CREDIT ASSESSMENT - ANALYSING INFORMATION

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STUDY OBJECTIVES

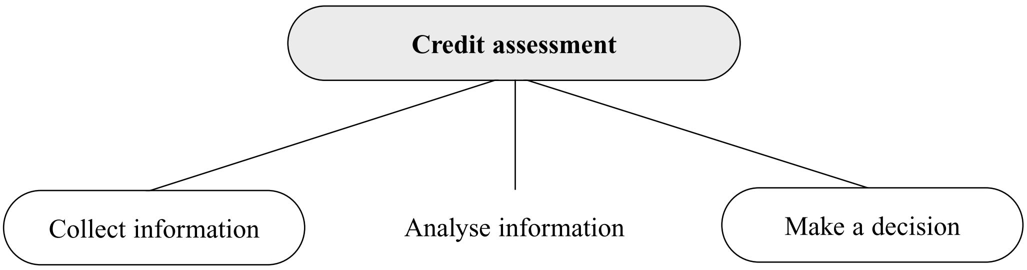
After studying this chapter, you should be able to:

- explain the meaning and importance of a credit standard
- analyse credit and other information about a person (the credit application) with the help of certain standards
- analyse credit and other information about an enterprise
- provide answers to the following questions with a view to learning how to analyse credit information:
  - What is analysed?
  - What is the purpose of the analysis?
  - What is the extent of the analysis?
- analyse the information in a case study about a person or enterprise applying for credit

INTRODUCTION

In the previous chapter we saw that the enterprise uses a number of resources to obtain information. In this chapter we will investigate the **way** in which this information is used - in other words, we will see exactly what the enterprise **does** with the information.

This will take us to the second step in the process of credit assessment, namely the **analysis of information**. This is a critical element in the credit assessment process. Without analysing information, the enterprise cannot make a decision about granting credit. The analysis of information is thus the **basis** for determining the credit risk and then making a decision about granting credit.



The information should be analysed on the basis of **certain guidelines**. If the enterprise does not know how to distinguish between acceptable and unacceptable credit risks, it cannot really make a sound decision. This highlights the importance of a credit standard - an aspect we will discuss in the first part of this chapter.

We will discuss the analysis of credit and other information by answering the following questions:

- What is analysed?
- What is the purpose of the analysis?
- What is the extent of the analysis?

The answers to these questions involve the following:

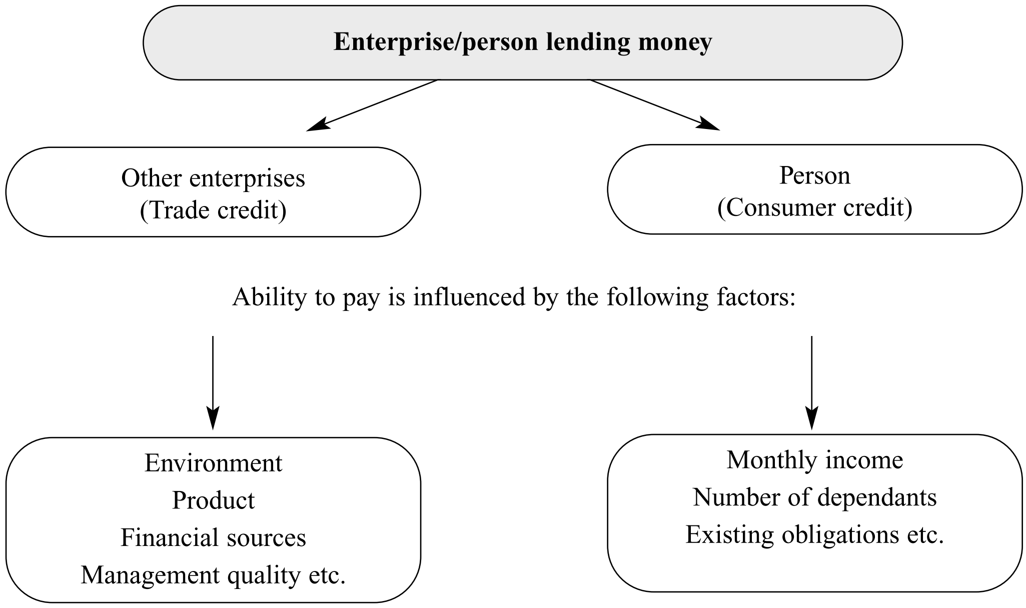
- The characteristics/factors determining the quality of a credit risk, as well as the aids that can be used
- The importance of a credit standard
- The purpose of the credit application and the type of information the enterprise already has at its disposal

Credit Standard

In everyday life people are constantly exposed to risk, for example the risk that you may have a car accident on the way to work, or that you may lose money on the stock exchange. In the same way, **enterprises** also have to face risks during their day-to-day operations - for instance, the risk that the market for their products or services may shrink, or that labour unrest may bring their production activities to a standstill.

Enterprises selling on credit also run a risk - the risk that debtors will pay their debts late, or will not pay at all. This risk is an integral element of credit, precisely because credit is based on a **promise** to pay in future. We can even take the view that credit is risk.

The risk of late payments or non-payment is influenced by many different factors. If we look, for example, at the risk run by an enterprise in granting credit to another enterprise, we will see that the debtor's ability to pay is influenced by factors such as the environment in which it operates, its product, the financial sources it will use to meet its obligations, and the quality of its management. In the case of an **individual** the risk is influenced by, among other things, the person's monthly income, number of dependants and his or her existing obligations.



Can you see how the abovementioned factors will determine the quality of a credit risk? The enterprise must obviously have information about these factors and analyse it - only then can it make a decision about granting credit.

The core activity in granting credit is **estimating the risk** involved. The more accurately the enterprise can estimate the risk, the greater the likelihood that it will make a sound decision. The enterprise's success is thus directly influenced by how efficiently it manages risk. Good risk management will result in higher returns (higher profitability), while poor or no risk management will reduce profitability and may even lead to the closure of the enterprise.

By analysing the available information, enterprises try to determine whether they would be willing to accept the risk of granting credit. The **credit risk is assessed** to determine whether it is a good, average or poor risk. Once the enterprise knows what type of risk it is dealing with, it will be able to decide whether it is willing to grant credit or not. If the enterprise, while analysing the credit information, already establishes at this stage that the person or enterprise represents a poor credit risk, it will not consider granting credit. In such a case the risk is too great that the person or enterprise will fail to pay and so cause financial losses for the enterprise.

The question is **how** the enterprise should decide that it is dealing with a good or a poor credit risk - are there any guidelines it can follow to make this decision?

Such a guideline is provided by the enterprise's **credit standard**. The credit standard gives an **indication of the risk** that the enterprise will be **willing to accept** with regard to a particular credit applicant. The role of the credit standard, in other words, is to provide guidelines for assessing the credit and other information about an applicant. Specific guidelines and norms are **important** for an analysis and a credit standard is absolutely essential.

The credit standard provides guidelines about the **requirements** that the **credit applicant** must meet before credit can be granted - it sets out the **minimum** requirements for an applicant to qualify for credit.

When the information is analysed on the basis of the credit standard, the enterprise has the **opportunity** to determine which applicants represent a great risk of bad debts and late payments. In this way the enterprise may decide not to grant credit to applicants representing a high degree of risk. In other words, if the degree of risk represented by an applicant is higher than the degree of risk that the enterprise is willing to run, the application will be refused.

