

- **CASH AND STOCK MANAGEMENT**
a learning element for staff of consumer cooperatives

international labour office, geneva
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by Urban Strand



MATCOM
Material and techniques for cooperatives management training

The MATCOM Project was launched in 1978 by the International Labour Office, with the financial support of Sweden. In its third phase (1984-1986) MATCOM is financed by Denmark, Finland and Norway.

In collaboration with cooperative organizations and training institutes in all regions of the world, MATCOM designs and produces material for the training of managers of cooperatives and assists in the preparation of adapted versions for use in various countries. MATCOM also provides support for improving the methodology of cooperative training and for the training of trainers.

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CASH AND STOCK MANAGEMENT

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PREREQUISITES

To benefit from this MATCOM Learning Element, you should:

- be able to perform percentage calculations;
- have studied the MATCOM Element "Basic Economics of a Consumer Co-operative", or have the corresponding knowledge.

HOW TO LEARN

- Study the Element carefully.
- Give written answers to all the questions in the Element. This will help you not only to learn, but also to apply the knowledge in your work at a later stage.
- After studying the Element on your own, discuss it with your instructor and your colleagues, then take part in the practical exercises organised by your instructor.

TRAINER'S NOTES

are available for this Element.

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INTRODUCTION

Members of consumer co-operatives often come with proposals for improving their shop, for example:

- we would like a larger assortment of goods;
- we should have a freezer in the shop; or
- we need to modernise the shop.



They do not always get the improvements they suggest and the reason is usually the same - lack of capital. Finding ways to finance the set-up of a new co-operative shop can be difficult - as can obtaining more capital for development of the business and managing the capital already contributed. These tasks demand well-trained management.

The purpose of this "MATCOM Element" is to help you understand matters related to financial management of a co-operative shop. You will study the questions of raising capital, but also "cash planning", i.e. how to avoid running out of cash when it is time to pay staff wages, insurance premiums and other expenses.

This booklet will also teach you how to read the balance sheet of your co-operative society. You should learn this - because the balance sheet can tell you a lot about the "health" of your society. Finally, you will see how a co-operative should adjust its economy to a common problem - inflation.

SOURCES OF MONEY

People form a consumer co-operative in order to have their own shop where they can buy good quality merchandise at reasonable price. But establishing a new shop requires a lot of money. Where can they get it? Let us look at some common ways of financing a co-operative. We will use the Unity Co-operative Society as an example.

Share capital

A person wanting to join a co-operative has to contribute a certain amount of money to it. This is called "buying shares" in the society.



In Unity Co-operative, every member had to buy at least one share. The price was T\$25.* The society sold 620 shares, raising T\$15,500 capital.

But more money was still needed.

Grants

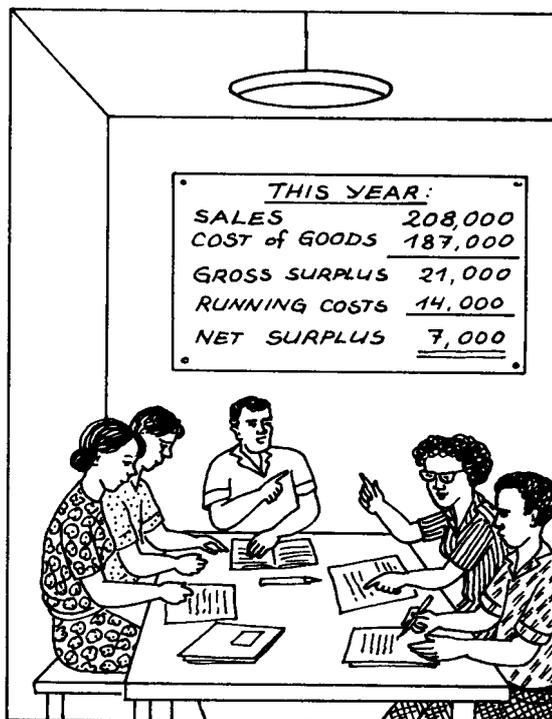
The local authorities wanted to help the inhabitants set up a shop. They decided to give T\$8,000 from the Community Development Fund to Unity Co-operative. Such a contribution is called a "grant".

The co-operative now had a total of T\$23,500 capital, enough to start a small shop.

* We use an imaginary currency here, because the booklet is used in many countries. We call it "Training dollars and cents" (T\$ and c).

Surplus on the business

The shop business became successful; the society earned a small surplus (or profit) each year. According to the National Co-operative Act, 10% of such annual surplus must be kept by a society. (Earnings retained in a business in this way are called "reserves".) But co-operative members are free to decide how to use the rest of the surplus.



Unity members decided that the best use of the surplus was in continued development of the shop. They usually decided at their annual meetings to reserve most of the surplus for use within the society, rather than just the compulsory 10%. Because of these decisions, the capital owned by the co-operative has increased by T\$10,500.

Bank loans

By proving that it could operate a profitable shop, the society established a good reputation. It was able to borrow the money it needed to develop the shop still further.

The co-operative was able to get a development loan of T\$10,000 from the National Bank as well as an additional ordinary bank loan of T\$5,000.



Unity also had a cheque account with the bank. It was agreed that the society would be allowed to make overdrafts of up to T\$15,000 on this account. This can be viewed as another type of loan.

Loans from the members

In accordance with the ideal of a co-operative, Unity was to be owned equally by the members. Everyone was supposed to have ten shares, but not everyone could afford to buy them all at once. People were allowed to become members even if they bought just one share, but they were encouraged to buy more later.

Nobody was allowed to own more than ten shares, but those who could afford it were asked to lend money to the society. It had borrowed T\$4,000 from such members.

Loans from employers of members

Quite a number of Unity's members were employed by the National Textile Company, which had a factory in the area. As part of its welfare programme, the company decided to support the co-operative with a loan of T\$5,000. This helped the employees to meet daily needs.

Credit from suppliers

Most of Unity's suppliers demanded cash payment or the settlement of bills shortly after the delivery of goods.

Unity was known to pay promptly. Its main supplier, the Co-operative Wholesale Society (CWS), therefore agreed to deliver goods on credit. The credit balance was never to exceed T\$10,000. This credit can also be regarded as a kind of loan, in goods rather than in cash.



Make a summary of all sources of capital available to Unity. How much belongs to the Society and how much is borrowed?

LOAN REPAYMENTS

As we have seen, Unity Co-operative found many ways to raise capital. This proved increasingly important as the business expanded.

