

## DEBT FINANCE AVAILABLE TO FIRMS OF ALL SIZES

**Introduction**

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**Contrasting debt finance with equity**

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**Bank borrowing**

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**Overdraft**

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**Term loans**

---

**Trade credit**

---

**Factoring**

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**Hire purchase**

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**Leasing**

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**Bills of exchange**

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**Acceptance credits (bank bills or banker's acceptance)**

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**Conclusion**

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## Introduction

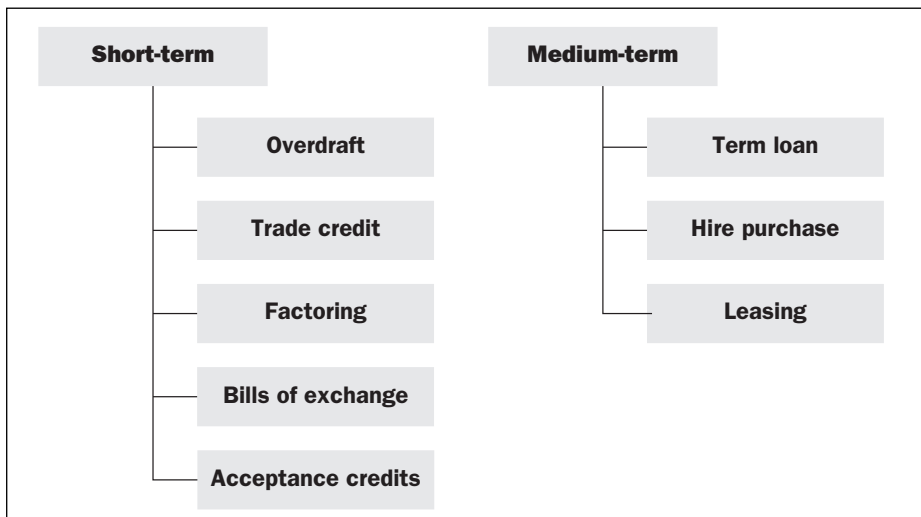
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For many firms, especially smaller ones, a combination of overdrafts and loans, trade credit, leasing and hire purchase make up the greater part of the funding needs. Large companies have access to stock markets, bond markets and syndicated loan facilities. These are often closed to the smaller firm, so, to pursue their expansion programs, they turn to the local banks and the finance houses as well as their suppliers for the wherewithal to grow. The giants of the corporate world have access to dozens of different types of finance, but they too value the characteristics, cheapness and flexibility of the forms discussed in this chapter.

All the forms of finance discussed in this chapter are described as either short- or medium-term finance (with the exception of some bank loans). The definitions of short-term and medium-term finance are not clear-cut. Usually finance repayable within a year is regarded as short, whereas that due for repayment between one and seven years is taken to be medium. But these cut-offs are not to be taken too seriously. Quite often an overdraft facility, which is due for repayment in, say, six months or one year, is regularly 'rolled over' and so may become relied upon as a medium-term, or even long-term, source of funds. Leasing, which is usually classified as a medium-term source, can be used for periods of up to 15 years in some circumstances, in others it is possible to lease assets for a period of only a few weeks, for example, a computer or photocopier. The forms of finance we will examine in this chapter are listed in Figure 15.1.

**FIGURE 15.1**

**The main forms of short-term and medium-term finance**



## Contrasting debt finance with equity

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### What is debt?

Put at its simplest, debt is something that has to be repaid. Corporate debt repayments generally take the form of interest and capital payments, but they can be more exotic compensations such as commodities and shares. The usual method is a combination of a regular interest, with capital (principal) repayments either spread over a period or given as a lump sum at the end of the borrowing.

**Debt is something that has to be repaid.**

### Cost of debt

Debt finance is less expensive to the firm than equity (ordinary shares) finance, not only because the costs of raising the funds (for example, arrangement fees with a bank or the issue costs of a bond) are lower, but because the rate of return required to attract investors is less than for equity. This is because investors recognize that investing in a firm via debt finance is less risky than investing via shares. It is less risky because interest has a higher claim than equity holders on income generated by the company – interest has to be paid even if that means there is nothing left to pay the shareholders a dividend. There is thus a greater certainty of receiving a return than there is for equity holders. Also, if the firm goes into liquidation, the holders of a debt type of financial security are paid back from the sale of the assets before shareholders receive anything. Thus we say that debt holders ‘rank’ higher than equity holders for annual payouts and liquidation proceeds.

### Extraordinary profits go to shareholders

Offsetting these plus-points for debt (from the debt holders point of view) is the fact that lenders do not, generally, share in the value created by an extraordinarily successful business. They usually receive the contractual minimum and no more, whereas shareholders can gain much more than the minimum required because they are the recipients of any surplus the firm generates. In the case of high performing businesses this can result in an initial share investment of a few thousand pounds being turned into many millions.

### Voting rights

Another disadvantage with debt is that the lenders do not, in normal circumstances, have any voting power over the company’s direction, for example, choosing the directors, agreeing to a merger or voting for a dividend payment.

Having said this, debt holders are able to protect their position to some extent through rigorous lending agreements and if these are breached they may be able to take control of a company. These lending agreements may, for instance, insist that the company does not exceed certain debt level relative to the amount shareholders hold in the company, or that annual interest does not exceed a stated multiple of annual profits.

### Shock absorption

The fact that debt finance usually requires regular cash outlays in the form of interest and the repayment of a capital sum means that the firm is obliged to maintain payments through bad times as well as good, or face the possibility of the lenders taking action to recover their dues by forcing the sale of assets or liquidation. High debt levels therefore pose a risk to the existence of the company

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– a poor performance over a few years can wipe out shareholders' wealth as the firm digs into the equity base to pay the debt obligations (for a consideration of when debt levels become too great see Chapters 10 and 18). The fact that shares carry no right to pay a

dividend or to ever repay the capital allows them to act as shock absorbers for the company. When losses are made the company does not have the problem of finding money for a dividend.

### Tax deductibility

When a company pays interest the tax authorities regard this as a cost of doing business and it can be used to reduce the taxable profit. This lowers the effective cost to the firm of servicing the debt compared with servicing equity capital through dividends, which are not tax deductible (see Chapter 10). To the attractions of the low required return on debt we must add the benefit of tax deductibility.

### Collateral and restrictions

Institutions providing debt finance often try to minimize the risk of not receiving interest and their original capital. They do this by first of all looking to the earning ability of the firm, that is, the pre-interest profits in the years over the period of the loan. As a back-up they often require that the loan be secured against assets owned by the business, so that if the firm is unable to pay interest and capital from profits the lender can force the sale of the assets to receive their legal entitlement. The matter of security has to be thought about carefully before a firm borrows capital. It could be very inconvenient for the firm to grant a bank a fixed charge on a specific asset – say a particular building – because the firm is then limiting its future flexibility to use its assets as it wishes. For instance, it will not be able to sell that building, or even rent it without the consent of the bank or the bondholders.

## Bank borrowing

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For most companies and individuals banks remain the main source of externally (i.e. not retained profits) raised finance. Ten years ago the most common form of bank borrowing was the overdraft facility. As we shall see there has been a remarkable shift, so that now the term loan has come to dominate.

Borrowing from banks is attractive for companies for the following reasons:

- *It is quick* The key provisions of a bank loan can be worked out speedily and the funding facility can be in place within a matter of hours. Contrast this with a bond issue or arranging factoring (see below) which both require a lot of preparation.
- *It is flexible* If the economic circumstances facing the firm should change during the life of the loan banks are generally better equipped – and are more willing – to alter the terms of the lending agreement than bondholders. If the firm does better than originally expected a bank overdraft (and some loans) can be repaid without penalty. Contrast this with many bonds with fixed redemption dates, or hire purchase/leasing agreements with fixed terms. Negotiating with a single lender in a crisis has distinct advantages (with bond finance there might be thousands of lenders – see next chapter).
- *It is available to small firms* Bank loans are available to firms of almost any size whereas the bond or money markets are for the big players only.
- *Administrative and legal costs are low* Because the loan arises from direct negotiation between borrower and lender there is an avoidance of the marketing, arrangement, regulatory and underwriting expenses involved in a bond issue (see Chapter 16).

### Factors for a firm to consider

There are a number of issues a firm needs to address when considering bank borrowing.

#### Costs

The borrower may be required to pay an arrangement fee, say 1 percent of the loan, at the time of the initial lending, but this is subject to negotiation and may be bargained down. The interest rate can be either fixed for the entire term of the loan (or part of it) or floating. If it is floating then the rate will generally be a certain percentage above the bank's base rate or the London Inter-Bank Offered Rate (LIBOR). LIBOR is the rate at which very safe banks lend to each other in the financial markets. This can be lending for as short as a few hours (overnight LIBOR) or for much longer periods, say three or six months.

Customers in a good bargaining position may be able to haggle so that they pay only 1 or 2 percent 'over base', or over say, 'three-month LIBOR'. In the case of the three-month LIBOR benchmark rate the interest payable changes every three months depending on the rates in the market for three-month lending between high

quality banks. Because the borrowing corporation is not as safe as a high quality bank borrowing in the interbank market it will pay 1 percent (or 100 basis points), 2 percent (200 basis points) or some other number of basis points per year more than the high quality bank would. In the case of base-rate related lending the interest payable changes immediately the bank announces a change in its base rate. This moves at irregular intervals in response to financial market conditions, which are heavily influenced by the Bank of England in its attempts to control the economy.

