Your money, your future

A young person's guide to budgeting, saving and investing.

Rathbones
Look forward

Your money, your future

A young person's guide to budgeting, saving and investing.

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Welcome

Welcome

Rathbones has a long history of supporting our community and we continue to build on this legacy today in education, sport and the arts. One of the cornerstones of this commitment is the Rathbones Financial Awareness programme.

For over 10 years, our financial awareness programme has been helping young people take control of their finances. Its goal is to provide 16-25 year olds with the knowledge and skills to build a secure financial future.

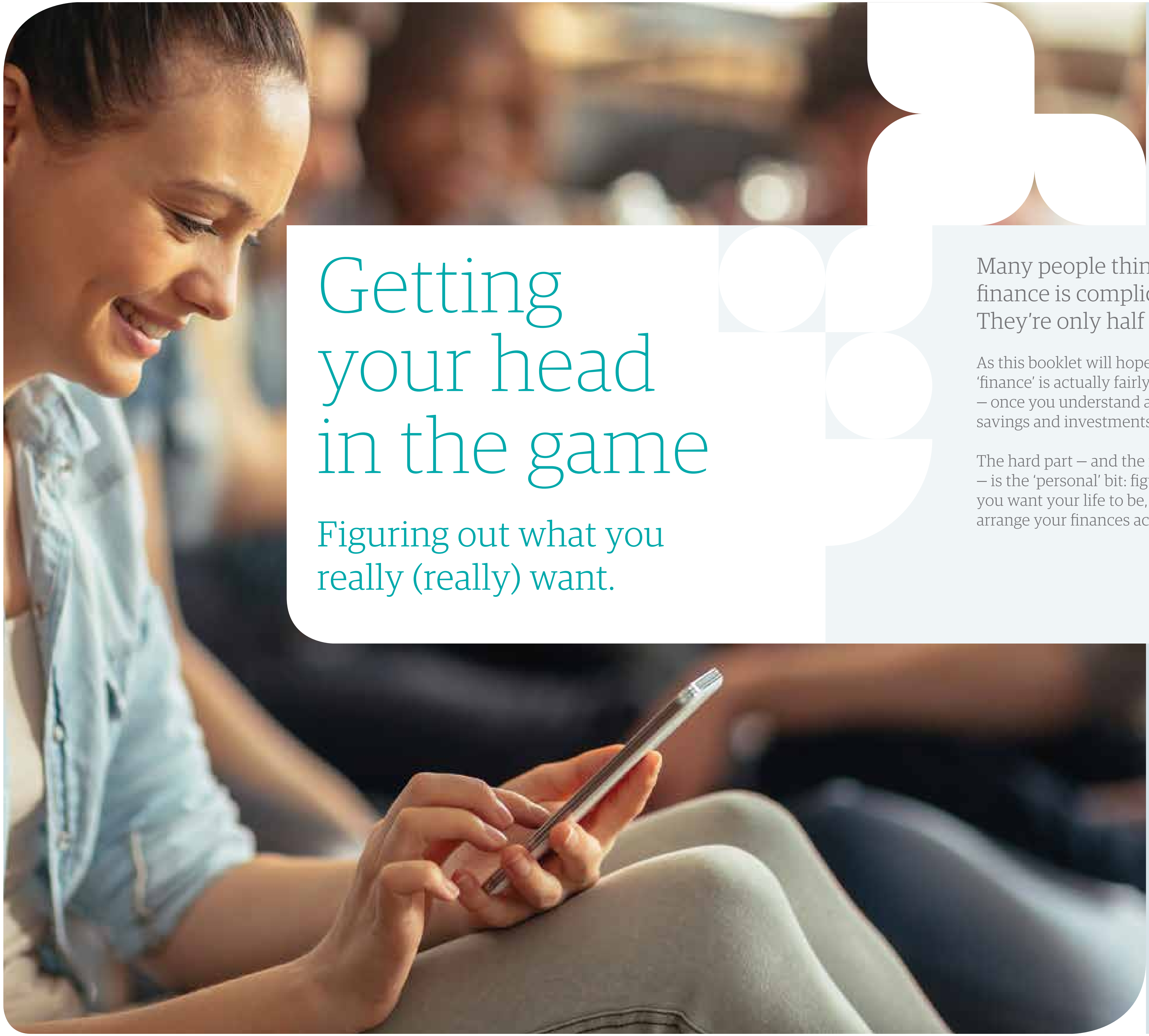
We'd like to thank the thousands of individuals who have taken part in the 'Your money, your future' events in Rathbones' offices and schools across the country. We hope you found them useful.

