Deciding on an absolute level of net debt – that is, of debt vs. equity, is a capital structure issue. Once this ratio has been decided, it is up to the CFO and the corporate treasurer to lower the cost of debt and monitor the return on investments. At the same time, treasurers must ensure that the company can meet its debt obligations and that the liquidity of the investments is adapted to the company’s development needs. This means choosing between the various financial products available and evaluating banks vs. other investors.

Before plunging headfirst into a discussion of existing products, we shall examine their general features and the investment selection criteria applied by corporate treasurers. We shall see further on that financing can be far more than just a financial resource and that it can raise quite complex issues. This is especially true with structured financing, which has shaken the foundations of capital structure policies. We will end the chapter with a roundup of investment products.

Section 26.1
GENERAL FEATURES OF CORPORATE FINANCING

Corporate managers have at their disposal a wide range of products for financing or investing cash surpluses. These products differ in terms of type of counterparty, maturity and seniority of redemption rights as well as the existence of collateral or accounting, legal and tax advantages. However, this wealth of options can become confusing when trying to compare the actual cost of the various products.

We therefore distinguish between:

- bank and market products (or intermediated vs. market financing);
- short-, medium- or long-term borrowings;
- loans backed by collateral, unsecured senior loans and subordinated loans.

Each of these distinctions is not enough to characterise a loan *per se*: financing can take the form of a bank loan or a listed issue, it can be secured or unsecured, short- or medium-term, etc. In addition, lines have blurred as the inventors of new financial products endeavour to combine the advantages of the various types of financing already
available. Our classification is thus simply a framework designed to help you evaluate the
products presented in the following sections.

<table>
<thead>
<tr>
<th>Bank financing</th>
<th>Market financing</th>
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<td><strong>Short-term</strong></td>
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<td>Asset backed</td>
<td>Factoring</td>
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<td>(invoice</td>
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<td>discounting)</td>
<td>bank loan</td>
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<td>Sale/leaseback</td>
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<th><strong>Short-term</strong></th>
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<td>Securitisation</td>
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<td>(asset-backed</td>
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<td>commercial paper)</td>
<td>securities)</td>
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| Commercial paper | Bonds |

1/ Bank vs. Market Financing

Bank financing is a question of negotiation and intermediation whereas primary
market financing is governed by market forces. Market financing allows the firm to call
directly on financial investors without transiting through a financial institution’s balance
sheet.

Syndicated loans are for large companies on the edge of bank and market financing
as banks create an internal market for that type of loan that are strongly standardised.

For small- and medium-sized companies, the choice between bank financing (bank
loans) and market financing is skewed in favour of bank financing.

The main differences between these two general financing categories are:

- cost;
- volume;
- flexibility.

The nature of the costs of intermediated borrowing differ significantly from that of
market debt. At first sight, it may seem that the only difference is the bank’s intermedi-
ation fees but, in fact, the interest rates agreed in Continental Europe between a company
and its bank generally do not correspond to the actual cost of the funds. In a highly com-
petitive environment, banks may offer clients very attractive terms that do not entirely
reflect the level of counterparty risk. They make up for the lost revenue by charging for
other services (investment bank services, cash management, etc.).

Conversely, banks take advantage of the sectors or geographical zones in which there
is little competition to overstate lending rates. Lastly, the amount they may lend is a func-
tion of their financial position. Prudential regulations set a limit on the risk-weighted
credit exposure allowed each financial institution according to its capital base. This is the
famous capital adequacy ratio also known as the Tier one ratio. As a result, when pricing
the credit, banks include the opportunity cost of the capital immobilised by the credit as
well as direct and fixed costs and the risk provision.

The Basel Committee on Banking Supervision released the final version of the new
Basel II framework at the end of June 2004. The new rules will be in effect in any single
country from 2008.
The Basel II agreement retains a single measure of risk-weighted assets that serves as the denominator for the calculation of a single regulatory capital ratio. Total risk-weighted assets (RWA) is the sum of RWA for credit risk, market risk and operational risk. The mechanical calculation of RWA for market risk and operational risk, which are not asset-based requirements, is to multiply the regulatory capital requirements for each by 12.5, the reciprocal of the minimum capital ratio of 8%.

The Standardised Approach (SA) builds on the work of ratings agencies – called external credit assessment institutions, or ECAI – and specifically uses ratings from ECAI to measure and differentiate credit risk. It includes 13 separate asset classes, and several of the 13 classes themselves have differentiated weightings. The SA also prescribes risk-weighting adjustments for high-risk categories, and for maturity. Lastly, the SA includes extensive rules for credit mitigation. The risk weights for corporates under the SA range from 20% to 150%, compared to the 100% weight for essentially all corporate exposures under the current accord. The differentiation is clearly superior to Basel I, but remains limited: corporates rated in the “BBB” and “BB” rating categories have the same 100% weight, and those in the “B” and “CCC” categories have the same 150% weight.

