The Financing of the Farming Enterprise

OBJECTIVES

- To give a definition of the concept "financing".
- To outline the particular circumstances that prevail in the farming enterprise and which distinguish its financing from other branches of industry.
- To explain the nature of the capital needs of the farming enterprise.
- To define the concept "capital" and to distinguish between the different forms of capital.
- To discuss the factors which influence the extent of the capital needs of a farming enterprise.
- To describe the sources from which farming enterprises can attract loan capital and to outline the relative importance of these sources as suppliers of loan capital to the farming enterprise.
- To discuss the sources of own and associated capital for farming enterprises.
- To define the concept "financing policy", outline the main requirements of a sound financing policy for the farming enterprise and to show how a farming enterprise can meet these requirements.
- To express a few ideas on reorganisation financing for the financially unsound farming enterprise.

There are divergent interpretations of the concept "financing". The point of departure maintained in this chapter is that financing concerns the following:
- Determining the nature and size of the enterprise's capital needs;
- An analysis of the forms in which and the sources from which capital can be obtained; and
The attraction of capital in such a form and from such a source(s) that it will fit in with the needs, both qualitatively and quantitatively — therefore the implementation of a rational financing policy.

These three aspects will be dealt with in this chapter. Before doing so, it is necessary to take note of the special circumstances that prevail in agriculture and which distinguish the financing of farming enterprises from the financing of enterprises in other branches of industry.

SPECIAL CIRCUMSTANCES WHICH INFLUENCE THE FINANCING OF FARMING ENTERPRISES

There are various circumstances in agriculture that differ from those in other branches of industry in the national economy. As a result of these circumstances the financing of the farming enterprise is complicated and it is often difficult to compete with other branches of industry for the available capital.

The following distinguish the financing of the farming enterprise from that of enterprises in other branches of industry:

- Agricultural production is exposed to variable climatic conditions;
- The demand for agricultural products is relatively inelastic;
- It is difficult to adjust agricultural production to the demand;
- Structural changes in agriculture take time;
- The seasonal nature of agricultural production;
- The large number of small production units;
- Land is the most important capital asset;
- Movable assets and agricultural products are nondurable and dispersed; and
- Structural deficiencies in agriculture.

These circumstances and their potential effect on the financing of the farming enterprise will now be briefly outlined.

Variable climatic conditions

The variable climatic conditions to which agriculture is exposed, make production erratic and agricultural financing very risky — even speculative in certain instances. When financing the farming enterprise the supplier of credit must therefore bear in mind that it is not only possible that the borrower will not be able to meet his
commitments on the due date, but that he might even need further aid to repair damage and/or produce the next crop.

The relatively inelastic demand for agricultural products

It is generally accepted that the elasticity of the demand for most agricultural products is low. As a rule the consumption of food will increase only slightly as a result of a substantial reduction in price, but on the other hand the consumer will, in times of shortage, pay more for food.

The farming community, unlike trade and commerce, is, however, in most instances not able to pass on the increase in his cost structure to the end consumer. Moreover, it is regarded as important to keep food prices as low as possible so as to limit increases in the cost of living as far as possible.

The unadaptability of agricultural production to changes in demand

It is difficult to adjust agricultural production to demand. In the case of a low price level, farmers will endeavour to maintain their production because diminished production effects only a slight saving in costs. Rapid expansion of production is hampered by biological factors and increasing marginal costs on a limited area.

As a result of the low price elasticity of both the demand for and the supply of most agricultural products, market prices tend towards an unstable equilibrium. Major price fluctuations are therefore possible and in the absence of stabilising measures on the part of the government, agriculture must be regarded as a speculative field of investment.

Structural changes in agriculture take time

When switching from one branch of production to another, or if more extensive changes are made in farming systems, one or more years usually elapse before the income from such branches again reaches the same or higher levels than was the case before the changes were introduced. A similar slow phase also often occurs when new farming enterprises are established.

It is therefore important to take these circumstances into account in agricultural financing. Conditions for granting credit — in respect of interest rates and arrangements for interest or capital repayments — are to be adjusted accordingly.

The seasonal nature of agricultural production

There is no continuous turnover of agricultural products as is the case in trade, secondary industries and mining. This is important to a credit supplier who has to
maintain the liquidity of his own finances. A constant flow of transactions could also serve as criterion for a credit supplier of his debtor’s activities, but in agriculture these transactions are usually sporadic and on a seasonal basis.

**Numerous small production units**

The farming sector is characterised by a large number of comparatively small production units spread over a large area.

The credit supplier must therefore make special arrangements to keep in touch with the debtors to prevent a weakening of his own security. This is of special interest when business is done in respect of more risky credit, especially credit for shorter terms.

**Land is the most important capital asset**

When financing land deals, it must be borne in mind that the purchase price of land is often determined by subjective considerations. Moreover, land is a means of investment and speculation. Because of this the purchase price of agricultural land is in most cases substantially higher than its estimated agricultural production value.

**Movable assets and agricultural products are nondurable and dispersed**

Movable assets are often mobile, difficult to identify and subject to handling by unskilled labour. These circumstances are of direct importance to the farmer in agricultural financing, especially if such assets have to serve as security. In this regard the personal traits of the farmer, such as his integrity and management skills, are exceptionally important and it is of cardinal importance for the supplier of credit to know the borrower personally and to maintain close contact with him.

**Structural deficiencies in agriculture**

It is suspected that more than 30% of the farming units in South Africa are so small as to be uneconomic for farming. There are also indications that the percentage of uneconomic units is much higher in some regions than in others. These circumstances should have a strong influence on the credit-worthiness of farmers in the areas concerned, and therefore also on the extent to which credit suppliers should be prepared to accommodate farmers with credit, if the long-term interests of the farmers are also taken into account.
THE CAPITAL NEEDS

There are no basic differences between the capital needs of a farming enterprise and those of, for example, a factory. Nevertheless it displays certain particular characteristics which necessitate a different approach. The following paragraphs deal firstly with the nature of the farming enterprise’s capital needs, and then with the factors that affect the size thereof.

The nature of the needs

To be able to farm, a person must have the necessary land, fixed improvements, agricultural machinery, equipment, livestock, etc. For production purposes he must be able to pay his labourers’ wages, buy seed, fertiliser and insecticides, repair his implements and vehicles, etc. To do all these things, the farmer or prospective farmer needs capital — there is therefore a need for capital for investment in different assets.

For a proper financing policy it is important to note that the capital invested in such assets is not again converted into money in the same way. A distinction must therefore be made between fixed capital and movable capital on the one hand, and working capital on the other.

The fixed capital and movable capital are required for investment in fixed assets and movable assets such as land, fixed improvements, machinery, equipment, orchards, breeding stock and dairy herds.

The major portion of a farming enterprise’s capital is usually invested in the land (if the farmer owns it) and this portion of the capital is not again converted into money (is not recycled or reproduced), or at least it should not be converted into money for as long as the farming enterprise exists. True, it will be partially converted into money if the farmer indulges in over-cropping, because over-cropping reduces the value of the land and then the yield of each crop includes part of the natural potential of the soil while that which remains continues to diminish in value. This situation corresponds with what is experienced in mining. In such a case the correct procedure would be to annually recover this reduction in value (depreciation) from the yield. The prudent and responsible farmer guards against exhaustion of the soil, and then the capital invested in the land is not converted into money. This is why depreciation of land is not written off as a cost against yields.

Fixed capital is further required for investment in a variety of durable fixed assets such as dams, watering-places, fences, sheds and kraals. The capital invested in some of these assets is not, for all practical purposes, converted into money while the farming enterprise exists. In the case of other assets of this nature, it is converted into money very gradually as their value decreases periodically. This explains why
no annual depreciation is recovered as costs against yields in respect of some fixed improvements, and only a small amount on others.