Inspired by the events, this booklet outlines the basics of personal finance to help the next generation start planning for the lives they want to lead.

For further information about the Rathbones Financial Awareness programme or to register for one of our events for 16-25 year olds visit:
rathbones.com/financialawareness

Laura Coleman
Partnerships Manager
laura.coleman@rathbones.com
020 7399 0000

Getting your head in the game



Getting your head in the game

Figuring out what you really (really) want.

Many people think personal finance is complicated. They're only half right.

As this booklet will hopefully show, the 'finance' is actually fairly straightforward – once you understand a few basics about savings and investments.

The hard part – and the most important – is the 'personal' bit: figuring out what you want your life to be, so that you can arrange your finances accordingly.

As the dictionary will tell you, money is just a medium of exchange. You can't eat a banknote or build a house with it. But it can turn hard work into a home; creativity into entrepreneurship; a desire to expand your horizons into a life-changing experience.

That's why personal finance isn't really about money – it's about choices. The ones you've made, and the ones you'll have to make in the future. So before making a financial plan, there's one question you need to ask yourself:

What do you really want?

No time like the present

Personal finance is... well, personal. Only you can know what's right for your circumstances. So in this booklet we'll offer just one piece of advice: whatever you decide to do with your finances, **start now.** Then you can stop worrying about money and start preparing for whatever life throws at you – and whatever you decide to throw at it.

Getting your head in the game

Life: how much does it cost?

The first step in sorting out your finances is to be realistic about how much things cost. You'll have your own priorities, but let's look at three of the most expensive things that many people do in their lives: buying a property, raising a family and retiring.

Buying a home

Buying a home ranks high on the list of many people's aspirations. The average cost of a property in the UK is just over £200,000. A lot will depend on where you plan to live: the average property will set you back nearly £118,000 in Northern Ireland but around £470,000 in London, where prices have almost doubled since 2006.

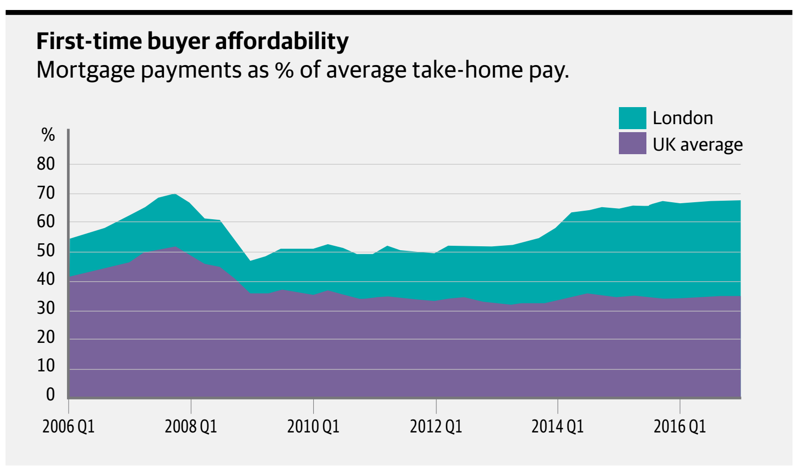
And remember, in the long term, if you want kids this will affect the size (number of bedrooms) and maybe even location of your home.

Can you afford it?

A decade ago, first-time buyers in London spent about half of the average take-home pay on their mortgage.

Today, getting on the housing ladder is costing them nearly 70% of their paycheques.

But taking the country as a whole, property has actually become more affordable for first-time buyers, mostly because it costs less to borrow money due to historically low interest rates.