For customers in a poorer bargaining position, offering a higher risk proposal, the rate could be 5 percent or more over the base rate or LIBOR. The interest rate will be determined not only by the riskiness of the undertaking and the bargaining strength of the customer but also by the degree of security for the loan and the size of loan. Furthermore, economies of scale in lending mean that large borrowers pay a lower interest rate.

A generation ago it would have been more normal to negotiate fixed-rate loans but sharp movements of interest rates in the 1970s and 1980s meant that banks and borrowers were less willing to make this type of long-term commitment. Most loans today are 'variable rate'. Floating-rate borrowings have advantages for the firm over fixed-rate borrowings:

- if interest rates fall the cost of the loan falls;
- at the time of arrangement fixed rates are usually above floating rates (to allow for lenders' risk of misforecasting future interest rates);
- returns on the firm's assets may go up at times of higher interest rates and fall at times of low interest rates, therefore the risk of higher rates is offset. For example, a bailiff firm may prosper in a high interest rate environment and can cope with higher interest charged to its business borrowing.

However floating rates have some disadvantages:

- the firm may be caught out by a rise in interest rates if, as with most businesses, its profits do not rise when interest rates rise. Many have failed because of a rise in interest rates at an inopportune time;
- there will be uncertainty about the precise cash outflow impact of the interest payable. Firms need to plan ahead; in particular, they need to estimate amounts of cash coming in and flowing out, not least so that they can pay bills on time. If the firm has large amounts of floating rate debt it has an extra element of uncertainty in estimating cash flows and thus greater difficulty in managing the business efficiently.

### Security

When banks are considering the provision of debt finance for a firm they will be concerned about the borrower's competence and honesty. They need to evaluate the proposed project and assess the degree of managerial commitment to its success. The firm will have to explain why the funds are needed and provide detailed cash forecasts covering the period of the loan. Between the bank and the firm stands the classic gulf called 'asymmetric information' in which one party in the

negotiation is ignorant of, or cannot observe, some of the information that is essential to the contracting and decision-making process. The bank is unable to accurately assess the ability and determination of the managerial team and will not have a complete understanding of the market environment in which they propose to operate. Companies may overcome bank uncertainty to some degree by providing as much information as possible at the outset and keeping the bank informed of the firm's position as the project progresses.

**Between the bank and the firm stands the classic gulf called 'asymmetric information'.**

The finance director and managing director need to consider both the quantity and quality of information flows to the bank. An improved flow of information can lead to a better and more supportive relationship. Firms with significant bank financing requirements to fund growth will be well advised to cultivate and strengthen understanding and rapport with its bank(s). The time to lay the foundations for subsequent borrowing is when the business does not need the money so that when loans are required there is a reasonable chance of being able to borrow the amount needed on acceptable terms.

Another way for a bank to reduce its risk is to ensure that the firm offers sufficient collateral for the loan. Collateral provides a means of recovering all or the majority of the bank's investment should the firm fail. The bank's loan can be secured by either a fixed or a floating charge against the firm's assets. A fixed charge means that specific assets are used as security which, in the event of default, can be sold at the insistence of the lender(s) and the proceeds used to repay them. A floating charge means that the loan is secured by a general charge on all the assets of the corporation. In this case the company has a large degree of freedom to use its assets as it wishes, such as sell them or rent them out, until it commits a default which 'crystallizes' the floating charge. If this happens a receiver will be appointed with powers to dispose of assets and to distribute the proceeds to the creditors. Even though floating-charge lenders can force liquidation, fixed-charge lenders rank above floating-charge debt holders in the payout after insolvency – they get paid first, if there is anything left then the floating charge lenders receive something.

Collateral can include stocks, debtors and equipment as well as land, buildings and marketable investments such as shares in other companies. In theory banks often have this strong right to seize assets or begin proceedings to liquidate. In practice they are reluctant to use these powers because the realization of full value from an asset used as security is sometimes difficult and such Draconian action can bring adverse publicity.

Banks are careful to create a margin for error in the assignment of sufficient collateral to cover the loan because, in the event of default, assigned assets usually command a much lower price than their value to the company as a going concern. A quick sale at auction produces bargains for the buyers of liquidated assets.

Another safety feature applied by banks is the requirement that the firm abide by a number of loan covenants which place restrictions on managerial action, for example insisting that annual profits be at least four times annual interest in every year while the loan is outstanding.

Finally, lenders can turn to the directors of the firm to provide additional security. They might be asked to sign personal guarantees that the firm will not default. Personal assets (such as homes) may be used as collateral. This erodes the principle of limited liability status and is likely to inhibit risk-taking productive activity. However for many smaller firms it is the only way of securing a loan and at least it demonstrates the commitment of the director to the success of the enterprise.

### Repayment

A firm must carefully consider the period of the loan and the repayment schedules in the light of its future cash flows. It could be disastrous, for instance, for a firm engaging in a capital project which involved large outlays for the next five years followed by cash inflows thereafter to have a bank loan which required significant interest and principal payments in the near term. For situations like these, repayment holidays or grace periods may be granted, with the majority of the repayment being made once cash flows are sufficiently positive.

It may be possible for a company to borrow by means of a mortgage on freehold property in which repayments of principal plus interest may be spread over long periods of time. The rate charged will be a small margin over the base interest rate or LIBOR. The main advantage of a mortgage is that ownership of the property remains with the mortgagee (the borrowing firm) and therefore the benefits that come from the ownership of an asset, which may appreciate, are not lost.

A proportion of the interest and the principal can be repaid monthly or annually and can be varied to correspond with the borrower's cash flows. It is rare for there to be no repayment of the principal during the life of the loan but it is possible to request that the bulk of the principal is paid in the later years. Banks generally prefer self-amortizing term loans with a high proportion of the principal paid off each year. This has the advantage of reducing risk by imposing a program of debt reduction on the borrowing firm.

The repayment schedule agreed between bank and borrower is capable of infinite variety – four possibilities are shown in Table 15.1.

The retail and merchant banks are not the only sources of long-term loans. Insurance companies and other specialist institutions such as 3i will also provide long-term debt finance.

### Overdraft

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Usually the amount that can be withdrawn from a bank account is limited to the amount put in. However business and other financial activity often requires some flexibility in this principle, and it is often useful to make an arrangement to take more money out of a bank account than it contains – this is an overdraft.

An overdraft is a permit to overdraw on an account up to a stated limit.



**TABLE 15.1**  
**Example of loan repayment arrangements**

**£10,000 borrowed, repayable over four years with interest at 10% pa (assuming annual payments, not monthly)**

(a) <i>Time period (years)</i>	1	2	3	4
Payment (£)	3,155	3,155	3,155	3,155
(b) <i>Time period (years)</i>	1	2	3	4
Payment (£)	1,000	1,000	1,000	11,000
(c) <i>Time period (years)</i>	1	2	3	4
Payment (£)	0	0	0	14,641
(d) <i>Time period (years)</i>	1	2	3	4
Payment (£)	0	1,000	6,000	6,831

Overdraft facilities are usually arranged for a period of a few months or a year and interest is charged on the excess drawings.

## Advantages

Overdrafts have the following advantages.

1. *Flexibility* The borrowing firm is not asked to forecast the precise amount and duration of its borrowing at the outset but has the flexibility to borrow up to a stated limit. Also the borrower is assured that the moment the funds are no longer required they can be quickly and easily repaid without suffering a penalty.
2. *Cheapness* Banks usually charge two to five percentage points over base rate (or LIBOR) depending on the creditworthiness, security offered and bargaining position of the borrower. There may also be an arrangement fee of, say, 1 per cent of the facility. These charges may seem high but it must be borne in mind that overdrafts are often loans to smaller and riskier firms that would otherwise have to pay much more for their funds. Large and well-established borrowers with low gearing and plenty of collateral can borrow on overdraft at much more advantageous rates. A major saving comes from the fact that the banks charge interest on only the daily outstanding balance. So, if a firm has a large cash inflow one week it can use this to reduce its overdraft, temporarily lowering the interest payable, while retaining the ability to borrow more another week.

## Drawbacks

A major drawback to an overdraft is that the bank retains the right to withdraw the facility at short notice. A heavily indebted firm may receive a letter from the bank insisting that its account be brought to balance within a matter of days.

**It is not usually wise to use the money for an asset that cannot be easily liquidated.**

This right lowers the risk to the lender because it can quickly get its money out of a troubled company, which allows it to lower the cost of lending. However, it can be devastating for the borrower and so firms are well advised to think through the use to which

finance provided by way of an overdraft is put. It is not usually wise to use the money for an asset that cannot be easily liquidated; for example, it could be problematic if an overdraft is used for a bridge-building project which will take three years to come to fruition.

The age-old convention of attaching the right of the bank to withdraw the overdraft facility to a loan agreement was flouted by NatWest in 2000 – *see* Exhibit 15.1.

With overdrafts the bank may take either a fixed or a floating charge over the firm's assets. It will also be on the look out for other forms of security, e.g. a personal guarantee of the directors or owners of the business (if the company defaults the bank can force the directors to pay off the loan from their own resources). When Sir Richard Branson borrowed from Lloyds TSB the bank took shares owned by Sir Richard in Virgin Atlantic as security. Note that, unusually, the overdraft facility extended to three years – *see* Exhibit 15.2.