The co-operative made every effort first to increase its owned capital - through shares, grants and reserved surplus.

Despite these efforts, Unity still had to raise capital by borrowing money. Of course, such borrowed capital must one day be repaid. What happens to a shop then? Here is a simplified example:

A co-operative society has used T\$10,000 of its owned capital and T\$30,000 borrowed capital to purchase a stock of goods.

Stock owned by the society	T\$ 10,000
"Borrowed stock"	<u>+ 30,000</u>
Total stock value	T\$ 40,000

After a few days, some goods are sold and T\$5,500 in cash is collected. It will cost T\$5,000 to purchase new goods to replace the stock sold, leaving T\$500 earned on the sales.

Sales	T\$ 5,500
Cost of goods sold	= <u>5,000</u>
Gross surplus	T\$ 500

Assume now that the society is suddenly required to repay T\$3,000 of the borrowed money.

The T\$500 which the society has earned would not be enough. But the manager has T\$5,000 in hand, ready to buy new goods. What happens if he takes T\$2,500 from this money to pay for the loan?



Of course, he cannot then buy the T\$5,000 worth of goods that he had wanted. He has T\$2,500 less to spend on goods - so the value of goods in the shop will be reduced by T\$2,500. Before, his stock was worth T\$40,000; now it will drop to T\$37,500.

There would also be a change in the ownership of the stock. Through repayment, the loan is reduced from T\$30,000 to T\$27,000. The situation is now like this:

Total stock value	T\$ 37,500
"Borrowed stock"	= <u>27,000</u>
Stock owned by the society	T\$ 10,500

From this example you should note:

- by using its surplus to repay the loan, the society managed to increase its owned capital (the proportion of stock it owned);
- by using additional capital to repay the loan, the society failed to maintain the stock level. (This additional money - the inflow from sales - should have been "earmarked" to buy replacement stock.)

The latter is often a serious failure. Diminished stock level means fewer goods available to members and fewer sales. The members suffer and the society is not likely to make enough surplus to meet expenses.



- A) Suggest at least one way to arrange repayment of the T\$3,000 which will allow the society to maintain the stock level.
- B) How would the ownership of the stock be affected if your advice is followed?

We understand from the previous example that a co-operative must be aware of the repayment conditions for any loans. It must be possible to settle the debts without causing difficulties in future operations.

Let us take another look at Unity's sources of capital and examine the conditions attached to the loans. Let us find out how the committee plans repayment.

The share capital

The share capital is usually regarded as owned by the society rather than borrowed. Nevertheless, a member wishing to leave the society is entitled to repayment; he has a right to get his money back. According to Unity's by-laws, repayment of shares is restricted so that only a minor part of the total share capital can be refunded in a given year. This is to protect the co-operative from sudden drains of large amounts.

The surplus

The most common way to increase owned capital in Unity Co-operative is through the surplus from the business, but even here there is a potential problem. A loss in a given year must be covered by the earlier surplus. If those should prove insufficient, the share capital would be consumed next. By then, the society would be bankrupt. So far Unity management has been successful at avoiding such loss.

The development loan

Development loans are intended to help promising business enterprises. Unity's loan is to be repaid over 25 years; the instalments begin after 5 years.

Year	Repayment
0-5	0
6-25	T\$ 500 (Total T\$10,000)

The committee expects to repay the loan according to this plan or faster, if possible. Such a schedule will increase the owned capital in the society by at least T\$500 per year.

The bank loan

The entire amount (T\$5,000) is to be paid back after 10 years. Well before that time, the committee will arrange for a new loan, if necessary.

The overdraft

Permissible overdrafting on the cheque account is not supposed to be used as if it were a regular loan, although it is possible to think of it in that way. The society intends using overdrafting only occasionally, when several payments are due at the same time.

The member loans

The committee expects that the members will deposit more and more money with the society. However, the committee is also well aware that this depends on business returns. The members must feel confident that their money is in good hands.

Members and management have agreed that anyone wanting to withdraw his money shall give notice a year in advance.

The employer loan

The National Textile Company (NTC), wanting to help its workers in the Unity Co-operative, contributed T\$5,000 to

their shop. But it gave the money as a loan, not a grant, to make sure it would really be used for the shop. If not, NTC can reclaim the money. It can also reclaim the loan if the shop were to close down, but as long as the business continues well, the NTC money will remain with the society.

The supplier credit

CWS allows credit for a limited time. A bill must be settled within three months of the day of delivery. That is, the society is given up to three months to sell a given quantity of goods and to collect enough money to pay for them.



Look at your summary on borrowed capital. (See the question on page 6.) Sort out the various loans under the following headings:

Long-term loans (at least 5 years)

Medium-term loans (1 - 4 years)

Short-term loans (less than 1 year).

LOAN COSTS

One reason why co-operatives prefer owned capital to borrowed is that they have to pay interest on loans. The more borrowed money in a society, the higher the costs.

Interest and other loan costs may vary considerably, as we shall learn from Unity Co-operative.

The shares

A co-operative is not required to pay interest on share capital. However, if a society earns a significant surplus, it might decide to use that money to pay interest to its members. Many societies do this because they find it reasonable to pay their members the same interest a savings bank would offer.

Unity Co-operative prefers not to pay the interest to its members in cash; instead, it adds T\$1 to the value of each share purchased.

The development loan

Conditions on this loan of T\$10,000 are quite favourable. The interest rate is only 3% per year; T\$300. When the repayment starts after 5 years, the loan will gradually be reduced, as will the annual cost of interest.

The bank loan

Unity's loan of T\$5,000 carries a normal interest rate of 12%. Annual cost is thus T\$600.

The overdraft

An interest rate of 15% will be charged whenever the overdraft is used. For example, the interest cost for a credit of T\$1,000 during one month would be T\$12.50.

$$\frac{15}{100} \times \frac{1}{12} \times 1,000 = 12.50$$

The member loans

Members lending money to the society are offered an annual interest rate of 8%. This is more than they can get at the bank but less than the society would have to pay for a bank loan. Both society and members gain.

The NTC loan

Since this money is intended as a contribution (which could be reclaimed) no interest is charged.

The supplier credit

CWS does not charge any interest on a bill paid within one month. But if the society wants extended credit, a monthly fee of 1.5% on the debt is charged thereafter. This is equal to an annual interest rate of 18% (12 months x 1.5%).

Credit given by suppliers is often (as seen in the example above) a combination of a free period and a period when interest is charged.



Calculate the total annual costs for the loans of Unity Co-operative. Assume that they have used the overdraft and the credit from CWS as much as allowed.

