

# Advanced Financial Management

## Sample Exam – December 2021

### Get to know your exam

*These graphical representations are intended to give an indication of exam requirements and associated question content.*

*Please note that you will not be able to complete answers within these documents and in isolation they will not sufficiently prepare you for your exam.*

*We encourage you to visit the ACCA Practice Platform in order to attempt up to date practice exams within the computer-based exam environment.*

# Instruction screens

AFM September/December 2021 exam (21/22 syllabus)

## Instructions (1 of 4)

The instructions displayed below are representative of those displayed in the live exam. Where there are differences between this past content exam and the live exam these are explained.

**General Instructions**

- In this exam, the instruction screens are not timed however in the live exam they will be available for a maximum of 10 minutes prior to the exam starting.
- In the live exam, the stated exam time will automatically start once the 10 minute period has passed (or earlier if you choose to start the exam within the 10 minute period).
- A copy of the instruction screens can be accessed at any time during the exam by selecting the Help button provided.

**The Workspace**

- Your exam consists of a number of questions. Each question is presented in a workspace. Each workspace will include:
  - Introductory information for the question.
  - Exhibits – these contain the question scenario content broken down into sections or sources of information you will need to answer the question requirement(s).
  - Requirements – these list the requirement(s) you are expected to answer in the workspace.
  - Response Options – you may be presented with one or more word processor and/or spreadsheet response options within which to construct your answer.
- When selected, the exhibits, requirements and response options will display in windows, which can be moved and resized as required.
- You can close each window individually or close all windows at once by selecting  **Close All** on the top toolbar. This minimises the open windows to the left-hand side of the screen. Note that any answers you have entered into the response options will be saved and you can re-open them and change your answers at any time.
- There is a splitter bar which you can move to see more or less of the left or right hand side of the screen as required.
- You can highlight or strikethrough text in the introductory information, PDF exhibits or requirements by selecting  **Highlight** or  **Strikethrough**.
- You can copy and paste between exhibits, requirements and response options by using the Ctrl-C (Copy) and Ctrl-V (Paste) shortcuts.

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## Instruction screens (continued)

AFM September/December 2021 exam (21/22 syllabus)

### Instructions (2 of 4)

#### Navigation

- The question number you are viewing is displayed in the top display bar. You can hide or restore this display by selecting .
- You can navigate between screens by selecting  or  or by clicking on a question number from the Navigator or Item Review screens.
- You can revisit questions and change your answers at any time during the exam.

#### Flag for Review

- If you wish to revisit/review a question later in the exam, click  **Flag for Review**.
- Click the button again to remove the flag.

#### Help

- Click the **Help** button provided to access:
  - A copy of these exam instructions.
  - Help and guidance on workspaces.
  - Formulae sheets/tax tables if your exam requires these. Note that the name of the Help button will indicate if formulae sheets/tax tables are available i.e.  **Help**,  **Help/Formulae Sheet** or  **Help/Tax Tables**

#### Calculator

- You have the option to use the on-screen standard or scientific calculators by selecting  **Calculator**.
- Note that in the live exam you are also permitted to use your own calculator providing it does not have the facility to store or display text.

# Instruction screens (continued)

AFM September/December 2021 exam (21/22 syllabus)

## Instructions (3 of 4)

### Workings/Scratch Pad

- You may use an on-screen Scratch Pad to make notes/workings by selecting  **Scratch Pad**
- You can cut and copy text from the Scratch Pad and paste into your response options either by using the Ctrl-C (Copy), Ctrl-X (Cut) and Ctrl-V (Paste) shortcuts, or the on-screen buttons.
- The Scratch Pad retains all notes/workings entered for all workspaces and these are available for the duration of the exam. They will not be submitted for marking after your live exam.
- You will also be provided with paper for notes/workings for your live exam, should you prefer to use it. This will not be submitted for marking. It will be collected at the end of the exam and must not be removed from the exam room.
- **Important:**
  - The notes/workings entered onto the Scratch Pad or your workings paper during the live exam will not be marked.
  - If you want the marker to see any notes/workings for question requirements in the live exam you must show them within the relevant response options.

### Symbol

- You can add a selection of currency symbols to your answers by selecting  **Symbol** on the top toolbar.