## Seasonal businesses

Overdrafts are particularly useful for seasonal businesses because the daily debit-balance interest charge and the absence of a penalty for early repayment mean that this form of finance can be cheaper than a loan. Take the case of Fruit Growers plc (Worked example 15.1).

### NatWest deletes overdraft clause

Jim Pickard

Campaigners for small companies claimed a victory yesterday after NatWest bank abolished its right to remove a customer's overdraft at a moment's notice.

NatWest said it would turn current industry practice on its head by deleting

the 'repayable on demand' clause from its small business overdrafts.

The bank said it would end the uncertainty faced by SMEs by ensuring that a three, six or 12 month overdraft meant exactly that. The conditions will apply to both secured and unsecured overdrafts.

## EXHIBIT 15.1 Natwest deletes overdraft clause

Source: *Financial Times* 21 November 2000

## Branson wins £17m loan facility increase

Francesco Guerrera and Thorold Barker

Sir Richard Branson can borrow a further £17m from Lloyds TSB under a loan facility backed by Virgin Group's controlling stake in Virgin Atlantic, the prize of his business empire.

Virgin said yesterday it had mortgaged his 51 per cent stake in the Virgin Atlantic in exchange for a £67m three-year facility from Lloyds.

Sir Richard's group has already used £50m of the overdraft facility on new businesses, including US and Australian mobile phone ventures and the acquisition of a chain of South African health clubs.

### EXHIBIT 15.2 Branson wins £17m loan facility increase

Source: *Financial Times* 12 June 2001

### Worked example 15.1 FRUIT GROWERS PLC

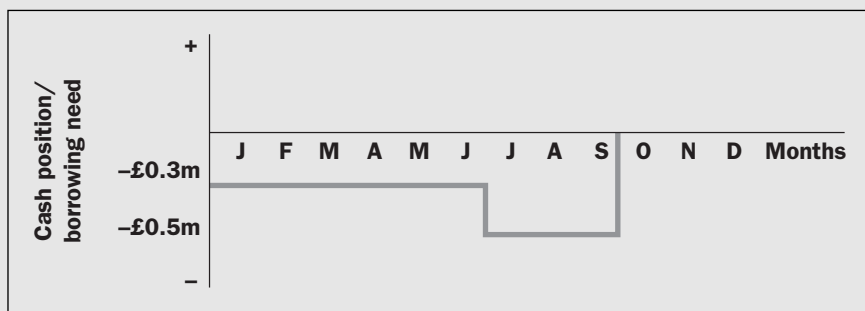
The management of Fruit Growers plc are trying to decide whether to obtain financing from an overdraft or a loan. The interest on both would be 10% per year or 2.5% per quarter. The cash position for the forthcoming year is represented in Figure 15.2.

#### Option 1. A loan for the whole year

A loan for the whole year has the advantage of greater certainty that the lending facility will be in place throughout the year. A total loan of £0.5m will be needed, and this will be repaid at the end of the year with interest. At the beginning of the year Fruit Growers' account is credited with the full £500,000. For the months when the business does not need the £500,000 the surplus can be invested to receive a return of 2% per quarter.

FIGURE 15.2

Monthly cash flow balance for Fruit Growers plc



**Cost of a loan for the whole year**

Interest charged $500,000 \times 10\%$	=	£50,000
Less interest receivable when surplus funds earn 2% per quarter		
January–June $200,000 \times 4\%$	=	£8,000
October–December $500,000 \times 2\%$	=	£10,000
Total cost of borrowing	=	<u>£32,000</u>

**Option 2. An overdraft facility for £500,000**

An overdraft facility for £500,000 has the drawback that the facility might be withdrawn at any time during the year – however, it is cheaper.

**Costs of an overdraft facility for £500,000**

1st quarter (J, F & M) $300,000 \times 2.5\%$	=	£7,500
2nd quarter (A, M & J) $300,000 \times 2.5\%$	=	£7,500
3rd quarter (J, A & S) $500,000 \times 2.5\%$	=	£12,500
4th quarter (O, N & D)	=	<u>£0</u>
Total cost of borrowing	=	<u>£27,500</u>

*Note:* We will ignore the complications of compounding intra-year interest.

**Criticism of banks**

The risk of a sudden withdrawal of an overdraft facility for most firms is very slight: banks do not generate goodwill and good publicity by capriciously and lightly canceling agreed overdrafts. The high street banks came in for strong criticism in the early 1990s: ‘In 1993 the best that could be said about the relationship between banks and their small firm customers was that both sides were in a state of armed neutrality’ (Howard Davies, Deputy Governor of the Bank of England, 1996). They were said to have failed to lower interest rates to small firms to the same extent as general base rates (a charge of which the Bank of England said they were not guilty), of not supporting start-ups, of having excessive fees, of being too ready to close down a business and being too focussed on property-based security backing rather than looking at the cash flows of the proposed activity.

**The best that could be said about the relationship between banks and their small firm customers was that both sides were in a state of armed neutrality.**

A number of these areas of contention have been addressed and matters are said to be improving. One particular problem with UK lending was said to be the excessive use of the overdraft facility when compared with other countries that used term

A number of these areas of contention have been addressed and matters are said to be improving. One particular problem with UK lending was said to be the excessive use of the overdraft facility when compared with other countries that used term

loans more extensively. In the 1980s between one-half and two-thirds of bank lending to small firms was in the form of overdrafts. A high proportion of these were rearranged at the end of each year for another 12 months ('rolled over') and so, in effect, became a medium-term source of finance. The disadvantages of this policy are that each overdraft renewal involves arrangement fees as well as the risk of not reaching an agreement and, therefore, the funding being withdrawn. It became obvious that a longer-term loan arrangement was more suitable for many firms and the banks pushed harder on this front. As a result, between 1993 and 1998, the proportion of bank lending to small firms represented by overdrafts declined from 49 to 30 percent, with term lending rising to 70 percent.

The relationship between banks and small businesses is said to have improved during the 1990s – see Exhibit 15.3.

## Banks boost links with small businesses

### Study expects switch to medium-term loans will bolster defences against economic swings

Andrew Balls

Small businesses are less vulnerable to the swings of the economic cycle than in the past because they rely less on bank overdrafts and more on medium-term bank loans with fixed repayments ...

... 'Banks are now more locked into the provision of finance to the small-firm sector throughout the economic cycle.' Banks' codes of practice for small business and improved British Bankers' Association industry standards for dealing with small businesses, have led to 'a more open, two-way relationship' between banks and small companies.

Banks now have better warning systems to highlight businesses that are getting into difficulty, and small companies appear more prepared to share information. The study, *The Financing of Small Firms in the UK*, says: 'Better relations and a greater degree of co-operation should help to avoid some of the strains of the previous recession, which contributed to increased business

failures and seriously affected the reputation of the banks.'

Better sharing of information also means banks are levying lower charges, requiring less collateral, and offering fixed-rate loans rather than overdraft facilities tied to short-term interest rates.

The balance between overdraft and term-lending was equally split in 1992. By 1998, term-lending accounted for 70 per cent of the total. Two thirds of banks' committed funds have maturities of more than five years.

As a percentage of total small-business finance, bank lending has fallen from 61 per cent in 1990 to 47 per cent in 1997. Hire purchasing and leasing has risen from 16 per cent to 27 per cent over the same period. Only 39 per cent of small businesses sought external finance in 1995–97, compared with 65 per cent in 1987–90. Small businesses are also relying more on internally generated funds than in the past, the Bank says.

## EXHIBIT 15.3 Banks boost links with small businesses

Source: *Financial Times* 17 May 1999

## Term loans

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A term loan is a loan of a fixed amount for an agreed time and on specified terms. These loans are normally for a period of between three and seven years, but they can range from one to 20 years. The specified terms will include provisions regarding the repayment schedule. If the borrower is to apply the funds to a project which will not generate income for perhaps the first three years it may be possible to arrange a grace period during which only the interest is paid, with the capital being paid off once the project has a sufficiently positive cash flow. Other arrangements can be made to reflect the pattern of cash flow of the firm or project: for example a 'balloon' payment structure is one when only a small part of the capital is repaid during the main part of the loan period, with the majority repayable as the maturity date approaches. A 'bullet' repayment arrangement takes this one stage further and provides for all the capital to be repaid at the end of the loan term.

Not all term loans are drawn down in a single lump sum at the time of the agreement. In the case of a construction project which needs to keep adding to its borrowing to pay for the different stages of development, an instalment arrangement might be required with, say, 25 percent of the money being made available immediately, 25 percent at foundation stage and so on. This has the added attraction to the lender of not committing large sums secured against an asset not yet created. From the borrower's point of view a drawdown arrangement has an advantage over an overdraft in that the lender is committed to providing the finance if the borrower meets prearranged conditions, whereas with an overdraft the lender can withdraw the arrangement at short notice.

The interest charged on term loans can be either at fixed or floating rates. In addition to the interest rate, the borrower will pay an arrangement fee which will largely depend on the relative bargaining strength of the two parties.