It is clear, therefore, that the **quality of the credit risk** is the deciding factor in the process of making a decision about granting credit. In the previous chapter we referred to the type of information an enterprise needs to determine the quality of the credit risk. Let us look at one or two examples again.

It is important that you should have a thorough knowledge of the characteristics or factors determining the quality of a credit risk.

Example *If a person applies for an account at a clothing store, the store will be interested in the following:*

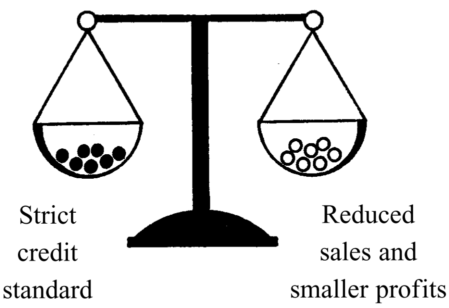
- *The customer's willingness to pay accounts regularly and on time - this is reflected in, among other things, the customer's payment record and pattern*
- *The customer's ability to pay, which is influenced by his or her income and occupation*
- *The customer's financial means, i.e. how strong the customer is financially - this is influenced by the customer's assets (tangible as well as intangible assets, in other words "touchable" and "non-touchable" assets)*
- *The additional security the customer could offer (for example, life insurance in the case of a bank loan)*
- *The state of the economy in general, which will also affect the customer's ability to pay*

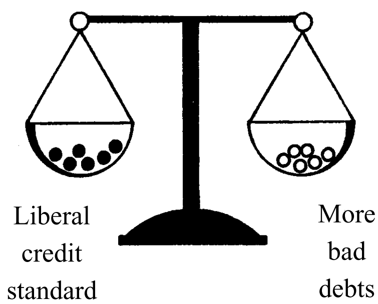
Suppose that a manufacturer of steel trailers applies for an overdraft facility of R100 000 at a commercial bank. Give four practical examples of the factors that could influence the quality of this credit risk.

(HINT: As a guideline, use the type of information the bank will need to make a decision about granting credit.)

The basis of a good credit risk is the credit applicant's **willingness** and **ability** to pay.

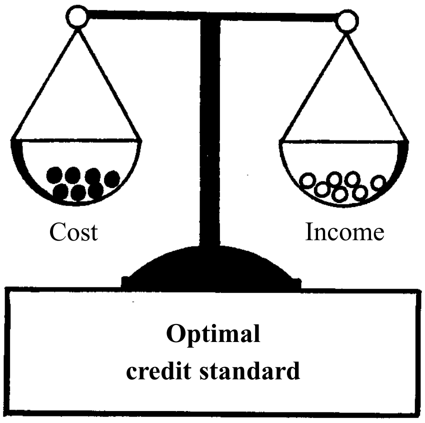
The enterprise's credit standard **reflects the credit risk** that the enterprise is **willing to accept**. A credit standard should thus never be determined at random. A very strict credit standard may lead to reduced sales and smaller profits. On the other hand, a liberal credit standard may result in bad debts. Only well-considered decisions about the credit standard will be able to ensure a maximum of sales together with a minimum of bad debts.





The **optimal credit standard** must be determined with a view to the risk that the enterprise is willing to accept. This means that an optimum state (balance) must be established between:

- the marginal costs of granting credit (including, for example, possible losses as a result of bad debts, collection costs, the cost of investing in the additional debtors)
  and
- the marginal income from the additional credit sales



This means that the enterprise may accept a credit risk up to that point where the expected profit from additional sales is equal to the cost of these additional sales. In other words, a guideline for determining the optimal credit standard is that there should be a balance between the marginal costs of the additional credit sales, on the one hand, and the marginal income from these sales, on the other hand.

One could also calculate the marginal cost in terms of the cost of the additional sales, **but** in this case the possible losses resulting from bad debts must be taken into account.

Establishing a credit standard does not mean that this standard can or may never change. The credit standard is not a fixed, inflexible guideline. **Flexibility** is necessary to adjust to changing circumstances. The enterprise may decide, for example, to relax the credit standard as a result of heavy competition, with the result that credit sales and the opportunities for profit will increase.

Accepting greater credit risks does not have advantages only. It also involves additional costs such as higher administration and capital costs, while bad debts may also increase.

A change in the credit standard of an enterprise thus entails the following:

- A **change in the sales volume** (for example, if the credit standard is made stricter, there will probably be a decline in sales)

- A **change in the level of investment in debtors** (if the credit standard is made stricter, credit sales will decline and the investment in debtors will be reduced accordingly)

- A **change in the number of potential bad debts** (the stricter the credit standard, the smaller the likelihood of bad debts)

Using examples to illustrate your answer, explain each of these changes in a situation where:

i) the credit standard is relaxed

ii) the credit standard is made stricter

The final decision about an adjustment in the credit standard, like the decision about the original credit standard, is based on the principle that the advantages resulting from the higher credit sales must be greater than the costs generated by the additional debtors.

Those of you who are interested may wish to examine the following practical example. It illustrates how an enterprise can determine whether a planned change in the credit standard will have any advantages.

Example *Enterprise XYZ's current credit terms are as follows:*

- *Credit period: 30 days*
- *Cash discount:5% if the debtor pays within 10 days after the purchase*

Enterprise XYZ grants credit on this basis to all applicants who, during assessment, are given a rating of 70 or higher on a credit rating scale. The enterprise is now also considering the granting of credit to applicants with a rating of 60 or higher.

Should credit be granted to this group, the new sales figures and payment pattern (as estimated by XYZ) will compare with the current data as follows:

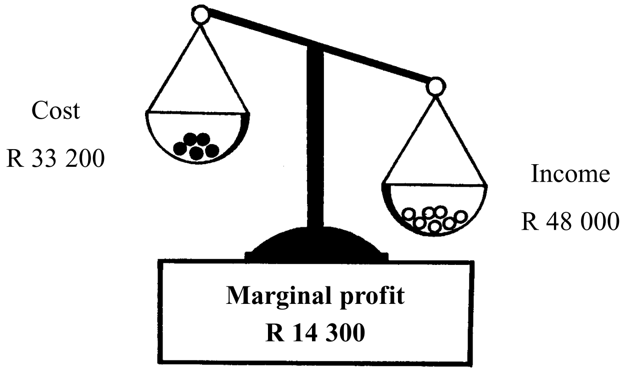
Annual credit sales:	*60 000 units/R600 000*
Expected increase in credit sales:	*20% (12 000 units)*
Expected annual credit sales:	*72 000 units/R720 000*
Average collection period of debtors:	*Will increase from 30 to 45 days*
Bad debts:	*5% of additional sales*
Discount:	*None*
Tax:	*40% of marginal income*
Minimum expected rate of return:	
(expected profitability):	*20%*
Sales price per unit:	*R10*
Variable costs per unit:	*R6*
Income per unit sold:	*R4*

To determine whether Enterprise XYZ should grant credit to the group concerned, the marginal costs of and the marginal income from the additional sales should be compared.

Assume that the production capacity is not fully utilised - this means that there will be no increase in the fixed costs of the additional units. Also assume that the sales price per unit remains constant.

