mark Scheme

Q1a

Sterling Treasury Advisors (STA) might propose an AIM listing on the London Stock Exchange (LSE) for the following reasons, along with a discussion on the general pros and cons of an equity listing.

1. **Access to Capital**:
   An AIM listing provides the manufacturing company with the opportunity to raise significant capital to support its expansion initiatives. This can be crucial for a growing company looking to scale operations without incurring debt.

2. **Market Visibility and Profile**:
   Being listed on AIM can enhance the company's public profile and visibility, which can lead to increased credibility with customers, suppliers, and potential investors. A higher profile can also attract media attention and further market opportunities.

3. **Flexibility and Regulation**:
   AIM offers a more flexible regulatory environment compared to the Main Market. This includes less stringent requirements for trading history and public float, which can be advantageous for smaller or newer companies looking to go public without the burden of heavy regulatory compliance.

4. **Liquidity and Valuation**:
   Listing on AIM provides a market for the company's shares, offering liquidity to existing shareholders and establishing a market valuation. This liquidity can be appealing to both current and future investors.

5. **Employee Incentives**:

1 mark per valid point

The public market in shares can facilitate employee share ownership schemes and share option plans. This visibility and tradability can encourage long-term commitment from employees and aid in retaining and recruiting quality staff.

6. **Potential for Acquisitions:**
   Having publicly traded shares can make it easier for the company to pursue acquisitions by offering shares as part of the payment, providing a strategic tool for growth through mergers and acquisitions.

However, there are several disadvantages to consider:

7. **Market Conditions and Volatility**:
   The company's share price will be subject to market conditions that are often beyond its control. This can lead to volatility in share price, which might not always reflect the company's actual performance.
8. **Loss of Control and Increased Scrutiny**:
   Equity financing through an AIM listing would mean sharing ownership with public shareholders. This could lead to a loss of control for the current management and increased pressure to meet shareholder expectations. Furthermore, the company will be subject to higher disclosure requirements and public scrutiny, which can be demanding and costly.

Overall, while an AIM listing offers several advantages such as access to capital, increased visibility, and flexibility in regulatory compliance, it also comes with potential drawbacks like market volatility, loss of control, and increased operational scrutiny. STA would need to weigh these factors carefully to advise their client on the most strategic path forward.

Total marks: 8

Q1b

	Equity	Debt
EBIT	5,000,000.00	5,000,000.00
Interest	0	1,200,000.00
EBT	5,000,000.00	3,800,000.00
Tax	1,000,000.00	760,000.00
Net Income	4,000,000.00	3,040,000.00
Shares in issue	7,000,000.00	5,000,000.00
Earnings per share (GBP)	**0.57**	**0.61**

½ mark for each line

1 mark

- A debt solution benefits from the tax shield. — 1 mark
- This results in a marginally higher EPS for debt vs equity. — 1 mark
- In as much as debt would make financial sense, the client will need to consider the risk implications of regular interest payments vs potential dividends to shareholders. — 1 mark

• Consider the client's capacity to manage a listing and its demands and propose a blended solution which utilises both equity and debt or alternatively raise debt only to generate the increase in company value from tax shield and from greater profits because of the extra capital, then use that higher company value to demand a higher share price at IPO than issuing equity at t this stage. The cost of issuing debt is likely to be lower than IPO costs including ongoing AIM costs, and quicker to issue versus an IPO even on AIM. Other factors include the probability of raising the full amount in either route, the nature of the debt (bank or other, repayment profile) and the covenants and security required on debt versus the flexibility of equity, plus the reliability of revenue to service the debt obligation to maturity.	1 mark
• Interest cover is still good in debt case - so financial stress would seem to be low	1 mark
• Optimal case is debt assuming cash flow is strong enough to service the debt and the repayment profile.	1 mark **Total marks: 8**

Q1c

Financial Support: A bank that can provide funding is crucial for either debt raising or supporting the AIM listing process. **Capital Adequacy and Credit Rating**: A strong credit rating by the bank gives more confidence to the client due to perceived lower counterparty risk. **Customer Service and Efficiency**: Efficient operations can help improve the client's operations and assist in expediting a debt-based solution. **Reputation and Management Quality**: The client should select a bank that has a good reputation to avoid any potential brand association risks and or conflicts. **Sophistication**: A sophisticated bank can offer tailored solutions for debt raising and provide support in the AIM listing process. **Territorial Spread**: A bank with a wide territorial spread can support global operations and assist with international aspects of the client's operations. **Product Portfolio**: A diverse product portfolio allows the bank to offer a range of product options to support the client. **Business Understanding**: A bank that understands the business can provide more relevant advice to the client.	1 mark per valid point