### Navigator Screen

- Navigator can be accessed at any time during the exam by selecting  **Navigator**.
- This screen allows you to jump to any question number in the exam.
- It also allows you to see the status of each question and whether it has been viewed, attempted or flagged for review.

 **Previous** **Next** 

# Instruction screens (continued)

AFM September/December 2021 exam (21/22 syllabus)

## Instructions (4 of 4)

### Reviewing the Exam

- You can review this exam once you have attempted any, or all, of the questions.
- To do this:
  - Navigate to the last question in the exam.
  - Click **Next →**.
- This takes you to the Item Review screen.

### Item Review Screen

- This screen gives you a final opportunity to see the flag and attempted status of each question and to review your answers before you exit the exam.
- You can select individual questions you wish to revisit, or quickly access groups of questions from the Item Review screen.
- During the item review period Navigator is not available however you can navigate to questions by selecting **Next →**, **← Previous**, or **→ Review Screen**.
- When reviewing questions you can change your answers and click **→ Review Screen** to view any updated status on the Item Review screen.

### Ending the Exam

- Once you have completed your item review and wish to finally end the exam click **→ End Exam** from the Item Review Screen.
- Once you end the exam, you cannot revisit any questions. Your answers will then be available for marking and review.

**← Previous** **Next →**

# Exam summary screen

AFM September/December 2021 exam (21/22 syllabus)

**Exam Summary**

**Time allowed:** This exam is not timed.

This exam is divided into two sections:

**Section A**

- One question worth 50 marks.
- 50 marks in total.

**Section B**

- Two questions, each worth 25 marks.
- 50 marks in total.

All questions are compulsory.

Select **Next** to start your exam.

[!\[\]\(4fc2f7cc81639d6310529267a2ee602c\_img.jpg\) Previous](#) **Next** [!\[\]\(714d70875eaf0e2f34d0a261eaf96dad\_img.jpg\)](#)

# Exam questions

## Section A – summary screen

AFM September/December 2021 exam (21/22 syllabus) Flag for Review

**Section A**  
This section of the exam contains **one question**.  
This question is worth **50 marks** and is compulsory.  
This exam section is worth **50 marks** in total.

**Important:**  
In your live exam, you should:

- Indicate which requirement each of your responses relate to so that this is clear for markers.
- Show all notes/workings that you want the marker to see within your responses. Remember, any notes/workings made on the Scratch Pad or on your workings paper will not be marked.

Select **Next** to continue.

Navigator Next →

## Section A – question 1

AFM September/December 2021 exam (21/22 syllabus) 1 of 3

Symbol  Highlight  Strikethrough  Calculator  Scratch Pad

Close All  Flag for Review

**Exhibits**

1. Zhichi Co policy failures

2. New project discount rate

3. New project cash flows

4. Financing the new project

5. Future project funding

**Requirements**

Requirements (50 marks)

**Response Options**

Word Processor

Spreadsheet

The following exhibits, available on the left-hand side of the screen, provide information relevant to the question:

1. Zhichi Co policy failures
2. New project discount rate
3. New project cash flows
4. Financing the new project
5. Future project funding

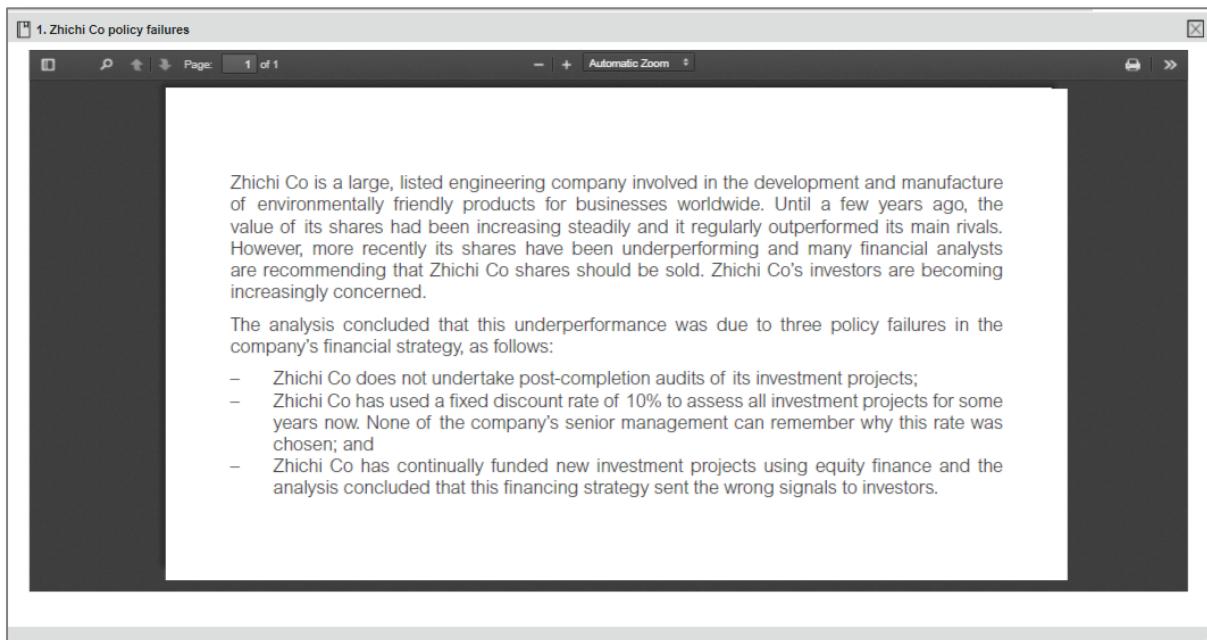
This information should be used to answer the question requirements within your chosen response option(s).