Marginal income from additional sales:	*R48 000 (R4 x 12 000)*
Current turnover rate of debtors:	*12 times (360 days/30 days)*
Expected turnover rate of debtors:	*8 times (360/45)*
Current average investment in debtors:	*R50 000 (R600 000/12 times)*
(credit sales/turnover rate)	

Expected average investment in debtors:	*R90 000 (R720 000/8 times)*
Expected increase in debtors: (marginal increase)	*R40 000*
Minimum expected rate of return:	*20%*
Costs of marginal increase:	*R8 000 (20% of R40 000)*
Bad debts:	*R6 000*
Tax:	*R19 200*
Marginal costs of additional sales:	*R33 200*
Marginal income from additional sales:	*R48 000*
Marginal profit after relaxing the credit standard:	*R14 800*



In the example, it is clear that Enterprise XYZ can carry out the decision to grant credit to applicants with a rating of 60 or higher. The marginal income that this will generate is higher than the marginal costs it involves. In this case, therefore, relaxing the credit standard has advantages for Enterprise XYZ in terms of nett income.

i) In your opinion, what would the implications be if an enterprise did not have a credit standard? Give at least three reasons for your view.

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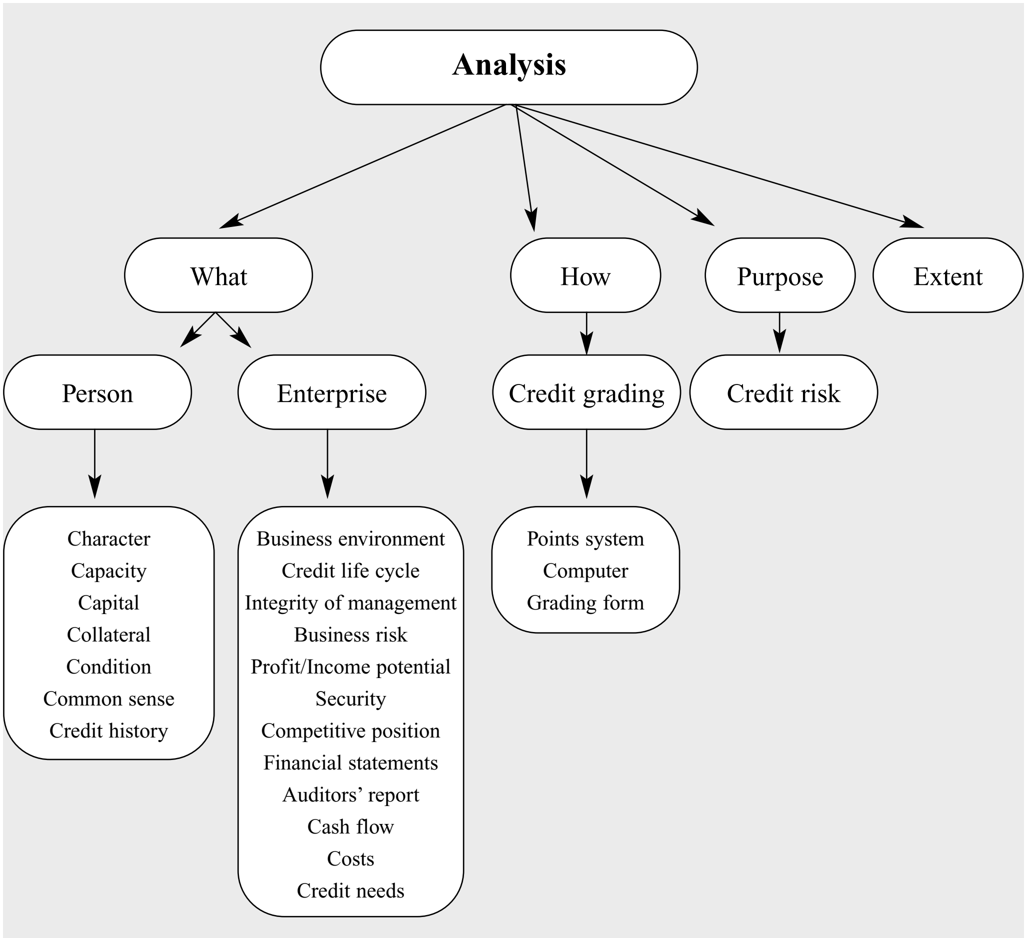
ii) Suggest at least five ways in which an enterprise can make provision for the risk of credit sales.

ANALYSIS OF CREDIT AND OTHER INFORMATION



What is Analysed?

A simple answer to this question would be "the information that the enterprise has available already, as well as the information that may be obtained from external sources". Yes, this is correct, but let us explore this concept in greater detail.

In analysing information, the enterprise is interested in the **quality** of the **credit risk**. In other words, the enterprise will examine all the information providing an indication of the quality of the credit risk. The enterprise will investigate, for example, the **nature** of the information about the customer's ability to pay, or the current economic situation in the country (are interest rates high or low?).

We will now discuss the information that is analysed with the help of practical examples. We will demonstrate **how** the enterprise uses the information it has available. The first example concerns **a person applying for credit** (consumer credit), and in the second the applicant is an enterprise (trade credit).

Note that if a person or enterprise applies for credit at a financial institution, the same guidelines apply as those used for consumer and trade credit.

Annexure 1 at the end of this chapter contains a case study about Family Pharmacy. Please read this case study carefully. We will be referring to it a number of times.

The following is an extract from the case study "Family Pharmacy":

Joe Allen is the owner-manager of Family Pharmacy. This enterprise is located in Hillside Centre, a small suburban shopping centre in a West Rand suburb. The shops in this centre include a post office, a fast-food restaurant, a greengrocer and a cafe, as well as the consulting rooms of two general practitioners and a dentist. Three kilometres down the road is another shopping centre with a large pharmacy that is open after hours.

Family Pharmacy offers credit to approved customers. Credit applicants have to complete an application form in which they must provide at least two trade references. These references are checked during the assessment process. The applicant's home and work telephone numbers are checked and confirmed, and his or her employer is contacted to ensure that he or she does work at the address provided. Joe also has a contract with Credit Information Limited, a credit bureau in Johannesburg. During the assessment of a credit application Credit Information is contacted to establish whether the applicant pays regularly and on time.

* * * * *

Suppose that Joan, a teacher, applies for an account at Family Pharmacy. Which information is analysed during the assessment process?
Let us have a look.

(In the answer to this question, you will see that we make certain assumptions about Joan - simply because we do not have all the information about her.)

- CHARACTER. This refers to Joan's **willingness to pay** as agreed on the basis of Family Pharmacy's credit terms. How regularly does Joan pay her accounts? Joan pays her Edgars account, her car installment at the bank, and her telephone account regularly and on time (based on information obtained from her trade references and the credit bureau - she thus has a good credit record). She will probably pay this account on time as well.

- CAPACITY. This refers to Joan's **ability to pay**. Does Joan have the financial means to pay before the due date? Joan has been a teacher for the past ten years and receives a monthly salary. She should thus be able to pay her account. Let us assume that Joan is married with two children. If Joan were unmarried and had five dependants, she would have had greater financial obligations. In such a case she might have had too many credit obligations, which would have influenced her ability to pay. Joan and her family have lived at the same address for the past five years. Based on the number of years Joan has been in the same home and has held the same post, it seems that she is a credit applicant with stability. It is important that Family Pharmacy should also look at how many accounts Joan has. If she has too many, it might lead to payment problems (she might be overcommitting herself).

- CAPITAL. This refers to Joan's **financial strength**. Will she still be able to pay her account regularly and on time in times of financial difficulty? Joan's financial strength is reflected by her assets. These include tangible assets (Joan owns their home, and she also has a savings account) and intangible assets (for example, Joan could easily find another job if she were to lose her current one - she could possibly also offer extra lessons at home).