	Innovation: An innovative bank can offer creative solutions for, accessibility, cash management, transacting, debt raising and may use novel approaches to support the AIM listing process. **Price-Competitiveness**: Competitive pricing is important for minimising the cost of debt and transacting. **Relationship Management**: Consistent relationship management is key for understanding the evolving needs of the company. *This mark scheme is not exhaustive – all valid points within answers will be awarded marks.* **Syllabus Refs : 1.3.2, 1.4.1, 1.5.1, 1.5.3**	**Total marks: 9**
		Total: 25 marks

QUESTION 2: CASE STUDY

Agile Supply Chains (ASC) is a leading integrated supply chain business based in South Africa. ASC is listed on the Johannesburg Stock Exchange (JSE) and is renowned for its comprehensive order-to-cash services. These solutions encompass logistics, trade finance and warehousing, making ASC a critical partner for businesses looking to streamline their supply chain operations. ASC's unique selling proposition lies in its ability to facilitate seamless supply chain processes, from warehousing and logistics to invoicing and trade finance. By providing innovative invoice finance solutions such as early payments through invoice factoring and embedded supply chain finance (SCF), ASC significantly enhances cash-flow management for its clients, thereby fostering a more efficient and reliable supply chain ecosystem.

Business model
ASC's business model is centred around offering a suite of services that cater to the diverse needs of businesses within most supply chains. These services include:

1. **warehousing**: ASC provides secure and efficient storage solutions for clients' goods, including automated stock control linking into the logistics offering, ensuring that products are stored in optimal conditions and are readily accessible when needed
2. **logistics**: ASC offers end-to-end logistics services, ensuring timely delivery of goods. ASC manages the entire logistics process, from transportation to delivery, ensuring that goods reach their destinations safely and on time
3. **invoicing**: Managing invoicing processes on behalf of its clients is another key service offered by ASC. ASC handles the invoicing process from start to finish, ensuring that invoices are generated accurately and promptly
4. **trade finance**:
    - **invoice factoring**: ASC purchases accounts receivable from clients at a discount, providing immediate cash flow.

Financial strategy
ASC employs a robust financial strategy to mitigate risks associated with its invoice factoring operations. ASC uses trade credit insurance to cover its invoice factoring exposures. This insurance provides a 100% cover on these exposures, ensuring that ASC is protected against potential defaults by customers of clients. The insurance is backed by a guarantor with an investment grade credit rating, which further enhances the security of ASC's financial operations.

Funding strategy: raising the bond
To support and expand its invoice factoring operations, ASC plans to issue a bond. The proceeds from this bond will be to ensure that ASC can maintain and potentially increase its trade finance activities, thereby supporting more suppliers and enhancing overall supply chain efficiency.

Bond details
The proposed bond will have the following characteristics:

- **bond amount**: ZAR500m
- **maturity**: 10 years
- **payment frequency**: Semi-annually
- **structure**: Deeply-discounted at 15%
- **indicative yield to maturity (EAR – effective annual rate)**:5%
- **face value**: ZAR100 per bond certificate
- **credit enhancement**: 100% indirect cover from trade credit insurance, backed by the insurer's investment grade credit rating.

Issuing the bond will enable ASC to:

1. **increase invoice factoring volume**: By providing more liquidity to clients, ASC can support a larger volume of trade finance activities.
2. **enhance competitive position**: Strengthening its market position by offering superior trade finance solutions compared to competitors.
3. **expand market reach**: Attracting new clients by offering comprehensive and secure financial solutions, thereby broadening its customer base.

Improvement to clients' trade receivables

The bond will empower ASC's clients to provide enhanced credit terms to their customers, thereby improving the client's market competitiveness. For instance, a major ASC client currently generates ZAR210m in sales and maintains trade receivables averaging ZAR35m, inclusive of a 15% sales tax. With ASC's support, the client plans to extend customer credit facilities to 90 days and offer a 10% discount to debtors who settle their accounts within seven days. This strategy is anticipated to boost turnover to ZAR500m, with approximately 30% of debtors expected to take advantage of the early payment discount.