Development loan	T\$ 10,000	T\$ _____
Bank loan	T\$ 5,000	T\$ _____
Overdraft	T\$ 15,000	T\$ _____
Member loans	T\$ 4,000	T\$ _____
NTC loan	T\$ 5,000	T\$ _____
CWS credit	T\$ 10,000	T\$ _____
Total costs		T\$ _____



How much would the society save per year, if it could convince members to lend an additional T\$5,000 to replace the bank loan?



Unity's manager has received a bill of T\$6,000 from CWS. The society will not be able to pay it within a month but will need credit for a second month.

- a) Would you recommend that the manager
- make an overdraft on the bank account to pay the bill, or
 - use the extended credit offered by CWS and pay the monthly credit fee?
- b) How much will the manager save by choosing the better alternative?

When considering the costs of various types of loans, you must look beyond interest rates. There may be other costs, too - sometimes well hidden, as in the examples that follow.

Fees

Some banks charge an annual fee for the right to overdraft. For example, Unity Co-operative can make overdrafts up to T\$15,000. It has to pay a fee of 1% on that amount, whether it uses the overdraft or not. Such a fee raises the cost of overdrafting; both the fee and the interest must be paid.

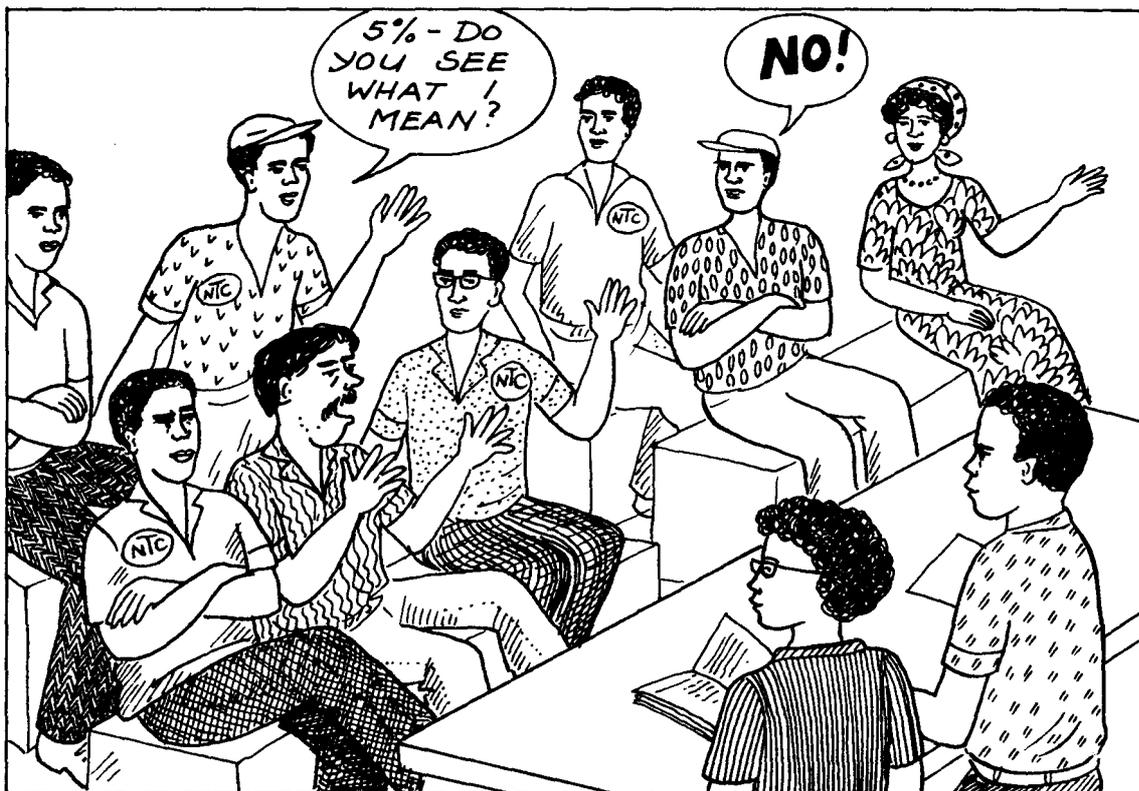
Assume that Unity needs to use an overdraft of only T\$1,500 in a given year. The total annual cost would be:

15% interest on T\$1,500	T\$ 225
1% fee on T\$15,000	150
	T\$ 375

This would be a very expensive way to borrow T\$1,500. The total credit cost of T\$375 is equivalent to an interest rate of 25%. The co-operative ought to consider carefully whether or not the overdraft facility is really needed and if the approved maximum credit could be reduced.

Special favours

NTC had offered the loan of T\$5,000 to help its workers who were members of Unity. But not all co-operative members were employees of NTC, although they all benefited from the loan. At a general meeting some workers said that this was not fair. They suggested that members who were NTC employees should get a special bonus of 5% on their purchases because "their" company supported the co-operative.



The manager estimated what this would cost the society:

- 40 NTC employees are members of Unity;
- the average annual purchases per member run about T\$2,500;
- the annual sales to employees total about T\$100,000;
- a 5% bonus on T\$100,000 is T\$5,000.

Thus, if the suggestion were to be accepted the bonus paid in one year would be equal to the whole amount borrowed. It would be like paying an interest of 100%. Realising this, the meeting rejected the proposal.

Wholesale prices

A competing wholesaler, the General Supplies Company (GSC), offered better payment conditions than CWS: two months with no interest charge.

Nevertheless, Unity Co-operative stayed with CWS. It did so not only because it preferred a co-operative wholesaler, but also because this was the most economical choice. Prices charged by GSC were generally higher than those of CWS. The committee had compared the price lists and found the price differences to be larger than the interest cost.



The Unity Co-operative buys goods for T\$2,000 from CWS.

- a) What is the total cost with two months credit? (First month free, second month at 1.5% credit charge.)
- b) What is the total cost if the same goods are bought from GSC at 5% higher price but without credit charge?

THE BALANCE SHEET

How a co-operative is financed can be studied in the "Balance Sheet" which every co-operative must present with its annual report.

On next page, you will find a balance sheet from Unity Co-operative. The sources of funds are listed under the heading "Liabilities".

Owned capital

"Reserves" includes the T\$8,000 grant from the local development fund and the accumulated surplus reserved from previous years.

"Surplus for disposal" is the surplus earned on the shop business during the actual year. The general meeting will decide how to use it.