- COLLATERAL. This refers to the **security** that Joan can offer (for example life insurance, or the home she owns). We know that Joan is a homeowner.

- CONDITION. How do **current economic conditions** influence Joan's ability and willingness to pay? If current interest rates are high, for example, this will have a direct influence on Joan's home and car installment: these payments will be higher. To date Joan has been able to meet all her commitments in time. A rise in interest rates is not expected in the near future.

- COMMON SENSE. This refers to **clear thinking** and **good judgement**. The credit assessor will assess this aspect based on his or her experience. For example, experience has shown that teachers are generally willing to pay regularly and on time. However, experience has also shown that their credit limit should not be set too high. This will be kept in mind when Joan's application is analysed. It is important to remember, however, that the analysis cannot be based solely on personal judgement - objectivity should be maintained.

- CREDIT HISTORY. Here Family Pharmacy looks at the way Joan has **managed her accounts in the past**. What is her history with regard to paying on time? (Information on this aspect can be obtained from the credit bureau or by way of a bank code enquiry.) Joan has a good credit record and a C bank code. There have been no debt-related court judgements against her.

We have now looked at “what is analysed”. Once the analysis is complete, Family Pharmacy has to decide whether it will accept Joan’s application. This will be discussed in more detail in another chapter.

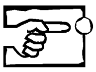
Let us now examine another example, in which an **enterprise** applies for credit.

Example *You are again referred to the case study about Family Pharmacy.*

Two weeks ago, a doctor who is a friend of Joe told him that the pharmacy next to the doctor’s practice is for sale. This pharmacy is also located in a suburban shopping centre on the West Rand. It is for sale because the owner has decided to move back to Cape Town.

The shopping centre in which the pharmacy is situated was opened a year ago. It has growth potential - the next shopping centre is about 5 kilometres away. A well-known supermarket chain has a shop in the centre, and it also contains a hardware store, a dry cleaning business and a florist.

After careful consideration, Joe decided to buy the pharmacy. He applied for a loan at his commercial bank. To do so, he had to hand in the financial statements of his enterprise together with the application form.



Where the case study does not provide complete information, we will make our own assumptions.

Let us now see what exactly is analysed when an enterprise applies for credit.

- BUSINESS ENVIRONMENT. Here we should keep in mind that Family Pharmacy is operating in a **constantly changing** environment. Which other pharmacies operate in the area, apart from those already mentioned? Is there a possibility of another pharmacy being opened that will offer better credit terms? Could sales increase in future? (Another medical doctor has opened a practice in the centre, and this could have a positive influence on Family Pharmacy’s sales.) How will medical research affect Family Pharmacy? (Generic medicines are becoming increasingly popular and may influence the pharmacy's medicine sales.)

- CREDIT LIFE CYCLE. The information in the case study suggests (and for the sake of this example, we will assume) that Family Pharmacy is in a **profitable growth phase**. This conclusion is based on details such as the following: the pharmacy is still paying its creditors on time, the enterprise's sales and profits are still growing, Family Pharmacy has a well-established relationship with its bank, and the risk of failure is low.

- INTEGRITY OF MANAGEMENT. Joe has the ability to run the pharmacy effectively. He does not act on impulse and gives careful consideration to business decisions, for example the decision to buy the new pharmacy. He does not set credit limits too high because he realises that doing so will have disadvantages. The pharmacy is geared towards customer service - for example, it offers a home delivery service. In the past the pharmacy has paid all its debts regularly and on time. The pharmacy has a good credit record and also a good record at the bank. Joe has kept up with the environment in which the pharmacy operates, and he is willing to make adjustments when necessary, for example by using a consultant when he needs advice. Joe has a **complete business plan** for his enterprise, as well as for the new pharmacy he would like to buy and for which he needs the loan.

- BUSINESS RISK. The chances that the pharmacy will **be successful and survive** are **good**. The pharmacy is well situated and accessible (the shopping centre is extremely popular). There are also two general practitioners and a dentist in the centre. 80% of the doctors' patients hand in their prescriptions at the pharmacy. There is a demand for the pharmacy's products, because it is essential for people to buy medicines. People also regularly buy the pharmacy's cosmetics. The pharmacy has reliable suppliers who visit it frequently. Family Pharmacy buys on credit from these suppliers, who offer normal, standard credit terms.

- PROFIT/INCOME POTENTIAL. Family Pharmacy must have an income to be able to pay its accounts regularly and on time. The enterprise has a sound cash flow and liquidity position. Joe is conscientious about **efficient cash management** - he realises that poor cash management has great disadvantages and a negative influence on the pharmacy's creditworthiness. In the past five years, the profits of the pharmacy have risen by 12% per year (and this trend may continue).

- SECURITY. This refers to the pharmacy's assets which could serve as security should the pharmacy's situation worsen. Over the years, the pharmacy has **built up a reserve** which could serve as a contra investment for the loan the pharmacy wishes to obtain.

- COMPETITIVE POSITION. This refers to Family Pharmacy's competition in the market. Family Pharmacy's **competition is strong**. Only three kilometres away there is another pharmacy which is open after hours. However, in spite of this competition, Family Pharmacy is maintaining a sound growth in sales and income. Nevertheless, the enterprise should have a strategy to counteract its competition, for example by concentrating on personal service and its home delivery service.

- FINANCIAL STATEMENTS. We can draw **certain conclusions** about the financial position of Family Pharmacy by studying its financial statements. We will discuss financial statements, and the analysis of these statements, in detail in chapters 4 and 5.

- AUDITORS' REPORT. Family Pharmacy's auditors are Steyn & Steyn. This firm has been the pharmacy's auditors since its establishment. To date, all the **reports** they have issued at the end of every financial year have been unqualified auditors' reports.

- CASH FLOW. From the case study it is clear that Family Pharmacy maintains a **healthy cash flow**, and understands that a good cash flow is important for obtaining additional credit. The credit assessor can obtain more information about cash flow by analysing the financial statements. We will discuss this in the following two chapters.

- COSTS. This refers to how **cost-effectively** the pharmacy is run. The costs incurred in carrying out the pharmacy's activities have a direct influence on the pharmacy's income. Based on the growth in sales and the pharmacy's sound financial position, we can assume that the pharmacy has attained break-even point and controls its costs effectively.

- CREDIT NEEDS. During the analysis it is also necessary for the bank to examine Family Pharmacy's credit needs. **How large is the amount** that the pharmacy plans to borrow, and how does it intend to pay back the loan? On behalf of the pharmacy, Joe applies for a loan of R250 000 to finance the second pharmacy. This asset that is purchased can simultaneously serve as additional security for the bank. Payments will be made from the pharmacy's income.

Can you see how enterprises use the information they have obtained about credit applicants?

In analysing the information, **good judgement** should be exercised. Good judgement is especially important when it is very difficult to determine whether the credit applicant is in fact a good or poor credit risk. It may also happen that an applicant is a good risk in theory, but that the credit manager finally decides against granting credit. However, personal judgement is not the only factor that should be relied on - we have already emphasised the importance of objectivity.