Help/Formulæ Sheet ← Previous  Navigator Next →

## Requirements

Requirements (50 marks)	
(a) Discuss and justify the actions Zhichi Co should take to address the three financial strategy policy failures.	(8 marks)
(b) Prepare a report for the board of directors (BoD) of Zhichi Co which:	
(i) Estimates an appropriate discount rate to use to determine the net present value of the new project based on all-equity finance;	(6 marks)
(ii) Estimates the net present value of the new project, assuming that it is all-equity financed;	(9 marks)
(iii) Estimates the adjusted present value of the new project;	(7 marks)
(iv) Evaluates whether the new project should be undertaken, and: • discusses the assumptions made in the estimates above; • discusses whether the adjusted present value method would be more appropriate than the conventional net present value method to evaluate the new project.	(10 marks)
Professional marks will be awarded in part (b) for the format, structure and presentation of the report.	(4 marks)
(c) Compare and contrast whether Zhichi Co should raise future funding through new debt finance or through asset securitisation.	(6 marks)

## Exhibit 1



The screenshot shows a Microsoft Word document window with the title '1. Zhichi Co policy failures' at the top. The document content is as follows:

Zhichi Co is a large, listed engineering company involved in the development and manufacture of environmentally friendly products for businesses worldwide. Until a few years ago, the value of its shares had been increasing steadily and it regularly outperformed its main rivals. However, more recently its shares have been underperforming and many financial analysts are recommending that Zhichi Co shares should be sold. Zhichi Co's investors are becoming increasingly concerned.

The analysis concluded that this underperformance was due to three policy failures in the company's financial strategy, as follows:

- Zhichi Co does not undertake post-completion audits of its investment projects;
- Zhichi Co has used a fixed discount rate of 10% to assess all investment projects for some years now. None of the company's senior management can remember why this rate was chosen; and
- Zhichi Co has continually funded new investment projects using equity finance and the analysis concluded that this financing strategy sent the wrong signals to investors.

## Exhibit 2

**2. New project discount rate**

Zhichi Co is considering a new project to manufacture environmentally friendly motor scooters which are fully carbon neutral. This is a diversification into a new business area for Zhichi Co in which it has no previous experience. Zhichi Co's chief financial officer is of the opinion that Zhichi Co should determine an appropriate discount rate for the project based on an initial assumption that the project will be all-equity financed.

Liyu Co would be a competitor to Zhichi Co as it manufactures environmentally friendly motor scooters, as well as equipment for wind farms. Approximately 60% of Liyu Co's business is manufacturing motor scooters and the remaining 40% is manufacturing wind farm equipment.

Given below is the most recent financial information relating to Liyu Co.

Share capital (\$0.25 nominal value)	\$20,000,000
Reserves	\$27,436,000
Market value of equity	\$172,000,000
Market value of debt	\$48,260,000
Equity beta	1.20

Sanwenyu Co is involved in the manufacture of equipment for wind farms. It has estimated its cost of equity as 15.4%, and it is financed 20% by debt and 80% by equity in market value terms.