Movable capital is required for investment in things such as orchards, breeding stock, dairy herds and woolled flocks, oxen, machinery, vehicles and equipment. The reproduction process is quicker here and the capital invested in such assets is converted into money sooner. These assets therefore usually have to be replaced sooner than those in the previous group which is why the depreciation recovered annually as costs against yields is substantially higher here than in the previous case.

The working capital is invested in current assets. These assets of the farming enterprise include, among other things, production supplies (e.g. unused fertiliser, stockfeed, rations, seed and fuel), stocks of semi-finished products (grain or other crops still on the land, slaughter stock not yet ready for the market and wool on woolled sheep), supplies of finished products (harvested but unmarketed grain and other crops, unmarketed wool clips and unmarketed slaughter stock that are ready for the market), products in transit and debtors. The capital invested in these things is repeatedly reproduced in total provided there are no crop failures or no other damage occurs. In the latter instance this capital may be completely or partially lost. The period during which this capital can be converted into money, varies from one production branch to another — in the dairy branch the reproduction process is much quicker than in the slaughter stock or grain branches. The working capital invested in each production branch is therefore reproduced as soon as the relevant production process is completed and the products are sold (in the case of credit sales when debts have been settled). The amount concerned is then again available as working capital for reinvestment in a following production process, provided it wasn't loan capital that has to be repaid.

Although the financing policy of the farmer will only be dealt with later in this chapter, it is nevertheless necessary at this stage — because of this last statement — to issue a brief warning about a policy aspect concerning the provision or acquisition of working capital.

To derive maximum continuous benefit from the investment in fixed and movable assets, the farmer has a permanent (constant) need for a certain component of working capital. Because the working capital is, however, fully reproduced after each production process, some farmers tend to acquire essential working capital by means of "loose" credit, as the need arises. Then, when the production process has been completed and the capital has been reproduced, the account is settled and the search for credit to finance the next production process starts all over again. This is a dangerous trend: What will happen when harvest day arrives and no credit can be obtained to pay the harvesters' wages, or if the debt is paid at the end of one production process, but credit cannot be acquired to buy seed
or fertiliser for the next production process? Regardless of any other considerations that may apply and to which attention will be paid later in this chapter, the farmer, if he gets his essential working capital on a credit basis, must make quite sure that adequate, regularly renewable or replaceable credit facilities will be available. If he does not have that certainty, he must be able to provide the essential working capital from own capital (such as retained profits).

However, every farming enterprise experiences times when exceptionally favourable weather conditions or a sudden increase in the demand for a specific product causes the need for working capital to temporarily rise above the normal essential minimum. In this case uncertain temporary credit sources may be used, because if such credit is suddenly withdrawn or is not available, it will only mean that the farmer cannot, or at least not fully, benefit from the favourable circumstances, thereby losing the opportunity of making "extra" profit. If he has made provision for the essential minimum, he can still maintain the "normal" profits.

From the preceding it can be seen that a greater portion of the capital than that invested in the fixed and movable assets is, indeed, "fixed". In this regard a distinction is therefore made between permanent (constant) and variable capital requirements.

Permanent capital is invested in fixed and movable assets, and to a greater or lesser extent in current assets. Permanent capital therefore represents the entire amount required permanently by a farming enterprise of a particular size to ensure maximum utilisation of its production capacity.

Variable capital is that portion of the working capital without which the enterprise can manage from time to time. The variation is caused by varying conditions, especially seasonal influences and coincidences.

To summarise, the nature of the capital needs of the farming enterprise can be presented as follows:

<table>
<thead>
<tr>
<th>Total capital needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed and movable capital</td>
</tr>
<tr>
<td>Permanent capital</td>
</tr>
</tbody>
</table>

The size of the needs

When referring to the size of the capital needs of the farming enterprise, it can be done in the absolute or the relative sense. Let us now look at the most important factors that determine the size (in both relative and absolute terms) of the capital needs of the farming enterprise.
The following factors influence the size of the enterprise’s capital needs:

- The region of the country and the nature of the soil
- The production branch
- The size of the enterprise
- The production techniques
- The general policy.

The region and nature of the soil

As already mentioned, the capital invested in land represents a large portion of the total capital needs. In the RSA there is often much variation between the unit price and general size of farms in the different regions. Consider the difference in farm size and unit price of land between a citrus farm in the Lowveld and a maize farm in the Transvaal Highveld; of a wine farm in the Western Cape and a sheep farm in the Karoo. The reasons for this considerable variation can be attributed to several things, including differences in the type of soil, climate, rainfall and distance from the major markets.

There are even price differences within the same region depending on soil potential, the percentage of arable land or grazing, the water sources, distance from town and schools, etc.

The production branches

The absolute and relative capital needs also differ from one production branch to another within the same region. Among other things the differences can be attributed to land prices, but also to the fact that a specific branch of production requires more land than another. Different production branches also require more or less labour, a bigger or smaller investment in machinery, more or less fertiliser and pesticides, etc.

The rate of turnover of the working capital in the different production branches also sometimes differs considerably and this could have an important influence on the extent of investment in working capital.

The size of the enterprise

Judged in absolute terms, and all other things being equal, the large farming enterprise will naturally require more capital than the smaller one. Farmer A who cultivates 500 ha of land will therefore need more capital than Farmer B who cultivates only 100 ha.
In a relative sense — and that is what is important here — the enterprise in which different production factors such as land, machinery and labour are fully utilised (used optimally and worked at full capacity) require less capital per production unit than would be the case if the production factors were utilised below capacity. If a tractor costing R10 000 and capable of cultivating 200 ha, is used to cultivate only 100 ha, the capital investment would be R100 per ha compared to only R50 per ha for someone who utilises a similar tractor to its full capacity.

In the farming enterprise, as in all other enterprises, the ideal should be to maintain a scale of production where optimum use is made of land and machinery (because these factors demand the biggest investment). Unfortunately this ideal is achieved less often in farming than in other enterprises. There are three main reasons for this:

- Farms of uneconomic size;
- Poor management in general; and
- Inadequate capital.

Regarding the latter, it often happens that a farmer has a beautiful farm, but for some reason or other he does not have enough capital to obtain the necessary machinery and to cultivate the land properly.

**The production technique**

Enterprises of the same size and type could have different capital needs, in both relative and absolute terms, depending on, for example, the extent of mechanisation, fertilising levels, and seed and forage consumption. Needs therefore differ as a result of the production techniques employed and/or cultivation methods used. A higher capital expenditure could, but need not be necessary. Farmers with comparatively little capital often do relatively much better than moneyed farmers, purely because they calculate accurately whether, for example, a greater degree of mechanisation will, in fact, lead to bigger profits.

**General policy**

Capital investment in the farming enterprise can be reduced in absolute terms by introducing a number of economy measures such as leasing land and not buying it; buying second-hand instead of new machinery; the joint use of machinery; and by working different shifts with the same machine rather than buying extra machines. In this way quite a lot can be saved on fixed and movable capital investment. The farmer must, however, be on his guard that the economy measures do not lead to a saving on capital in absolute terms, but an increase in
relative terms. This happens when efficiency is sacrificed by, for example, using poor second-hand machinery.

There are also different ways in which to economise on the investment in working capital. The working capital of the farming enterprise is invested in assets such as stocks of production supplies, semi-finished products and finished products, goods in transit and debtors. By maintaining a policy that no production supplies will be stocked, but that they will be purchased as required, selling finished products immediately and not holding them back with a view to better prices, and selling strictly for cash and not on credit, considerable savings can be effected on working capital investment. Such a policy could naturally have drawbacks. The farmer may run the risk of not being able to obtain fertiliser when needed or he may miss price advantages because finished products were sold immediately for cash.