Checklist for a Credit Analysis of an Enterprise

Industry:

- Competition
- Supply of and demand for products/services
- Strikes - which trade unions are active
- Import tariffs
- How labour-intensive the industry is
- Technological sophistication
- Price sensitivity
- Barriers to entry
- Cyclical nature of the industry
- Seasonal nature of the industry

Performance risk:

- Technical expertise
- Quality of product
- Product life cycle
- Risk of labour action
- Risk of too few suppliers and buyers
- Risk of single product
- Risk of old stock
- Risk of fluctuations in exchange rate
- Risk of stagnating market
- Risk of defective equipment
- Risk of production delays
- Risk of replacing expensive machinery/equipment

Quality of management:

- Succession planning
- Knowledge of the industry
- Evaluation of management skills
- Pro-active approach
- Structure
- Planning
- Control of stock and debtors

Financial risk:

- Financial strength
- Capitalisation
- Assets in use
- Profit margins
- Generation and maintenance of capital
- Management of cash flow

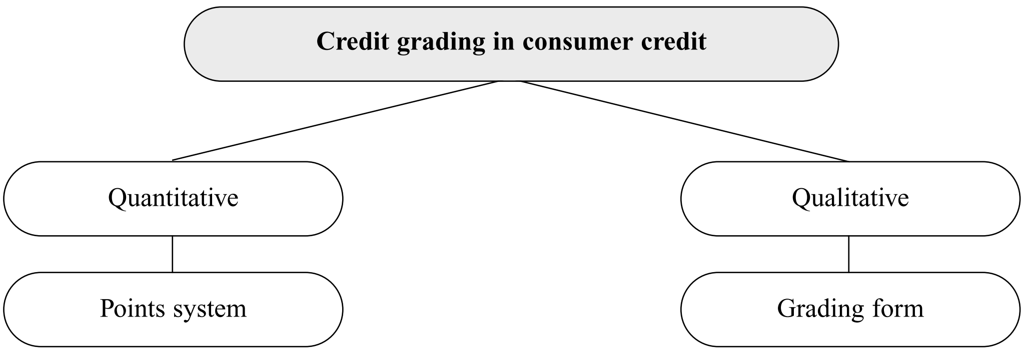
In the examples above, we distinguished between the factors that were assessed to determine the credit risk represented by Joan, on the one hand, and Family Pharmacy, on the other. Without looking at your notes, try to identify the factors below that are used for analysing consumer credit. Underline the correct words.

security	competitive position	common sense
credit life cycle	credit history	collateral
costs	business environment	character
auditors' report	condition	capital
credit needs	profit/income potential	capacity
business risk	cash flow	financial statements

How is it analysed?

Credit Grading

Credit grading is usually applied when the factors affecting the creditworthiness of **people** are analysed (i.e. in consumer credit). Although the same principles can also be applied to trade credit, this is not generally done at present. The process is essentially the assessment of a person’s creditworthiness on the basis of certain set guidelines. The enterprise bases these guidelines or criteria on factors that have been associated with good or poor credit risks in the past.



Credit grading by way of the points system

In practice, credit grading by way of the points system is known as “credit scoring”.

Points (relative weights) are given to certain factors such as home ownership, residential address, occupation, employer and the number of years in the service of the employer, annual/monthly income, owning a bank credit card and other trade references. For example, the enterprise might give 10 points to a person who has worked for the same employer for the past five years, and 5 points to a person who has worked for an employer for two years only. Alternatively, the enterprise might give a o point to an unemployed person, 10 points to a person with his or her own enterprise, and 12 points to a person in one of the professions (for example a doctor or a lawyer).

	Yes	No
Has worked for the same employer for more than 5 years	10	5
Does the applicant have a job?	5	0
Does the applicant have his or her own enterprise?	10	0
Is he or she a member of one of the professions?	12	0

Once the applicant has completed the application form, the information is keyed into the computer. The computer then calculates the person's score. The applicant's total score is compared with the minimum score required by the enterprise (in terms of the credit standard). If the applicant's score is higher than the minimum score the application is approved, and if it is lower the application is refused.

Example

Minimum score:	*200*
Below 200:	*The application is refused*
Between 200 and 300:	*The application is referred to the credit manager**
Above 300:	*The application is approved*

* As you will remember, we mentioned in the first chapter that exceptional cases are usually referred to the credit manager. This is a good example of such a case.

In most large retail enterprises with a great volume of accounts, **credit scoring** is done by using **computer packages**. With the help of computer scientists and statisticians, score charts are developed for use by the enterprise concerned. It is very difficult for one enterprise to use the score charts of another, since the debtors and the market of different enterprises vary greatly. The factors that are weighed may be the same, but the weight or points allocated to the various factors will differ. The score charts are developed by using a random sample of past debtors and, with the help of computer techniques, identifying all the factors which distinguish a good credit risk from a poor one.

We will not discuss the drawing up of score cards for the purposes of this course.

Credit grading can also be done **by hand** by completing a score chart. This is mainly done by small enterprises, or as an emergency measure by larger enterprises if their computer system is off-line. (In such a case the grading is later transferred to computer and the score is adjusted if necessary.)

The following is a simple example illustrating the principle of credit scoring:

Example

Suppose that James Ngobeni applies for an account at Clothing Store, a family clothing business. Once he has completed the application form, the information should be processed to determine whether his application can be approved.

Factors assessed	Points allocated	
	Yes	No
Is the applicant married?	10	5
Does the applicant own a home?	15	5
Has the applicant lived at the same address for longer than 2 years?	5	2
Has the applicant worked for his or her employer for longer than 2 years?	5	3
Does the applicant have a monthly income of more than R1 500?	18	8
Does the applicant have a bank credit card?	20	5
Does the applicant have any other trade references?	15	5

Minimum score:	55
Less than 55:	Application is refused
Between 55 and 60:	Application is referred to the credit manager
Over 60:	Application is approved

Would you recommend that James's application be accepted or not? Write a paragraph to justify your recommendation.

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Advantages of Credit Grading with a Points System

- The enterprise can make more effective credit decisions by eliminating those applicants who do not qualify for credit.
- Decisions about credit are made according to certain set guidelines.
- It eliminates problems arising from prejudice - for example, it prevents the credit assessor from judging factors such as income and career using his or her personal values.

- The assessment of credit applicants can be delegated - the information can be keyed into the computer, processed by the computer, and the result of the application (whether it is accepted or refused) can be provided immediately.

- It saves costs - the application can be finalised quickly by subordinates in the department.

Advantages of Credit Grading by Computer

- It is a simple operation in enterprises with a great number of account holders (for example in clothing stores like Edgars).

- If necessary, the criteria on which the assessment is based can be rapidly adjusted.

- The enterprise has a permanent link to the credit bureau - as the information on the application form is keyed into the computer, it is simultaneously verified by the credit bureau.

- Credit assessments are done rapidly and the turnover time of the application is reduced (the turnover time is the time from the point where the applicant submits the application up to the point where he or she is informed whether it was successful or not).

- Credit limits are usually given automatically. This means, for example, that if an applicant has a score of 100, a credit limit of R1 000 may be granted. If an applicant has a score of 500, on the other hand, a credit limit of R6 000 may be granted.

- All information about a customer is available on computer. This has several advantages. For example, if a customer's application has been refused by one branch of a store and he or she applies for an account at another branch of the same store, this will immediately be recognised by the computer (and the application will be refused).

Disadvantages of Credit Grading

- Good credit risks may be refused or poor credit risks may be accepted.

- The system may eliminate good credit risks if no one does any further follow-up investigation.

- Little attention is given to the applicant's personal characteristics, i.e. quantitative aspects are regarded as more important than qualitative aspects.

