



Level 4 - Diploma

Financial Reporting & Taxation

F1 Financial Reporting and Taxation

Module: 23

Short-Term Finance and Investment

1. Introduction

Finance

Businesses don't always use their own cash to fund their growth. In fact, it is often better to look for ways to raise finance (borrow from others) to invest in a new business venture rather than waiting until you have enough of your own money. If the business venture is successful, then you will be able to pay back the money owed and keep the rest for yourself. However, if you'd waited until you had enough of your own money, you might have missed out on the opportunity altogether! It's important, then, for a business to have a good understanding of **how and when to use finance**.

Investment

Of equal importance is understanding **how and when to invest**. Investment includes things from purchasing non-current assets to buying shares in other companies, and the goal is to make a return. However, there are certain approaches to investment that will yield better results than others.

So, what we will be looking at in this chapter is both **short-term finance** and **short-term investment** (short-term meaning 'less than 12 months') and by the end of it you will have a deeper understanding of how companies approach these areas.

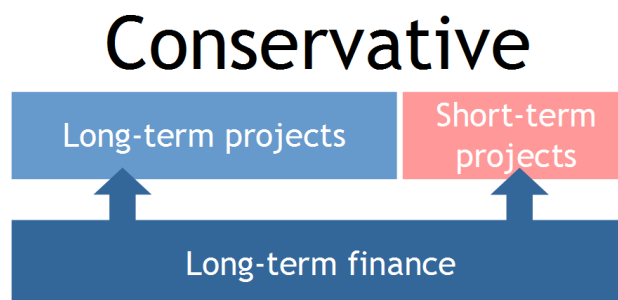
2. Approaches to financing

Short-term finance is a way of **raising funds for short-term projects**, usually within the course of a 12-month period. However, it is not all that simple, and there are a number of possible approaches to short-term financing that will be suitable depending on the needs of the business.

Let's start by taking a look at the three over-riding approaches to financing: **conservative**, **matching** and **aggressive**.

Conservative financing

This involves financing both long-term assets (non-current assets) and short-term assets **using long-term finance**, such as equity or long-term loans.



Example

For example, using some of the money from a share issue (when a company sells shares to investors through a stock exchange) to purchase a new factory (non-current asset) and inventories (current asset) would be an instance of conservative financing.

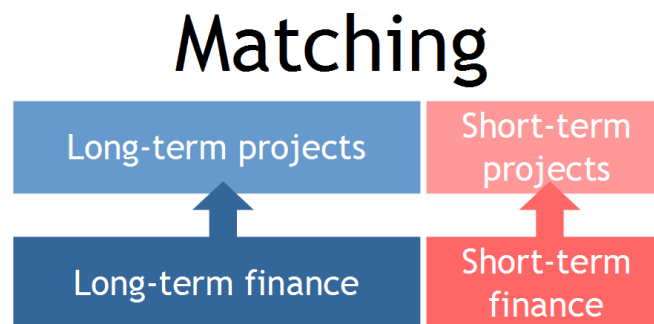
Pros and cons

This is a **safe** way of managing debt as there is little risk of non-repayment in the short-term.

On the other hand, it is **more expensive** as equity and long-term debt tends to be more expensive due to the **higher risk being taken by these investors** compared with short-term lenders.

Matching financing

Matching aims to **link closely the short and long-term nature of investments with the short and long-term nature of finance** used to support them:



Example

- **Using long term funding** (e.g. equity or long-term debt) **for long-term projects and assets**. The aim is to use the long-term returns from these projects/assets to pay back the long-term debt. If returns are not due for 4-5 years, then debt repayment should be delayed until that point or after.
- **Short term funding to match against short term needs:**
 - e.g. Leasing for short-term equipment use.
 - e.g. Bank overdrafts for short-term cash flow shortages.