QUESTION 2

a.	Discuss ASC's services offering in the context of supporting its clients' working capital management and capital expenditure.	7 marks
b.	Calculate, showing your workings, the applicable coupon rate of the bond. You are also required to discuss **FIVE** benefits of the proposed credit enhancement solution.	9 marks
c.	Calculate the expected increase in trade receivables for ASC's client after it extends credit facilities to 90 days. Examine **FOUR** potential long-term effects on ASC's client's business operations and profitability by extending credit facilities to 90 days. You are required to show your workings.	9 marks
		Total: 25 marks

Mark scheme

Q2a

Warehousing Solutions: ASC's warehousing services help suppliers optimise inventory management by providing secure and efficient storage. This ensures products are accessible when needed, reducing holding costs and improving inventory turnover, crucial for working capital management.

Logistics Solutions: Offering end-to-end logistics, ASC ensures timely delivery of goods. Efficient logistics reduce the cash conversion cycle by minimising transit time, accelerating the movement from inventory to sales.

Invoicing Solutions: ASC manages the invoicing process for suppliers, ensuring accurate and prompt invoice generation. Efficient invoicing speeds up the accounts receivable process, improving cash flow and reducing days sales outstanding (DSO).

1 mark per valid point

Invoice Factoring: ASC's invoice factoring service provides immediate cash flow to suppliers by purchasing their accounts receivable at a discount. This enhances liquidity, allowing quick access to funds tied up in receivables, improving working capital.

Trade Credit Insurance: ASC mitigates invoice factoring risks with trade credit insurance, providing 100% cover against potential defaults. This ensures reliable cash flow for ASC and its suppliers, stabilising working capital management.

Bond Financing: Proceeds from the bond issue will expand ASC's invoice factoring operations. Increased liquidity for trade finance supports more suppliers, improves their cash flow, and enhances working capital efficiency across the supply chain.

CAPEX: By using ASC's services clients don't have to spend money on building warehouses or buying trucks for delivery etc.

Outsourcing is not free for a client, so the client must pay for ASC's services which is a drain on the client's WC (cash flow). The client might not be able to sell all invoices and so will have WC requirements for invoices it retains, or those sold-back by ASC.

Total marks: 7

Q2b

YTM	5%		
Face Value	100		
Term	10		
Payment Frequency	2		
Discount	15%		
Rate	2.469508%		
85 = C x (1/0.02469508) x [1-(1.02469508) ^-20] + (1.02469508^-20) *100			
85 =	40.49390153	X	0.386086787
	15.63416035	+	61.39132128
85 =	15.63416035	C+	61.39132128
23.60867872	15.63416035	C	
C=	1.510070141		
Coupon Rate	**3.02014%**	pa	

1 mark

1 mark

2 marks

Credit enhancement benefits:

Risk Mitigation: The trade credit insurance provides 100% cover against potential defaults, significantly reducing the credit risk associated with invoice factoring. This ensures that ASC and its investors are protected against non-payment by suppliers.

Attractive to Investors: With the credit enhancement backed by an insurer with an Investment Grade credit rating, the bond becomes more attractive to investors. This high level of security can lead to lower borrowing costs and increased demand for the bond.

Improved Credit Rating: The credit enhancement can lead to a higher credit rating for the bond itself, reflecting lower risk. A better credit rating typically results in lower interest rates, reducing the overall cost of capital for ASC.

Enhanced Liquidity: By providing a safety net through insurance, the credit enhancement improves the liquidity position of ASC. This enables the company to extend more favourable credit terms to suppliers, thereby enhancing the overall efficiency and reliability of the supply chain.

Increased Confidence Among Stakeholders: The presence of credit enhancement fosters greater confidence among all stakeholders, including suppliers, customers, and financial partners. This increased trust can lead to stronger business relationships, higher supplier participation, and potentially better terms and conditions in future financing arrangements.