It is important that credit grading and the points or weights allocated to various factors or characteristics should be regularly revised and adjusted. The enterprise operates in a changing environment, and the characteristics indicating that an applicant is a good credit risk may be influenced by these changes.

- **Credit grading by means of a grading form**

Credit grading by means of a grading form involves assessing the applicant on a scale ranging from excellent to poor.

Each detail obtained from the credit applicant is judged to be excellent, good, average or poor. Each characteristic is assessed individually. The assessment is based on the credit assessor's experience and the analysis of similar applications. An enterprise may thus decide to use a credit grading system in terms of which the applicants are assessed on a scale such as the following:

Characteristics assessed	**Grading**			
	Excellent	Good	Average	Poor
Income	x			
Occupation		x		
Integrity			x	
Payment record			x	
Collateral		x		
Cash flow		x		

Advantages of Credit Grading with a Grading Form

- Each individual factor is thoroughly assessed.
- The assessment is done in a logical way, which is especially useful if the credit assessor is inexperienced.
- It enables the enterprise to compare the original assessment of the customer with the way in which the customer actually manages the account.
- It may be used to evaluate the performance of the credit assessor - how successfully has the credit assessor assessed the applicant's creditworthiness?
- It can be used to compare the estimated risk with the customer's actual payment pattern.

Disadvantages of the Grading Form

- The credit assessor must have experience in carrying out this type of assessment.
- The assessor must have a sound knowledge of people and must know how to interpret the information provided.

- The method is time-consuming.

The following is another extract from the case study about Family Pharmacy.

The creditworthiness of credit applicants is assessed by using a credit grading system. Applicants are rated on a scale ranging from poor to average, good and excellent. Recently Joe has started to consider refining the grading method in order to make better credit decisions. The advantages of credit scoring have led him to believe that it is a better method. He has asked the help of James Denton, a credit consultant, to implement a better credit grading system.

i) Why do you think Joe sees credit scoring as a better method? Give at least five reasons.

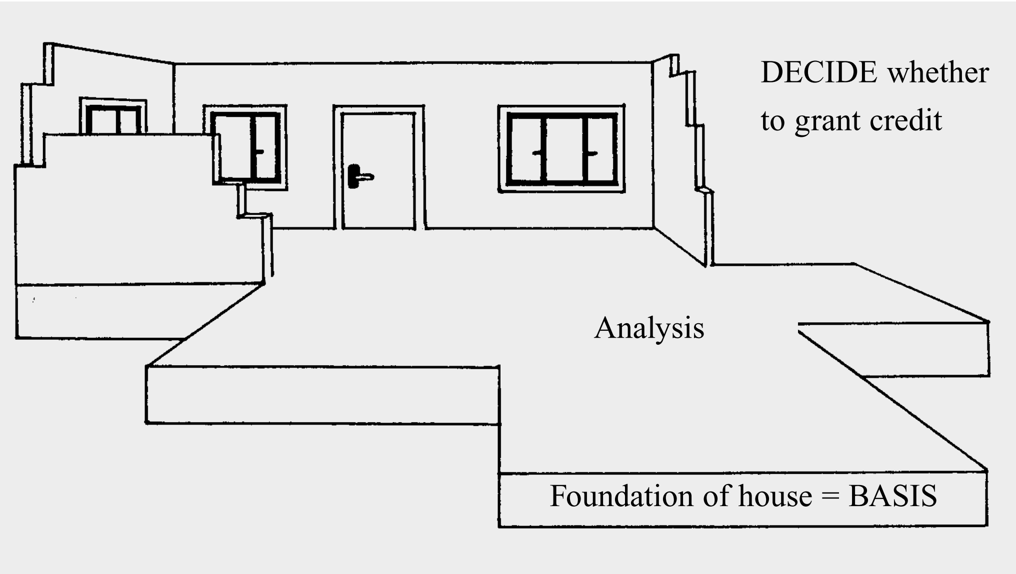
ii) What does credit scoring involve? Briefly explain this in five sentences.

The Purpose of Analysis

The enterprise uses the analysis to determine the **quality (degree) of the credit risk** - in other words, to determine whether it can accept the risk of granting credit to the customer concerned. The enterprise wants to establish whether the applicant meets the minimum requirements laid down by the credit standard. In simple terms, the enterprise (the creditor) wishes to determine the **willingness** and the **ability** of the applicant to pay as agreed.

The main reason why enterprises grant credit is to earn an income from credit transactions. It must be worth their while to sell on credit. Given the fact that granting credit also has certain disadvantages and costs for the enterprise, the advantages and income must obviously exceed the disadvantages to make granting credit worthwhile. If the enterprise grants credit without assessing the applicant, the advantages of credit will certainly not exceed the disadvantages. **Without an analysis the enterprise has no basis for making**

a credit decision. If credit decisions are made at random, there is a very strong likelihood that there will be late payments, non-payment and bad debts.



Example

Let us assume that Family Pharmacy's credit standard requires a person to have a fixed address, a telephone number and a monthly income of at least R1 200. If the person has a credit card, an account can be automatically opened with a credit limit of R800. However, the person must have had the credit card for at least two years and must have managed it efficiently (all payments, including interest payments, must have been done regularly and on time - this information can be verified by contacting the credit card company).

By analysing Joan's information, Family Pharmacy can establish that she:

- has a monthly income of R2 300
- has a fixed residential and work address
- has provided the correct telephone numbers
- has not received any letters of demand, and has had no court judgements against her
- has had a bank credit card for the past ten years (and the bank confirms that she has a good payment record)

Can you see why it is necessary to analyse the information? If Family Pharmacy had not analysed Joan's information, it would not have known that Joan meets the minimum requirements of the credit standard.

Give five practical examples of minimum requirements that the bank may have set and which Family Pharmacy will have to meet before the bank will consider its application for a loan:

The Extent of Analysis

The answer to this question is directly influenced by the **nature and the amount** of information that the enterprise already has. You have seen that the enterprise needs sufficient information to make decisions. Another relevant factor is the **purpose** of the credit application - is it a new application, or is it an existing debtor whose credit limit has to be revised or adjusted?

It is of the utmost importance that the enterprise should have **detailed and accurate** information to undertake the analysis. It is therefore essential to verify the information provided (for example, the credit record can be verified by contacting the credit bureau, other trade references and the bank). The information must also be **up to date**. A person's or enterprise's financial position may change dramatically within a short time. For example, a debtor who has been a good credit risk until the end of the previous year could have experienced such a change in circumstances in six months that his or her credit facilities might have to be reconsidered. It is thus essential to keep information about existing debtors up to date.

If the information has not been provided or is insufficient, therefore, additional information has to be obtained. However, the enterprise must also keep the **cost** of obtaining the information in mind.

If a person applies for a loan at a financial institution for the first time, for example for a home loan of R200 000, the institution should obviously investigate the applicant's creditworthiness thoroughly. If, two years later, the same person applies for a personal loan of R5 000, the institution will not undertake such a detailed investigation again, because it already has a great deal of information about the person. The person has been a client for two years already and the institution has first-hand information and experience of him or her (including bank statements). The requirement that the information should be up to date remains valid, however.

The **needs** of the individual or enterprise will also influence the extent of the analysis. For example, in the case of trade credit, the size of the order received will give an indication what the extent of the analysis should be. If the enterprise expects a new order to be followed by further orders, the initial investigation must be very thorough.