FORMS OF CAPITAL

For the farming enterprise, capital is the accrued power of disposal over the goods and services used to obtain a monetary return from the enterprise. This power of disposal (or capital) can also be regarded as the monetary value of the assets used by the enterprise to produce its income.

It is also necessary to make a clear distinction between own capital and loan capital. This is necessary because, when developing a financing policy, each type has its own uses.

Own capital

Own capital (also known as net worth) is that portion of the enterprise’s total power of disposal (capital) belonging to the legal owner(s) of the farming enterprise. It need never be repaid to anyone and there is no interest to be paid on it. This part of the capital is therefore available free of charge and it can only diminish if the farming enterprise suffers losses and/or if the owner and his family spend it. Own capital is also known as risk capital, because it is also a guarantee for suppliers of loan capital against losses. That is also why, as a general rule, suppliers of loan capital demand that own capital must not be less than loan capital. In other words, the assets must be at least twice as much as the loan capital.

Example

<table>
<thead>
<tr>
<th>Balance sheet</th>
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</thead>
<tbody>
<tr>
<td>Loan capital</td>
</tr>
<tr>
<td>Net worth (own capital)</td>
</tr>
<tr>
<td>Assets</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
Loan capital

As the name implies, loan capital is that portion of the total available power of disposal (capital) of the farming enterprise which is supplied by other persons or institutions (non-owners). Loan capital is debt and must, depending on the conditions, be repaid to the owner of such capital. This repayment can be done in a lump sum or in instalments. Interest must also be paid on loan capital. This interest payment could be made periodically, in cash, or it may be added to the loan amount, in which case interest must also be paid on interest. Should the farmer fail to repay the loan or pay the interest on the due date, the supplier of the capital is legally entitled to take steps against him. This has led to the ruin of many a farmer.

Although this is also in essence loan capital, it is necessary to distinguish a third type of loan capital which, for lack of a better name, is known as associated capital. This associated capital, is capital supplied by relatives and is distinguished from ordinary loan capital because repayment and interest conditions are usually more favourable than when the capital is borrowed from outsiders. It could, however, be dangerous to rely too heavily on this anticipated leniency.

Loan capital (and associated capital) are available over the long, medium and short term.

Long, medium and short-term loan capital

- **Long-term loan capital** is capital lent to the farmer for a period of ten years or more.

- **Medium-term loan capital** is lent to the farmer for periods of between two and ten years.

- **Short-term loan capital** is usually made available to the farmer for a maximum period of two years. It may also be available for any shorter period.

This division is arbitrary and in practice the different types may overlap.

**SOURCES OF LOAN CAPITAL**

Farming enterprises in South Africa may attract loan capital from a variety of sources.
The following are the best known sources of loan capital for farming enterprises in the RSA:

- The Land Bank
- The Agricultural Credit Board
- Agricultural cooperatives
- Other banking institutions
- Insurance companies
- Other financial institutions
- Trade creditors
- Private persons.

The Land Bank

The Land Bank grants three types of loans to farmers, namely:

- Mortgage loans
- Charge loans
- Advances to promote farming.

Mortgage and charge loans can be regarded as long-term loans, while advances to farmers to promote farming are granted on a medium and short-term basis.

Long-term loans

MORTGAGE LOANS

As the name indicates, mortgage loans are granted with a mortgage on the land as security. Mortgage loans may be granted for the following purposes:

- fixed improvements;
- the purchase of livestock and equipment;
- to repay debts;
- payment of costs concerning the subdivision of land;
- the creation or promotion of agricultural and rural industries;
- the purchase of land;
- any other purpose related to farming or agriculture; and
- any other purpose in respect of which advances are authorised by the Land Bank Act or other legislation.

The maximum term of mortgage loans is usually 25 years, although the Act makes provision for a maximum term of 40 years.

Mortgage loans are repaid by means of annual actuarial instalments which include interest, capital redemption, and, where applicable, insurance premiums.
The Land Bank grants charge loans to full-time farmers for the following purposes:

- The building of dipping tanks and silos;
- The erection of fences;
- To provide a water supply and the purchase and erection of mechanical equipment for pumping water;
- The supply of electricity and the purchase, erection, installation or maintenance of equipment, apparatus and fittings required for the use of that electricity, and to pay connection fees.

Charge loans do not require the registration of a mortgage on the land on which the improvements are to be made. The charge is on the land and each successive owner is responsible for the payment of instalments while he owns the land.

Like mortgage loans, charge loans are long-term ones which at present — and depending on circumstances — can be granted for a period of 25 years. Repayment is by means of annual actuarial instalments that include interest, capital redemption and insurance premiums (where applicable).

Medium and short-term loans

The Land Bank grants medium and short-term loans in the form of advances to farmers for the promotion of farming.

Section 34 of the Land Bank Act makes provision for the granting of such advances and stipulates that the Land Bank Board may provide an advance for a farmer provided that he completes a promissory note. The purpose of such an advance is firstly to enable him to cope with seasonal expenses, and secondly to purchase and install agricultural machinery or other agricultural implements or equipment, and to purchase livestock.

The advances for seasonal expenses (short-term) loans are limited to sugar-cane farmers, certain fruit farmers in the Cape Province, wattle farmers and citrus farmers.

Regarding medium-term loans, only established farmers who have the necessary credit-worthiness and disposable income, qualify for these.

Applicants who can help themselves or whose financial position is of such a nature that they can get assistance from other credit institutions fairly easily, do not qualify for this type of advance.

On completion of a promissory note, farmers can get medium-term advances for the following purposes:

- the purchase of livestock;
- purchase of new agricultural machinery or implements;
- the purchase of bulk cooling tanks, engines and generators by —
— fresh-milk producers who market their milk in a controlled area;
— persons who farm in Natal, Griqualand East and certain areas of the Eastern Cape and who market their fresh milk to or through certain specific dairy cooperatives; and
— milk producers whose properties are situated on a bulk-milk route;

• purchase of milking machines and accessories, including installation costs;
• purchase of sprinkler irrigation equipment (only available to landowners);
• purchase of light and heavy-duty trucks;
• purchase of cattle-weighing scales; and
• purchase of bulk tobacco-drying equipment (only available to landowners).

The Agricultural Credit Board

Under the present political dispensation, the government regards agricultural financing as "own affairs". For Whites it falls under the Department of Agriculture and Water Supply and is handled by the Agricultural Credit Board. The Board grants four types of financial assistance, namely:

• Credit under the Agricultural Credit Act which is not normally supplied by any of the other sources. This includes the consolidation of debt, credit for the purchase of production supplies and stockfeed by financially weak farming enterprises, financing of land purchases, credit to provide housing for Non-White employees and financial assistance for soil conservation works, irrigation works and flood damage.
• Subsidies on stockfeed purchased during disaster droughts and rebates on the transport thereof.
• Subsidies on the re-establishment of crops, orchards and vineyards on reclaimed irrigation land.
• Interest subsidies on carry-over debts due to drought conditions.

Agricultural cooperatives

Agricultural cooperatives are a very important source of short-term loan capital or credit. When granting credit to their members, the agricultural cooperatives act partially as intermediary and partially independently.

The agricultural cooperatives act as intermediary when they make money, supplied by the Land Bank in the form of cash credit or seasonal loans, available to farmers in the form of cash or credit facilities. A distinction must be made here between two types, namely the payment of advances ("voorskotte") on delivered products, and granting credit for primary production purposes, such as the purchase of seed, fertiliser, fuel and bags, and for hail insurance premiums.
Independent credit facilities provided by the cooperative are when the latter supplies credit, from its own funds, or from loans obtained from institutions other than the Land Bank.