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<th>RISK WEIGHTINGS UNDER STANDARDISED APPROACH OF BASEL II: CORPORATES</th>
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<td>Claims on corporates</td>
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When resorting to market financing, the issue costs are proportional to the funds raised. One or more banks may form an underwriting syndicate to buy the securities issued and endeavour to resell them immediately on the market (firm underwriting). They thus accept the risk that they may not be able to sell the securities. Banks can also simply act as agents selling the securities to investors without taking any responsibility (best efforts). A company that resorts to market financing usually has to set up specific services to keep investors constantly informed of its plans and prospects. In general, it also has to have the company or issue rated (see Chapter 25). However, since the market already values the debt, the company may consider that the rate offered reflects the actual cost of financing since, as we explained above, bank lending rates are usually lower.

One advantage of bank credit is that companies can borrow the exact amount they need. Financial markets, however, impose specific constraints in terms of issue volumes. To be listed, a security has to be sufficiently liquid, and the minimum liquidity required is usually measured in units of hundreds of thousands of euros. This means that companies cannot issue “small” debt volumes, which considerably restricts their access to the listed debt market. It rules out small- and medium-sized companies as well as larger firms that have only limited or temporary borrowing requirements.

These listing constraints in terms of volume also apply to the availability of funds. Whereas bank loans can be obtained fairly rapidly, the preliminaries for floating an issue take several weeks (especially if it is the first time that the company has issued bonds), with no guarantee of success. These preparations chiefly concern the rating and the information that must be provided to investors. Moreover, market volatility means that the success of the issue may be uncertain. A company that launches an issue while a major strategic operation (acquisition, restructuring, etc.) is under way may find it difficult to sell its securities in a market disconcerted by the rapid changes in its situation. Funds
are easier to obtain through intermediated transactions. In the same vein, a company can renegotiate the terms of its bank credit if its situation changes, which of course is out of the question for listed debt securities, since their characteristics are determined once and for all upon issuance.

All these reasons explain why, in Continental Europe, bank loans account for the lion’s share of the financing of small- and medium-sized firms. Market financing continues to be the preserve of large groups or investment funds that apply the necessary discipline and deal in volumes that are sufficiently large to ensure that the securities issued are liquid.

Corporate treasurers allocate the cheapest resources to the more predictable portion of their borrowing requirements. They then adjust their credit levels using the financing that is easily available (bank loans for large groups, overdrafts in the case of SMEs) as new information emerges. When unexpectedly faced with large funding requirements, they call on the resources immediately available, which are then gradually replaced by less costly or better structured resources (term loans, guarantees, etc.) Bear in mind as well that corporate treasurers have to diversify their sources of funds to avoid becoming dependent on the specific features of a given category of financing.

So, even if the nominal cost of bond borrowings is marginally higher, the bond market enables companies to remain more independent vis-à-vis banks and avoid excessively constraining covenants. Bank loans impose greater constraints to the company with covenants and guarantees to their loans. In that respect bond issues are easier to manage for the treasurer once issued.

2/ Financial Planning

The information provided by cash projections allows corporate treasurers to obtain better financing conditions than when they have no idea what the future holds. Suppose the treasurer knows for certain that he will have to invest €100 million during the year and that the company will not generate positive cash flow until its 3rd year. His best option would be to use financing for which no reimbursements are necessary during the first 2 years, such as a bank credit with deferred repayment or a bullet 5-year bond borrowing (i.e. redeemable in one shot after 5 years).

In addition, the potential gains for the company, such as greater visibility and lower financing or transaction costs, depend on the size of the amounts mobilised for each maturity.

The distinction between long, medium and short-term financial resources reflects the treasurer’s main forecast horizons and, accordingly, the type of information at his disposal.

As a result, treasurers deal with these issues separately by setting up a financing plan with various maturities. Afterwards, of course, they may switch between short, medium and long-term financing as opportunities arise.

Depending on the treasurer’s anticipations regarding interest rate, she can use derivatives to swap long-term interest rates for floating rates even if he decides to borrow long-term money.
3/ GUARANTEES

For a long time, financing products were classified in a given credit category according to the collateral or guarantees given to protect creditors, since these guarantees directly impact the cost of the borrowing. They are usually divided into two categories:

- **business loans**, guaranteed solely by the prospects of the lending company, in other words, by its financial health (general balance sheet financing);
- **loans granted for a specific purpose and secured by the transaction or asset that they have helped finance**. Collateralised loans are probably the oldest and most significant in this category. In general, the amount of credit granted does not exceed the value of the asset pledged by the borrower.

The concept of lending for specific purposes has come under attack for being contrary to the financial logic according to which financing contributes to the cash position, which is the result of a company’s overall operational decisions rather than specific transactions. While the distinction between business loans and specific-purpose, secured credit may sometimes blur, using collateral definitely reduces the cost of a loan and may sometimes allow a company to obtain financing that is not necessarily justified by its intrinsic qualities. This is the case, for example, of securitisation and finance leases.

The borrower identifies the assets pledged in order to segregate them and obtain better financing terms. Using collateral based on a given transaction makes it possible to isolate the various economic risks. Since investors’ perceptions of these risks differs according to their respective resources and preferences, the cost of financing the various components may be cheaper than that of the whole.

4/ DEBT REDEMPTION PRIORITY RIGHTS

Contrary to the secured creditor, the unsecured creditor is said to be a **chirographic creditor**. Legal or contractual provisions may rank certain creditors behind chirographic creditors, thus making them **subordinated creditors**. This means that if the company is wound up, they are paid after the preferred creditors but before the shareholders. The debt held by creditors with either a security claim or a priority claim on repayment of the principal and the interest is generally called **senior debt**.