The **cost** of the credit investigation must always be kept in mind. The advantages that the transaction may have for the enterprise concerned must **justify** the cost of the investigation.

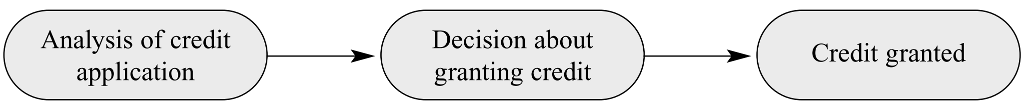
We again refer to the example of Joan applying for an account at Family Pharmacy.

i) What should the extent of this analysis be? Make recommendations and justify these recommendations.

CONCLUSION

In this chapter we saw how the enterprise uses the information it collects about credit applicants to make a decision about granting credit. The information that is analysed are those details that will give the enterprise an indication of the quality of the credit risk.

The credit and other information about the person or enterprise applying for credit must be analysed on the basis of the enterprise's credit standard. This is done to determine whether the credit applicant meets the enterprise's minimum requirements. The way in which the credit application is analysed depends on the type of application as well as the type of credit applicant (for example, on whether it is a person or an enterprise).



QUESTIONS FOR SELF-EVALUATION

Use the second case study about Trailer (Pty) Ltd in annexure 2 to answer the following questions.

In answering the questions, also refer back to chapter 2.

1. Trailer (Pty) Ltd sells its products on credit directly to the final consumer, as well as to distributors in, for example, large towns in the rural areas.

   i) Discuss the factors influencing the quality of the following credit risks:

   * Sam Peters, a final consumer, applies for credit at Trailer (Pty) Ltd.

   * TJ Co-operation places an order for trailers with Trailer (Pty) Ltd. The co-operation asks for credit facilities.

ii) What is the role of the credit standard in assessing the two credit applications above?

iii) In analysing information, which two important aspects should Trailer (Pty) Ltd keep in mind with regard to the completeness and the cost of the information?

2. Discuss the meaning and importance of a credit standard in Trailer (Pty) Ltd.

3. What type of information can Charles Paterson (the sales representative) obtain about TJ Co-operation with a view to the annual revision of the credit limit? Make your own assumptions and discuss.

4. As a result of the increase in sales during the past year Paul has decided to extend his factory. He would like to extend its capacity so that it will be able to manufacture trailers for horses. The capital needed for this extension amounts to R500 000. Paul decides to apply for a short-term loan at the bank. He plans to use the income from sales to pay the interest on this loan of R500 000.

   Analyse the information you have about Trailer (Pty) Ltd. (You may also make your own assumptions, but it must fit into the context of the case study.)

   For the purposes of this answer, it is not necessary to analyse the financial statements and cash flow - we will discuss these later. Only take into account the factors we have studied so far.

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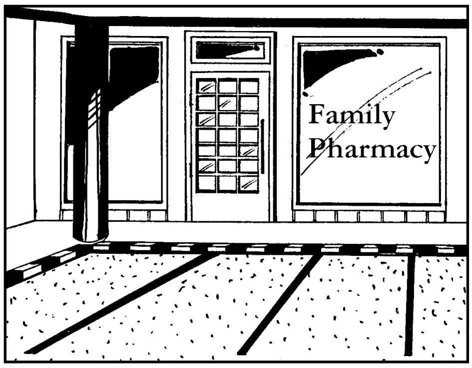
ANNEXURE 1

Family Pharmacy



Joe Allen is the owner-manager of Family Pharmacy. This enterprise is located in Hillside Centre, a small suburban shopping centre in a West Rand suburb. The shops in this centre include a post office, a fast-food restaurant, a greengrocer and a cafe, as well as the consulting rooms of two general practitioners and a dentist. Three kilometres down the road is another shopping centre with a large pharmacy that is open after hours.

Joe Allen completed his training at the Cape Technikon in 1987. Immediately after this he started working at a pharmacy in Cape Town. However, Joe always thought that he would like to return to the West Rand where he grew up. In 1990 he bought the pharmacy in the Hillside Centre after hearing from a colleague that it was for sale. Today he is still the owner-manager of this pharmacy. Joe regards customer relations as very important and he is always careful to ensure that his customers are satisfied. He has, among other things, implemented a home delivery system, which has become especially popular with customers in a nearby retirement village.

During the past five years, Family Pharmacy's sales have increased by an average of 12%. These sales include sales of medicines as well as cosmetics, perfumes and other products usually sold by pharmacies. About 80% of the patients who consult the two general practitioners in the Hillside Centre take their prescriptions to Family Pharmacy. The pharmacy frequently has cosmetics sales. These sales are especially popular with the pharmacy's account holders. Information about the sales is mailed to them with their account statements.

Family Pharmacy offers credit to approved customers. Credit applicants have to complete an application form in which they must provide at least two trade references. These references are checked during the assessment process. The applicant's home and work telephone numbers are checked and confirmed, and his or her employer is contacted to ensure that he or she does work at the address provided. Joe also has a contract with Credit Information Limited, a credit bureau in Johannesburg. During the assessment of a credit application Credit Information is contacted to establish whether the applicant pays regularly and on time.

The creditworthiness of credit applicants is assessed by using a credit grading system. Applicants are rated on a scale ranging from poor to average, good and excellent. Recently Joe has started to consider refining the grading method in order to make better credit decisions. The advantages of credit scoring have led him to believe that it is a better method. He has asked the help of James Denton, a credit consultant, to implement a better credit grading system.

Another problem James has to solve is the issue of credit limits. Account holders frequently ask for an increase in their credit limit. This made Joe realise that the customers' credit limits do not necessarily meet their needs. However, he has always been too afraid of the disadvantages of high credit limits to actually grant higher limits.

Customers have a maximum credit period of 45 days. Account statements close on the 20th of every month. The statements are usually mailed on the 22nd. Customers who pay their accounts before or on the 7th of the next month qualify for a 5% cash discount. Interest of 18% per year is charged on accounts paid after the 7th. Interest is also consistently charged on overdue accounts.

Sales representatives of various pharmaceutical companies regularly visit Family Pharmacy. Joe orders the products he wishes to buy directly from these representatives. The sales representatives take the orders to their companies for processing, after which the goods are delivered. Joe buys on credit from all the pharmaceutical companies. They all have standard credit terms of 45 days. Representatives of cosmetics companies also regularly visit the pharmacy.

Family Pharmacy's favourable liquidity position and positive cash flow are the result of Joe's ability to plan and control effectively. He realised at an early stage that poor cash management will have great disadvantages for his company, and that it may also have a negative effect on his creditworthiness and his access to external sources of capital.

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Two weeks ago, a doctor who is a friend of Joe told him that the pharmacy next to the doctor's practice is for sale. This pharmacy is also located in a suburban shopping centre on the West Rand. It is for sale because the owner has decided to move back to Cape Town.

The shopping centre in which the pharmacy is situated was opened a year ago. It has growth potential - the next shopping centre is about 5 kilometres away. A well-known supermarket chain has a shop in the centre, and it also contains a hardware store, a dry cleaning business and a florist.

After careful consideration, Joe decided to buy the pharmacy. He applied for a loan at his commercial bank. To do so, he had to hand in the financial statements of his enterprise together with the application form.