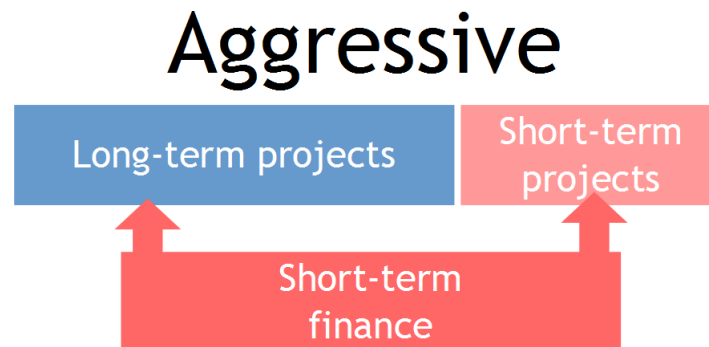
Pros and cons

Matching aims to **balance risk and financing costs**. This is a safe way to use finance.

It is also **risks and costs appropriate to the type of investment**, making it easier to manage.

Aggressive financing

Aggressive financing is **the funding of part of long-term assets and all current assets using short-term funds.**



Example

Using a bank overdraft or a short-term loan of less than 12 months to fund the purchase of non-current assets is an example of aggressive financing.

Pros and cons

Short term funds are usually less expensive due to the lower risks being taken by lenders, so this **can be the cheapest** approach to financing.

However, **risks to the company are higher** as the repayment will need to be made in the short term, which could put the company in cash flow difficulties if it is not able to generate cash through sales or raise further funds from another source.

These are **best suited to companies with a strong credit position and good access to short-term funds**, and companies which are highly cash generative with a short working capital cycle (e.g. a supermarket or restaurant).

3. Short-term financing methods

Introduction

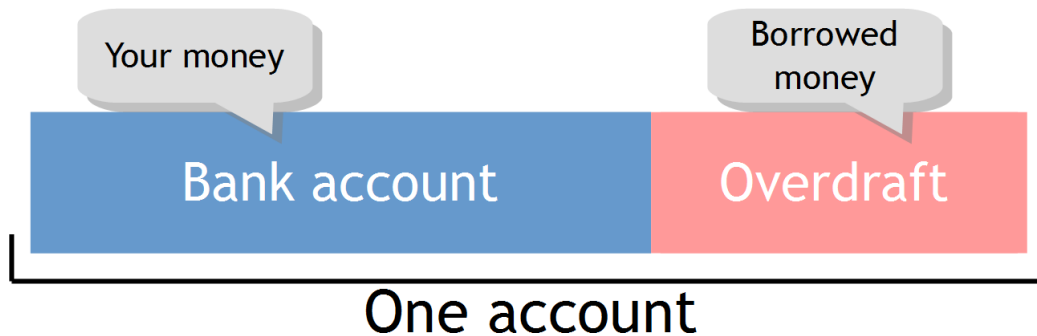
So, let's say you start a new company and you decide you need to take an aggressive financing approach in the early years because you have limited access to long-term finance. You're aware of the risks, but you think it's really your best option.

What kinds of short-term finance are available to you? Are they all equally expensive and risky, or do they vary? Well, in the next section, we're going to take a look at the main forms of short-term finance, and perhaps at the end we'll have a clearer idea of which route to go in order to finance your new business.

We have already seen some of these in earlier chapters, but we'll go over them again here for completeness.

Overdrafts

An overdraft is a **highly flexible** source of short term funds provided by a bank up to a set limit. For instance, you may have a business account with a bank for your cash balance. With that account, you are offered the option of an overdraft of £15,000 at 10% finance cost. That essentially means you have a £15,000 'buffer' in your current account for times when you don't have enough cash to cover all expenses. However, when you use the overdraft, you will have to pay a finance charge (interest) of 10%.



Thus, overdrafts can be a useful method for providing for **short-term cash requirements**. It can be drawn on at any time and is most useful for **day-to-day expenses**.

An overdraft is a relatively **expensive** way of borrowing short term, as the bank charges more due to the flexibility provided and lack of security on the debt.