Subordinated debt is repaid after the claims of the other creditors, in particular the senior creditors, have been settled.

**Subordinated creditors represent a guarantee for the other creditors because, by increasing the assets, they contribute to the company’s solvency.**

In exchange for taking on a greater risk, subordinated creditors demand a higher interest rate than the holders of less risky debt, in particular the senior creditors. The rating of the subordinated debt depends on its level of subordination.

**Subordinated debt allows creditors to choose the level of risk they are willing to accept, ensuring a better distribution of risks and remuneration.**

When setting up financing for a leveraged buyout (see Chapter 44) the **highly** subordinated debt that fits between subordinated debt and equity is called **mezzanine debt**.
Mezzanine investors are repaid only after all other subordinated debt claims have been settled. Being far riskier, mezzanine financing also carries a higher rate of return, generally accompanied by a warrant kicker or conversion option to increase its yield. The equity kicker component usually regards the equity of the issuing company.

In short, corporate treasurers create as many financial products with varying risk/reward profiles as needed according to their debt repayment priorities.

5/ Accounting, Legal and Tax Features

Certain types of financing are based on using a tax advantage at a given time (finance leases or perpetual subordinated notes), off-balance-sheet financing (securitisation, sale/leasebacks) or legal protection (e.g. nonrecourse borrowing). In such cases, the emphasis is on achieving a specific objective and the cost of credit becomes less important.

Section 26.2

Marketable Debt Securities

At a given risk level, market financing vehicles are relatively homogenous. We have classified them by maturity.

1/ Medium- to Long-Term Debt Securities

Bonds are the main medium-term market financing vehicles used by corporations, particularly in the 5-to-10 year segment. They are discussed in greater detail in Chapter 25. Bonds can be subordinated, convertible or redeemable in shares – in short, they are the answer to investors’ dreams!

Bonds can be issued in a currency other than that of the issuer. The most liquid currencies are the euro, the dollar, sterling and the Swiss franc.
**High-yield bonds** are generally subordinated debt, typically taking the form of 5-, 6- or 10-year bonds. These bonds are issued by companies in the process of being turned around or with a weak financial base, in particular LBOs. Their high yields match the level of risk involved, making them a very speculative investment. The holders of these bonds enter into a debt subordination agreement whereby, in the event of bankruptcy proceedings (whether court-ordered or amicable), their claims are not settled until all claims held by traditional bank lenders have been fully repaid.

**Medium-term notes** are negotiable notes with a maturity of more than 1 year. The market for medium-term notes is still in its infancy and, as in the case of the bond market, investors in Continental Europe would rather entrust their medium-term funds to institutional investors such as insurance companies and financial institutions than to medium-sized industrial companies. In any event, the issuing of both negotiable medium-term notes and high-yield bonds is virtually impossible without a credit rating. This product can be issued continuously within a Euro Medium Term Notes programme using the same documentation (see Chapter 25 for more details).

## 2/ Commercial paper

**Commercial paper** is negotiable debt securities issued on the money market by companies for periods ranging from 1 day to 1 year. In practice, the average maturity of commercial paper is very short, between 1 and 3 months. They are issued in minimum denominations of €150,000 at fixed or variable rates. Issuers can also launch variable rate commercial paper linked with a variable rate/fixed rate swap (see Chapter 47) or paper denominated in US dollars with a euro swap, allowing them to separate the company’s financing from interest or exchange-rate risk management.

**Commercial paper enables companies to borrow directly from other companies without going through the banking system at rates very close to those of the money market.**

Obtaining at least a short-term credit rating for a commercial paper issue is optional but implicitly recommended, since companies are required to indicate whether they have called on a specialised rating agency and, if so, must disclose the rating given. Moreover, any issuer can ask a bank for a commitment to provide financing should the market situation make it impossible to renew the note. These backup lines came into their own in 2001 when the US commercial paper market for nonfinancial issuers contracted by 40%. Companies have to have such lines if they want their commercial paper issues to get an investment grade rating. Certain credit rating agencies, for example, will only keep their short-term rating of outstanding commercial paper at A1+ if 70% of the paper is covered by a backup line.

Two markets are active on the European level:

- The ECP (European Commercial Paper) market is based in London and is not regulated. In April 2008, volume outstanding from corporates issues on this market was €123.4bn (excluding banks and securitisation).
- The French TCN (*Titres de Créances Négociables*) on which French but also other European corporates issue. This market is regulated and under supervision of French market authorities, and is more secured and flexible transactions (spot and overnight
delivery). In April 2008, volume outstanding from corporates issues on this market reached €44.6bn (excluding banks and securitisations).

Continental European central banks are currently trying to unify the European market and create the Short Term European Paper (STEP).

In addition to lower issue costs, commercial paper gives the company some autonomy *vis-à-vis* its bankers. It is very flexible in terms of maturity and rates, but less so in terms of issue amounts.

Lastly, regardless of their country of origin, companies can issue American commercial paper. Such issues are governed by Regulation 144A defining the terms and conditions of securities issues by foreign companies in the US (see Chapter 30).