A term loan often has much more accompanying documentation than an overdraft because of the lengthy bank commitment. This will include a set of obligations imposed on the borrowing firm such as information flows to the bank as well as financial gearing (debt to equity capital ratio) and liquidity (availability of funds to meet claims) constraints. If these financial ratio limits are breached or interest and capital is not paid on the due date the bank has a right of termination, in which case it could decide not to make any more funds available, or, in extreme cases, insist on the repayment of funds already lent. Even if a firm defaults the bank will usually try to reschedule or restructure the finance of the business (e.g. grant a longer period to pay) rather than take tough enforcement action.

## Trade credit

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The simplest and most important source of short-term finance for many firms is trade credit. This means that when goods or services are delivered to a firm for use in its production they are not paid for immediately. These goods and services can then be used to produce income before the invoice has to be paid.

**The most important source of short-term finance for many firms is trade credit.**

The writer has been involved with a number of small business enterprises, one of which was a small retail business engaged in the selling of crockery and glassware – Crocks. Reproduced, as Figure 15.3, is an example of a real invoice (with a few modifications to hide the identity of the supplier). When we first started buying from this supplier we, as a matter of course, applied for trade credit. We received the usual response, that the supplier requires two references vouching for our trustworthiness from other suppliers that have granted us trade credit in the past, plus a reference from our bankers. Once these confidential references were accepted by the supplier we were granted normal credit terms for retailers of our type of product, that is, 30 days to pay from the date of delivery. One of the things you learn in business is that agreements of this kind are subject to some flexibility. We found that this supplier does not get too upset if you go over the 30 days and pay around day 60: the supplier will still supply to the business on normal credit terms even if you do this on a regular basis.

Each time supplies were delivered by this firm we had to make a decision about when to pay. Option 1 is to pay on the 14th day to receive  $2\frac{1}{2}$  percent discount – see note at the bottom of the invoice. Option 2 is to take 60 days to pay. (Note: with Option 1 the  $2\frac{1}{2}$  percent deduction is on the ‘nett goods’ amount which is the value of the invoice before value added tax (VAT) is added, that is £217.30.)

#### *Option 1*

$$£217.30 \times 0.025 = £5.43$$

So, we could knock £5.43 off the bill if we paid it 14 days after delivery. This looks good but we do not yet know whether it is better than the second option.

#### *Option 2*

This business had an overdraft, so if we could avoid taking money from the bank account the interest charge would be less. How much interest could be saved by taking an additional 46 days (60 days – 14 days) to pay this invoice? Assuming the annual percentage rate (APR) charged on the overdraft is 10 percent the daily interest charge is:

$$(1 + d)^{365} = 1 + i$$

where:

$d$  = daily interest, and  $i$  = annual interest

$$d = \sqrt[365]{(1 + i)} - 1$$

$$\sqrt[365]{(1 + 0.1)} - 1 = 0.00026116$$

Interest charge for 46 days:

$$(1 + 0.00026116)^{46} - 1 = 0.01208 \text{ or } 1.208\%$$

$$(255.33 - 5.43) \times 0.01208 = £3.02$$

**FIGURE 15.3**  
**A typical invoice**

Supplier XYZ plc	Invoice number 501360
54 West Street, Sussex	Date 29/02/98
Invoice address	Branch address
Crocks	Crocks
Melton Mowbray	Grantham
Leics	Lincolnshire
LE13 1XH	

INVOICE

Account	Customer	Sales order	Carrier	AEP	Despatch No.	Due date	Page
T02251	81535	T01537		090	000067981	28/03/98	1

Item	Part code	Description	Unit of sale	Quantity despatched	Unit price	%	Amount	VAT code
1	1398973	Long glass	Each	12	0.84	0.00	10.08	0
2	12810357	Tumbler	Each	12	0.84	0.00	10.08	0
3	1395731	Plate	Each	60	1.10	0.00	66.00	0
4	1258732	Bowls	Each	30	4.23	0.00	126.90	0
5	1310102	Cup	Each	1	4.24	0.00	4.24	0
		VAT 0:						
		217.30 @						
		17.5%						

Nett goods	217.30
Charges	0.00
VAT	38.03
	255.33

Note our settlement terms:  $2\frac{1}{2}\%$  discount may be deducted for payment within 14 days of invoice date; otherwise due 30 days strictly nett.

Thus £3.02 interest is saved by delaying payment to the 60th day, compared with a saving of over £5 on the option of paying early. In this particular case taking extended trade credit is not the cheapest source of finance; it is cheaper to use the overdraft facility.

Many suppliers to our business did not offer a discount for early settlement. This gives the impression that trade credit finance is a free source of funds, so



the logical course of action is to get as much trade credit as possible. The system is therefore open to abuse. However, a supplier will become tired of dealing with a persistent late payer and will refuse to supply, or will only supply on a basis of payment in advance. Another point to be borne in mind is that gaining a bad reputation in the business community may affect relationships with other suppliers.

## Advantages

Trade credit has the following advantages.

1. *Convenient/informal/cheap* Trade credit has become a normal part of business in most product markets.
2. *Available to companies of any size* Small companies, especially fast-growing ones, often have a very limited range of sources of finance to turn to. Banks frequently restrict overdrafts and loans to the asset backing available.

## Factors determining the terms of trade credit

### Tradition within the industry

Customs have been established in many industries concerning the granting of trade credit. Individual suppliers are often unwise to step outside these traditions because they may lose sales. Figure 15.4 shows the number of days it takes customers of the firms in the listed industries to pay their bills. There is quite a large variation between industries; for retailers where most sales are completed on zero credit terms the average period is only a few days, whereas in the metal goods sector 11 weeks is considered the norm.

### Bargaining strength of the two parties

If the supplier has numerous customers, each wanting to purchase the product in a particular region, and the supplier wishes to have only one outlet then it may decide not to supply to those firms which demand extended trade credit. On the other hand, if the supplier is selling into a highly competitive market where the buyer has many alternative sources of supply, credit might be used to give a competitive edge.

### Product type

Products with a high level of turnover relative to stock levels carried by firms are generally sold on short credit terms, for example food. The main reason is that these products usually sell on a low profit margin and the delay in payment can cause the money tied up in trade credit to grow to a very large sum very quickly. This can have a large impact on the cash resources and profit margin of the supplier.

**FIGURE 15.4**

**Credit period days taken by customers of East and West Midlands medium-sized firms**

	Credit period (days)	
	East Mids	West Mids
1 Chemicals	68	64
2 Metal goods	75	74
3 Mechanical engineering	74	77
4 Electrical and electronic engineering	72	78
5 Rubber and plastics	72	71
6 Textiles	49	60
7 Footwear and clothing	42	48
8 Food, drink and tobacco	37	39
9 Paper, print and publishing	68	66
10 Construction	44	46
11 Wholesale distribution	56	70
12 Retail distribution	19	20
13 Business services	80	64

Source: G.C. Arnold and P Davis (1995) *Profitability trends in West Midlands Industries. A Study for Lloyds Bowmaker*. Edinburgh: Lloyds Bowmaker. Reprinted with permission of Lloyds UDT Limited.

## Factoring

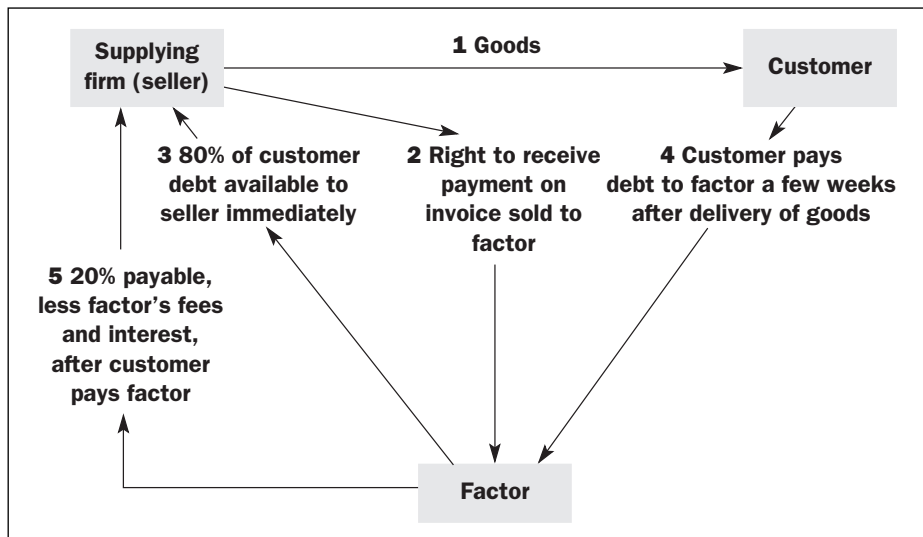
To receive trade credit is a bonus for customer firms. However, this common practice also brings a burden to the firms supplying this form of finance. For many companies the amount owed by customers at any one time (debtor balances) is a multiple of their monthly turnover. For a medium-sized firm this can amount to millions of pounds. Costs, e.g. wages, have flowed out but customers are yet to pay – which can impose a severe strain on the ability of the firm to meet its obligations as they fall due.