Long- and medium-term liabilities

Here you should recognise the various loans to the society.

Current liabilities

These debts are to be paid within a short time. Note that the society has not used the maximum credit allowed by the supplier, nor is there any overdraft on the cheque account.

"Expenses accrued" are bills for water and electricity received during December. They will be settled in January.

The balance sheet describes the financial situation on a certain date - 31 December. By the following day, the current liabilities might have changed.

BALANCE SHEET AS OF 31 DECEMBER, 1984

Liabilities

Owned capital:

Shares	T\$ 15,500	
Reserves	18,500	
Surplus for disposal	<u>5,200</u>	T\$ 39,200

Long-term liabilities:

Development loan	10,000	
National Textile Company loan	5,000	
Bank loan	<u>5,000</u>	T\$ 20,000

Medium-term liabilities:

Loans from members	<u>4,000</u>	T\$ 4,000
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Current liabilities:

Owed to suppliers	3,200	
Bank overdraft	0	
Expenses accrued	<u>1,300</u>	T\$ 4,500

TOTAL T\$ 67,700

Assets

Fixed assets:

Shop building	T\$ 12,000	
Fixtures	<u>7,500</u>	T\$ 19,500

Investment:

Shares in CWS	<u>1,000</u>	T\$ 1,000
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Current assets:

Cash in hand	700	
Cash at bank	4,600	
Stock of goods	40,800	
Owed by customers	<u>1,100</u>	T\$ 47,200

TOTAL T\$ 67,700

We have looked at the co-operative's sources of money. Now let us see how the money is used. That can also be determined from the balance sheet, under the heading "Assets".

Fixed assets

Buildings and lasting equipment owned by the society represent a value of T\$ 19,500. This is not necessarily equal to their actual market value because it is calculated in a special way.

The shop building, for example, was bought for T\$15,000 three years ago. The co-operative accounts for this cost by deducting a "depreciation cost" each year over a longer period of time. So far, T\$3,000 have been deducted and T\$12,000 now remain as the "book-value" of this asset.

Investment

A co-operative may sometimes use its funds to finance other enterprises which might benefit it. Unity is a member of CWS, the Co-operative Wholesale Society, and has bought shares in it for T\$1,000.

Current assets

These are the assets which are available in cash or which could be made available within a short time. It is assumed possible to sell out the entire "stock of goods", converting it into cash. It is also assumed that outstanding debts "owed by customers" can be collected.

The stock of goods is valued at its "cost price". This is the amount which was used to buy the goods, and which the

society will acquire again when the stock is sold. Items damaged or too old to be sold must no longer be included in this stock value. Such loss in stock value means that the society has lost some of its assets.

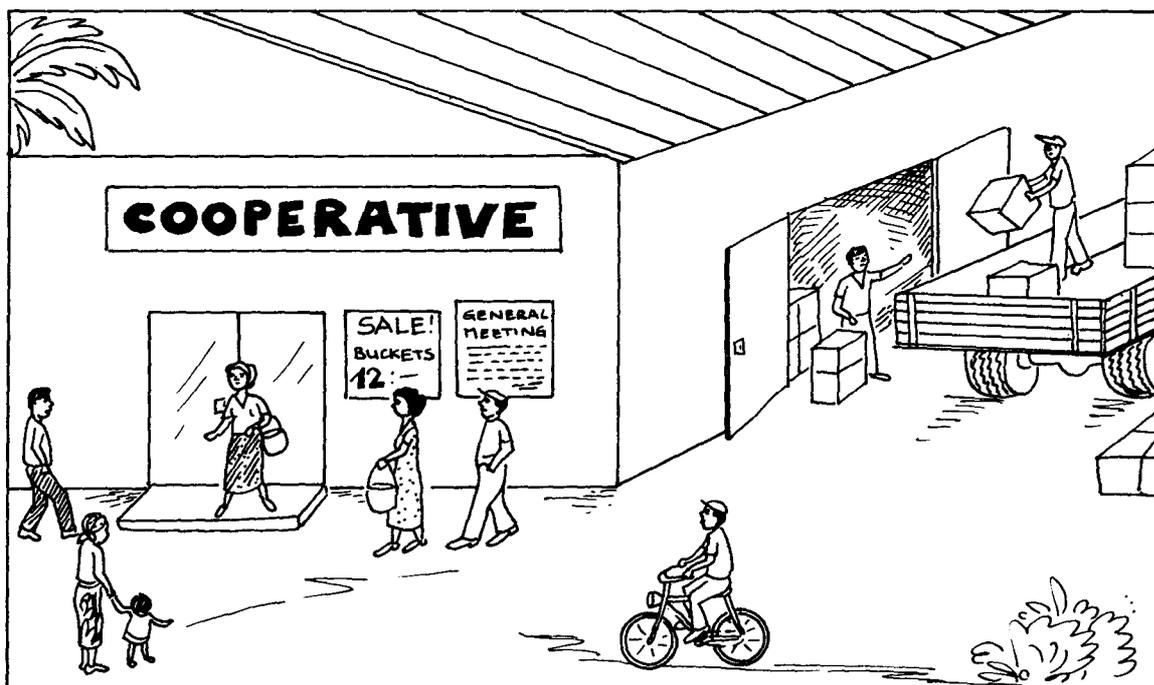


Compare the liabilities with the assets of Unity Co-operative.

- a) Is there enough cash available to pay the current liabilities?
- b) How much of the current assets will remain when the current liabilities have been paid?