Recently many of the bigger cooperatives have tended to finance tractor and implement purchases of members. The conditions of these loans vary from one cooperative to the next.

Agricultural cooperatives have an automatic lien on the crops and/or goods of members if these were produced and/or purchased by means of the cooperatives’ credit facilities.

Other banking institutions

Other banking institutions include ordinary commercial banks and banking institutions that offer instalment-sale and leasing facilities to farmers. All indications are that these institutions play an important role as sources of medium and short-term credit for farmers.

Because commercial banks have to maintain their liquidity position and comply with official monetary and control requirements, they are mainly concerned with providing short-term credit in the form of overdraft facilities. In supplying this type of credit, subjective factors such as the personality perceptions of the bank manager and the farmer’s position of trust play a major role.

In the case of new clients, special attention is paid to the asset position of the applicant as reflected in his balance sheet. Of special importance here are net worth, solvency and liquidity. Established clients who desire additional credit facilities or an extension of their present facilities, will also have their asset positions reconsidered and their past credit record plays a vital role.

Another important instrument that can be used during negotiations for overdraft facilities, is the cash budget. From this the bank manager can deduce whether the applicant plans his affairs thoroughly, and also for what the credit is required and how and when he plans to repay it. It is hardly possible to over-emphasise the importance of a thorough cash budget in this regard.

Banks often insist that the short-term loans which they grant must be backed by the ceding of life insurance policies or surety bonds. Because of the short-term nature of the loans, they also usually expect the debt to be repaid at the end of the harvesting season. When this seasonal repayment is not made, the overdraft, where possible, is usually secured by registering a mortgage.

In difficult times, when credit facilities are restricted, some credit institutions tend to help existing clients rather than new ones. However, applications from deserving clients are usually dealt with sympathetically.

The interest rates at which short-term loans (overdraft facilities) are made available are fairly high. Because of the danger that overdraft facilities may be
cancelled due to credit restrictions, farmers should not rely too heavily on bank credit for financing a farming enterprise. The comparatively high interest rates make the use of overdraft facilities, except for the financing of peak-season needs, undesirable, even if only from a cost point of view.

*General banks* provide medium-term facilities with repayment periods that vary between two and five years. The interest rates at which these loans are made available are often exorbitant. Agricultural equipment is not subject to the provisions of the Instalment-Sales Act.

The bank has a lien on the equipment bought with the borrowed money and should the farmer fail to fulfil his commitments to the bank at any time during the contract period, the goods may be claimed and sold to pay the debt.

**Insurance companies**

Unlike ordinary banking institutions, *insurance companies* concentrate on long-term mortgage loans. The term of such loans varies between 20 and 40 years. They play a minor role in the provision of short-term loans.

**Other financial institutions**

Other financial institutions include trust companies and boards of executors. The vast majority of loans granted by them are given against a mortgage on fixed property. They also grant loans against other security such as surety bonds and sessions of insurance policies, crops, legacies and documentary proof of fixed deposits. These institutions use partially their own capital for this purpose, but the money is largely obtained from short-term deposits from the public.

Because the major portion of their funds consists of private investments, these institutions follow a conservative lending policy and they are highly selective when granting loans.

**Trade creditors**

Most farmers also use the short-term credit facilities of suppliers other than cooperatives to a greater or lesser degree. The credit term in these cases usually varies between 30 and 120 days, but could be longer.

Two aspects deserve special mention:

- This type of credit could be very expensive, especially where suppliers give discount for cash. It may sometimes pay a farmer better to borrow money elsewhere and benefit from the cash discount, rather than availing himself of the credit terms.
• It could and, in fact, has happened that farmers lose their bargaining power by landing too deeply in debt with one supplier. This is a very real danger for which the farmer must always be on the alert.

**Private persons**

Private persons include active farmers and other private persons who are not related to the borrower.

According to statistics private persons are important providers of mortgage loans. Unfortunately no data are available about the period for which and the interest rates at which these loans are granted. It is, however, known that some of them are granted for a comparatively short term.

This could be extremely dangerous for the borrower because before the loan capital could generate enough profit from which the loan could be repaid, the due date is on hand and if the farmer cannot get a loan elsewhere to replace the old one, he could very easily lose his farm.

Private persons also provide short and medium-term loans. Although there are no data to confirm this, the general opinion is that this type of loan is provided by members of the family rather than strangers, and as such should be regarded as associated capital.

**The relative importance of different sources of loan capital**

An indication of the relative importance of the different sources of loan capital can be obtained by looking at the percentage contribution of loan capital sources to the total debt burden of farmers, as shown in table 8.1.

**Table 8.1 The percentage contribution of different sources of loan capital to the total debt burden of farmers in the RSA, 1978-1983***

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total debt burden on 31 December (Rm)</td>
<td>2 870,0</td>
<td>3 219,3</td>
<td>3 836,6</td>
<td>4 838,7</td>
<td>5 785,4</td>
<td>7 410,2</td>
</tr>
<tr>
<td>Percentage contribution by source of loan capital</td>
<td>100,0</td>
<td>100,0</td>
<td>100,0</td>
<td>100,0</td>
<td>100,0</td>
<td>100,0</td>
</tr>
<tr>
<td>Land Bank</td>
<td>18,7</td>
<td>18,4</td>
<td>17,6</td>
<td>17,7</td>
<td>17,1</td>
<td>18,0</td>
</tr>
<tr>
<td>Agricultural Credit Board</td>
<td>5,4</td>
<td>5,0</td>
<td>4,7</td>
<td>4,1</td>
<td>4,2</td>
<td>4,2</td>
</tr>
<tr>
<td>Agricultural cooperatives</td>
<td>19,4</td>
<td>20,3</td>
<td>22,6</td>
<td>23,5</td>
<td>23,7</td>
<td>24,0</td>
</tr>
<tr>
<td>Commercial banks</td>
<td>21,6</td>
<td>21,5</td>
<td>20,9</td>
<td>21,8</td>
<td>27,4</td>
<td>30,4</td>
</tr>
<tr>
<td>Other financial institutions</td>
<td>15,8</td>
<td>16,5</td>
<td>16,0</td>
<td>17,2</td>
<td>13,6</td>
<td>11,9</td>
</tr>
<tr>
<td>Trade creditors</td>
<td>3,3</td>
<td>3,3</td>
<td>3,2</td>
<td>3,3</td>
<td>3,0</td>
<td>2,5</td>
</tr>
<tr>
<td>Private persons</td>
<td>15,8</td>
<td>15,0</td>
<td>15,0</td>
<td>12,4</td>
<td>11,0</td>
<td>9,0</td>
</tr>
</tbody>
</table>
The data in table 8.1 are self-explanatory and need no further discussion.

**SOURCES OF OWN CAPITAL**

This discussion is restricted to one-man farming enterprises, since this is the most important form of ownership in the farming sector in the RSA.

**Own capital sources for the one-man farming enterprise include the following:**
- Legacies and gifts
- Farm profits
- Savings at the expense of domestic consumption
- Additional labour efforts
- State subsidies

**Legacies and gifts**

In the present climate of high land prices in the RSA, new entrants to the farming sector who are also landowners, can be divided into two main groups:
- Established professional persons who earned their money outside the farming sector and who wish to diversify their interests by investing their surplus capital in farming; and
- Those who acquired their land via a legacy or general parental support in the form of gifts.

Those who cannot be classified into one of these groups, find it difficult to acquire land without incurring heavy debts and being in constant need of money.

**Farm profits**

The farmer who did not inherit his land or was not assisted by relatives in other ways, has to rely on profit retention from the enterprise to build up enough own capital. The same applies to the established farmer who wants to expand his farming activities.