Factoring (or ‘invoice finance’) companies provide three services to firms with outstanding debtors, the most important of which, in the context of this chapter, is the immediate transfer of cash. This is provided by the factor on the understanding that when invoices are paid by customers the proceeds will go to them. Factoring is increasingly used by companies of all sizes as a way of meeting cash flow needs induced by rising sales and debtor balances. About 80 percent of factoring turnover is handled by the clearing bank subsidiaries, e.g. HSBC Invoice Finance, Alex Lawrie (Lloyds TSB) and Royal Bank of Scotland Commercial Services. However there are dozens of smaller factoring companies. Three closely related services are offered by factors. These are: the provision of finance, sales ledger administration and credit insurance.

## The provision of finance

At any one time a typical business can have one-fifth or more of its annual turnover outstanding in trade debts: a firm with an annual turnover of £5m may have a debtor balance of £1m. These large sums create cash difficulties that can pressurize an otherwise healthy business. Factors step in to provide the cash needed to support stock levels, to pay suppliers and generally aid more profitable trading and growth. The factor will give an advanced payment on the security of outstanding invoices. Normally about 80 percent of the invoice value can be made available to a firm immediately (with some factors this can be as much as 90 percent). The remaining 20 percent is transferred from the factor when the customer finally pays up. Naturally the factor will charge a fee and interest on the money advanced. The cost will vary between clients depending on sales volume, the type of industry and the average value of the invoices. According to HSBC the charge for finance is comparable with overdraft rates (2–3 per cent over base rate). As on an overdraft the interest is calculated on the daily outstanding balance of the funds that the borrowing firm has transferred to their business account. Added to this is a service charge that varies between 0.2 and 3 percent of invoiced sales. This is set at the higher end if there are many small invoices or a lot of customer accounts or the risk is high. Figure 15.5 shows the stages in a typical factoring transaction. First, goods are delivered to the customer and an invoice is sent. Secondly, the supplier sells the right to receive the invoice amount to a factor in return for, say, 80 percent of the face value now. Thirdly, some weeks later the customer pays the sum owing, which goes to the factor and finally, the factor releases the remaining 20 percent to the supplier less interest and fees.

**FIGURE 15.5**  
Stages in a factoring deal



Factors frequently reject clients as unsuitable for their services. The factor looks for 'clean and unencumbered debts' so that it can be reasonably certain of receiving invoice payments. It will also want to understand the company's business and to be satisfied with the competence of its management. Figure 15.6 shows how a factor might calculate the amount to be advanced.

This form of finance has some advantages over bank borrowing. The factor does not impose financial ratio covenants (e.g. profits as a multiple of interest) or require fixed asset backing. Also the fear of instant withdrawal of a facility (as with an overdraft) is absent as there is usually a notice period. The disadvantages are the raised cost and the unavailability of factoring to companies with many small-value transactions.

### Sales ledger administration

Companies, particularly young and fast-growing ones, often do not want the trouble and expense of setting up a sophisticated system for dealing with the collection of outstanding debts. For a fee (0.5–2.5 percent of turnover) factors will take over the functions of recording credit sales, checking customers' creditworthiness, sending invoices, chasing late payers and ensuring that debts are paid. The fees might seem high, say £100,000 for a firm with a turnover of £5m, but the company avoids the in-house costs of an administrative team and can concentrate attention on the core business. Moreover, factors are experienced professional payment chasers who know all the tricks of the trade (such as 'the check is in the post' excuse) and so can obtain payment earlier. With factoring sales ledger administration and debt collection generally come as part of the package offered by the finance house, unlike with invoice discounting (*see* below).

**FIGURE 15.6**

#### Amount available from a factor

A supplying firm has £1m of outstanding invoices, £40,000 are so old that the factor will not consider them, £60,000 are rejected as poor quality or are export sales and £30,000 are subject to a dispute between the supplier and the customer. The factor is prepared to advance 80% of suitable invoices:

Total invoices		£1,000,000
Less:		
Debts excessively old	£40,000	
Non-approved	£60,000	
In dispute	£30,000	
		<u>(130,000)</u>
		<u>£870,000</u>

The amount the factor is willing to provide to the supplier immediately is 80% of £870,000, or £696,000 (69.6% of total invoices).

## Credit insurance

The third service available from a factor is the provision of insurance against the possibility that a customer does not pay the amount owed. The charge for this service is generally between 0.3 and 0.5 percent of the value of the invoices.

## Recourse and non-recourse

Most factoring arrangements are made on a non-recourse basis, which means that the factor accepts the risk of non-payment by the customer firm. For accepting this risk the factor will not only require a higher return but also want control over credit assessment, credit approval and other aspects of managing the sales ledger to ensure payment. Some firms prefer recourse factoring in which they retain the risk of customer default but also continue to maintain the relationship with their customers through the debt collection function without the sometimes overbearing intervention of the factor. With confidential invoice factoring the customer is usually unaware that a factor is the ultimate recipient of the money paid over, as the supplier continues to collect debts, acting as an agent for the factor.

## Invoice discounting

With invoice discounting, invoices are pledged to the finance house in return for an immediate payment of up to 90 percent of the face value. The supplying company guarantees to pay the amount represented on the invoices and is responsible for collecting the debt. The customers are generally totally unaware that the invoices have been discounted. When the due date is reached it is to be hoped that the customer has paid in full. Regardless of whether the customer has paid, the supplying firm is committed to handing over the total invoice amount to the finance house and in return receives the remaining 10 percent less service fees and interest. Note that even invoice discounting is subject to the specific circumstances of the client agreement and is sometimes made on a non-recourse basis. The key differences between invoice discounting and factoring are that the former is *usually* with recourse to the supplying company and collection from the customer is made by the supplying company. If your company needs the services of sales ledger administration and collection then factoring is for you.

The finance provider usually only advances money under invoice discounting if the supplier's business is well established and profitable. There must be an effective and professional credit control and sales ledger administration system in the supplying firm and turnover must be at least £250,000. Charges are usually lower than for factoring because the sales ledger administration is the responsibility of the supplying company. Fees are 0.2 to 0.8 percent of company sales plus interest comparable with business overdraft rates.

Exhibit 15.4 illustrates the importance of factoring to a packaging company.

## Vital factor in surviving a slump

Ferga Byrne

In 1991, as recession took hold, Jitu Shukla, managing director of Shukla Packaging, reached the end of his tether. For months, he had struggled to get customers to pay outstanding invoices. That and a change in the production base of the Watford-based wrapping paper and accessories company, requiring 50 per cent advance payment on international production, meant cashflow was becoming critical.

'I was spending all my time chasing debtors [across England] and I was increasingly stressed,' says Mr Shukla. 'Customers were delaying their payments by 15–20 days on average and we were heading for a cashflow crisis.'

His experience is not unusual. In an economic downturn companies can see their payment terms extended by 10–15 days, to potentially disastrous effect, says Phillip Mellor, senior analyst at D&B, the business information group. Mr Mellor says that for many smaller businesses, debtor payment after 70 days can wipe out the profit margin.

With his bank manager increasingly nervous about the size of the company's overdraft, Mr Shukla opted for full-service factoring plus credit insurance from Lombard, now part of Royal Bank of Scotland Commercial Services. He worried about how his customers might react but it was a risk worth taking because otherwise the business might fail.

While factoring was relatively rare in the UK then, today some 30,000 companies use it in some form. 'Factoring is a powerful way for companies to make their assets work harder,' says Andrew Pepper, a partner at accountancy firm BDO Stoy Hayward. 'Factors generally advance some 80–90 per cent of a company's debtor ledger compared to a figure of, say, 50 per cent for overdrafts. Factoring is particularly useful for a

growing company as the size facility increases as your turnover does.'

For Mr Shukla, the decision to factor receivables was crucial. '[It] transformed the liquidity position of the company. And it has allowed me to focus my attention where it mattered – building relationships with our customers, vital during a turndown, and on new product development.'

Factoring is not suitable for every business. It is unlikely to be offered in sectors such as construction and engineering, where payments are made over extended periods.

Factoring is usually more suitable for companies suffering an adverse cash cycle rather than dealing with bad payers – Shukla Packaging suffered both. Unless a company chooses credit insurance – less than 10 per cent do – factoring cannot eliminate bad debts. It may, in some cases, exacerbate the underlying problem, says John Anglin, a business adviser working at Entrust, a local enterprise agency in the north-east of England. 'I have seen companies in serious financial trouble when they have had to pay advances back to the factors – money that had already been spent – when a customer defaulted,' he says.

For Mr Shukla, taking out credit insurance with the factoring saved his business when greetings card company Athena collapsed less than a year later, accounting for almost 40 per cent of his receivables.

Shukla's customers tend to pay the factors quicker than they paid Shukla Packaging but this is not always the case. Mike Savich, managing director of steel company Magnemag, found his customers were paying the factoring company later than when he ran his own debtors ledger. This has been a growth constraint as Magnemag was unable to factor new invoices until outstanding invoices were paid.

The cost of the credit management and bill collection service performed by Royal Bank of Scotland Commercial Services has varied between 1–2 per cent of total invoices, which Mr Shukla says 'is a fraction of the cost of hiring a sales ledger clerk and a credit controller to chase debts throughout the UK, not to mention the possible legal costs'.

The interest rate on the company's factoring advances is lower than the rate on its overdraft, which Mr Shukla attributes to the factoring company's better understanding of the underlying business, helping it make a more accurate

risk assessment than the bank. But some companies have seen their working capital position deteriorate when the bank has reduced the overdraft facility dramatically, says Eddy Weatherall, of the Independent Banking Advisory Service.