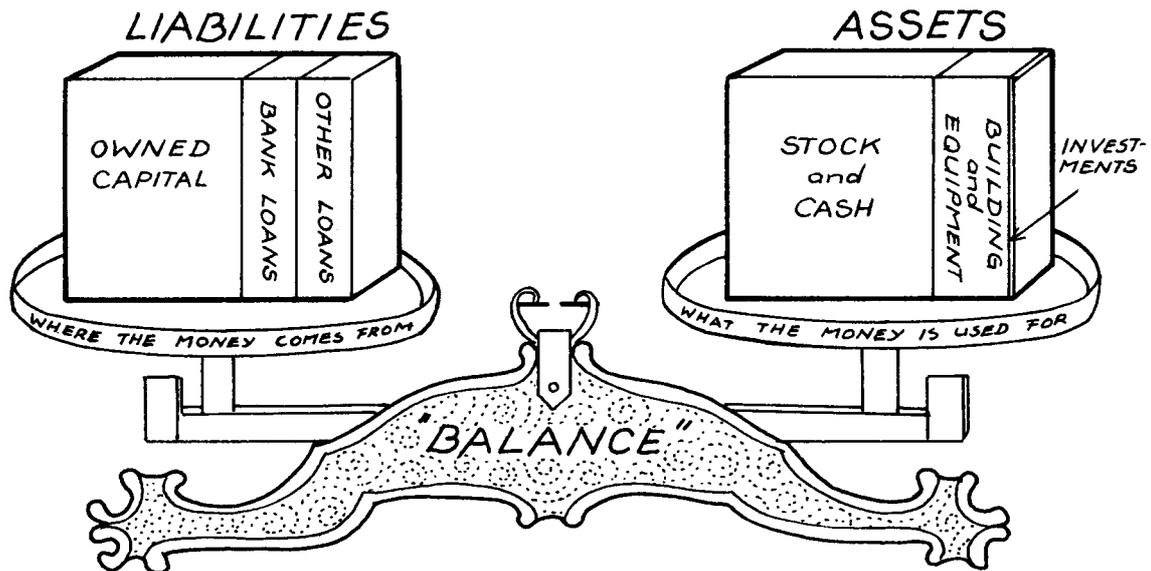
Working capital

What remains of the current assets when the current liabilities have been paid is called the "working capital". This capital makes the business operations possible - the buying and selling of goods. If the working capital is too small, it is not possible to maintain a large stock of goods - a common problem in many shops.



Balance

On a balance sheet, liabilities must always equal assets. They "balance" each other. The liability side indicates the sources of money. The asset side indicates how the society is using that same money.



If there is a change in the total on the liability side, there must be an equal change on the asset side. For example, new members joined Unity Co-operative and together bought shares for T\$300. The total share capital (on the liability side) increased from T\$15,500 to T\$15,800. The shares were paid in cash and thus cash in hand on the asset side increased from T\$700 to T\$1,000.



How will the liabilities and the assets change because of the following events?

- a) The Annual General Meeting decides to distribute the surplus so that T\$2,200 is reserved and T\$3,000 is paid as bonus to the members.

- b) The National Textile Company increases its loan to the society with another T\$5,000. The amount is paid in goods manufactured by NTC, which will be sold in the co-operative shop.

THE FLOW OF CASH AND GOODS

Mrs. Ruta buys a chicken in the shop and pays T\$20. There is an increase in the amount in the society's cash box.

The stock of goods decreases, of course - but only by T\$18, the cost price of the chicken.



Both cash and stock are included under "current assets" on the balance sheet. Through this transaction, total current assets increase by T\$2. This is the surplus or profit earned by the society.

Purchase and sale of goods are the typical transactions of a consumer co-operative. You can see from the example of Mrs. Ruta's chicken that -

- a) this is a movement within current assets - cash and goods are exchanged;
- b) it is through such movement that a surplus can be earned.

You can spend a society's money in two ways; buying goods or paying other expenses. Note the difference! If you use T\$250 to buy a stock of chickens, you will not change the total value of the current assets. You simply have chickens instead of cash and you can still make use of this asset. But if you pay T\$250 for electricity, your cash will be reduced. It will not be replaced by any other current asset.

Therefore, you must earn a surplus to be able to pay such expenses. If you use other capital for the expenses, you will not be able to replenish your stock completely.

Now you understand why it is so difficult to increase the amount of stock in a shop. Members might want a larger selection of goods, but the society cannot afford it. When sold stock is replaced, almost all current assets of the society have been turned into goods, leaving very little cash.



The weekly sales in a shop are some T\$ 8,000.
The average trade margin is 10%.

- a) How much will be required for purchase of a new stock?

- b) What is the maximum amount that could be spent on other expenses without reducing future trading?

THE RATE OF STOCK TURN

The value of the stock in Unity Co-operative is usually between T\$30,000 and T\$40,000.

The average stock value is T\$35,000.

The average markup is 12% or T\$4,200.

The average stock value at selling price is T\$39,200.

STOCK VALUE AT <u>COST PRICE</u>	T\$ 35,000
MARK - UP (MARGIN)	4,200
STOCK VALUE AT <u>SELLING- PRICE</u>	T\$ 39,200

This means that the society earns a gross surplus of T\$4,200 when the entire stock is sold. How long does that take? Or, as a businessman would say, "How quickly do they turn the stock?" (That is a better expression, because the stock is never entirely sold out, of course. It is being constantly replenished.)

The "rate of stock turn" is a measure of how quickly the **stock** is sold. To calculate your rate of stock turn, simply divide the annual sales by the average stock.

$$\frac{\text{Annual sales}}{\text{Average stock}} = \text{Rate of stock turn}$$

If it takes Unity Co-operative a whole year to sell goods worth T\$39,200, the rate of stock turn is 1. If it sells goods for T\$78,400 in a year, the rate of stock turn is 2, and so on. But sales in Unity total, in fact, about T\$392,000 in a year, hence it turns its stock 10 times annually.

$$\frac{\text{T\$392,000}}{\text{T\$ 39,200}} = 10$$

Unity Co-operative earns a gross surplus of T\$4,200 every time it turns the stock. Thus, in one year it will earn:

$$10 \times T\$4,200 = T\$42,000$$

Of course, if it could turn the stock more often it would earn a higher gross surplus.

With a stock turn rate of 10, an item will be stocked in the shop 36 days - about 5 weeks - before it is sold ($360 \text{ days} / 10 = 36$).

This is an average figure. The manager knows that perishable items like bread and milk are usually sold within one day. They have a very high rate of stock turn. Many groceries are commonly sold within a week.



Some things, however, stay a long time in the shop. The tinned corned beef was received about half a year ago. The honey must have been on the shelf even longer. The bundles of cloth take at least two months to sell out.



Goods remain in the shop for long periods for two main reasons:

- There is not much customer demand for them. (Only a few members normally buy honey. Cloth is not often sold.)
- They may have been purchased in too large a quantity. (80 tins of corned beef were ordered last time.)

If the manager sold out the "shelf-warmers" and replaced them with other goods more in demand, the stock turn rate would increase. If he reduced the quantities he ordered and instead ordered goods more often, he could afford to include new items in his assortment.

For a shop dealing only in goods in high demand, it should be possible to reach a stock turn rate of 20 or more.

Given the same investment in stock, Unity Co-operative would double its sales and surplus if it attained a stock turn rate of 20.