The estimated risk-free rate is 4.8% and the market risk premium is 8%. The corporation tax rate applicable to all the companies is 20%.

## Exhibit 3

**3. New project cash flows**

Zhichi Co expects the new project manufacturing environmentally friendly motor scooters to last for four years. The project will require an immediate expenditure of \$70m for plant and machinery. After the project ends in four years' time, it is anticipated that the project will be sold for \$42m, inclusive of any inflationary increase.

The following estimates of revenues and costs, relating directly to the project, have been made:

- In the first year, sales revenue is expected to be \$10m and then increase to \$40m in year two. In the final two years of the project, sales revenue will grow by 20% each year.
- Costs are estimated at 120% of sales revenue for the first year and 80% of sales revenue for the second year before reducing to 40% of sales revenue for each of the final two years.

Substantial initial working capital of \$10m will be required at the start of year one of the project. Subsequently, working capital of 15% of sales revenue for that year will be required at the start of years two to four. Any remaining working capital will be released at the end of the project.

Zhichi Co pays corporation tax of 20% every year. Tax is payable with a year's time delay and any tax losses from the project are set against the company's profits from other projects. Tax allowable depreciation is available on the expenditure on the plant and machinery for the project at an annual rate of 15% on a reducing balance basis. It is anticipated that the plant and machinery will have a realisable value of \$20m at the end of the project, and this realisable value is included in the project's estimated sale price of \$42m.

## Exhibit 4

4. Financing the new project

Page: 1 of 1 Automatic Zoom

Due to the positive environmental nature of the new project, Zhichi Co can obtain the entire funding for the project through a loan at a subsidised interest rate of 180 basis points lower than the estimated risk-free rate of 4.8%. Zhichi Co's normal borrowing rate is 6%. Zhichi Co has decided that the project should be entirely funded through the subsidised loan.

Issue costs, which need to be paid, are anticipated to be 3% of the gross finance. Issue costs are not allowable as a tax-deductible expense.

Given that the new project is to be funded by the subsidised loan, Zhichi Co's chief financial officer is of the opinion that the adjusted present value of the project would be more appropriate than the conventional net present value, based on a risk-adjusted cost of capital, to evaluate the project. However, he cannot explain why this should be the case.

## Exhibit 5

5. Future project funding

Page: 1 of 1 Automatic Zoom

Zhichi Co's board of directors (BoD) is considering whether to raise funds for forthcoming projects either through new debt finance or through asset securitisation.

In addition to its manufacturing business, Zhichi Co receives rental income on some of its factory premises and its plant and machinery which it hires to other companies. The BoD is of the opinion that it should securitise this rental income.

## Section B – summary screen

AFM September/December 2021 exam (21/22 syllabus)

Flag for Review

### Section B

This section of the exam contains **two questions**.

Each question is worth **25 marks** and is compulsory.

This exam section is worth **50 marks** in total.

#### Important:

In your live exam, you should:

- Indicate which requirement each of your responses relate to so that this is clear for markers.
- Show all notes/workings that you want the marker to see within your responses. Remember, any notes/workings made on the Scratch Pad or on your workings paper will not be marked.

Select **Next** to continue.

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## Section B – question 1

AFM September/December 2021 exam (21/22 syllabus) 2 of 3

Symbol Highlight Strikethrough Calculator Scratch Pad

**Exhibits**

- 1. Brandon Co
- 2. Transaction to be hedged

**Requirements**

- Requirements (25 marks)

**Response Options**

- Word Processor
- Spreadsheet

The following **exhibits**, available on the left-hand side of the screen, provide information relevant to the question:

1. Brandon Co
2. Transaction to be hedged

This information should be used to answer the question **requirements** within your chosen **response option(s)**.

Help/Formulae Sheet Previous Navigator

## Requirements

Requirements (25 marks)  

(a) Explain how the functional areas of a treasury department could add value to Brandon Co's restructuring plans and for each functional area, discuss the advantages of a centralised treasury department. (7 marks)

(b) Recommend a hedging strategy for the \$36m loan based on the hedging choices the treasury manager is considering, if the central bank base rate increases to 6.6%. Support your answer with appropriate calculations. (15 marks)

Note: Up to 4 marks are available for discussion. (3 marks)

(c) Briefly explain what is meant by smoothing and how this technique could be used to manage Brandon Co's interest rate risk. (3 marks)

## Exhibit 1

1. Brandon Co 

Page: 1 of 1  Automatic Zoom  

Brandon Co is a holding company, operating a small chain of luxury department stores in city centre locations throughout the eurozone. Under the existing structure, the stores are grouped into a number of regional subsidiaries, each with their own head office and treasury function. The board plans to undertake a restructuring exercise in response to a significant decline in revenue over recent years. This will involve closing unprofitable stores within the eurozone whilst expanding into other more profitable locations worldwide. The proposal represents a significant expansion for the company and will be financed by a combination of debt and equity.