Advantages

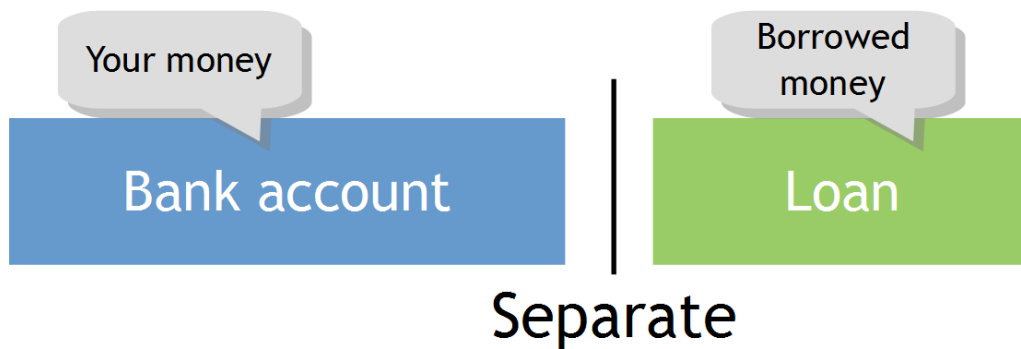
- **Flexible** – you can borrow as needed (which may make it cheaper than a loan if the total is only borrowed for a short period of time).
- **Quick** to arrange.

Disadvantages

- **Arrangement fees** for setting up or extending overdrafts.
- **Charges** for exceeding overdraft limits without authorisation.
- The bank has the right to **ask for repayment** of overdrafts at **any time**.
- **Only available at the company's own bank**. If they don't want to give the company an overdraft the company will have to switch banks in order to get one.
- The **interest rate** applied is nearly always **variable**, making it difficult to accurately calculate borrowing costs as it will go up and down depending on rates in the market.

Short-term loans

A short-term loan provides a loan for a **specific period** of time for a **specific amount** of money. Unlike an overdraft, which is essentially extra funds in your bank account, a loan is money given directly to you by a bank with certain finance costs and conditions attached.



Advantages

- **Known date for repayment** – the loan will usually have regular set dates for repayments (e.g. first of the month), which makes payment easier to organise.
- **Availability of full amount of funds for agreed time** – with a loan you get the whole amount for the whole time as guaranteed by the contract.

Disadvantages

- **Lack of flexibility** – once the contract is agreed it becomes difficult, but not impossible, to change the terms of the loan (e.g. increasing the amount or period of repayment).
- **May be a fee for early repayment** – this would be the case when you find you don't need the loan and want to pay any amount you have used off quickly. The bank will have calculated an expected return in interest on the loan, and so they may fine you for attempting to end the contract early.
- **May borrow funds not needed on which interest is still paid** – if you later find that the loan was not needed, you may still end up paying interest for money that you didn't even use.
- **May require security** – a security is a way for the bank to ensure they're get their money back and can include things such as machinery or property.

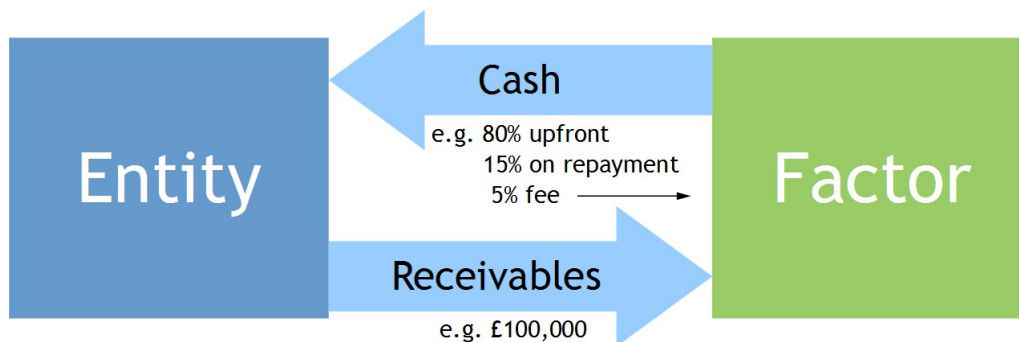
Trade creditors

This is when you pay a supplier for a good or service sometime after you receive or use it. The longer a company are able to take to pay suppliers the less pressure there is on cash availability. Longer payables also help to **keep financing costs down, as credit from suppliers is usually at no cost.**