In addition to straight commercial paper, companies can use the commercial paper market for securitisation transactions (see below). This specific market segment is called Asset Backed Commercial Paper (ABCP).

3/ **Securitisation**

Securitisation was initially used by credit institutions looking to refinance part of their assets, in other words, to convert customer loans into negotiable securities.

Securitisation works as follows: a bank first selects mortgages or consumer loans, or unsecured loans such as credit card receivables, based on the quality of the collateral they offer or their level of risk. To reduce risk, the loans are then grouped into an SPV so as to pool risks and take advantage of the law of large numbers. The SPV buys the loans and finances itself by issuing securities to outside investors: equity, mezzanine debt, subordinated debt, senior debt, commercial paper, etc., so as to offer different risk–return profiles to investors. Usually the vehicle is kept alive and “refilled” progressively by banks with new loans when old loans mature. The new entity, such as a debt securitisation fund receives the flow of interest and principal payments emanating from the loans.
it bought from the banks (or nonbank companies). The fund uses the proceeds to cover its obligations on the securities it has issued.

To boost the rating of the securities, the SPV buys more loans than the volume of securities to be issued, the excess serving as enhancement. Alternatively, the SPV can take out an insurance policy with an insurance company. The SPV might also obtain a short-term line of credit to ensure the payment of interest in the event of a temporary interruption in the flow of interest and principal payments.

Most of the time, the securitisation vehicle subcontracts administration of the fund and recovery to one service provider and cash management to another. More complicated structures, often based on swaps (see Chapter 47), can also be used when the SPV does not need to reproduce the exact cash flows of the original loans. Instead, cash flows can be reorganised to satisfy the requirements of the various investors involved: no income stream, steady income stream, increasing income stream, etc.

With the help of securitisation specialists, some industrial companies regularly securitise accounts receivable, inventories, buildings or other assets. In short, the whole balance sheet can be made liquid. Once isolated, certain assets are of higher quality than the balance sheet as a whole, thus allowing the company to finance them at preferential rates. This said, the cost of these arrangements is higher than that of straight debt, especially for a high-quality borrower with an attractive cost of debt.

For example, Arcelor Mittal is securitising its account receivables and Avis its rental fleet, while Glencore is doing the same thing with its lead, nickel, zinc, copper and aluminium inventories.

The subprime crisis has badly hurt securitisation of banks’ assets due to a fear of finding subprime loans or debts of highly leveraged LBOs among the securitised assets.

For industrial groups, the securitisation market is still open provided the SPV structure is crystal clear and its assets of undisputed quality.

The following chart shows the European securitisation issuance (in €bn) from 1997 to 2007:

![European Securitisation Issuance (in €bn)](chart)


### Section 26.3

#### Bank Debt Products

Banks have developed a number of credit products that, contrary to market financing, are tailored to meet the specific needs of their clients. We will first take a look at business
loans before moving on to discuss the various types of specific purpose, secured financing. There are numbers of loans, so we will only describe general features and the main products.

1/ **BUSINESS LOANS**

**(a) Features of business loans**

Business loans have two key characteristics: they are based on interest rates and take into account the overall risk to the company.

They are business loans because they are not granted for a specific purpose (investments, trade payables, inventories, etc.). There is no connection between the funds advanced and the company’s disbursements. They can even be used to finance an investment already made.

This translates into two possible approaches:

- The company calculates how much it needs and negotiates with its bank to obtain the corresponding credit, for example a credit line, even if no investment is explicitly planned during the period.
- The bank determines the overall amount of financing required by the company based on investment volumes and changes in investment as well as working capital requirements and grants an overall loan to cover these requirements.

For companies, these loans are often a backup mechanism to meet any kind of cash payment.

Business loans are based on interest rates – in other words, cost, and the cheapest usually wins. They rarely come with ancillary services such as debt recovery, and are determined according to the maturity schedule and margin on the market rate.

These loans take into account **corporate risk**. The bank lending the funds agrees to take on the company’s overall risk as reflected in its financial health. A profitable company will always obtain financing as long as it adopts a sufficiently prudent capital structure. In fact, the financial loan is guaranteed by the corporate manager’s explicit compliance with a certain number of criteria, such as ratios, etc.

Financial loans are a type of credit that, in theory, is repaid by the cash flow generated by the company.

**Syndicated loans** are typically set up for facilities exceeding €100 million that a single bank does not want to take on alone. The **lead bank** (or banks depending on the amounts involved) is in charge of arranging the facility and organising a syndicate of 5–20 banks that will each lend part of the amount.

A syndicated loan (or credit facility) is a relatively large loan to a single borrower structured by a lead manager(s) and the borrower. Funds are provided by a group of banks (rather than a single lender).²

There are four types of credit or lending facilities:

1. **Committed facilities**, a legally enforceable agreement that binds bank to lend up to stated amounts.
2 **Revolving credits.** In this case, the borrower has right to borrow or “draw down” on demand, repay, and then draw-down again. The borrower is charged a commitment fee on unused amounts. Options include:

- multi-currency option: right to borrow in several currencies;
- competitive bid option: solicit best bid from syndicate members;
- swingline: overnight lending option from lead manager.