SALES $20 \times \text{T\$ } 39,200 = \text{T\$ } 784,000$
GROSS SURPLUS $20 \times \text{T\$ } 4,200 = \text{T\$ } 84,000$



1. Calculate the stock turn rate and the gross surplus in Unity Co-operative, if the annual sales are
 - a) T\$313,600
 - b) T\$470,400
2. Calculate the annual sales and the gross surplus in Unity Co-operative, if the average stock value is T\$39,200 and the rate of stock turn is 15.
3. What are the two main ways to improve the rate of stock turn?

The stock level

Unity Co-operative members bought T\$392,000 worth of goods last year. Suppose now that they actually could have used more or other goods and had more money to spend?

You know that the society had used most of its available capital to purchase its stock of goods. It apparently could not afford more. But did the manager order wisely? You have learned by now that it would have been possible for him to increase sales without increasing the amount spent on stock.

If he had improved both the range of stock and his ordering procedure, he would have been able to turn the stock more rapidly and to increase sales quite a bit!



The situation may vary in other co-operatives.

For example, customers might have only enough money to purchase the most essential goods, already available through their co-operative.

In a case like that, it would hardly be possible to increase annual sales by much. But it would still be a good idea to improve the rate of stock turn.

Assume that Unity Co-operative reached its maximum sales last year. The customers did not require goods other than those sold for T\$392,000.

By ordering smaller quantities more frequently, the manager might have been able to improve the rate of stock turn from 10 to 16 times.

The stock value with a stock turn rate of 10 was on average T\$39,200 at selling price.

STOCK VALUE AT SELLING PRICE	
$\frac{T\$ 392,000}{10}$	= T\$ 39,200
TRADE MARGIN	<u>4,200</u>
STOCK VALUE AT COST PRICE = T\$ 35,000	

At cost price, the average stock value was T\$35,000.

With a stock turn rate of 16 and the same sales, the average stock value would be smaller.

STOCK VALUE AT SELLING PRICE	
$\frac{T\$ 392,000}{16}$	= T\$ 24,500
TRADE MARGIN	<u>2,500</u>
STOCK VALUE AT COST PRICE = T\$ 22,000	

At cost price (about 10% lower than selling price) the average stock value would be T\$22,000.

If the average stock value can be reduced from T\$35,000 to T\$22,000, the need for capital is reduced. Assets and liabilities can be reduced by T\$13,000.

It would be possible to do without some of the loans. If the bank loan of T\$5,000 at 12% interest were repaid, the society would save T\$600 a year. The loans from members (T\$4,000) could also be paid. That 8% interest (T\$320 a year) would be saved.



How much can the capital be reduced if the rate of stock turn is improved from 10 to 14 times? (Assume sales remain the same; T\$392,000.)

CASH PLANNING

Liquidity

The ability to pay debts when they are due is called "liquidity". During a normal month Unity Co-operative has good liquidity. There is enough cash to pay all the normal monthly expenses. This is because the income from sales is saved and available to pay for both goods and the expenses of running the shop.

But there are some months when expenses exceed the available cash. Liquidity is insufficient. Why?

- There might be an exceptional demand for goods requiring a temporary increase of stock.
- There might be some "extra" costs in addition to the "usual" monthly expenses.

Such things can usually be anticipated. The manager is aware that the customers will buy a lot of goods before the new year celebrations, for example. He knows which months the insurance premium, the business licence, the loan interest, the electricity bill and such other large special payments are due.

For Unity Co-operative, liquidity problems are easily solved thanks to the overdraft facility and the CWS credit. Without these, the problems would be much more difficult.



Cash budgets

Ben is the manager of a small co-operative. He has to use the money of the society very carefully. There is just enough capital to stock the most-demanded goods. No credit is allowed by the suppliers or the bank.

During January the sales in the shop bring in T\$25,000 in cash. The stock must be replenished; Ben purchases new goods for T\$22,500. Staff wages and some minor expenses must also be paid; T\$2,000 in total.

This is a summary of the cash flow during the month:

CASH IN:	Sales	T\$	+ 25,000
CASH OUT:	Purchases		- 22,500
	Expenses		= <u>2,000</u>
CASH RESULT		T\$	+ 500

The cash has increased by T\$500 compared to the previous month. At the end of December the society had T\$800 in cash. Hence, the total cash at the end of January is T\$1,300.

CASH BALANCE 1 Jan.	T\$	800
CASH RESULT Jan.	T\$	<u>500</u>
CASH BALANCE 31 Jan.	T\$	1,300

The cash flow in February is expected to be almost the same as in January. But Ben knows that in addition to the usual expenses he will have to pay an electricity bill of T\$1,200. He prepares a simple cash budget to see if there will be enough cash.

February:

CASH BALANCE 1 Feb.			+ 1 300
CASH IN:	Sales	+ 25,000	
CASH OUT:	Purchases	- 22,500	
	Usual expenses	- 2,000	
	Electricity	= <u>1,200</u>	
CASH RESULT Feb.		- 700	= <u>700</u>
CASH BALANCE 28 Feb.			+ 600

The cash to be collected during February will not cover the expenses of the month. Another T\$700 is needed. Fortunately, at the end of January T\$1,300 was available in cash. This can also be used. When all bills are paid, the society will be left with T\$600 in cash.



The sales during March are expected to reach T\$30,000 and the purchases T\$27,000. The society also has to pay an insurance fee of T\$2,400.

- 1) Help Ben to prepare a cash budget for March.

CASH BALANCE 1 March		_____
CASH IN	_____	
CASH OUT: Purchases	_____	
Usual expenses	_____	
Insurance	_____	
CASH RESULT March		_____
CASH BALANCE 31 March		_____

- 2) Suggest how the budget should be changed so that the society will be able to pay all expenses.

When Ben finds that there will not be enough cash to meet the expenses in March, he tries various ways to solve the problem.

First he looks at the inflow of cash. Could it be increased? Selling more goods will mean more cash. Ben is afraid it might be difficult. He has already estimated higher sales in March than in the previous months.

There are other ways to increase the inflow. The society cannot borrow more money. But perhaps more share capital could be collected from members.

If Ben fails to increase the cash inflow, he has to reduce the outflow. Salaries, rent for the building and insurance must be paid. The only remaining possibility is to purchase fewer goods.

What solution did you suggest? (See your answer to question 2 on the previous page.)



Suppose that Ben reduces his purchase of goods. How will that affect future business?

Without a cash budget Ben might not realise the cash problem in time. One day he might find that there is not enough money to buy all the goods required. Some items might have to be omitted from the order. The customers might suffer shortages. Sales might be less than expected meaning, in turn, less cash inflow.