The restructuring is due to be discussed at the upcoming board meeting, including the possibility of centralising the treasury function.

## Exhibit 2

2. Transaction to be hedged

Assume today's date is 1 November. Brandon Co's treasury manager predicts a short-term loan of \$36m will be required next year on 31 January to fund an investment in non-current assets as part of the overseas expansion. The loan will be repaid on 31 May.

Brandon Co can borrow at the central bank base rate plus 40 basis points. The central bank base rate is currently 5.7%. Interest rates have been relatively volatile over the last few years and the finance director is concerned that the central bank could increase the base rate to 6.6% between now and 31 January in response to expectations about inflationary pressures within the economy. Recent media reports have also speculated on the possibility of a reduction in the base rate.

**Hedging**

Brandon Co's treasury manager would like to investigate smoothing as a technique to manage the company's future exposure to interest rate risk but for the purposes of this transaction is considering the following hedging possibilities with the objective of minimising exposure to interest rate risk:

- Forward rate agreements (FRAs)
- Interest rate futures
- Options on interest rate futures

The following data is available for each of the above:

**FRAs**

The following FRA rates are available:

3-4	5.82%
3-7	5.90%
4-8	5.99%

**Three-month \$ futures, \$500,000 contract size**  
Prices are quoted in basis points at 100 – annual % yield.

December:	94.07
March:	93.95
June:	93.82

**Options on three-month \$ futures, \$500,000 contract size, option premiums are in annual %.**

Strike price	December	March	June	December	March	June
93.75	0.168	0.238	0.323	0.025	0.087	0.163

Assume futures and options contracts are settled at the end of each month. Basis is assumed to diminish to zero at contract maturity at a constant rate, based on monthly time intervals. It is also assumed that there is no basis risk and there are no margin requirements.

## Section B – question 2

AFM September/December 2021 exam (21/22 syllabus) 3 of 3

\$  Symbol   Highlight   Strikethrough   Calculator   Scratch Pad  Close All  Flag for Review

**Exhibits**

- 1. Hanwood Shoes Co
- 2. Sale of children's shoes division
- 3. Impact and consequences of sale
- 4. Hanwood Shoes Co's SOFP

**Requirements**

- Requirements (25 marks)

**Response Options**

- Word Processor
- Spreadsheet

The following exhibits, available on the left-hand side of the screen, provide information relevant to the question:

1. Hanwood Shoes Co  
2. Sale of children's shoes division  
3. Impact and consequences of sale  
4. Hanwood Shoes Co's SOFP

This information should be used to answer the question requirements within your chosen response option(s).

Help/Formulæ Sheet ← Previous  Navigator  Next →

## Requirements

Requirements (25 marks)  

(a) Calculate the expected sales price of the children's shoes division and demonstrate its impact on Hanwood Shoes Co's statement of financial position and forecast earnings per share. (13 marks)

(b) Discuss whether Hanwood Shoes Co's investors are likely to be satisfied with the proposed sale of the children's shoes division and its consequences for profits and funding. (7 marks)

(c) Discuss the implications for future profits and liquidity of the alternative suggestion made by the non-executive director. (5 marks)

## Exhibit 1

1. Hanwood Shoes Co  

Page: 1 of 1  Automatic Zoom 

Hanwood Shoes Co started trading 40 years ago, manufacturing and selling children's shoes in shops. The shoes have been of higher quality than shoes produced by its competitors, although also more expensive. School shoe sales in particular have been a consistent large generator of cash, helping to fund the company's expansion.

About 15 years ago, Hanwood Shoes Co started manufacturing and selling adults' shoes. Hanwood Shoes Co's adults' shoes are currently sold at a higher profit margin than children's shoes. Adults' shoe sales now generate the majority of Hanwood Shoes Co's profits. The adults' shoes sold are a mixture of formal types with a long lifespan and some fashionable shoes. The inventory turnover period for adults' shoes is, on average, significantly higher than for children's shoes.