**The question is: how can profit be retained?** The first requirement for profit retention is that the enterprise must show a "profit" that is available for retention. The "profit" consists of the periodic growth in net worth that, in the normal course of things, is equal to the farm profit after tax minus domestic and private expenses. The first requirement for profit retention is therefore to make a farm profit.
To show a profit the farming enterprise must be viable and be managed efficiently. The first requirement for this is that the right land, fixed improvements, machinery and working capital must be available. The second, but no less important, requirement is that the land, machinery, etc., must be utilised (managed) correctly. The correct assets without good management will contribute as little to a satisfactory profit as the best manager without the right assets. In the long term sound financing is also not possible without profit. It is therefore correct to say that, without a good farm that is well managed, there can be no sound financing, but only a constant lack of funds.

Savings at the expense of domestic consumption

Closely associated with the above, it can be said that profit retention is saving, since the profits retained are not consumed, but are used (reinvested) in the enterprise. Provided the capital saved in this way is reinvested in the right things and provided management in general is good, this leads to capital formation which, in its turn, produces new profits. (It will not generate new profits if the capital saved is spent on an expensive new implement, while the present one can give as good a service. True, the owner’s interest does improve temporarily, but because of higher depreciation and unused capacity [over-capitalisation] future profits will be reduced and in the long term owner’s interest will be lower than it would have been if the old implement had been retained.)

In the farming situation extra savings are often a prerequisite for progress. The word "extra" is used because it occurs at the expense of a standard of living that would possibly have been higher if the farmer had allowed himself a higher remuneration for his enterprise and labour. (The farmer therefore has to choose between greater profit retention or a higher standard of living — he himself must determine the priorities. However, he must also know what a higher standard of living is going to cost him in terms of sacrificed profit and realise that he will not be able to maintain such a standard of living for any length of time without proper profit retention.)

The farm income (farm profit) makes it possible to make improvements inside and around the homestead, or to buy a new car, to take an expensive holiday, to buy better clothing, etc. However, to reduce the debt burden the profit is rather used for voluntary capital repayment, buying an essential implement or building up more working capital to buy essential fertiliser. Numerous farmers do follow this course and, although fellow farmers may call them stingy, they are only working towards a secure future for their enterprise, their dependents and themselves. Large sums may not be added to the owner's interest (own capital) on a monthly basis, but they do increase over the years and the profit capacity of the enterprise is constantly enhanced.
Additional labour efforts

The formation of own capital is also possible through the correct utilisation of enforced periods of idle time on the farm. It is not uncommon for both farmers and their workers to have time on their hands, and this can be usefully employed to accumulate own capital by, for instance, effecting improvements connected with the conservation of water and soil. Leisure periods in the winter months can be used for inspecting and overhauling implements and machinery. This will be conducive to an eventual saving in costs and the yielding of higher returns, thus making an even more substantial retention of profits possible.

The latter process firstly has the advantage that it reduces wear, thereby postponing replacement which usually has to be done with expensive, borrowed money. Secondly, the machinery is ready to be used when the first rains arrive. If the maintenance work is not done timeously, the implements will not be ready for use at the appointed time and cause delays because repairs still have to be effected. This increases costs and production chances are lost which reduces the profits from which own capital can be built up. Everything here therefore hinges on effective farm management — using the available labour in such a way that the biggest benefit is derived from it.

State subsidies

In itself a state subsidy will generally not make an important direct contribution to own capital. However, if these subsidies are used well, they could help to stabilise the farm profits and/or increase them, thereby becoming an important source of own capital.

ASSOCIATED CAPITAL

A farmer may borrow money from his parents or other relatives for a shorter or longer term. As a rule he then has to deal with lenient creditors, something that could be a great advantage in times of emergency. The danger of this type of loan is, however, that the borrower may depend too much on this leniency and therefore not display the necessary financial discipline. Such lack of financial discipline has in the past led to the ruin of potentially good farmers.

THE FINANCING POLICY

Deciding on a proper financing policy or plan is one of the most difficult tasks a farmer has to face. It is an extremely complicated matter because of the large number of subjective, uncontrollable and unquantifiable factors that affect a
financing policy. It is therefore impossible to lay down a formula that a farmer can use to decide on his financing policy. It is only possible to point out the factors that have to be considered when deciding on a financing policy and to show what the influence of certain actions will be under specific circumstances.

Despite the complexity of the problem, a proper financing policy is of critical importance for every farmer. There are numerous examples, especially in the recent past, of enterprises with tremendous potential which failed simply because the farmer neglected the financing aspect.

**The financing plan (policy) of a farming enterprise refers to the policy that is or should be followed when combining the various forms of capital, bearing in mind the specific nature and extent of the capital needs of the farm and its profit potential, including the risk element.**

The major problem encountered with the compilation of a financing policy is to combine the different forms of capital in such a way that the specific enterprise can make a profit, and secondly that it continues operating to produce a profit. It is therefore firstly concerned with maximum exploitation of the enterprise's profit potential and secondly the survival of the enterprise in the long term.

The question is whether it is necessary for each farming enterprise to have its own financing plan. The answer is an unequivocal: Yes! In the same way that any other activity on the farm must be planned, its financing must also be planned. But, as there are differences in the planning of the same production activity on two neighbouring farms, the "right" financing plan will also differ from enterprise to enterprise. The reasons for these different plans are obviously that no two farmers' circumstances and the profit potential of no two farms are exactly the same and these differences must be handled in different ways.

The main requirements for a sound financing policy are:

- a knowledge of the present, but especially the future capital needs of the enterprise;
- maintaining liquidity or developing resilience; and
- profitable financing.

Only by taking due cognisance of these three requirements, is it possible to develop a sensible and sound financing plan.
Knowledge of the capital requirements

To design a sound financing plan, the first requirement is a knowledge of the past, present and future capital requirements, and in this regard, the balance sheet, but especially the financing budget, are valuable aids.

Knowing the nature and extent of the capital needs is naturally the first requirement for designing a sound financing plan. If the farmer does not know how much and for what the capital is required, he cannot hope to attract the right amount or the right type of capital.

As basic point of departure the farmer must therefore know his enterprise’s past, present and foreseeable future needs as well as possible.

The capital needs on a specific date, namely the date of the balance sheet, are obtained from the asset side of the balance sheet (provided, naturally, that it was properly compiled) (see discussion of the balance sheet in chapter 6). As much detail as possible must be given and the different assets should be grouped together according to their type (fixed, movable and current). If all the assets have, in fact, been included and "correctly" valued (see chapter 5) the asset side of the balance sheet will show how much capital the enterprise needs to finance its activities at the present scale. The liability side will show how the farming enterprise obtains its capital.

At times other than the balance sheet date the capital needs could be greater or smaller than appeared from the balance sheet. These differences can be attributed to an intentional contraction or expansion of activities and also to seasonal changes and incidental events. To know his past capital requirements, the farmer must study the movements in his expenditure — as shown in the expenditure records — for a period of at least a year. It would naturally be better to calculate the average over a number of years, taking into account changes in the capacity or composition of the enterprise, prices, etc. Such calculations are particularly important because they could serve as guidelines for determining the size and time of future needs as accurately as possible.

However, if past records are not available, this does not mean that no planning can be done for the future. He could then start with an inventory and draw up a balance sheet from the data. He can then budget for future capital needs and keep a record of actual events. This serves as the starting point for a proper financing plan.

If a farmer wants to review his present financing policy critically, he must be familiar with the existing capital requirements of the enterprise. The first step is to compare his assets and liabilities in the balance sheet and then to reflect on how he provided in peak needs that might have occurred. If his strategy was not very
successful, he can compile a better financing plan and implement it immediately, or as soon as possible.