This would be a dangerous situation. It might prove necessary to cut the next order, too, due to lack of money. If allowed to continue, this could eventually lead to an empty shop - no goods and no cash.



But Ben does prepare a cash budget. He is therefore aware of the coming liquidity problem while there is still time to solve it. Even if he does find it necessary to reduce the purchase of goods, he can plan it so as to cause the least harm to the customers.



Explain how Ben can purchase fewer goods without causing shortages and reduced sales.

The easiest means of avoiding liquidity problems are not available to Ben's co-operative:

- increasing the cash inflow through an overdraft on the bank account;
- reducing the cash outflow through credit from the supplier.

Both methods can be used to meet occasional needs for cash. But they may only postpone the problems. It is advisable, therefore, to prepare cash budgets for some months ahead.

When a manager incurs any debts, he must know when he can settle them!

FINANCIAL ANALYSES

If a co-operative society has a positive cash result almost every month, the cash balance will steadily increase. Does this mean that the "financial position" of the society will improve?

How do we assess the financial position? Let us agree that the following three conditions are typical of a "healthy" co-operative:

- it has good liquidity (it can pay its debts when due);
- it has sufficient working capital;
- it is self-supporting (it owns most of its assets).

Let us take a look at these characteristics, one by one.

Good liquidity

The balance sheet shows the actual liquidity on a certain day. It shows outstanding debts and how much cash is available to pay them. This is the situation in Unity Co-operative on 31 December 1984 (compare pages 18-19):

<u>Cash</u>		<u>Short-term debts</u>	
Cash in hand	T\$ 700	Owed to suppliers	T\$ 3,200
Cash at bank	T\$ 4,600	Expenses accrued	T\$ 1,300

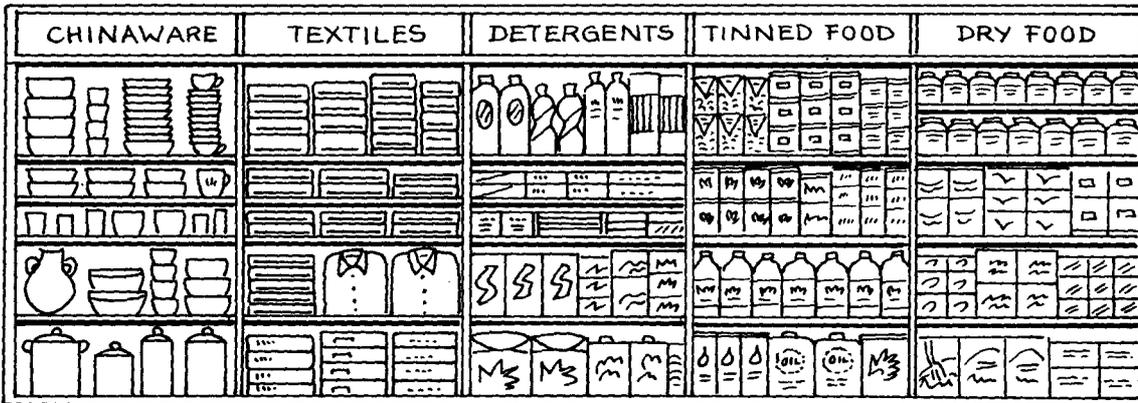
Liquidity is satisfactory at this moment; the cash exceeds the debts.

But the balance sheet says nothing about the liquidity in the coming months. You learned on pages 29-33 that you need a cash budget to project the liquidity situation for the future.


 A society has T\$2,200 at the bank and T\$600 in the cash box in the shop. It has received a bill of T\$1,350 from a supplier and the staff expects T\$1,200 of this month's wages. Explain the liquidity situation.

Sufficient working capital

A society has sufficient working capital when it can afford to stock all commodities selected for the stock range.



It might be useful to study the development of the working capital. Most co-operatives try to increase the working capital so that the stock range can be expanded.

How much working capital a society has can easily be determined from the balance sheet.

These figures are from the Unity Co-operative:

	<u>31.12.1983</u>	<u>31.12.1984</u>
Current assets	T\$ 43,100	47,200
Current liabilities	- 3,300	4,500
Working capital	T\$ 39,800	42,700

The assets were financed by:

Owned capital	T\$ 39,200 (62%)
Borrowed capital	<u>24,000</u> (38%)
Total	63,200 (100%)

(We omit the current liabilities, since they have been deducted from the assets.)

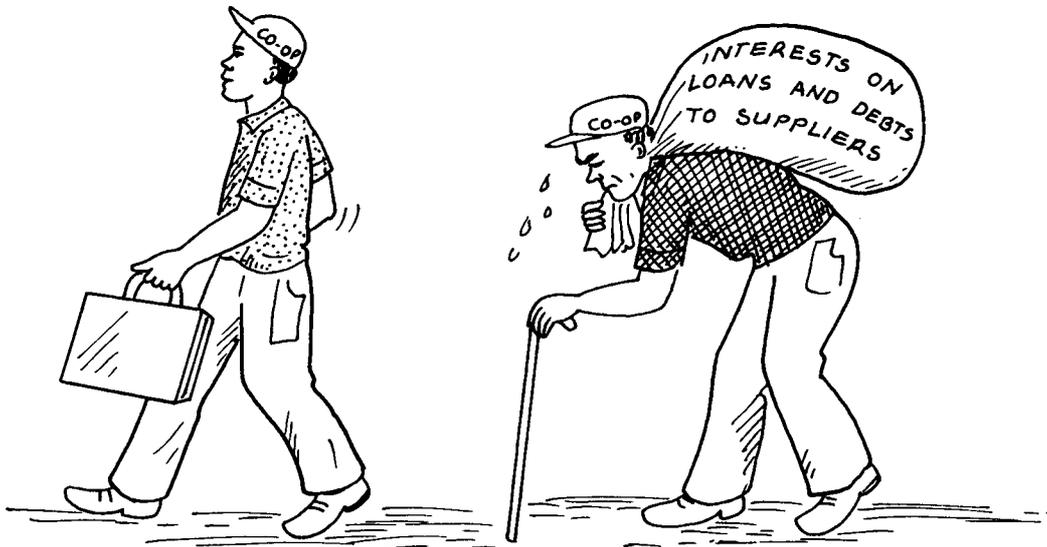
In 1984 the society owned 62% of its available capital - a good situation. But what happens the following year? Will the society become more or less self-supporting? Answer the questions below.