1 mark per valid point

5 marks

Total marks: 9

Q2c

Expected Level of Discount (ZARm)	15	(500*30%*10)
New Sales Level (ZARm)	485	(500-15)
Average Trade Receivables	65.1	(0.3*7) +(0.7*90)
New Level of Trade Receivables (ZARm)	86.5027397	485x65.1/365
Sales Tax application	99.478151	86.50274*1.15
Receivables Increase (ZARm)	**64.478151**	**99.478151-35**

Increased Sales: Extending credit facilities to 90 days and offering an early payment discount is expected to increase sales from ZAR 210 million to ZAR 500 million.

Impact on Trade Receivables: Trade receivables are expected to increase from ZAR 35 million to approximately ZAR 99.478m.

Cash Flow Management: The client will need to manage a larger amount of trade receivables, which could impact cash flow. However, offering an early payment discount may encourage faster settlement and improve cash flow in the short term for those customers who take advantage of the discount.

Operational Adjustments: The client may need to adjust its invoicing and collections processes to accommodate the longer credit period and manage the increased trade receivables.

1 mark per line

	Profitability: While the increased sales are beneficial, the client needs to ensure that the cost of financing the increased trade receivables, and any potential bad debts are managed effectively to maintain profitability. ASC will have this headache because of factoring (assuming these invoices are eligible under its factoring service and associated credit insurance policy). The client will have more cashflow from more invoices factored. Client working capital will increase because of the need for more stock and payables. *This mark scheme is not exhaustive – all valid points within answers will be awarded marks.* **Syllabus refs: 1.2.2, 1.2.4, 1.4.2, 1.4.4, 1.5.1**	1 mark per valid point **Total marks: 9**
		Total: 25 marks

QUESTION 3: CASE STUDY

Unione Nazionale Capitale (UNC) is a leading Italian private development financial institution established in 1985. UNC is known for its stringent credit criteria and benchmarks, ensuring that borrowers meet specific financial health standards before accessing its diverse range of financial products.

UNC offers a comprehensive suite of financial products designed to meet the varying needs of businesses:

- term loans
- leasing
- revolving credit facilities
- Islamic finance
- bank guarantees
- mezzanine finance.

Review of credit application
UNC is currently reviewing a credit application from Fabbricazione Innovazione Design (FID) an Italian manufacturing company seeking to finance the expansion of its production facility. FID has been in operation for 12 years and has demonstrated steady growth in its industry. FID seeks to borrow EUR2.5m to purchase new equipment. FID has also indicated a willingness to lease the equipment, as an alternative.

Credit criteria set.
UNC sets specific credit criteria tailored to different financial products, reflecting their risk profiles and the nature of financing:

Feature	Term loans	Leasing
Minimum annual revenue	EUR10m	EUR5m
Debt-to-equity – 'gearing ratio'	2:1 or lower	3:1 or lower
Minimum operating profit margin	20%	18%
Net income/profitability	Positive net income/profit from operations in the past three years	Positive net income/profit from operations in the past two years
Business operation duration	At least seven years	At least three years
Financial terms	9% fixed interest rate for a EUR 2.5 million facility, with a five-year tenor and a 19% writing down allowance	EUR 580,000 per lease payments payable in advance each year, with the equipment value written down to zero at the end of five years

Assumptions: Equipment value is written down to zero at the end of five years.

A critical consideration for credit committees, when assessing a borrower's financial health, is to determine the borrower's capacity to repay the debt. Analysing a borrower's cash flow is key in determining this.

Extract of applicant's financials
Financial statements for FID for the years 2024, 2023, and 2022.

Extracts of FID's financials - Year ending 30 September (EUR)

	2024	2023	2022
Revenues	15,263,785	12,563,258	9,921,450
Operating expenses	9,463,547	7,914,853	6,448,943
Operating profit	5,800,238	4,648,405	3,472,507
Interest expense	434,000	487,200	511,000
Tax expense	1,073,248	832,241	592,302
Net income	4,292,990	3,328,964	2,369,205

	2024	2023	2022
Cash and cash equivalents	1,565,230	1,210,589	854,882
Accounts receivable	3,499,540	278,954	2,256,141
Inventories	1,950,000	1,565,000	1,210,000
Total current assets	7,014,770	3,054,543	4,321,023
Property, plant, and equipment	9,100,587	7,582,456	7,325,845
Total assets	**16,115,357**	**10,636,999**	**11,646,868**
Accounts payable	3,150,330	2,489,630	1,954,781
Short-term debt	1,200,000	960,000	800,000
Long-term debt	5,000,000	6,000,000	6,500,000
Total liabilities	**9,350,330**	**9,449,630**	**9,254,781**
Shareholder equity	**6,765,027**	**1,187,369**	**2,392,087**

FID pays tax at a concessionary tax rate of 20% per annum.