A knowledge of the existing capital requirements is, however, not enough because there is constant change. Even if he should decide to maintain the same production capacity of the same production branches, the farmer must, especially now, be increasingly aware of an increase in production costs and the prices of agricultural machinery, since these factors result in increased capital needs. The prices which the farmer receives for his products are also subject to changes, while the production quantities (yield per unit) can vary depending on new cultivation methods, weather conditions and diseases. The farmer himself may naturally also decide to initiate changes by, for example, expanding some of his existing production branches and/or to add or abandon others. In such cases he must know how such changes will affect the nature and extent of his capital needs.

Knowledge of the capital needs within the foreseeable future, can be obtained by means of a financing budget (see chapter 4). Should the enterprise be maintained at its present scale and composition, a financing budget for a year is adequate. If, however, he plans expansion, he will have to budget for a longer period.

Developing resilience or maintaining liquidity

Developing resilience or maintaining liquidity in a farming enterprise demands that —

- the net farm income should cover interest and capital redemption on the total amount borrowed, even in relatively lean years; and
- the term of a loan should be commensurate with the useful life of the asset purchased by the proceeds of the loan.

Maintaining liquidity (resilience) means retaining the ability of the farming enterprise, even in relatively poor years, to —

- pay the farmer’s debts on the due dates (including interest and capital redemption); and
- incur other expenses (wages, fertiliser, seed, stockfeed, etc.) to continue farming on his present scale.

A farming enterprise can be made liquid or resilient in two ways, namely:

- The farmer must have enough own capital at his disposal; and
- He must combine the different types (forms) of loan capital correctly.
How much is enough own capital? The answer to this question concerns two things, namely the size and stability of the net farm income; that is the risk factor or profit expectations.

As a general rule it means that the net farm income — even in poor years — must exceed the total amount needed to meet interest payments and capital redemptions on loan capital. It may, in any case, not be less for any length of time. The period will depend largely on the providers of loan capital. If they are lenient creditors (in other words if they are prepared to postpone the date of payment of interest and capital redemption), the period will be slightly longer.

An enterprise with a high profit that varies excessively (an enterprise with substantial risk) is not suitable for using a lot of loan capital. The more stable the profits, the lower they can be without causing payment and redemption problems.

To determine how much loan capital can be used (or how much own capital is required), an attempt must be made to estimate the future net farm income. This estimate must then be compared with the interest payment and capital redemption for different amounts and compositions of loan capital. Such an estimate of net farm income must make adequate provision for essential farming expenses. The ideal amount of own capital is the one where, even in comparatively poor years, it will still be possible to pay interest and make capital redemption payments.

Table 8.2 gives particulars of the required rate of return on total capital that will enable a farmer with a specific debt ratio\(^1\) and average cost of loan capital\(^2\) to cover his annual interest commitments with his annual net farm income.

### Table 8.2 Required rate of return on total capital to break even with interest commitments at different debt ratios and different average costs of loan capital

<table>
<thead>
<tr>
<th>Debt ratio</th>
<th>15%</th>
<th>18%</th>
<th>20%</th>
<th>22%</th>
<th>24%</th>
<th>26%</th>
</tr>
</thead>
<tbody>
<tr>
<td>50%</td>
<td>7,5</td>
<td>9,0</td>
<td>10,0</td>
<td>11,0</td>
<td>12,0</td>
<td>13,0</td>
</tr>
<tr>
<td>45%</td>
<td>6,8</td>
<td>8,1</td>
<td>9,0</td>
<td>9,9</td>
<td>10,8</td>
<td>11,7</td>
</tr>
<tr>
<td>40%</td>
<td>6,0</td>
<td>7,2</td>
<td>8,0</td>
<td>8,8</td>
<td>9,6</td>
<td>10,4</td>
</tr>
<tr>
<td>35%</td>
<td>5,3</td>
<td>6,3</td>
<td>7,0</td>
<td>7,7</td>
<td>8,4</td>
<td>9,1</td>
</tr>
<tr>
<td>30%</td>
<td>4,5</td>
<td>5,4</td>
<td>6,0</td>
<td>6,6</td>
<td>7,2</td>
<td>7,8</td>
</tr>
<tr>
<td>25%</td>
<td>3,8</td>
<td>4,5</td>
<td>5,0</td>
<td>5,5</td>
<td>6,0</td>
<td>6,5</td>
</tr>
<tr>
<td>20%</td>
<td>3,0</td>
<td>3,6</td>
<td>4,0</td>
<td>4,4</td>
<td>4,8</td>
<td>5,2</td>
</tr>
</tbody>
</table>

From the data in the table it emerges that a farmer with a debt ratio of 40% and an average cost of loan capital of 18% needs a rate of return on total capital of 7.2% just to meet his interest commitments for the year. A rate of return on total capital of 7.2% will therefore enable him to pay the interest on loans from the net farm income, but not to repay any capital or to meet living costs.
Further to the above, table 8.3 contains particulars of the required rate of return on total capital if a farmer with a specific capital investment and subsistence needs wants to cover his annual cost of living with his annual net farm income.

Table 8.3 Required rate of return on total capital to break even with cost of living at different levels of capital investment and annual costs of living

<table>
<thead>
<tr>
<th>Capital investment* R</th>
<th>6 000</th>
<th>8 000</th>
<th>10 000</th>
<th>12 000</th>
<th>14 000</th>
<th>16 000</th>
<th>18 000</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 000</td>
<td>12,00</td>
<td>16,00</td>
<td>20,00</td>
<td>24,00</td>
<td>28,00</td>
<td>32,00</td>
<td>36,00</td>
</tr>
<tr>
<td>100 000</td>
<td>6,00</td>
<td>8,00</td>
<td>10,00</td>
<td>12,00</td>
<td>14,00</td>
<td>16,00</td>
<td>18,00</td>
</tr>
<tr>
<td>250 000</td>
<td>2,40</td>
<td>3,20</td>
<td>4,00</td>
<td>4,80</td>
<td>5,60</td>
<td>6,40</td>
<td>7,20</td>
</tr>
<tr>
<td>500 000</td>
<td>1,20</td>
<td>1,60</td>
<td>2,00</td>
<td>2,40</td>
<td>2,80</td>
<td>3,20</td>
<td>3,60</td>
</tr>
<tr>
<td>750 000</td>
<td>0,80</td>
<td>1,10</td>
<td>1,30</td>
<td>1,60</td>
<td>1,90</td>
<td>2,10</td>
<td>2,40</td>
</tr>
<tr>
<td>1 000 000</td>
<td>0,60</td>
<td>0,80</td>
<td>1,00</td>
<td>1,20</td>
<td>1,40</td>
<td>1,60</td>
<td>1,80</td>
</tr>
<tr>
<td>1 500 000</td>
<td>0,40</td>
<td>0,50</td>
<td>0,60</td>
<td>0,80</td>
<td>0,90</td>
<td>1,10</td>
<td>1,20</td>
</tr>
<tr>
<td>2 000 000</td>
<td>0,30</td>
<td>0,40</td>
<td>0,50</td>
<td>0,60</td>
<td>0,70</td>
<td>0,80</td>
<td>0,90</td>
</tr>
</tbody>
</table>

*Capital investment = Average asset value of initial and final balance sheets.

It becomes clear from the data in table 8.3 that a farmer with a capital investment of R750 000 and an annual need of R12 000 for a livelihood, needs a rate of return on total capital of 1,6% if he wants to cover his cost of living from his net farm income.

With the aid of the data in tables 8.2 and 8.3 it is also possible to determine what rate of return on total capital is required to afford annual interest commitments and cost of living from the annual net farm income. In this way a farmer with a debt ratio of 40%, an average cost of loan capital of 18%, a capital investment of R750 000 and cost of living expenses of R12 000 per year, will need a rate of return on total capital of 8,8% (7,2 + 1,6) to achieve this.