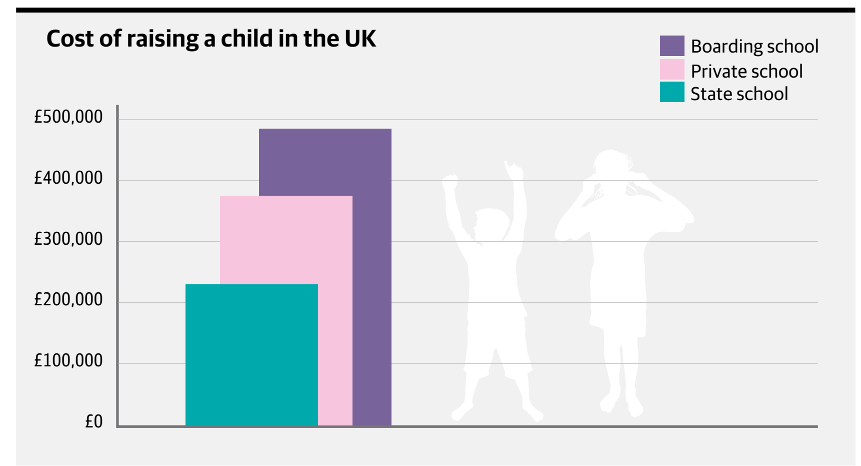


Source: Nationwide: First-time buyer affordability indices: 2016

Raising a family

Most parents say their children are priceless; well, they're certainly not cheap!

Do you think you'll want children? On average a UK family has 1.7 children, how many would you ideally have?



Source: LV = Cost of a child report: 2016

Can you afford it?

The expected cost of raising a child born in 2016 to 21 years of age is £231,843.

If you want to educate them privately you'll need to put away an extra £140,000 per child.

Wanting to send them to boarding school? That will be another £120,000 on top of that!

Getting your head in the game

Retiring

Throughout your working life you will put money away through National Insurance or personal contributions to fund your retirement (more on this on page 18 and 19). But how much do you need and for how long?

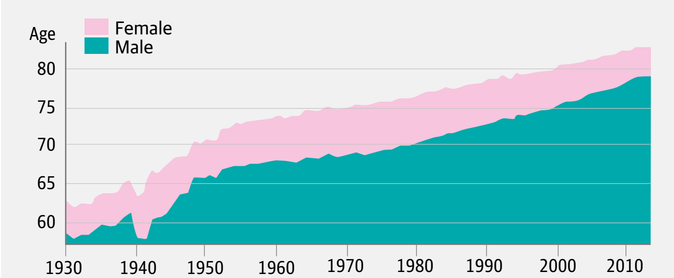
People are living longer. Amazingly, males born in the early 1930s could expect to live to only 63 years old; a male born in 2013 can expect to live for 82 years! Clearly we hope the trend persists. But will people be able to stop working in their sixties if they're going to live well beyond their 100th birthday?

Can you afford it?

Sources estimate you need at least £13,600 a year to maintain even a basic standard of living. That's more than the full state pension which in 2017 is only £8,297.

If you start planning and saving early though, you can afford to be aspirational.

Life expectancy at birth, 1930–2013 (UK)



Source: Human mortality database

How much do you need to retire?

It's fairly straightforward to estimate how much money you'll need before you can afford to retire.

Let's assume you've paid off your mortgage and have no dependent children. You can calculate this based on just you as an individual or as a couple, up to you!

Step 1:
Work out your annual expenditure by filling in the table

General living costs (food, travel, household, etc.)	£
Car(s) (includes depreciation say £5-10k per year per car)	£
Holidays	£
House repairs & maintenance	£
Utility bills (electricity, water, council tax, etc.)	£
Going out / entertainment	£
Insurance	£
Other	£
Total	**£**

Step 2:
Divide your annual expenditure by 0.06

This assumes your savings will generate an income for your retirement of 6% a year on average, which is a reasonable long-term guesstimate.

$$\frac{\text{Total from step 1}}{0.06} = £ \boxed{}$$

Your lump sum needed to retire.