UNC may impose conditions precedent before approving financing, such as:

- **insurance requirements:** ensuring the borrower has adequate insurance coverage
- **board resolutions:** authorisation from the board to proceed with the transaction
- **ESG:** complying with environmental and social responsibility standards
- **legal documentation:** providing legal documentation to verify ownership and other legal aspects.

QUESTION 3

a.	Analyse FID's financials against UNC's credit criteria. You are also required to recommend and justify whether a term loan or lease would be better for FID.	11 marks
b.	Discuss the impact of IFRS 16 on financial statements and FOUR other considerations a treasurer should keep in mind when choosing between leasing and purchasing an asset.	6 marks
c.	Discuss the significance of the conditions precedent that may be imposed by UNC and how these might help to mitigate the risks associated with a potential facility agreed for FID.	8 marks
		Total: 25 marks

Mark scheme

Q3a

Ratio/Metric	Applicant	UNC's Credit Policy for Term Loans	UNC's Credit Policy for Leases
Minimum Annual Revenue	EUR15,263,785	EUR10m (Term Loans)	EUR5m (Leases)
Debt-to-Equity/Gearing Ratio	0.69:1*	2:1 or lower	3:1 or lower
Operating Profit Margin	38.00%	12%	10%
Net Income/Profitability	3 years	3 years (Term Loans)	2 years (Leases)
Business Operation Duration	12 years	At least 7 years	At least 3 years

½ mark per line

Consideration should be made whether the ratios will still hold after UNC provides a facility.

1 mark

Year	Opening Written Down Value	Writing down allowance	Written down carrying value	Tax Saved
1	2,500,000.00	475,000.00	2,025,000.00	95,000.00
2	2,025,000.00	384,750.00	1,640,250.00	76,950.00
3	1,640,250.00	311,647.50	1,328,602.50	62,329.50
4	1,328,602.50	252,434.48	1,076,168.03	50,486.90
5	1,076,168.03	Writing down closing value		215,233.61

½ mark per line

(2 ½ marks total)

After tax cost of debt 7.2%

Cost of funding equipment with loan						
	0	1	2	3	4	5
Purchase	(2,500,000.00)					
Tax relief	0	95,000.00	76,950.00	62,329.50	50,486.90	215,233.61
Total	(2,500,000.00)	95,000.00	76,950.00	62,329.50	50,486.90	215,233.61
PVF (7.2%)	1	0.932835821	0.87018267	0.811737564	0.757217877	0.70635996
PV	(2,500,000.00)	88,619.40	66,960.56	50,595.20	38,229.58	152,032.40
NPV	(2,103,562.86)					

½ mark per line

(3 marks total)

Cost of lease						
	0	1	2	3	4	5
Lease	(580,000.00)	(580,000.00)	(580,000.00)	(580,000.00)	(580,000.00)	(580,000.00)
PVF (7.2%)	1	0.932835821	0.87018267	0.811737564	0.757217877	0.70635996
PV	(580,000.00)	(580,000.00)	(504,705.95)	(470,807.79)	(439,186.37)	-
Tax saving	0	116,000.00	116,000.00	116,000.00	116,000.00	116,000.00
PV tax saving	-	108,208.96	100,941.19	94,161.56	87,837.27	81,937.76
NPV	**(2,062,658.15)**					

½ mark per line

(3 marks total)

A lease solution would be better than taking out a term loan to buy the equipment.

1 mark

Total marks: 11

Q3b

IFRS 16, implemented in 2019, has fundamentally changed the accounting treatment for leases, impacting both lessees and lessors. The key changes and their effects on financial statements are as follows:

Balance Sheet:

Right-of-Use Assets: Lessees must recognise a right-of-use asset for almost all leases, reflecting the right to use the leased asset over the lease term.

Lease Liabilities: Lessees also recognise a corresponding lease liability, representing the obligation to make lease payments. This increases both total assets and total liabilities, impacting leverage ratios and financial covenants.