The downside of taking longer to pay suppliers is the **risk of worsening relationships** with them. A balance needs to be struck between continuing good supplier relations and delaying payment for funding purposes.

Factoring

Factoring is where a business “**sells**” its **accounts receivable** (i.e. invoices) to a third party (called a factor) at a **discount**. When used for funding, the factor provides financing in the form of a cash advance, typically 70-85% of the invoice amount. The balance of the purchase price is paid, net of the factor's discount fee (commission) and other charges, upon collection of the debt by the factor.



Example

Accounts receivable are €100,000. An agreement is made with a factor that 80% (€80,000) is paid now at a 5% fee. Upon receipt of the debt from the receivable, €5,000 is kept by the factor and the remaining €15,000 paid over to the company.

Advantages

- There are many factoring companies, so **a company can negotiate to find the best rates.**
- The company can protect from bad debts by taking the “**non-recourse factoring**” service, where the factor will pay for the full amount even if the receivable never pays, although the factor charges more for this due to the risk taken.
- **Cash is released as soon as orders are invoiced** helping to fund future payments to suppliers.
- **Factors will credit check customers** which can help reduce bad debt risk.

- **Internal costs** of managing a sales ledger and credit control can be **reduced**.

Disadvantages

On the downside, factoring can suggest **cash flow problems** to customers, and there is a loss of control over methods used to chase up debts. As such it may **worsen the company's reputation with its customers**.

Invoice discounting

Invoice discounting is very similar to factoring. When a business enters into an invoice discounting arrangement, the company can **select individual invoices to discount and so receive funding on an invoice-by-invoice basis**.

If, for example, an invoice was £100,000, a company can discount it for say 80% of this amount, in which case £80,000 is available.

The **difference between invoice discounting and factoring** is that with factoring the debt is 'sold' to the factor who processes the debt, while with invoice discounting the **responsibility for raising sales invoices and for credit control stays with the business**.

Advantages

- It **can be arranged confidentially**, so that customers are unaware that the business is borrowing against sales invoices.
- **Flexibility**
- **Quick funding**
- Open contracts with **no long-term ties**
- **No leaving fees** for ending an agreement

Disadvantages

- The finance company will **charge a fee** for the service, and **interest on the amount borrowed**
- The finance company **may refuse to lend against some invoices**, for example if it believes the customer is a credit risk, sales to overseas companies, sales with very long credit terms, or very small value invoices.

Example – new business

If you were setting up a new business and have exhausted all your own funds what do you think the best funding options would be?

Unless you have a lot of money tied up in receivables, you probably don't want to go down the factoring route just yet as it can show signs of struggling and damage customer relations. Given you also don't know exactly

how much you'll have in receivables (as you haven't got any yet) it could be difficult to do.

An overdraft and or a short-term loan seem like the best options, and each can be tailored specifically towards certain needs. For instance, the overdraft can be a way to cover any cash deficits for day-to-day expenses, whilst the loan could be put towards purchasing new equipment or hiring staff.

You may approach friends and family for funds too, and if you're lucky they may have funds they can either lend you or put up for equity in the company.

4. Short-term finance for international trading

Joanna runs a UK company trading overseas for the first time. She's considering selling a £10,000 machine to a company in Azerbaijan and the company want to buy on credit, which is the norm for the industry. Joanna is worried though. She doesn't know the laws of the country. She knows little about the customer. She's concerned that they will not pay and is not sure whether to go ahead with the contract.