It is difficult to obtain reliable information about farming rates of return on total capital in the RSA. Davel nevertheless found that the average rates of return on total capital of all farmers in the RSA since 1980 was as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Rate of Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>8,9%</td>
</tr>
<tr>
<td>1981</td>
<td>9,4%</td>
</tr>
<tr>
<td>1982</td>
<td>7,6%</td>
</tr>
<tr>
<td>1983</td>
<td>4,8%</td>
</tr>
<tr>
<td>1984</td>
<td>7,5%</td>
</tr>
</tbody>
</table>

From the preceding statistics it appears that a considerable number of farming enterprises in the RSA should not use relatively large amounts of loan capital.
Resilience also depends on the combination of the different kinds of loan capital. If it has been established that the expected net farm income allows that a certain amount of loan capital may be used, this does not mean that any type of loan may be entered into. The period for which the loan is obtained must relate to the period for which it will be used.

Strictly speaking, to purchase land from which the capital does not again become available, only own capital should be used. Loan capital may, however, be used provided that it is available over a very long term and redemption is therefore gradual. Moreover, the expected net farm income should be adequate so that interest payments and capital redemption can be made from it. It is very dangerous to acquire a mortgage loan to purchase land if such a loan can be called in at short notice, because the enterprise would then probably not have made enough profit to redeem the loan. In this instance a mortgage loan from the Land Bank is the obvious choice because the interest rate is relatively more favourable than in other cases and especially because the Land Bank is lenient in times of crisis (see the discussion of land purchases in chapter 9).

It is generally also unwise to finance assets such as farm buildings, machinery and breeding stock — from which the capital is reproduced gradually or partially — with short-term loans such as bank credit. Even if the bank is willing to renew the loan annually, circumstances beyond its control might prevent it from doing so. An example of this is government measures such as when the Reserve Bank requires that commercial banks must restrict their loan facilities. If this happens, the person who borrowed the money is in difficulties. In this regard it is therefore useful to connect certain types of loans with certain types of assets.

The term of the loan must adapt to the time that it will take the asset purchased with it to reproduce the capital invested in the asset. For example, if a tractor is bought and depreciation is written off over a ten-year period according to the straight-line method, the purchase should, strictly speaking, be financed by a loan over a period of ten years. Short-term credit is therefore only suitable for financing seasonal expenses (working capital) and not for buying assets of which the capital circulates over a longer period. In the latter instance redemption of the loan may be required before the whole of the loan has been reproduced, with resultant redemption problems. Regarding seasonal expenses, it has already been shown that it could be dangerous to finance the permanent need for working capital with short-term loans. This must always be borne in mind.

Therefore, if a loan is obtained, it must have a term that is adjusted to the circulation time of the capital invested in the specific asset bought with the loan capital. There is, however, an important exception to this rule. If the enterprise is so profitable that the loan(s) can be redeemed from the profits sooner, one may deviate from the rule. If, however, the loan has to be redeemed and the asset has
to be replaced, the farmer must be certain that the enterprise as a whole will make enough profit during the period concerned to meet all commitments in respect of this loan and all other loans that may exist. Most enterprises are, however subject to great risk which is why it would be unwise to deviate too far from this rule.

**Profitable financing**

The use of loan capital in the farming enterprise could, under certain circumstances, contribute to an increased rate of return on own capital.

A farming enterprise must be financed both safely and profitably. If the farmer has already ensured that the enterprise has resilience (its safety has been taken care of), the use of loan capital could contribute to an increase in the rate of return on own capital. The following are important here:

- The loan capital must be supplementary to own capital. Loan capital cannot replace own capital which is why the farmer must first provide sufficient own capital.

- When the rate of return on total capital is higher than the average percentage cost of loan capital, the rate of return on own capital increases progressively as a result of the so-called positive financial leverage effect as a greater percentage of loan capital is used. This statement can be substantiated with a numerical example.

**Table 8.4 Example of a positive financial leverage effect**

<table>
<thead>
<tr>
<th>Description</th>
<th>Case A</th>
<th>Case B</th>
<th>Case C</th>
<th>Case D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total capital (a)</td>
<td>R 100 000</td>
<td>R 100 000</td>
<td>R 100 000</td>
<td>R 100 000</td>
</tr>
<tr>
<td>Own capital (b)</td>
<td>100 000</td>
<td>80 000</td>
<td>60 000</td>
<td>40 000</td>
</tr>
<tr>
<td>Loan capital (c)</td>
<td>—</td>
<td>20 000</td>
<td>40 000</td>
<td>60 000</td>
</tr>
<tr>
<td>(c) as percentage of (a)</td>
<td>0%</td>
<td>20%</td>
<td>40%</td>
<td>60%</td>
</tr>
<tr>
<td>Rate of return on total capital at 16%</td>
<td>R 16 000</td>
<td>R 16 000</td>
<td>R 16 000</td>
<td>R 16 000</td>
</tr>
<tr>
<td>Interest on loan capital at 10%</td>
<td>—</td>
<td>2 000</td>
<td>4 000</td>
<td>6 000</td>
</tr>
<tr>
<td>Farm profit</td>
<td>R 16 000</td>
<td>R 14 000</td>
<td>R 12 000</td>
<td>R 10 000</td>
</tr>
<tr>
<td>Rate of return on own capital</td>
<td>16%</td>
<td>17.5%</td>
<td>20%</td>
<td>25%</td>
</tr>
</tbody>
</table>

**Conclusion:** The rate of return on own capital increases progressively as a greater percentage of loan capital is used, provided the rate of return on total capital (16%) is higher than the average cost of loan capital (10%). Unfortunately, the opposite
is also true. If the rate of return on total capital is lower than the average cost of loan capital, the rate of return on own capital declines progressively as a result of the so-called negative financial leverage effect as a bigger percentage of loan capital is used. This statement is illustrated in table 8.5.

**Table 8.5 Example of a negative financial leverage**

<table>
<thead>
<tr>
<th>Description</th>
<th>Case A</th>
<th>Case B</th>
<th>Case C</th>
<th>Case D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total capital (a)</td>
<td>R 100 000</td>
<td>R 100 000</td>
<td>R 100 000</td>
<td>R 100 000</td>
</tr>
<tr>
<td>Own capital (b)</td>
<td>R 100 000</td>
<td>R 80 000</td>
<td>R 60 000</td>
<td>R 40 000</td>
</tr>
<tr>
<td>Loan capital (c)</td>
<td>—</td>
<td>R 20 000</td>
<td>R 40 000</td>
<td>R 60 000</td>
</tr>
<tr>
<td>(c) as percentage of (a)</td>
<td>0%</td>
<td>20%</td>
<td>40%</td>
<td>60%</td>
</tr>
<tr>
<td>Rate of return on total capital at 6%</td>
<td>R 6 000</td>
<td>R 6 000</td>
<td>R 6 000</td>
<td>R 6 000</td>
</tr>
<tr>
<td>Interest on loan capital at 10%</td>
<td>—</td>
<td>R 2 000</td>
<td>R 4 000</td>
<td>R 6 000</td>
</tr>
<tr>
<td>Farm profit</td>
<td>R 6 000</td>
<td>R 4 000</td>
<td>R 2 000</td>
<td>—</td>
</tr>
<tr>
<td>Rate of return on own capital</td>
<td>6%</td>
<td>5%</td>
<td>3,3%</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Conclusion:** The rate of return on own capital declines progressively as a bigger percentage of loan capital is used when the rate of return on total capital (6%) is lower than the average cost of loan capital (10%).