3 **Term loans.**

4 **Letters of credit, equipment lines, . . .**

Once lending terms are set, pieces of the loan are sold to other banks. Some bank lenders are members of the syndicate while others are not, and buy only “participations”. A borrower pays a fee to a manager to structure and sell the loan. Fees increase with the complexity of the loan, and the risk of the borrower.

What is the borrower’s rationale for using this instrument?

- The potential to raise larger amounts than from a single bank.
- The possibility of making few visits to the market. This in turn determines lower fixed costs and scale economies.
- The enhanced visibility among a larger group of lenders.
- The tradability of syndicated loans. Their high liquidity determines lower rates.

The lender’s rationale belongs to the following factors:

- Diversification of bank loan portfolios.
- Reduced risk of default against syndicate vs. a single bank.
- Access to deals/credits not otherwise available to some banks.
- Up-front fee income (to managers) + loan trading and derivative sales potential.

Below is the single-sided secondary trading volume for 1991–2008Q1 subdivided into par and distressed volume.
The lead bank receives a commission of between 0.15% and over 1% of the loan. The size of the commission depends on the borrower’s rating, the lead bank’s level of commitment (whether it is underwriting the loan or not) and the size of the loan.

(b) Types of business loans

Overdrafts on current accounts are the corporate treasurer’s means of adjusting to temporary cash shortages but, given their high interest charges, they should not be used too frequently or for too long. Small enterprises can only obtain overdrafts against collateral, making the overdraft more of a secured loan.

Commercial loans are short-term loans that are easy to set up, and therefore very popular.

The bank provides the funds for the period specified by the two parties. The interest rate is the bank’s refinancing rate plus a margin negotiated between the two parties. It generally ranges from 0.10% to 1.50% per year depending on the borrower’s creditworthiness since there are no other guarantees.

Commercial loans can be made in foreign currencies either because the company needs foreign currencies or because the lending rates are more attractive.

The repeated use of commercial loans may result in a short- or medium-term confirmed credit line. When the credit facility is confirmed, an engagement or confirmation commission amounting from 1/16% to 1/18% is paid. The commission is based on the borrower’s creditworthiness and the duration of the credit and allows the company to discount the commercial paper as and when needed.

Extending this concept leads us to the master credit agreement, which is a confirmed credit line between several banks offering a group (and by extension its subsidiaries) a raft of credit facilities ranging from overdrafts, commercial credit lines, backup lines, foreign currency advances or guarantees for commercial paper issues (see above). These master agreements take the form of a contract and give rise to an engagement commission on all credits authorised, in addition to the contractual remuneration of each line drawn down. Large groups use such master agreements as multi-currency and multi-company backup lines and umbrella lines, and secure financing from their usual banks according to market conditions. Smaller companies sometimes obtain similar financing from their banks. Engagement commissions are usually paid on these credit lines.

Master agreements take into account the borrower’s organisation chart by organising and regulating its subsidiaries’ access to the credit lines. At the local level, the business relationship between the company’s representatives and the bank’s branches may be based on the credit conditions set up at group level. Subsidiaries in other countries can draw on the same lines at the same conditions. Centralising credit facilities in this manner offers a number of advantages by:

- pooling cash between subsidiaries in different countries to minimise cash balance differentials;
- harmonising the financing costs of subsidiaries or divisions;
- centralising administrative and negotiating costs to achieve real economies of structure.

Master agreements are based on a network of underlying guarantees between the subsidiaries party to the agreement and the parent company. In particular, the parent company must provide a letter of comfort for each subsidiary.
(c) Covenants

Banks include a certain number of covenants in the loan agreements, chiefly regarding accounting ratios, financial decisions and share ownership. These covenants fall into four main categories:

- **Positive or affirmative covenants** are agreements to comply with certain capital structure or earnings ratios, to adopt a given legal structure or even to restructure.
- **Negative covenants** can limit the dividend payout, prevent the company from pledging certain assets to third parties (negative pledges) or from taking out new loans or engaging in certain equity transactions, such as share buybacks.
- **Pari passu** clauses are covenants whereby the borrower agrees that the lender will benefit from any additional guarantees it may give on future credits.
- **Cross default** clauses specify that if the company defaults on another loan, the loan which has a cross default clause will become payable even if there is no breach of covenant or default of payment on this loan.

2/ Specific Purpose, Secured Lending

When specific purpose, secured lending takes the form of a bank loan, it is perfectly suited to cash management or investment plans. Such loans can be used to:

- accelerate collection of receivables;
- finance or defer an expense.

The actual use of such lending has diverged from its theoretical definition. For companies of a certain size, specific purpose, secured loans form part of their overall financial resources and usually serve more to raise working capital in general than finance the specific underlying operations.

Banks, too, no longer respect the main principles of this lending category. Before granting a loan, banks analyse the applicant’s finances and look at its overall debt level. Any decision to grant a loan is based on an overall assessment of the company.

We will take a quick survey of the main types of conventional credit instruments and recommend you turn to the specialised text books for a more detailed examination.

(a) Financing accounts receivable

There are several short-term financing techniques that bridge the cash flow gap between invoicing and collection and are backed by the corresponding trade receivable. They are the counterpart to trade credit (inter-company credit), which is widely used in some countries (continental Europe).