Parvin runs an Azerbaijani building company and he needs a new machine. He's approached a company (the one run by Joanna) and she's got exactly what he needs - but he's worried! She'd like him to pay in cash, but how can he trust that he'll get the machine after he's paid? If she doesn't pay, it would be difficult to take her to court in an unknown country in a language he doesn't know.

Due to the uncertainties, Parvin and Joanna decide not to proceed with the deal.

As we can see, Joanna and Parvin would benefit from selling to each other but the uncertainties of international trade make this difficult. However, there are solutions. Let's take a look at these and see how they could resolve their problems.

Export factoring

Export factoring is essentially the same as factoring, but for **overseas sales**.

Key points

- The company can **choose to invoice in one currency and be paid in another**. This helps to manage foreign exchange risk because if payment is made immediately there is protection against currency fluctuations.
- **The cost of export factoring is usually slightly higher** than the cost of domestic factoring due to the increased currency and credit risks being faced by the factor.

- **Bad debt risk can be reduced** by purchasing credit protection from the factor. This could be a solution for Joanna therefore as, for a fee, she can guaranteed being paid – the factor takes the risk.

Documentary credits

This is a **document issued by a bank on behalf of a customer** authorising someone to **withdraw a certain amount of funds from their account**.

The process begins when a buyer (Parvin) and seller (Joanna) complete a sale agreement. Joanna would advise the bank that she wishes to provide credit to Parvin. Joanna's bank will then contact Parvin's bank and confirm the agreement.

With all parties satisfied that payment is being sent and received through their respective banks, Joanna can dispatch the goods with confidence that payment will be made. Once dispatched, Joanna will provide proof of shipment to her bank. Joanna's bank will then request the funds from Parvin's bank, which will check the documents and release the payment, so Joanna can be paid. Once Parvin has supplied the funds to the bank to cover this amount, the bank will release the documents to Parvin, which will enable him to claim his machine.

The banks are effectively acting as guarantors in the transaction ensuring Joanna gets paid and Parvin gets his machine.

This process is **time consuming** and can involve significant **bank fees**. However, the process is **very secure** in that it involves two different banks as intermediaries to guarantee and handle the payment. For these reasons, documentary credits can be a valuable option for very large sums or when dealing with overseas buyers that one is not familiar with.

Bills of exchange

A bill of exchange is a written, signed document that **acknowledges a debt**.

In any business transaction, the seller may draw up a 'bill', which stipulates that the **customer must pay a certain amount by a certain date**. This is basically a contract confirming the amount and due date for payment of the goods/services.

The supplier can keep the bill and **redeem the payment on the due date**, but he may also **sell the bill to a third party in order to receive payment earlier**.

Bill of exchange

Debt outstanding:
£20,000

Payment due:
01/01/X1

If Parvin were to provide Joanna with a Bill of Exchange, Joanna should be able to sell this on to a bank (or any other party that wishes to buy it), after which the bank will need to contact Parvin and collect payment themselves. It is the bank that take the risk though and not Joanna. The **bank, of course, want to get paid** for the risk they are taking. They do this **buy**

buying the bill of exchange at a discount. The £10,000 bill for the machine might be sold for just £9,500 giving the bank a £500 profit on the deal.

Calculating the discount rate

When selling/buying a bill of exchange, you need to be able to calculate the applicable discount. The formula for doing this is:

$$\text{Price} = F \times \left(1 - \frac{RT}{365}\right)$$

Where

F = Face value of the bill

R = Discount rate

T = Time in days to maturity

Example

A bill of exchange for £20,000 has 60 days to maturity, and we require a return of 10%. Therefore, the price we would pay for the bill would be:

$$\text{Price} = 20,000 \times \left(1 - \frac{0.10 \times 60}{365}\right)$$

Price = £19,671.23

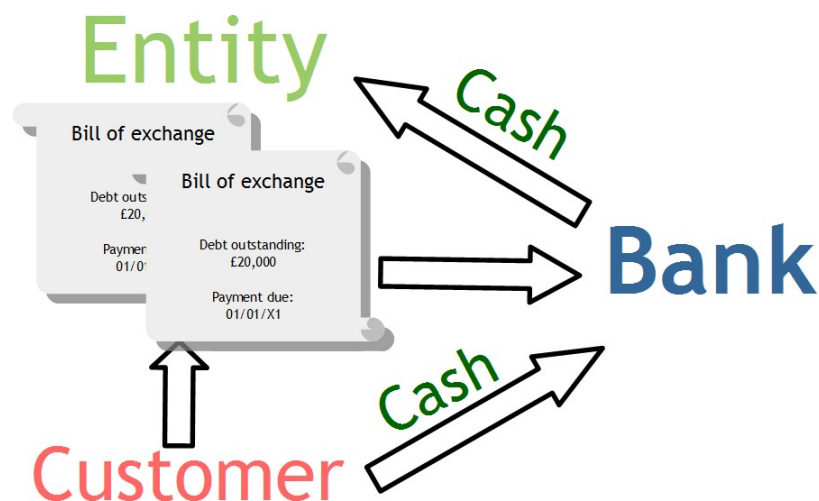
Bills of exchange are useful because they **provide a legal document** to facilitate the collection of debts from foreign customers. It also affords the **buyer a period of credit**, while giving the **seller the option to sell the bill and cash in immediately** or hold the bill and wait out the term.

Forfaiting

Forfaiting is a process whereby **exporters can sell a series of bills of exchange over a long-term period** (usually up to 5 years). The bills are guaranteed by favourably rated international banks located in the importer's country.

These notes are then sold to a bank, known as the 'forfaiting bank', at a discount rate. The bank then claims the payments from the importer on the due dates.

Let's imagine that Joanna's deal with Parvin is just the start of a long-standing trade relationship. Joanna will have a whole variety of customers in Azerbaijan. A bank in Azerbaijan would become the 'forfaiting' bank who agrees to discount all Joanna's bills of exchange. The bank is in a stronger position to assess the credit of local companies and chase up payment than Joanna would be, and Joanna is happy because she has a long-standing agreement that assures payment for sales made.



Forfactoring is **non-recourse**, meaning the **exporter is not liable for any non-payment** once the bills have been sold. This is the reason the bills must be guaranteed by an international bank in the first place.

Forfactoring is advantageous for exporters as it provides a **source of finance**, allowing them to turn foreign receivables into **immediate cash**. It is also non-recourse, which removes all liability to exporter as soon as the bills are sold, while also completely removing foreign exchange and interest rate risk. This allows for more **accurate budgeting** and **cash management**.

5. Short-term investment

During the course of business, organisations will sometimes find themselves with a **surplus of funds**. Events that can lead to this might be a particularly large sale or the disposal of a number of assets. In these situations, it can be wise to **retain a certain amount of cash as a precautionary measure** but having unusually large sums of cash sitting in the bank is generally considered a poor utilisation of funds.

Unless the cash will be used to repay debt or pay dividends to shareholders, management should **consider possible short-term investment opportunities**. Even if only invested for a week, a decent return can be made which will contribute towards increasing the organisation's profit.

Interest-bearing accounts

Very simply, these are accounts in which you can deposit funds and make a return by earning interest. These accounts can fall into two categories:

- Bank deposit accounts.
- Money market deposits.

Deposit accounts

Some deposit accounts are 'instant access' accounts, which allow the investor to **withdraw the money without notice** and **without loss of**

interest. The interest rate is usually low on these accounts, and they are used when the investor wants to earn some interest on surplus cash, but places great importance on instant liquidity.

Money market deposits

Money market deposits are amounts of money deposited through a bank in the money markets. These are the financial markets for short-term borrowing and lending. The **money markets** are used largely by banks and other financial institutions, for depositing and lending funds. Banks can deposit short-term funds with other banks or borrow short-term from other banks in the inter-bank market.