Both the decision to factor and the choice of factoring company need careful consideration. Mr Savich says his factoring contract was long, with lots of legal detail. 'Many companies simply do not have the expertise or the time to fully access the nature of the deal,' says Mr Savich. 'And it can be difficult to unwind later.'

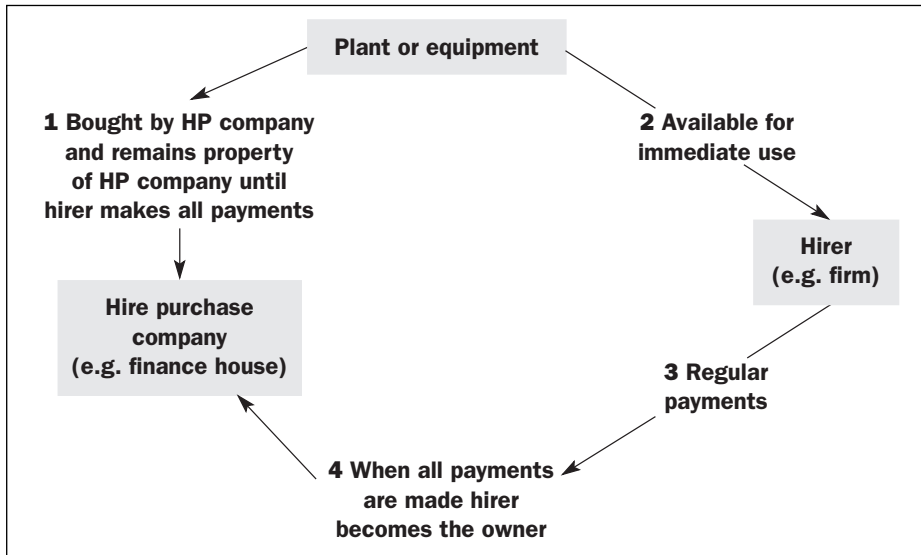
#### EXHIBIT 15.4 Vital factor in surviving a slump

Source: *Financial Times* 24 January 2002

## Hire purchase

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With hire purchase the finance company buys the equipment that the borrowing firm needs. The equipment (plant, machinery, vehicles, etc.) belongs to the hire purchase (HP) company. However the finance house allows the 'hirer' firm to use the equipment in return for a series of regular payments. These payments are sufficient to cover interest and contribute to paying off the principal. While the monthly instalments are still being made the HP company has the satisfaction and security of being the legal owner and so can take repossession if the hirer defaults on the payments. After all payments have been made the hirer becomes the owner, either automatically or on payment of a modest option-to-purchase fee. Nowadays, consumers buying electrical goods or vehicles have become familiar with the attempts of sales assistants to also sell an HP agreement so that the customer pays over an extended period. Sometimes the finance is provided by the same organization, but more often by a separate finance house. The stages in an HP agreement are as in Figure 15.7, where the HP company buys the durable good which is made available to the hirer firm for immediate use. A series of regular payments follows until the hirer owns the goods.

**FIGURE 15.7****The hire purchase sequence**

Some examples of assets that may be acquired on HP are as follows.

- Plant and machinery
- Business cars
- Commercial vehicles
- Agricultural equipment
- Hotel equipment
- Medical and dental equipment
- Computers, including software
- Office equipment

There are clearly some significant advantages of this form of finance, given the fact that over £7bn of new agreements are arranged each year for UK businesses alone. The main advantages are as follows.

- 1 *Small initial outlay* The firm does not have to find the full purchase price at the outset. A deposit followed by a series of instalments can be less of a cash flow strain. The funds that the company retains by handing over merely a small deposit can be used elsewhere in the business for productive investment. Set against this is the relatively high interest charge and the additional costs of maintenance and insurance.
- 2 *Easy to arrange* Usually at point of sale.
- 3 *Certainty* This is a medium-term source of finance that cannot be withdrawn provided contractual payments are made, unlike an overdraft. On the other hand the commitment is made for a number of years and it could be costly to terminate the agreement.
- 4 *HP is often available when other sources of finance are not* For some firms the equity markets are unavailable and banks will no longer lend to



them, but HP companies will still provide funds as they have the security of the asset to reassure them.

- 5 *Fixed-rate finance* In most cases the payments are fixed throughout the HP period. While the interest charged will not vary with the general interest rate throughout the life of the agreement the hirer has to be aware that the HP company will quote an interest rate which is significantly different from the true annual percentage rate. The HP company tends to quote the flat rate. So, for example, on a £9,000 loan repayable in equal instalments over 30 months the flat rate might be 12.4 percent. This is calculated by taking the total interest charged over the two and a half years and dividing by the original £9,000. The monthly payments are £401.85 and therefore the total paid over the period is  $£401.85 \times 30 = £12,055.50$ . The flat interest is:

$${}^{2.5}\sqrt{(12,055.50/9,000)} - 1 = 0.1240 \text{ or } 12.4\%$$

This would be the true annual rate if the entire interest and capital were repaid at the end of the 30th month. However, a portion of the capital and interest is repaid each month and therefore the annual percentage rate (APR) is much higher than the flat rate. As a rough rule of thumb the APR is about double the flat rate.

6 *Tax relief* The hirer qualifies for tax relief in two ways:

- The asset can be subject to a writing-down allowance (WDA) on the capital expenditure. For example, if the type of asset is eligible for a 25 percent WDA and originally cost £10,000 the using firm can reduce its taxable profits by £2,500 in the year of purchase; in the second year taxable profits will be lowered by  $£7,500 \times 0.25 = £1,875$ . If tax is levied at 30 percent on taxable profit the tax bill is reduced by  $£2,500 \times 0.30 = £750$  in the first year, and  $£1,875 \times 0.3 = £562.50$  in the second year. Note that this relief is available despite the hirer company not being the legal owner of the asset.
- Interest payments are deductible when calculating taxable profits.

The tax reliefs are valuable only to profitable companies. Many companies do not make sufficient profit for the WDA to be worth having. This can make HP an expensive form of finance. An alternative form of finance, which circumvents this problem (as well as having other advantages) is leasing.

## Leasing

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Leasing is similar to HP in that an equipment owner (the lessor) conveys the right to use the equipment in return for regular rental payments by the equipment user (the lessee) over an agreed period of time. The essential difference is that the lessee never becomes the owner – the leasing company retains legal title. Subsidiaries of clearing banks dominate the UK leasing market, but the world's biggest leasing companies are Ford, GE Capital and GMAC (owned by General Motors).

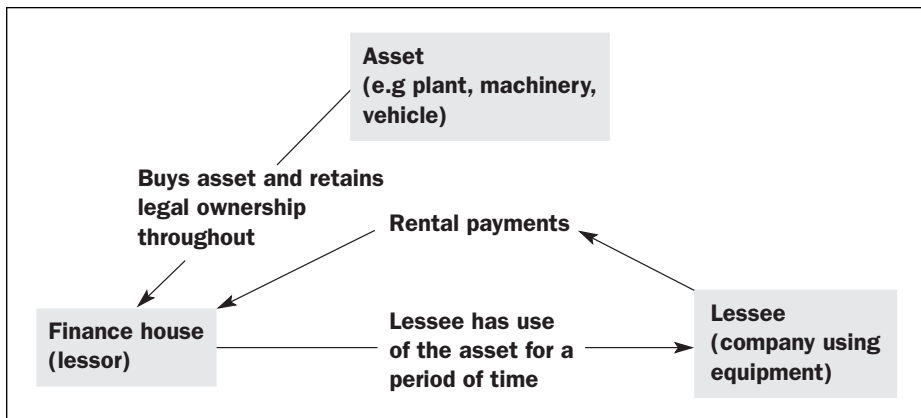
Leasing, together with hire purchase, accounts for approximately one-quarter of all fixed capital investment by UK firms – rising to 50 percent for small firms. Figure 15.8 shows that a typical lease transaction involves a firm wanting to make use of an asset approaching a finance house which purchases the asset and rents it to the lessee.

It is important to distinguish between operating leases and finance leases.

### Operating lease

Operating leases commit the lessee to only a short-term contract or one that can be terminated at short notice. These are certainly not expected to last for the entire useful life of the asset and so the finance house has the responsibility of finding an alternative use for the asset when the lessee no longer requires it. Perhaps the asset will be sold in the secondhand market, or it might be leased to another client. Either way the finance house bears the risk of ownership. If the equipment turns out to have become obsolete more quickly than was originally anticipated it is the lessor that loses out. If the equipment is less reliable than expected the owner (the finance house) will have to pay for repairs. Usually, with an operating lease, the lessor retains the obligation for repairs, maintenance and insurance. It is clear why equipment which is subject to rapid obsolescence and frequent breakdown is often leased out on an operating lease. Photocopiers, for example, used by a university department are far better leased; so, if they break down the university staff do not have to deal with the problem. In addition the latest model can be quickly installed in the place of an outdated one. The same logic applies to computers, facsimile machines and so on.