To give you an idea:

Annual income at retirement	Approximate size of pension pot required
£10,000	£166,667
£20,000	£333,333
£30,000	£500,000
£40,000	£666,667
£50,000	£833,335
£60,000	£1,000,000

So let's put it all together and calculate the total of your largest life expenses:

Fill in the table below

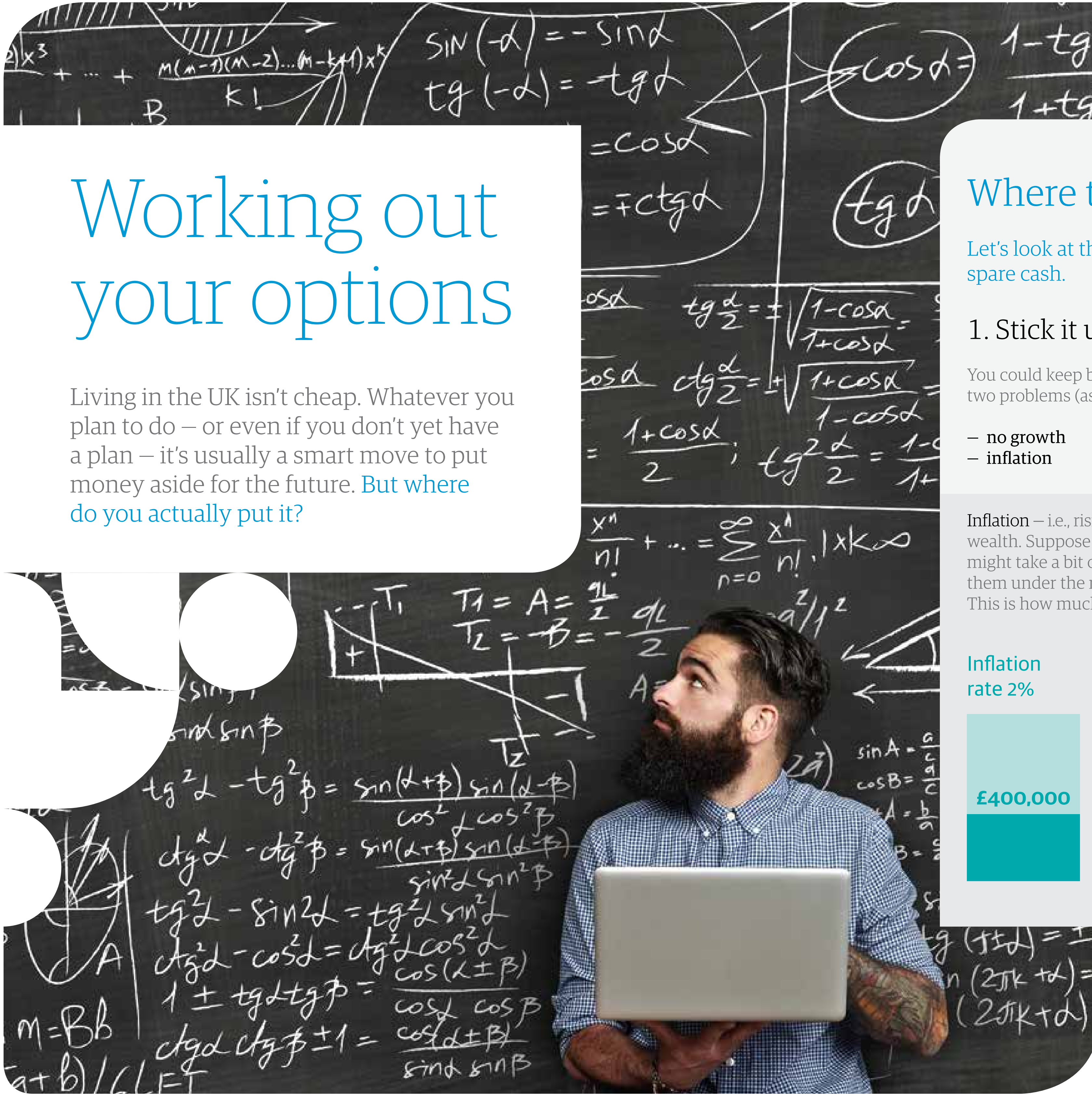
Your home: How much does a house cost considering size and location?	£
Children? Based on the costs on page 9, about how much will your children cost to raise?	£
Your retirement: What was the lump sum you calculated on page 11?	£ Total from previous page
Total	**£**

This is the total excess capital needed to finance your life over and above your day-to-day living costs.