**Discounting** is a financing transaction wherein a company remits an unexpired commercial bill of exchange to the bank in return for an advance of the amount of the bill, less interest and fees.
The discounting bank becomes the owner of the bill and, ordinarily, is repaid when it presents the bill to its customer’s customer for payment. If, at maturity, the bill remains unpaid, the bank turns to the company, which assumes the bankruptcy risk of its customer (such discounting is called discounting with recourse).

In principle, a company uses discounting to obtain financing based on the credit it extends to its own customers, which may be better known to the banking system than the company is. In this way, the company may be able to obtain better financing rates.

In discounting, the bank does not finance the company itself, but only certain receivables in its portfolio, i.e. the bills of exchange. For the bank, the risk is bounded by a double guarantee: the credit quality of its customer backed by that of the issuer of the bill of exchange.

In consolidated accounting, discounted bills are reintegrated into accounts receivable and the bank advances are reported as debt.

For this reason, banks now also offer nonrecourse discounting, which is a straight sale of customer receivables, wherein the bank has no recourse to its customer if the bill remains unpaid at maturity. This technique allows the company to remove the receivables from its balance and from its off-balance sheet commitments and contingencies.

**Factoring** is a credit transaction whereby a company holding an outstanding trade bill transfers it to its bank or a specialised financial institution in exchange for the payment of the bill, less interest and commissions. We discussed this off-balance sheet financing technique in greater detail in Chapter 7.

**Factoring companies or factors** specialise in buying a given portion of a company’s trade receivables at a discount on the face value. The factoring company then collects the invoice payment directly from the debtors.

Banks increasingly offer nonrecourse discounting services, which consist of an outright purchase of the trade receivables without recourse in the event of default. This technique removes contingent liabilities from the bank’s on- and off-balance sheet accounts.

Specific products exist to finance receivables arising from exporting. A **promissory note** is a physical proof of the existence of a receivable in the accounts of an exporter. Promissory notes are negotiable and therefore allow financing of the receivable.

**b** Loans to finance or defer an expense

Customers use these loans to finance an asset or bridge the time gap between payments to suppliers and settlements. The object of the financing thus plays a two-fold role: on the one hand it represents a guarantee for the creditor and, on the other, it is used to repay the credit. It is thus self-liquidating.

A **bridge loan** is set up to provide funds until permanent financing is raised that will be used to repay it, such as capital increases, bond borrowings or the disposal of a subsidiary. Bridge loans are of short duration, expensive and frequently used for large amounts. They have developed in step with financial transactions, in particular mergers and acquisitions. They can take the form of an overdraft or a spot loan that is repaid by means of an asset disposal or the issue of financial securities.
Loans secured by inventory are used to finance inventories arising out of the seasonal nature of the activities of certain companies. Sugar beet producers, for example, process their crops in October and November but sell their produce throughout the year. To finance their inventories, they can deposit a portion in public bonded warehouses. In exchange, they receive a warehouse warrant giving the holder title to the merchandise. This receipt enables the producer to pledge the goods after endorsing the receipt and registering the transaction in the warehouse’s books.

The sugar beet producer can then sell the warrant to obtain working capital. When it matures, the warrant is either reimbursed and the producer regains control over the goods, or it is not repaid, and the holder sells the goods.

Bank guarantees are not real cash loans, since the bank advances the funds only if the client defaults. They are therefore recorded as off-balance sheet commitments by the financial institutions.

For companies, bank guarantees can ease cash shortages by enabling them to delay payment of amounts due, collect advances immediately or avoid payments, for example of lease deposits.

They also make it easier to obtain financing from other banks or institutions, or on better terms, or allow the company to win a contract it might not have without the bank guarantee. This said, the obligation arising on the guarantee may not be greater than that of the main debtor.

The three main types of guarantees are documentary credit, customs guarantees and buyer’s credit.

Buyers credit or export credit is used to finance export contracts of goods and/or services between an exporter and the buyer importing the goods/services. The banks granting the buyer’s credit undertake to provide the borrower with the funds needed to pay the supplier directly according to the terms specified by contract.

The borrower in turn gives the bank an irrevocable mandate to pay the funds only to the supplier. The agreement stipulates the interest rates, duration and repayment conditions of the loan, and any bank fees or penalties that may arise in the event the borrower does not meet its obligations.

The credit agreement also specifies that the transaction is purely financial, since the borrower must repay the funds notwithstanding any disputes that may arise in the course of its business with the exporter. The advantages to the supplier are:

- insurance against payment default;
- the cost of the credit is not deducted from the contract while the risk level remains acceptable to the bank;
- the portion of the contract that must be paid upon maturity is not on the balance sheet.

Moreover, in most cases the first payments can be made before completion of the contract. There is thus less need to resort to cash or pre-financing loans. And lastly, if the sale is denominated in a foreign currency there is no need to worry about hedging the foreign exchange risk while the borrower makes his repayments.

Certain types of buyer’s credit can also be used to finance major projects and thus resemble project financing, which we will discuss below.
1/ TYPES OF LEASES

In a lease contract the firm (lessee) commits itself to making fixed payments (usually monthly or semiannually) to the owner of the asset (lessor) for the right to use the asset. These payments are either fully or partially tax-deductible, depending on how the lease is categorised for accounting purposes. The lessor is either the asset’s manufacturer or an independent leasing company.