Apart from the liquidity risk referred to earlier, namely that when using loan capital the farmer must ensure that the interest payment and capital redemption commitments can be met even in relatively poor years, there is a further risk involved in using loan capital. This is known as the economic risk. The use of loan capital also has the risk that the rate of return on total capital could drop lower than the average cost of loan capital (or the average cost of the loan capital could rise higher than the rate of return on total capital) with a resultant lower (even negative) rate of return on own capital.

Firstly this means that the farmer must be very careful when using loan capital by trying to maintain a low debt ratio if he has risk-sensitive branches in his enterprise, in other words if his rate of return on total capital can fluctuate as a result of crop failures and/or price changes. Secondly, the farmer must try to ensure that the average cost of the loan capital does not rise higher than his anticipated rate of return on total capital.

Unfortunately, the farmer has little control over the latter aspect, since interest rates are often adjusted upwards after he has already accepted the loan.

- Apart from a potentially favourable financial leverage effect, the use of loan capital could also have a favourable technical leverage effect. This happens when the loan capital enables the farmer to expand his activities, thereby
making better use of his existing production capacity (land, machinery, labour, etc.).

- The use of loan capital has a tax advantage because interest may be deducted for tax purposes. This benefit is, however, often over-estimated and calculation in this regard must be made very accurately (see chapter 11 for an example of such calculations when buying implements).

Final remarks

The financing plan or policy of a farming enterprise centres on three important aspects, namely knowledge of capital needs, the development of resilience and profitable financing.

A financing budget, and more specifically the cash component of this budget, is the best aid in estimating capital requirements.

Correct use of loan capital, particularly with regard to the appropriate amounts to be borrowed and the currency of loans, is required to develop resilience.

Regarding the desired extent (amounts) of loan capital, it is important for a farmer not to borrow more than he can repay over the long term. The farmer must therefore first estimate his potential net farm income over the next few years and if this is enough to meet his existing commitments, (e.g. existing debts, cost of living and income tax) and still leave a surplus, he can enter into further debt commitments equivalent to the surplus. When determining the potential net farm income and therefore the surplus, the farmer must give due consideration to risks such as droughts.

An important cause of the perilous liquidity position in which many farmers find themselves, is that they borrowed on the basis of their security value (solvency ratio) and not according to their potential repayment ability. Because land values increase constantly, farmers' security values increase and financial institutions are willing to lend still more in the full knowledge that they are in no danger of losing their money if a farmer should have to sell out. Fortunately, there seems to be a change in the approach of financial institutions these days, and when granting loans more attention is being paid to the ability to repay.

Another very real problem among the farming community is the tendency to finance medium and even long-term assets (movable and fixed assets) by means of short-term credit (e.g. overdrafts). This means that the loan has to be redeemed before the assets can reproduce the capital invested in them, or before the enterprise as a whole has made enough "profit", with the result that there are repayment problems. In this respect too, the financial institutions are not blameless, and loans with shorter terms are often recommended well knowing that they have higher interest rates than loans with a longer term and that the borrower's security value is adequate to protect the institution's interests in case of adversity.
It is therefore important to remember that a cautious financing policy demands that the term of the loan be adapted to the life of the asset to be purchased with it and that farming, with its numerous risks, necessitates a cautious financing policy.

Profitable financing means that the average cost of loan capital is compared with the rate of return on total capital. If the latter is higher than the former, it is profitable to use loan capital. In South Africa the position is, unfortunately, that the average rate of return on total capital in most branches of farming compares very unfavourably with the interest rates on loan capital, which is why, in practice, there is little hope of using loan capital profitably. In fact, there is more likelihood of a negative financial leverage effect and this, together with the high cost of inputs which virtually necessitates the use of loan capital, leaves little hope for improvement in the poor financial position of our farmers in the long term, unless urgent counter-measures for low farming rates of return on total capital can be found.

In conclusion it may be said that farming in South Africa, as a result of the countless climatological risks and generally low farming rates of return on total capital (for which there are many reasons), does not lend itself to the use of loan capital. This is a fact which is unfortunately not fully realised by agricultural leaders and farmers and this lack of insight and knowledge is surely the biggest single cause of the disastrous situation in which many farmers often find themselves.

REORGANISATION FINANCING

The farming enterprise that needs reorganisation is one which suffers and accumulates losses as a result of which it could eventually become completely illiquid and insolvent. The problem is fairly easy to solve if the enterprise is inherently viable and has competent management, but has landed in a financial predicament because of many years of adversity. Extension of credit can be obtained from creditors and relief measures are offered by organisations such as the Agricultural Credit Board to tide such farmers over difficult times.

The problem becomes more difficult when the enterprise is viable, but is not properly managed. This situation requires more than financial reorganisation. In such a case the enterprise should be taken over by someone else, or the present owner must improve his methods or be taught how to farm. The latter could be a difficult task, but need not be. In the RSA the Department of Agriculture is prepared to give free assistance, but unfortunately not enough use is made of this valuable government support.
It is impossible to solve the problem with financial assistance when the enterprise forms an uneconomic unit and it is not possible to buy extra land to make it an economic one. If it is possible to buy the extra land, financial measures could succeed if the price of the land is reasonable and the owner can contribute enough own capital to lessen the danger of repayment problems.

It serves no purpose to undertake financial reorganisation if inherent technical shortcomings will cause the enterprise to become unsound again. Each reorganisation should therefore be preceded by a thorough diagnosis of the problems of the enterprise. If technical reorganisation is required, this must be done simultaneously with the financial reorganisation.

If the necessary technical reorganisation can be undertaken, the financial problem is how to create a capital structure that will leave the enterprise with a financial burden with which it will be able to cope. The problem is usually more difficult in agriculture than in other industries, because the aim of agriculture is to reorganise the enterprise without changing ownership and management. The farmer who is on the farm must, if possible, remain there. The financial solution must therefore in the first place be sought in a partial writing off of debt, postponement of repayment or the conversion of existing debt into "easier" debt.

Private creditors will only write off the debt if they can expect that, once the farming enterprise has been put on a sound footing, they can gain more from further business dealings with the farmer than from the proceeds of a forced sale of the enterprise concerned. In some cases the creditors may prefer to extend the term of repayment, sometimes at a lower rate of interest, but they are more likely to choose transfer of their claims to the Agricultural Credit Board.

The problem of a financial reorganisation becomes more difficult if not only the existing debt burden has to be reduced, but new credit is required to make the enterprise a paying proposition once more. The Agricultural Credit Board is prepared to assist here, and the conditions for assistance are then adapted to circumstances. It is obvious that great caution will have to be exercised to keep the ultimate debt burden within the future ability of the enterprise to repay. Ideally, the farmer and his family should eventually increase his own capital to a reasonable size by economising on personal expenses.

SUMMARY
The financing problems of the farming enterprise were elucidated in this chapter. It commenced with a review of the circumstances that have a special influence on
the financing of farming enterprises, and this was followed by a discussion of capital requirements, forms of capital and capital sources. The chapter concluded with a discussion of a farming enterprise's financing policy, from which it emerged that farming enterprises in the RSA have to be extremely careful as regards the use of relatively large amounts of loan capital because risk-sensitive enterprises such as farming do not lend themselves to such practices.

END NOTES

1 Debt ratio

\[
\text{Debt ratio} = \frac{\text{Average interest-bearing liabilities from opening and final balance sheets}}{\text{Average asset value of opening and final balance sheets}} \times \frac{100}{1}
\]

2 Average cost of loan capital

\[
\text{Average cost of loan capital} = \frac{\text{Interest payable per year}}{\text{Average interest-bearing liabilities from opening and final balance sheets}} \times \frac{100}{1}
\]