Don't panic

Life can seem dauntingly expensive. Money to buy a house – or start a business, or raise a family – needs to be found in addition to covering day-to-day living costs.

But don't panic. The savings markets exist precisely to help people meet needs like this – to turn the savings you make today into the things you need tomorrow. In the next sections, we'll explain how they work.



Working out your options

Living in the UK isn't cheap. Whatever you plan to do – or even if you don't yet have a plan – it's usually a smart move to put money aside for the future. But where do you actually put it?

Where to put your money

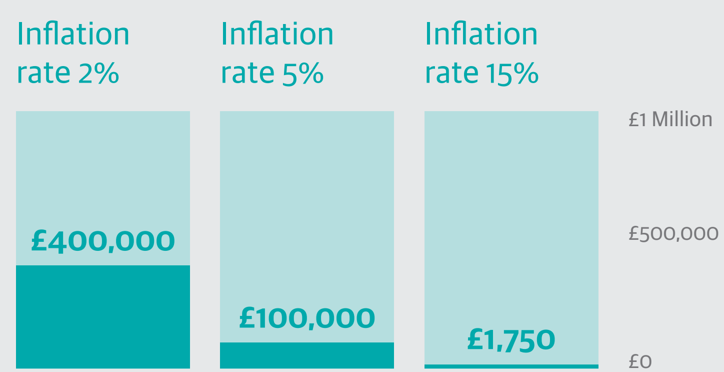
Let's look at three things you could do with spare cash.

1. Stick it under the mattress

You could keep bundles of cash at home, but there are two problems (aside from the obvious security concerns):

– no growth
– inflation

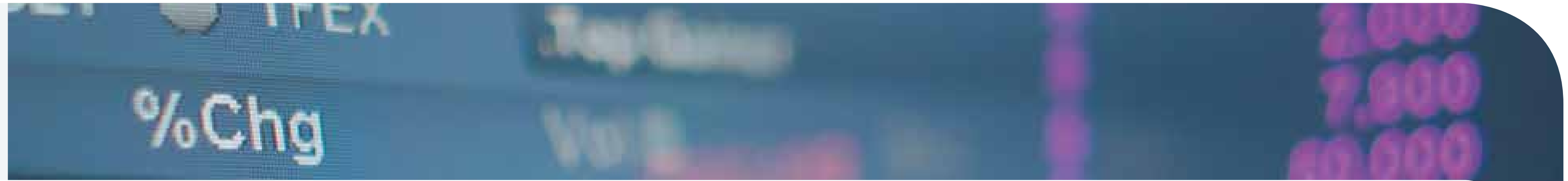
Inflation – i.e., rising prices – constantly nibbles away at your wealth. Suppose you have £1 million in banknotes (which might take a bit of explaining) and you decide to shove them under the mattress for the next 45 years (ditto). This is how much money you'll be left with in real terms:



Get real about inflation

Economists often use the expression 'in real terms'.

'Real' in this context means the value of money once you take account of rising prices. In 1982, £1,000 would buy you 16,438 eggs. In 2016, you can get just 3,703 eggs for the same sum. A person with £1,000 today is clearly worse off in real terms (though possibly just as sick of omelettes.)



2. Put it in the bank

Your money should be safe in a bank. The snag is that interest rates on deposit accounts are extremely low at the moment.

After tax and inflation have eaten away at your savings, the real value of your capital will stagnate at best. If inflation is higher than the interest you're earning, you'll be losing money in real terms.

1%
Typical rate of interest currently

2%
The Bank of England's target inflation rate

BANK OF ENGLAND

3. Invest it

The third option is to invest your savings in things like shares, bonds, gold or property.

Investing carries the risk that you may lose some or all of your money, but it can also turbo-charge the growth of your savings. The table below compares the long-term returns of cash and equities (aka shares). Later, we'll look at these investment options in more detail.