If the firm fails to make fixed payments it normally results in the loss of the asset and even bankruptcy, although the claim of the lessor is normally subordinated to other lenders.

The lease contract may take a number of different forms, but normally is categorised as either an operating or a financial lease.

For operating leases, the term of the lease contract is shorter than the economic life of the asset. Consequently, the present value of lease payments is normally lower than the market value of the asset. At the end of the contract the asset reverts back to the lessor, who can either offer to sell it to the lessee or lease it again to somebody else. In an operating lease, the lessee generally has the right to cancel the lease and return the asset to the lessor. Thus, the lessee bears little or no risk if the asset becomes obsolete.

A financial (or capital) lease normally lasts for the entire economic life of the asset. The present value of fixed payments tends to cover the market value of the asset. At the end of the contract, the lease can be renewed at a reduced rate or the lessee can buy the asset at a favourable price. This contract cannot be cancelled by the lessee.3

From an accounting point of view, leasing an asset rather than buying it substitutes lease payments as a tax deduction for the payments that the firm would have claimed if it had owned the asset – depreciation and interest expenses on debt.

SIC-15 clarifies the recognition of incentives related to operating leases by both the lessee and lessor. SIC 17, “Leases”, has been effective for annual financial statements since 1999. According to these principles:

- Finance leases are those that transfer substantially all risks and rewards to the lessee.
- Lessees should capitalise a finance lease at the lower of the fair value and the present value of the minimum lease payments.
- Rental payments should be split into (i) a reduction of liability, and (ii) a finance charge designed to reduce in line with the liability.
- Lessees should calculate depreciation on leased assets using useful life, unless there is no reasonable certainty of eventual ownership. In the latter case, the shorter of useful life and lease term should be used.
- Lessees should expense operating lease payments.

2/ REASONS FOR LEASING

There are different reasons a firm can prefer leasing.

1 The firm may not have the borrowing capacity to purchase an asset.
2 Operating leases provide a source of off-balance sheet financing for heavily leveraged firms. However, this opportunity does not reduce the firm’s financial risk. Lenders are in fact careful in considering the cash flow effects of lease payments.

3 The firm may want to avoid bond covenants.

3/ TO LEASE OR BUY?

The analysis regarding whether a firm should buy or lease follows the same principles illustrated so far of investment analysis. Thus we have basically three alternatives in valuing the relative convenience of leases:

1 The decisions can be based according to the present value of incremental after-tax cash flows of the two alternatives. In computing the present value of a lease’s cash flows, we should use the after-tax cost of borrowing since we are comparing two borrowing alternatives. A lease payment is like the debt service on a secured bond issued by the lessee, and the discount rate should be approximately the same as the interest rate on such debt.

2 Alternatively, we can compare the IRR of the two alternatives and choose the one with the lower rate.

3 Finally, we could compute the difference between the two cash flows (buying and leasing) and compute the internal rate of return on these differential cash flows. This rate should then be compared with the after-tax cost of debt to determine which alternative is more attractive.

Suppose an airline company needs a new airplane with an economic life of 5 years. The company is considering two alternative sources of financing: a fixed rate loan and a financial leasing. The following table shows the general financial information about the plane and the two alternatives:

<table>
<thead>
<tr>
<th>General information</th>
<th>5 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly payments in year 1</td>
<td>12</td>
</tr>
<tr>
<td>Discount rate</td>
<td>5.00%</td>
</tr>
<tr>
<td>Marginal tax rate</td>
<td>35.00%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Purchase information</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of monthly loan payments</td>
<td>60</td>
</tr>
<tr>
<td>Purchase price, before sales/use taxes</td>
<td>€51,000,000</td>
</tr>
<tr>
<td>Down payment, if purchased</td>
<td>€5,100,000</td>
</tr>
<tr>
<td>Interest rate, if financed</td>
<td>6.00%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lease information</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of monthly lease payments</td>
<td>60</td>
</tr>
<tr>
<td>Fair market value, if leased</td>
<td>€51,000,000</td>
</tr>
<tr>
<td>Monthly lease payment, from Boeing, before sales/use tax</td>
<td>€597,721</td>
</tr>
<tr>
<td>Down payment, if leased</td>
<td>€5,100,000</td>
</tr>
<tr>
<td>Residual value % after 10 years</td>
<td>90.51%</td>
</tr>
<tr>
<td>Security deposit (refunded at end of lease, escrowed at discount rate)</td>
<td>€5,100,000</td>
</tr>
</tbody>
</table>

Source: Input Range.
The following table reports the NPV of the two alternatives:

**LEASE OR PURCHASE OF A BUSINESS JET**

<table>
<thead>
<tr>
<th>Discount rate</th>
<th>5.00%</th>
<th>Sales/use tax</th>
<th>0.00%</th>
<th>Marginal tax rate</th>
<th>35.00%</th>
<th>Down payment/ security deposit</th>
<th>€5,100,000</th>
<th>Interest rate, if financed</th>
<th>6.00%</th>
<th>Residual value %</th>
<th>90.51%</th>
<th>Bonus depreciation (0 = no, 1 = yes)</th>
<th>0</th>
<th>Lease payment</th>
<th>€597,721</th>
</tr>
</thead>
</table>