Hanwood Shoes Co is organised on the basis of two separate divisions for children's and adults' shoes. Its shops sell either children's shoes or adults' shoes, but not both. Hanwood Shoes Co also sells adult shoes to other retailers.

Five years ago, Hanwood Shoes Co restructured its cost base. It moved production of children's shoes to new facilities in its home country and outsourced the production of adults' shoes to foreign suppliers. However, Hanwood Shoes Co's board now predicts that profits from children's shoes will increase at a slower rate than adults' shoes. It expects that in the next few years, a greater share of the children's shoes market will be taken by companies with a lower cost base.

Hanwood Shoes Co's board is aware that it must convince investors that any major strategic changes it makes will result in an increase in earnings per share. Investors will also consider a change in earnings per share against any change in the business risk profile of the company.

## Exhibit 2

2. Sale of children's shoes division

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Automatic Zoom

Hanwood Shoes Co's board wishes to improve the company's cash position for two reasons. First, loan notes of \$175m nominal value are due to be redeemed in just over a year's time. The board is unwilling to seek renewed loan funding because the terms would not be favourable and some investors have expressed concern about gearing levels. Second, Hanwood Shoes Co has recently been slow to pay some of its suppliers of adults' shoes. One major supplier recently delayed delivery of shoes to Hanwood Shoes Co until it was paid for previous deliveries.

Hanwood Shoes Co's chief executive proposed that the company should in future only sell adults' shoes and should sell the children's shoes division. He believed from industry contacts that at least three children's clothing manufacturers, looking to expand their product range, would be interested. The finance director suggested that the proceeds from the sale of the division could first be used to pay off the loan notes. It would then be used to increase cash held and thus improve liquidity. The remaining proceeds would be invested in the adults' shoes division to improve earnings per share.

A non-executive director asked why liquidity needed to be improved. He claimed that higher profits could be achieved by investing funds not required to repay the loan notes in non-current assets. He thought that Hanwood Shoes Co should maintain the same level of current assets as it has now.

## Exhibit 3

3. Impact and consequences of sale

Page: 1 of 1

Automatic Zoom

1. The sales price of the children's shoes division will be the sum of the present value of predicted future free cash flows. The discount rate to be used is 10%.
2. The predicted after-tax free cash flows of the children's shoes division (\$m) are as follows:

Year	1	2	3	4
	\$m	\$m	\$m	\$m
	76	81	85	88

3. The predicted after-tax profits of the children's shoes division in Year 1 can be assumed to be \$76m. The total after-tax profits for Hanwood Shoes Co for Year 1 if the children's shoe division is not sold is predicted to be \$217m.
4. After Year 4, free cash flows for the children's shoes division should be assumed to increase at a rate of 3.5% per year.
5. The proceeds received for selling the children's shoes division would be used first to pay off the 9% loan notes. Part of the remaining amount from the sales proceeds will be held as part of current assets, so that the current ratio increases to 1.4. The rest of the sale proceeds will be invested in non-current assets.
6. The profit on the sale of the children's shoes division should be taken directly to reserves.
7. The non-current assets of the children's shoes division can be assumed to be \$608m and the current assets can be assumed to be \$349m.
8. Additional investment in non-current assets is expected to earn an 18% pre-tax return and additional investment in current assets is expected to earn a 6% pre-tax return.
9. Tax is payable at an annual rate of 20% on profits.

## Exhibit 4

4. Hanwood Shoes Co's SOFP

Edit Format

100%

A1

A	B	C	D	E	F	G	H	I
1	<b>Hanwood Shoes Co's current statement of financial position</b>							
2				\$m				
3	<b>Assets</b>							
4	Non-current assets	1,200						
5	Current assets	909						
6	<b>Total assets</b>	2,109						
7	<b>Equity and liabilities</b>							
8	Called-up share capital	50						
9	Reserves	737						
10	<b>Total equity</b>	787						
11	Non-current liabilities							
12	9% loan notes	175						
13	7% loan notes	145						
14	Bank loans	108						
15	<b>Total non-current liabilities</b>	428						
16	Current liabilities	894						
17	<b>Total equity and liabilities</b>	2,109						
18								
19								
20								
21								