**FIGURE 15.8**  
A leasing transaction



Operating leases are also useful if the business involves a short-term project requiring the use of an asset for a limited period. For example construction companies often use equipment supplied under an operating lease (sometimes called plant hire). Operating leases are not confined to small items of equipment. There is a growing market in leasing aircraft and ships for periods less than the economic life of the asset, thus making these deals operating leases. Many of Boeing's aircraft go to leasing firms.

### **Finance lease**

Under a finance lease (also called a capital lease or a full payout lease) the finance provider expects to recover the full cost (or almost the full cost) of the equipment, plus interest, over the period of the lease. With this type of lease the lessee usually has no right of cancellation or termination. Despite the absence of legal ownership the lessee will have to bear the risks and rewards that normally go with ownership: the lessee will usually be responsible for maintenance, insurance and repairs and suffer the frustrations of demand being below expectations or the equipment becoming obsolete more rapidly than anticipated. Most finance leases contain a primary and a secondary period. It is during the primary period that the lessor receives the capital sum plus interest. In the secondary period the lessee pays a very small 'nominal', rental payment. Even the armed forces have turned to leasing as a method of funding: in 2001 the Ministry of Defence signed a ten-year deal worth £500m involving 8,500 vehicles being leased from Lex Vehicle Leasing.

### **Advantages**

The advantages listed for hire purchase also apply to leasing: small initial outlay, certainty, available when other finance sources are not, fixed-rate finance and tax relief. There is an additional advantage of operating leases and that is the transfer of obsolescence risk to the finance provider.

The tax advantages for leasing are slightly different from those for HP. The rentals paid on an operating lease are regarded as tax deductible and so this is relatively straightforward. For financial leases, however, the tax treatment is linked to the modern accounting treatment following SSAP 21. This was introduced to prevent some creative accounting which under the old system allowed a company to appear to be in a better gearing (debt/equity ratio) position if it leased rather than purchased its equipment. Prior to SSAP 21 a company could lower its apparent gearing ratio and therefore improve its chances of obtaining more borrowed funds by leasing. Take the two companies X and Y, which have identical balance sheets initially, as shown in Figure 15.9.

**FIGURE 15.9****Balance sheets of companies X and Y**

<i>Initial balance sheet for both X and Y</i>		
Shareholders' funds (net assets)		£1,000,000
Debt capital		<u>£1,000,000</u>
Total assets		<u>£2,000,000</u>
Now, if X borrows a further £1m to buy equipment, while Y leases £1m of equipment the balance sheets appear strikingly different under the old accounting rules.		
	Company X	Company Y
Shareholders' funds (net assets)	1,000,000	1,000,000
Debt capital	<u>2,000,000</u>	<u>1,000,000</u>
Total assets	<u>3,000,000</u>	<u>2,000,000</u>

Company X has a debt/equity ratio of 66.67 percent whereas Y has obtained the use of the asset 'off-balance sheet' and so has an apparent gearing ratio of only 50 percent. A superficial analysis of these two firms by, say, a bank lender, may lead to the conclusion that Y is more capable of taking on more debt. In reality Y has a high level of fixed cash outflow commitments stretching over a number of years under the lease and is in effect highly geared. Under these rules Y could also show a higher profit to asset ratio.

Today finance leases have to be 'capitalized' to bring them on to the balance sheet. The asset is stated in the balance sheet and the obligations under the lease agreement are stated as a liability. Over subsequent years the asset is depreciated and, as the capital repayments are made to the lessor the liability is reduced. The profit and loss account is also affected: the depreciation and interest are both deducted as expenses.

The tax authorities apply similar rules and separate the cost of interest on the asset from the capital cost. The interest rate implicit in the lease contract is tax deductible in the relevant year. The capital cost for each year is calculated by allocating rates of depreciation (capital allowances) to each year of useful life.

These new rules apply only to finance leases and not to operating leases. A finance lease is defined (usually) as one in which the present value of the lease payments is at least 90 percent of the asset's fair value (usually its cash price). This has led to some bright sparks engineering leasing deals which could be categorized as operating leases and therefore kept off balance sheets – some are designed so that 89 percent of the value is paid by the lessee. However the authorities are fighting back as Exhibit 15.5 shows. This discusses the impact of bringing operating lease liabilities on to the balance sheet for property companies. However, the proposed accounting changes will apply to all companies.

## Tightening the lease

Doug Cameron

The fall-out from Enron has focused investor and regulatory attention on the role and treatment of special purpose vehicles, the financing entities that ultimately sank the US energy trader.

The preoccupation with these entities has masked slow progress in developing new treatments for the most common off-balance-sheet vehicle: leasing.

There remains widespread discontent among accounting bodies about international disparities in the treatment of leases, covering equipment such as aircraft and computers and fixed assets such as property.

The main global standard-setters – including those in the UK, the US and the International Accounting Standards Board (IASB) – currently distinguish between finance leases and operating leases and require a radically different accounting treatment for each.

In simple terms, finance leases are carried on the corporate balance sheet and operating leases are not.

The classification of the lease affects a range of performance and reporting measures: debt levels, gearing, return on assets employed and interest cover, as well as reported profits.

Minor differences in a leasing contract can also result in one transaction being claimed as a finance lease and another as an operating lease, transforming the accounting treatment of financing structures that are virtually identical.

The ISAB's treatment of leases is enshrined in IAS17, a standard last revised in 1997. In common with other standard-setters, it defines a finance lease as one in which most of the risks and rewards of ownership are transferred to the lessee over the course of

the lease. All other leases are defined as operating leases.

Proposals announced in December 1999 by the UK Accounting Standards Board (ASB) – and distributed internationally to members of the G4+1 group of industrialised nations – promised a radical review of the way in which leases are reported.

The most fundamental change would be to end the differential accounting treatment of finance and operating leases, with the latter no longer treated as an off-balance-sheet item.

The effect would be to transfer billions of dollars of assets on to corporate balance sheets.

The proposals received a mixed reception. There was support for the concept of treating leases on an equitable basis to improve transparency – but concern over how this would transform, and perhaps choke off, some of the basic financing options open to companies.

... The financial flexibility offered by operating leases is ingrained in the financial planning of many corporate sectors, which are unlikely simply to roll over and accept their disappearance.

For example, operating leases have been the fastest-growing source of funding for the airline industry, with almost a quarter of the global commercial fleet now rented by carriers from lessors such as Gecas, a unit of GE Capital, and ILFC, part of American International Group, the world's largest listed insurer.

In the UK, land and buildings account for about 80 per cent of operating leases and a study of 200 UK companies that found that the total value of operating leases was equivalent to 39 per cent of the long-term debt displayed on their balance sheets.

### EXHIBIT 15.5 Tightening the lease

Source: *Financial Times* 30 May 2002

A very important tax advantage can accrue to some companies through leasing because of the legal position of the asset not belonging to the lessee. Companies that happen to have sufficient profits can buy assets and then reduce their taxable profits by writing off a proportion of the assets' value (say 25 per cent on a reducing balance) against income each year. However companies with low profits or those which make a loss are unable to fully exploit these investment allowances and the tax benefit can be wasted. But if the equipment is bought by a finance company with plenty of profits, the asset cost can be used to save on the lessor's tax. This benefit can then be passed on to the customer (the lessee) in the form of lower rental charges. This may be particularly useful to start-up companies and it has also proved of great value to low- or no-profit privatized companies. For example, the railway operating companies often make losses and have to be subsidized by the government. They can obtain the services of rolling stock (trains, etc.) more cheaply by leasing from a profit-generating train-leasing company than by buying. Another advantage is that the leasing agreement can be designed to allow for the handing back of the vehicles should the operating license expire or be withdrawn (as the train-operating licenses are – after seven years or so).

Exhibit 15.6 (Big ticket leasing) and Exhibit 15.7 (IFC) demonstrate the extent to which the availability of lease finance influences big business, at the macro end of the scale, and the working lives of millions of people even in the poorest countries on earth, on the micro scale, where it is seen as playing an important role in lifting people out of poverty.

### **Big ticket leasing accounts for a third of the funds provided through leasing**

Leasing is sometimes used for very large assets – often in excess of £100m – which range from entire production lines and ships to shopping centers and accommodation for university students. For example in the early 1990s NatWest Markets put together a £290m leasing facility for Humber Power for gas and electrical plant and machinery. Another example is Airstream Finances, which leases 200 commercial aircraft on six continents. In 2001 Airbus sold 111 aircraft to International Lease Finance Corporation worth \$8.7bn, which will then lease the planes to airlines around the world.

**Exhibit 15.6** Big ticket leasing

## IFC extends leasing aid to Vietnam

Nancy Dunne

The International Finance Corporation, the private sector arm of the World Bank, has announced its first foray in Vietnam's financial sector – the establishment of a leasing company to enable small and medium-sized companies to procure capital goods.

On the surface the \$15m loan and \$750,000 equity investment looks modest. However, the corporation has been promoting leasing as one of the quickest, cheapest and most flexible ways of supporting business in emerging economies, where businesses desperately need machinery, office and plant equipment.

The IFC is planning to sign a joint venture deal on November 12 to set up the first leasing company in Egypt.

The new Vietnamese company, Vietnam International Leasing Company (VILC), is expected to write leases of \$25,000–\$30,000 for smaller or micro enterprises and \$100,000–\$150,000 for medium-sized companies. IFC says VILC will have 'a strong impact on Vietnam's financial sector by extending and improving credit delivery and introducing new financial products to the local market to encourage capital formation and investment' ...