**If purchased:**

| Purchase price, including sales/use taxes | €51,000,000 |
| Sales price at end of holding period | €46,160,100 |
| Monthly payment – computed, includes sales/use taxes | −€887,376 |
| Total number of monthly payments | 60 |

<table>
<thead>
<tr>
<th>Year</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash inflow/tax savings</td>
<td>−€3,437,400</td>
<td>−€5,082,913</td>
<td>−€3,647,422</td>
<td>−€2,557,459</td>
<td>−€2,505,025</td>
<td>−€50,423,952</td>
</tr>
<tr>
<td>Net cash flow</td>
<td>€12,311,107</td>
<td>€5,565,594</td>
<td>€7,001,085</td>
<td>€8,091,048</td>
<td>€8,143,482</td>
<td>−€20,000,324</td>
</tr>
<tr>
<td>Annual present values</td>
<td>€12,311,107</td>
<td>€5,300,565</td>
<td>€6,350,190</td>
<td>€6,989,351</td>
<td>€7,918,583</td>
<td>−€20,000,324</td>
</tr>
<tr>
<td>Net present value of cash flows, if purchased</td>
<td>€10,342,311</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**If leased:**

| Monthly lease payment | −€597,721 |
| Total number of monthly lease payments | 60 |

<table>
<thead>
<tr>
<th>Year</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net cash flow</td>
<td>€13,077,224</td>
<td>€4,662,224</td>
<td>€4,662,224</td>
<td>€4,662,224</td>
<td>€4,662,224</td>
<td>−€1,152,179</td>
</tr>
<tr>
<td>Annual present values</td>
<td>€13,077,224</td>
<td>€4,440,213</td>
<td>€4,228,774</td>
<td>€4,027,404</td>
<td>€947,901</td>
<td>€24,825,715</td>
</tr>
<tr>
<td>Net present value of cash flows, if leased</td>
<td>€24,825,715</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference in cash flows (Purchase – Lease)</td>
<td>−€14,483,404</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The NPV of the purchase alternative is around €10m while the NPV of the lease alternative is around €24m. Thus, from a financial standpoint, the company should prefer the lease alternative.

Deciding on an absolute level of net debt, that is, of debt vs. equity, is a capital structure issue. Once this ratio has been decided, it is up to the CFO and the corporate treasurer to lower the cost of debt and monitor the return on investments. At the same time, treasurers must ensure that the company can meet its debt obligations and that the liquidity of the investments is adapted to the company's development needs. This means choosing between the various financial products available and playing off banks vs. investors. These products differ in terms of type of counterparty, maturity and seniority of redemption rights as well as the existence of collateral or accounting, legal and tax advantages. However, this wealth of options can become confusing when trying to compare the actual cost of the various products. We therefore distinguish between:

- bank and market products;
- short-, medium- or long-term borrowings;
- loans backed by collateral, unsecured senior loans and subordinated loans.

For small- and medium-sized companies, the choice between bank financing (bank loans) and market financing is skewed in favour of bank financing as their needs do not correspond to the size and liquidity required by financial markets.

The distinction between long-, medium- and short-term financial resources reflects the treasurer's main forecast horizons and, accordingly, the type of information at his disposal.

Giving guarantees or seniority to a loan often allows the interest paid to be lower but limits the financial flexibility of the firm.

Debt market products include long-term financing: bonds (investment grade or high yield depending on the rating of the company) and short-term financing: commercial paper.

Bank debt products include loans for general purpose financing (business loans) for which agreements include standard covenants (positive covenants to comply with certain requirements; negative covenants to limit the financial flexibility of the company; pari passu clauses; cross default clause). Specific purpose financing is backed by assets (factoring, export credit, loans on inventories, ...).

**QUESTIONS**

1/ Should the analysis of covenants in high-yield corporate issues be carried out separately from other characteristics?

2/ In an article in a popular daily publication, a statement similar to the following was made: “Repurchase agreements are extremely risky vehicles”. Explain why this statement is ambiguous.

3/ Is project financing based on the personal and real guarantees of the sponsors?
4/ What is the difference between discounting and factoring?

5/ What services can be offered as part of factoring?

6/ In a securitisation transaction, is a company that transfers assets to an SPV at risk if these assets do not cover the debts of the SPV?

**Answers**

1/ Covenants in high yield corporate bond issues should be reviewed in conjunction with the issuer’s overall strategy.

2/ When a repurchase agreement is used to create leverage (i.e. when it is used as a financing vehicle), it is a risky vehicle because of the risk associated with leverage. In contrast, when it is used as a vehicle in which to invest funds on a short-term basis, if properly structured it is a high quality money market instrument.

3/ No, one of the main features of project financing is that the feasibility of the project is mainly – if not exclusively – based on the cash flows of the project.

4/ In factoring, the company can effectively transfer the risk of non-payment to the factor, while in discounting, the company will always bear the risk.

5/ Financing, recovery, bad debt insurance, removing assets from the balance sheet.

6/ Normally no. The SPV bears the risk and insures itself against, by oversizing the assets transferred.

**Bibliography**


[www.europeansecuritisation.com](http://www.europeansecuritisation.com), European securitisation site.