? In 1985 the total owned capital is T\$42,000; and the borrowed capital T\$28,000.

a) What percentage of the total capital is owned by the society?

b) Is the society more or less self-supporting than before?

WARNING! A HEAVY BURDEN OF HIGH CAPITAL COSTS
MAY BE TOO MUCH FOR YOUR CO-OPERATIVE!



INFLATION

- Sugar is T\$3.60 a kilo. Last year it was only T\$3.20.
- Many other things have become more expensive, too. This soap used to be T\$1.20. Now it is T\$1.30.



Two customers, Mrs. Malu and Mrs. Kama, are **discussing** the rise in prices. Mrs. Malu says that last year she spent T\$100 a week on food. Now she pays about T\$110 - buying no more food than before. All prices have simply gone up, not only in the co-operative shop, but everywhere.

The average price increase per year is called inflation. We shall see how it can affect the financing of a co-operative shop business.

Working capital

Mrs. Malu noticed that she had to spend more money than before just to be able to buy the same goods. This was because the value of the money had been reduced.

The same applies to the shop. When the stock needs to be replenished, more cash is required just to purchase the same amount of goods. Therefore, the working capital must be increased with inflation.

Unity had a working capital of T\$42,700 at the end of 1984. Assuming a 10% inflation rate during 1985, the price of consumer goods would increase an average of 10%. The working capital must then also increase by 10%.

$$10\% \text{ of T\$42,700} = \text{T\$4,270}$$

By the end of 1985, the working capital ought to be at least T\$46,970. Otherwise, the society might be forced to reduce its stock range, unable to afford to purchase as many goods as before.



In the exercise on page 36, you calculated the change of working capital in the Unity Co-operative from 1984 to 1985. During the same time, the rate of inflation was 10%. Adjust the working capital accordingly (add 10%). How would you answer the questions on page 36 now, considering the inflation?

Financing

If the rate of inflation is high, a society requires more capital to keep its business alive. How can the society find additional sources of finance?

Borrowing money for this purpose would not be very wise. The cost of interest would increase and the society would become increasingly dependent on creditors.

It is better to increase the owned capital. (Members might agree to buy more shares.) Most important, the net surplus earned on the business should remain in the society. At least the amount needed to maintain the value of the working capital should be reserved; the higher the rate of inflation, the larger net surplus required.

In practice, the net surplus can continually be adjusted to the inflation rate by increasing selling prices. The following example will show how it is done:

Unity Co-operative has a stock of 200 kilograms of sugar. It was purchased at T\$3.00/kg and will be sold at T\$3.20.

Sales	(200 x 3.20)	T\$ 640
Cost of goods	(200 x 3.00)	<u>600</u>
Gross surplus		T\$ 40

When all the sugar is sold, the society can replace it with another 200 kg and make T\$40 surplus.

But before any sugar is sold, new prices are suddenly announced: a cost price of T\$3.40 and a selling price of T\$3.60/kg. If the old stock is sold at the new selling price, there will be a larger gross surplus:

Sales	(200 x 3.60)	T\$ 720
Cost of goods	(200 x 3.00)	<u>600</u>
Gross surplus		T\$ 120

The big surplus is essential if the society is to refill the stock of sugar:

Income from sales		T\$ 720
Purchase of new stock (200 x 3.40)		<u>680</u>
		T\$ 40

When the society has purchased new stock, there is just as much money, left as there would have been before the price increase. The large surplus may look unfair to the members, but in terms of goods the society is no richer than before.



How many kilograms of sugar could the society purchase at the new cost price, if the old stock is sold at the old selling price?

“CHECK-OUT”

To prove to yourself that you have fully understood this Element, you should now go through the following questions. Mark what you think is the right answer to each question. If you have problems with a particular question, go back and read the corresponding chapter again. Your teacher will later check your answers.



- 1 A loan is repaid without being replaced by other capital. Therefore the stock level is likely to
 - a increase;
 - b decrease;
 - c remain on the previous level.

- 2 "It costs money to borrow money". The most expensive loan is usually
 - a a long-term bank loan;
 - b an overdraft on the cheque account;
 - c loans from members.

- 3 When a co-operative society borrows money from members, how much interest should it pay compared to the interest on a savings account in a bank?
 - a An equal interest.
 - b A slightly higher interest.
 - c A slightly lower interest.

- 4 A monthly interest of 2% is equal to an annual interest of
 - a 2%;
 - b 6%;
 - c 24%.

- 5 The balance sheet can tell
 - a the costs of the capital;
 - b the actual market value of the assets;
 - c how the capital is used.

- 6 The total assets and the total liabilities of the balance sheet are
- a sometimes equal;
 - b always equal;
 - c never equal.
- 7 What is working capital?
- a The cash in hand.
 - b The cash in hand plus the cash at the bank.
 - c The current assets less the current liabilities.
- 8 What is the rate of stock turn if the annual sales are T\$300,000 and the stock value is in the range of T\$10,000 to T\$30,000?
- a 10.
 - b 15.
 - c 30.
- 9 The stock turn rate can be improved if
- a goods are purchased in smaller quantities;
 - b** goods are purchased in larger quantities;
 - c ordering intervals are extended.
- 10 A society has the best liquidity when the total current liabilities are
- a equal to the available cash;
 - b smaller than the available cash;
 - c larger than the available cash.
- 11 The aim of a cash budget **is to**
- a** increase the working capital;
 - b earn a higher net surplus;
 - c avoid liquidity problems.
- 12 Because of inflation, the working capital
- a must be reduced;
 - b must be increased;
 - c must be maintained at the previous level.

To complete your studies of this topic you should take part in some of the following exercises to be organised by your teacher.

1 The Balance Sheet

Study the balance sheets of a co-operative society from two or more succeeding years.

- a Calculate and note for each year
 - the liquidity;
 - the amount of working capital;
 - the ratio of owned capital compared to total capital (excluding current liabilities).

- b If possible, try to find an official figure for the rate of inflation or make your own estimate according to your experience of the average price increases.

- c Give your comments on the financial development and the present status of the society.

- d Give your advice on how the financial situation could be improved.

2 Loans and Credits

Analyse the loans and credits given to a society. Find out the various conditions and interest costs. Rank the loans from most favourable to least favourable.

3 The Cash Budget

Prepare a simple cash budget for a co-operative society. Start with the next month and plan for the following six months.

- a Calculate the cash balance month-by-month. See if any action must be taken to avoid a cash problem. If so, suggest what to do.

- b If possible, follow up what is really happening during the time covered by the cash budget. Note any deviation from your estimates and explain it.