Income Statement:

Depreciation and Interest Expense: Lease expenses are now split into depreciation of the right-of-use asset and interest on the lease liability. This changes the expense recognition pattern, typically reducing operating expenses and increasing EBITDA (Earnings Before Interest, Taxes, Depreciation, and Amortisation).

Cash Flow Statement:

Operating vs. Financing Activities: Lease payments are divided into principal repayments (financing activities) and interest payments (operating activities), which can improve operating cash flow metrics.

Four Key Considerations for a Treasurer:

Cost Comparison:

Total Cost Analysis: The treasurer should compare the total cost of leasing versus purchasing, including lease payments, interest rates, maintenance costs, and any additional fees. For purchases, this includes the purchase price, financing costs, and potential tax benefits from depreciation.

Cash Flow Impact:

Short-term vs. Long-term Cash Flows: Leasing spreads payments over the lease term, which can help manage cash flow more effectively. Purchasing requires significant upfront capital or regular loan repayments. The treasurer should evaluate how each option affects the company's cash flow, especially in terms of liquidity and capital allocation.

Tax Implications:

Tax Benefits and Deductions: Leasing and purchasing have different tax treatments. Lease payments are generally deductible as operating expenses, while purchased assets can be depreciated over their useful life, providing potential tax benefits. The treasurer needs to consider the timing and magnitude of these tax implications in their decision-making.

Flexibility and Risk Management:

Asset Flexibility and Obsolescence Risk: Leasing offers flexibility to upgrade or return assets, reducing the risk of obsolescence and technological redundancy. It is particularly beneficial for assets with a short useful life or those subject to rapid technological changes. Purchasing, while providing ownership, comes with the full responsibility for asset management and potential risks related to maintenance, obsolescence, and residual value.

1 mark per valid point.

Total marks: 6

Q3c

A condition precedent refers to a specific event or action that must occur before another party is obligated to perform their part of an agreement, particularly a loan agreement.

Insurance Requirements:

Significance: Ensures that the borrower has adequate insurance coverage, which is crucial in the event of unforeseen circumstances such as accidents, natural disasters, or other liabilities.

Risk Mitigation: Protects both the borrower and UNC from financial losses that may occur due to unexpected events, thereby ensuring the continuity of operations and repayment capability.

Board Resolutions:

Significance: Board resolutions for loans hold significant weight. They document formal approval by the company's highest authority, ensuring transparency and accountability for the decision. This reassures lenders that the loan wasn't taken lightly, and the company has a plan for its use and repayment.

Risk Mitigation: Conversely, requiring a board resolution mitigates risk for both parties. The documented approval process protects directors and demonstrates responsible decision-making. For the lender, it reduces the potential for legal disputes by providing clear evidence of proper authorization should the loan go bad.

Environmental and Social Compliance:

Significance: Ensures that the borrower complies with environmental and social responsibility standards.

Risk Mitigation: Reduces potential risks associated with non-compliance, such as legal penalties, reputational damage, and operational disruptions. It also promotes sustainable practices, which can enhance long-term business stability.

Legal Documentation:

Significance: Requires the borrower to provide legal documentation to verify ownership and other legal aspects related to the facility.

Risk Mitigation: Ensures the legality and validity of the transaction, reducing the risk of disputes or legal challenges. It also provides clarity on ownership and the collateral offered, which is critical in the event of default.

This mark scheme is not exhaustive – all valid points within answers will be awarded marks.

Syllabus refs: 1.4.1, 1.4.2, 1.4.4, 1.5.1

1 mark per valid point

Total marks: 8

Total: 25 marks

Published in December 2024 by
ACT (Administration) Limited
10 Lower Thames Street
London
EC3R 6AF

www.treasurers.org

Copyright © ACT (Administration) Limited 2024

All rights reserved. Except as permitted under current legislation you may not photocopy, store in a retrieval system, publish, perform in public, adapt, broadcast, transmit, record or reproduce in any form or by any means or medium any part of this work without ACT (Administration) Limited's permission.

Nothing in this publication should be taken as constituting professional advice. Although we have made every effort to ensure that the contents are correct at the time of publication, ACT (Administration) Limited makes no warranty that the information in this publication is accurate or complete and accepts no liability for any loss or damage suffered by any person acting or refraining from acting as a result of anything in this publication.