Value and return

When dealing with investments, you will often come across the terms **face value** (also known as nominal value), **market value**, **coupon rate** and **rate of return**.

To best illustrate these terms, we will make use of an example:

Imagine you buy a bond for £100, and the interest rate on the bond is 10%. That means you will be receiving £10 per year in interest for as long as you own the bond.

In this situation, we can say that the **face value** of the bond is £100, and the **coupon rate** of the bond is 10%.

After a few years you want to sell the bond. However, interest rates have risen since you purchased it. Buyers can now easily secure bonds with interest rates of 15%.

Logic tells you that you will never sell a £100 bond paying 10% interest when buyers can simply go and purchase new bonds and get 15% interest.

Therefore, you realise that you must reduce the price to £67. The coupon rate and face value do not change. The bond is still a £100 bond paying £10 per year in interest. However, by selling the bond for £67, the return has now increased to 15% ($£67 \times 15\% = £10$). Now that the return has increased to the market rate, you will have a much better chance of selling the bond to a willing buyer.

Here, the **coupon rate** of the bond is 10%, the **rate of return** is 15%, the **face value** is £100, and the **market value** is £67.

Yield to maturity

The yield to maturity (YTM) is the yield on an instrument after taking into account the difference between its **purchase price** and **redeemable value**.

Example

Let's say we have a bond with a face value of £1,000 and a coupon rate of 10%. The bond is redeemable in 5 years.

We are told that the current purchase price of the bond is £800.

To calculate the YTM we use the following formula, which you should have seen in previous studies as the internal rate of return (IRR) formula:

$$\text{IRR} = A + \frac{\text{NPVa} - \text{NPVb}}{\text{NPVb} - \text{NPVa}} \times (B - A)$$

Where A is the first discount rate used to calculate NPVa and B is the second discount rate used to calculate NPVb.

You should have previously studied IRR and discount factors and as such we are going to assume you understand this concept in this explanation. If you do not know it or remember it, you'll need to review your management accounting studies for this technique.

You should recall that in IRR calculations we calculate the effective rate of return. In previous studies this would have been for a particular project, so you could decide if the return was good enough to decide whether to proceed. In this case we're going to work out the effective rate of return on a bond.

We start by working out the Net Present Value at two different discount rates. The goal is to use two different rates that the effective rate will fall between. In this case, we know that the market value of the bond is £800, and the annual interest is £100. That works out to roughly 12.5%, so we could estimate a range of 12% to 18%.

Calculating NPV at 12%

Firstly, we're receiving £100 for 5 years. In the cumulative discount tables, we can look up a cumulative discount factor at 12% for 5 years.

Periods (n)	Interest rates (r)									
	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2	1.713	1.690	1.668	1.647	1.626	1.605	1.585	1.566	1.547	1.528
3	2.444	2.402	2.361	2.322	2.283	2.246	2.210	2.174	2.140	2.106
4	3.102	3.037	2.974	2.914	2.855	2.798	2.743	2.690	2.639	2.589
5	3.696	3.605	3.517	3.433	3.352	3.274	3.199	3.127	3.058	2.991
6	4.231	4.111	3.998	3.889	3.784	3.685	3.589	3.498	3.410	3.326

The present value of the interest payments is: £100 x 3.605 = £360.5

Next, we know that £1,000 will be received in 5 years' time, so we look up a 12% discount rate for 5 years in the standard discount tables:

Periods (n)	Interest rates (r)									
	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2	0.812	0.797	0.783	0.769	0.756	0.743	0.731	0.718	0.706	0.694
3	0.731	0.712	0.693	0.675	0.658	0.641	0.624	0.609	0.593	0.579
4	0.659	0.636	0.613	0.592	0.572	0.552	0.534	0.516	0.499	0.482
5	0.593	0.567	0.543	0.519	0.497	0.476	0.456	0.437	0.419	0.402
6	0.535	0.507	0.480	0.456	0.432	0.410	0.390	0.370	0.352	0.335