Family Pharmacy (Pty) Ltd

Income statement for the financial year ended 31 December 1995

	R'000
Sales	5500
Less: Cost of sales	4000
Gross income	1500
Less: Operating costs	1000
Nett income before tax and interest	500
Less: Interest	75
Nett income before tax	425
Less: Tax	204
Nett income after tax	221
Less: Dividends to shareholders	20
Retained earnings	201
Less: Reserves	50
Retained earnings	151

	R'000
Sales	1995
Credit sales	4000
Cash sales	1500
	5500
Stock for 1994	300

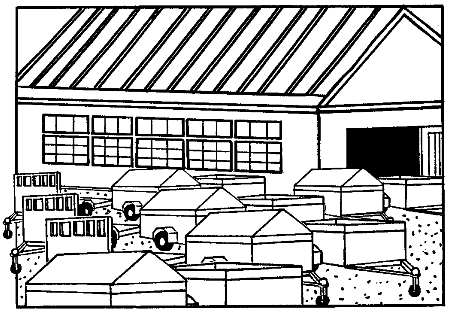
Family Pharmacy (Pty) Ltd

Balance sheet for the financial year ended 31 December 1995

			1995
CAPITAL EMPLOYED			R'000
Own capital (shares)			800
Reserves			500
Retained earnings			200
TOTAL OWN CAPITAL			1500
LOAN CAPITAL			
Long-term loan			500
			2000
EMPLOYMENT OF CAPITAL			
FIXED ASSETS			2000
Less: Depreciation			500
NETT FIXED ASSETS			1500
CURRENT ASSETS		1 000	
Cash	200		
Debtors	450		
Stock	350		
CURRENT LIABILITIES		500	
Creditors	500		
NETT CURRENT ASSETS			500
			2000

Ratio	Industry	1994	1995
Current ratio	2	1,40	
Acid-test ratio	1	0,84	
Turnover rate of debtors	7,5 times	8	
Turnover rate of stock	6 times	11,88	
Turnover rate of fixed assets	5 times	3,29	
Turnover rate of total assets	3,8 times	2,16	
Debt ratio	50%	48%	
Debt-equity ratio	50%	79%	
Interest coverage	5 times	6,23	
Gross income margin	30%	24%	
Nett income margin	5%	3,5%	
Profitability (enterprise)	18%	17%	
Profitability (own capital)	20%	26%	
Creditors' payment period	45 days	45 days	

Trailer (Pty) Ltd



Mr Paul Smith is the owner-manager of Trailer (Pty) Ltd. Trailer (Pty) Ltd is an enterprise that manufactures trailers for the general consumer, as well as for transporting farm produce and livestock. The enterprise has identified a need for trailers that are specifically designed for transporting horses, and has started to develop this market as well.

Trailer (Pty) Ltd was established 15 years ago. It started as a very small enterprise and gradually grew into a strong company. The enterprise is located in Rosslyn, an industrial area north of Pretoria. More than 85% of the enterprise's sales are in Gauteng and the Northern Province. The enterprise sells on credit directly to the final consumer, as well as to distributors in, for example, large towns in the rural areas.

Credit is offered in the form of an open account, and the account holders are given a period of 30 days to pay. There is a country-wide demand for the trailers used to transport horses.

The enterprise's sales and nett income showed consistent growth from its establishment up to about three years ago. However, by the end of 1992 the demand for trailers started to decline. Competition increased in the market, and weather conditions (such as droughts and hailstorms) also affected the company's sales.

In an effort to increase sales, Paul decided to market the enterprise's products aggressively. He cut the prices of products to stimulate sales. He also decided to revise his customers' credit terms. Among other things, he introduced more favourable payment periods (credit periods). During 1995 the enterprise had a 30% increase in debtors. During the first half of 1995 sales started to increase again, and grew consistently for the rest of the year.

Paul was satisfied with the improvement and believed that, if these business conditions could be maintained, the enterprise's cash flow position would also improve. He started paying his creditors only after receiving a second statement from them, even though he realised that this was not an ideal situation. He thought that this was a short-term arrangement and that he would pay regularly and on time again once he has paid off all the debts that had fallen into arrears. In the past two months the enterprise has often exceeded the limit of its bank overdraft facility. (In the past this very seldom happened.)

As a result of the increase in sales during the past year Paul has decided to extend his factory. He would like to extend its capacity so that it will be able to manufacture trailers for horses. The capital needed for this extension amounts to R500 000. Paul decides to apply for a short-term loan at the bank. He plans to use the income from sales to pay the interest on this loan of R500 000.

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ADDITIONAL INFORMATION:

* Management of the enterprise
  Paul has owned the enterprise for 15 years. His record at the bank is good. He has always met his obligations towards the bank and has paid as agreed. Trailer (Pty) Ltd has been a client of the bank for the past 10 years.

* Credit bureau
  Trailer (Pty) Ltd has a clean credit record. There have been no judgements against the enterprise or its owner.

* Auditors
  Steyn & Steyn has been the enterprise's auditors since 1983. The financial statements for the financial year ending on 31 December 1995 have been audited. An unqualified report was issued.

* Sales representatives
  Trailer (Pty) Ltd employs two sales representatives. They are Vusi Themba (Gauteng) and Charles Paterson (Northern Province).

* Revision of credit facilities
  Trailer (Pty) Ltd analyses and assesses the financial position of their debtors every year.

ANNEXURE 2A

Trailer (Pty) Ltd

Income statement for the financial year ended 31 December 1995

Nett sales	14 679 872
Less: Cost of sales	12 498 193
Gross profit	2 181 679
Less: Operating costs	1 848 426
Nett profit before interest and tax	333 253
Less: Interest paid	224 355
Nett profit before tax	108 898
Less: Tax paid	52 271
Nett profit after tax	56 627
Less: Dividends paid	14 157
Retained earnings	42 470

Trailer (Pty) Ltd

Balance sheet for the financial year ended 31 December 1995

CAPITAL EMPLOYED		
OWN CAPITAL		
Common shares		1 745 175
Distributable reserves		1 152 579
TOTAL OWN CAPITAL		2 897 754
LOAN CAPITAL		
Long-term loans (bank)		892 660
		3 790 414
EMPLOYMENT OF CAPITAL		
FIXED ASSETS		
Land, buildings, machinery and equipment		1 715 513
Less: Depreciation		502 031
NETT FIXED ASSETS		1 213 482
CURRENT ASSETS		5 994 095
Cash	292 934	
Debtors	2 201 765	
Stock	3 499 396	
CURRENT LIABILITIES		3 417 163
Short-term loan (bank)	1 367 428	
Creditors	1 499 879	
Liabilities in arrears	549 846	
NETT CURRENT ASSETS		2 576 932
		3 790 414

Financial ratios	**1993**	**1994**	**1995**
Current ratio	3,07	2,68	
Acid-test ratio	1,66	1,08	
Turnover rate of stock	8,6 x	7,1 x	
Debtors' payment period	36 days	36 days	
Creditors' payment period	20 days	24 days	
Debt ratio	40%	46%	
Debt-equity ratio	68%	86%	
Interest coverage	15,9 x	7,97 x	
Nett profit margin	5,5%	3,4%	
Profitability (enterprise)	35%	20%	
Profitability (own capital)	28%	17%	

The following norms may be used for the assessment:

Financial ratios	**Norm**
Current ratio	2
Acid-test ratio	1
Turnover rate of stock	9 x
Debtors' payment period	45 days
Creditors' payment period	30 days
Debt ratio	50%
Debt-equity ratio	60%
Interest coverage	5 x
Nett profit margin	12%
Profitability (enterprise)	25%
Profitability (own capital)	20%