IFC has been working closely with governments, advising them on leasing regulations, recruiting sponsors and technical partners and investing in new leasing companies.

An IFC paper, issued in August, said one-eighth of the world's private investment was financed through leasing. Its share is soaring; in some countries it provides as much as one-third of the private investment.

IFC has helped set up leasing companies in over half of the developing countries. In August it provided \$5.6m in financing to help establish Uzbek Leasing International, the first specialised leasing company in Uzbekistan.

The corporation also helps leasing companies, in which it has equity, to expand. Last March it guaranteed a local currency loan of \$3m equivalent for the Industrial Development Leasing Company of Bangladesh, established in 1986.

IFC's involvement allows the company to borrow locally for a longer period than otherwise would be possible.

IFC's first leasing venture was in 1977 in Korea. The Korea Development Leasing Corporation is now the world's fifth largest leasing industry.

### EXHIBIT 15.7 IFC extends leasing aid to Vietnam

Source: *Financial Times* 1 November 1996

## Bills of exchange

A bill is a document that sets out a commitment to pay a sum of money at a specified point in time. The simplest example is an ordinary bank check that has been dated two weeks hence. The government borrows by selling Treasury bills which commit it to paying a fixed sum in, say, three months. Local authorities issue similar debt instruments, as do commercial organizations in the form of commercial bills (*see* Chapter 16).

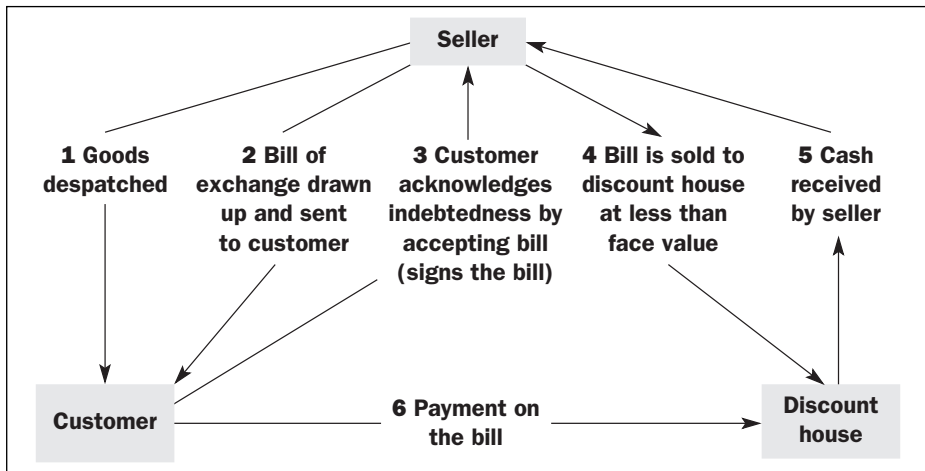
Bills of exchange are mainly used to oil the wheels of overseas trade. They have a long history helping to promote international trade, particularly in the nineteenth and twentieth centuries. The seller of goods to be transported to a buyer in another country frequently grants the customer a number of months in which to pay. The seller will draw up a bill of exchange – that is, a legal document is produced showing the indebtedness of the buyer. The bill of exchange is then forwarded to, and accepted by the customer, which means that the customer signs a promise to pay the stated amount and currency on the due date. The due date is usually 90 days later but 30, 60 or 180 days bills of exchange are not uncommon. The bill is returned to the seller who then has two choices, either to hold it until maturity and receive payment under it then, or to sell it to a bank or discount house (the bill is discounted). Under the second option the bank will pay a lower amount than the sum to be received in, say, 90 days from the customer. The difference represents the bank’s interest.

For example, if a customer has accepted a bill of exchange that commits it to pay £200,000 in 90 days the bill might be sold by the supplier immediately to a discount house or bank for £194,000. After 90 days the bank will realize a profit of £6,000 on a £194,000 asset, an interest rate of 3.09 percent  $((6,000/194,000) \times 100)$  over 90 days. This gives an approximate annual rate of:

$$(1.0309)^4 - 1 = 0.1296 = 12.96\%$$

Through this arrangement the customer has the benefit of the goods on 90 days credit, the supplier has made a sale and immediately receives cash from the discount house amounting to 97 per cent of the total due. The discounter, if it borrows its funds at less than 12.9 percent, turns in a healthy profit. The sequence of events is shown in Figure 15.10.

**FIGURE 15.10**  
The bill of exchange sequence





Bills of exchange are normally only used for transactions greater than £75,000. The effective interest rate charged by the discountor is a competitive 1.5 to 4 percent over interbank lending rates (for example, LIBOR) depending on the creditworthiness of the seller and the customer. The bank has recourse to both of the commercial companies: if the customer does not pay then the seller will be called upon to make good the debt. This overhanging credit risk can sometimes be dealt with by the selling company obtaining credit insurance. Despite the simplification of Figure 15.10, many bills of exchange do not remain in the hands of the discountor until maturity but are traded in an active secondary market (the money market).

### **Acceptance credits (bank bills or banker's acceptance)**

In the case of acceptance credits (bank bills) the company which is in need of finance requests the drawing up of a document which states that the signatory will pay a sum of money at a set date in the future. This is 'accepted' (signed) by a bank (rather than by a customer). At the same time the company accepts a commitment to pay the accepting bank.

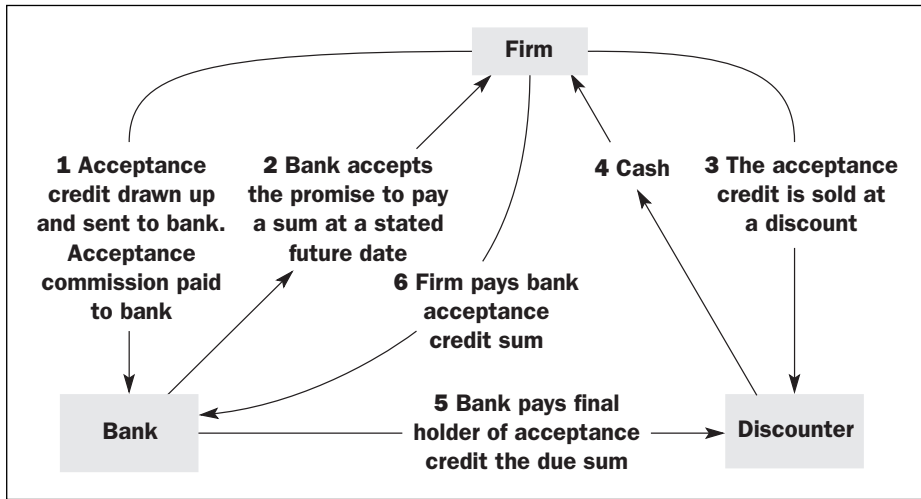
This bank commitment to pay the holder of the acceptance credit can then be sold in the money markets to, say, another bank (a discountor) by the firm to provide for its cash needs. (Alternatively an importing company could give the acceptance credit to its overseas supplier in return for goods – and the supplier can then sell it at a discount if required).

The acceptance credit is similar to a bill of exchange between a seller and a buyer, but now the organization promising to pay is a reputable bank representing a lower credit risk to any subsequent discountor. These instruments therefore normally attract finer discount rates than a trade bill. When the maturity date is reached the company pays the issuing bank the value of the bill, and the bank pays the ultimate holder of the bill its face value.

The company does not have to sell the acceptance credit immediately and so can use this instrument to plug finance gaps at opportune times. There are two costs of bank bill finance.

1. **The bank charges acceptance commission for adding its name to the bill.**
2. **The difference between the discount price and the acceptance credit's due sum.**

These costs are relatively low compared with those on overdrafts and there is an ability to plan ahead because of the longer-term commitment of the bank. Unfortunately this facility is only available in hundreds of thousands of pounds and then only to the most credit-worthy of companies.

**FIGURE 15.11****An acceptance credit sequence**

## Conclusion

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The modern corporation has a rich array of alternative sources of funds available to it. We have considered only short- and medium-term finance in this chapter. The next chapter looks at debt finance available for the long term, mostly finance available to the largest firms with the ability to draw on the financial markets. Chapter 17 describes the various ways of raising share finance for the growing firm.

It is the responsibility of the senior management team to select the most appropriate combination of forms of finance and the proportions of each. Each organization faces different circumstances and so the most appropriate mixture will change from one entity to another. To help make this judgment we have already considered the advantages and disadvantages of bank overdrafts and loans; trade credit; factoring; hire purchase and leasing, and; trade and bank bills. We now go on to broaden the range of possible types to bonds, convertibles, mezzanine finance, Eurobonds, medium-term notes, commercial paper, project finance, sale and leaseback, preference shares and ordinary shares.

## Websites

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[www.bba.org.uk](http://www.bba.org.uk)

British Bankers Association

[www.dti.gov.uk](http://www.dti.gov.uk)

Department of Trade and Industry

[www.fsb.org.uk](http://www.fsb.org.uk)

Federation of Small Businesses

[www.payontime.co.uk](http://www.payontime.co.uk)

Better Payments Practice Group

[www.fla.org.uk](http://www.fla.org.uk)

Finance and Leasing Association

[www.factors.org.uk](http://www.factors.org.uk)

Factors and Discounters Association