Present value = £1,000 x 0.567 = £567

The total present value of holding the bond is: £567 + £360.5 = £927.50

We then take off the purchase price of the bond of £800 to find the NPV.

$$NPVa = £927.50 - £800 = £127.50$$

Calculating NPV at 18%

Then, we'll repeat the process at a discount rate of 18%. (£100

$$\times 3.127) + (£1,000 \times 0.437) = £749.7$$

$$NPVb = £749.7 - £800 = -£50.3$$

Calculate yield to maturity

Let's put these values into our IRR formula:

$$IRR = 12 + \frac{127.5}{127.5 + 50.3} \times (18 - 12)$$

$$IRR = 12 + 4.3$$

$$IRR = 16.3\%$$

This illustrates that the effective yield of the bond until the time of redemption is 16.3%. This is better known as the **yield to maturity** and takes into account the difference in face value and market value of the bond while also accounting for the time value of money.

Short-term investing and risk

When investing funds in the short term, management needs to make an effort to **find the balance between risk and return**. Some risks to consider are:

Foreign exchange risk

Foreign exchange rates can be rather unpredictable in the short term. While there may be some ability to 'ride out' fluctuations in the long term, short term investments often need to be cashed out at short notice to fulfil business obligations. Unfavourable changes in the exchange rate can leave the business with less cash than it started with.

Tax risk

Changes in tax rates or tax law can have a significant impact on the value of securities, as the cash inflow from the security will change.

Default risk

When preparing cash forecasts, management is likely to have some reliance on interest and principal being repaid on time. However, this is not always the case, and there is **sometimes a chance that the money owed will not be paid at all**. While investment options such as treasury bills and

government bonds offer lower rates, their risk of default is very low which can make them an attractive investment.

Bonds issued by companies depend on the company still being around to pay interest and the sums back at the end of the bond's life.

Price risk

As we've seen earlier in this chapter, a change in interest rates can have a significant impact on the market value of a security. **A rise in interest rates** will result in a sale of the security at a lower value than was paid for it.

Liquidity

Committing funds in the short term can be risky if **unforeseen events require the cash to be released**. Management should consider the ease with which investments can be turned into cash, and the likelihood that the cash will be needed in the foreseeable future.

Common short-term investments

Below are some common investment options available to entities wishing to invest in the short-term.

Treasury bills

Treasury bills **do not pay interest**, but instead are **issued at a discount and redeemed at face value after a certain period** i.e. they may be issued at £80 and redeemed at £100. They are guaranteed by the government giving them a certain appeal to risk averse investors.

Bank deposit

Depositing money in an interest earning bank account is a common way to **invest cash surpluses in the short term**. Interest rates are typically fixed, and higher rates can be secured for longer terms.

Certificates of Deposits

These are **instruments issued by banks which pay a fixed amount of interest for a fixed term**. The holder can either hold the certificate for the entire term or sell it to a third party at anytime.

Money market accounts

This is similar to investing money in a bank deposit. The **interest rate is usually variable**, and terms can range from a day to a year or more.

Government bonds

These are **bonds issued by the government and are often seen as one of the safer investment options**. Interest rates are generally lower than corporate bonds, but the volume of bonds issued is usually larger which makes them more liquid.

Corporate bonds

These are **bonds issued by larger corporations as a means of long term finance**. They are riskier than government bonds as they depend on the company being able to pay interest and redeem the bond at maturity and so the interest rate is generally higher. They can be sold on the money market at any time.

Commercial paper

Commercial paper is an unsecured promissory note (a promise to pay a certain amount at a certain time) with a fixed maturity of no more than 270 days. It's equivalent to a short-term loan therefore and is typically sold at a discount to the face value.

The fact that it is unsecured means this increases the discount that is required to make it attractive to investors.