Cash vs equities: a (very) long-term view
£100 invested in 1899 would be worth this much today*:

	Actual amount	Value today (inflation-adjusted)	Annual rate of return
Cash	£20,535	£256	0.8%
Equities	£2,265,437	£28,232	5.0%

1899 2016

Source: Barclays equity gilt study. *Assumes income is reinvested with no deductions.

Being tax efficient: pensions and ISAs

The UK government wants citizens to be financially self-sufficient (otherwise it'll have to support them). It therefore offers various tax incentives to encourage people to save and invest. Two such ways are through pensions and ISAs.

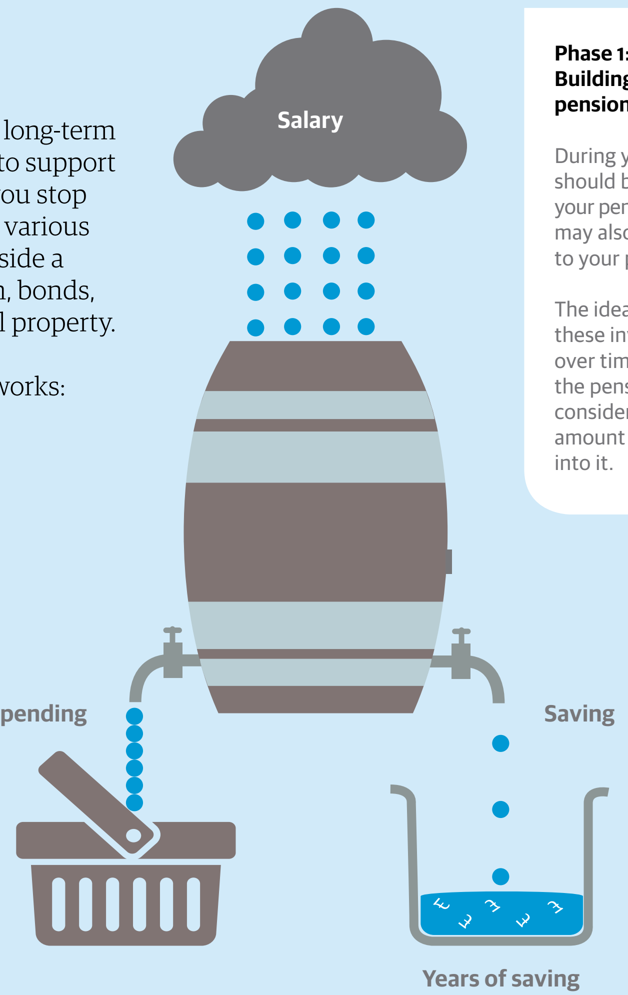
The state pension

Provided you meet certain criteria, such as making your National Insurance contributions, the government currently provides a state pension when you reach the qualifying age. In 2017/18 it is £159.55 per week. Many people find this insufficient to cover basic expenses which is why they put money into a private pension. Also there is no guarantee that the state pension will be available by the time you retire, so don't rely on it!

Pensions

A pension is basically a long-term savings plan designed to support you financially when you stop working. You can keep various types of investment inside a pension including cash, bonds, shares and commercial property.

Here's how a pension works:



Phase 1:
Building up your pension pot

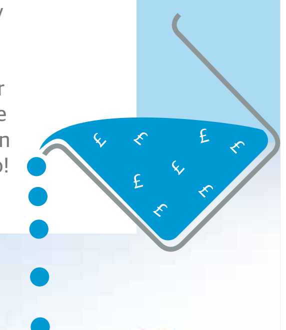
During your working life you should be putting money into your pension pot. Your employer may also have a scheme to add to your pension.

The idea is that the value of these investments will grow over time, so that in the end the pension pot is worth considerably more than the amount of money you put into it.

Phase 2:
Living off your pension

When you stop working, your pension needs to support you for the rest of your life. In the same way that savings in a bank account earn interest, the investments in a pension usually generate some income.

If you can survive only on the income, you can theoretically afford to live forever. If you eat into the capital, the size of your pot will decrease over the years. The trick is to make sure the value of your pension doesn't flatline before you do!



ISAs

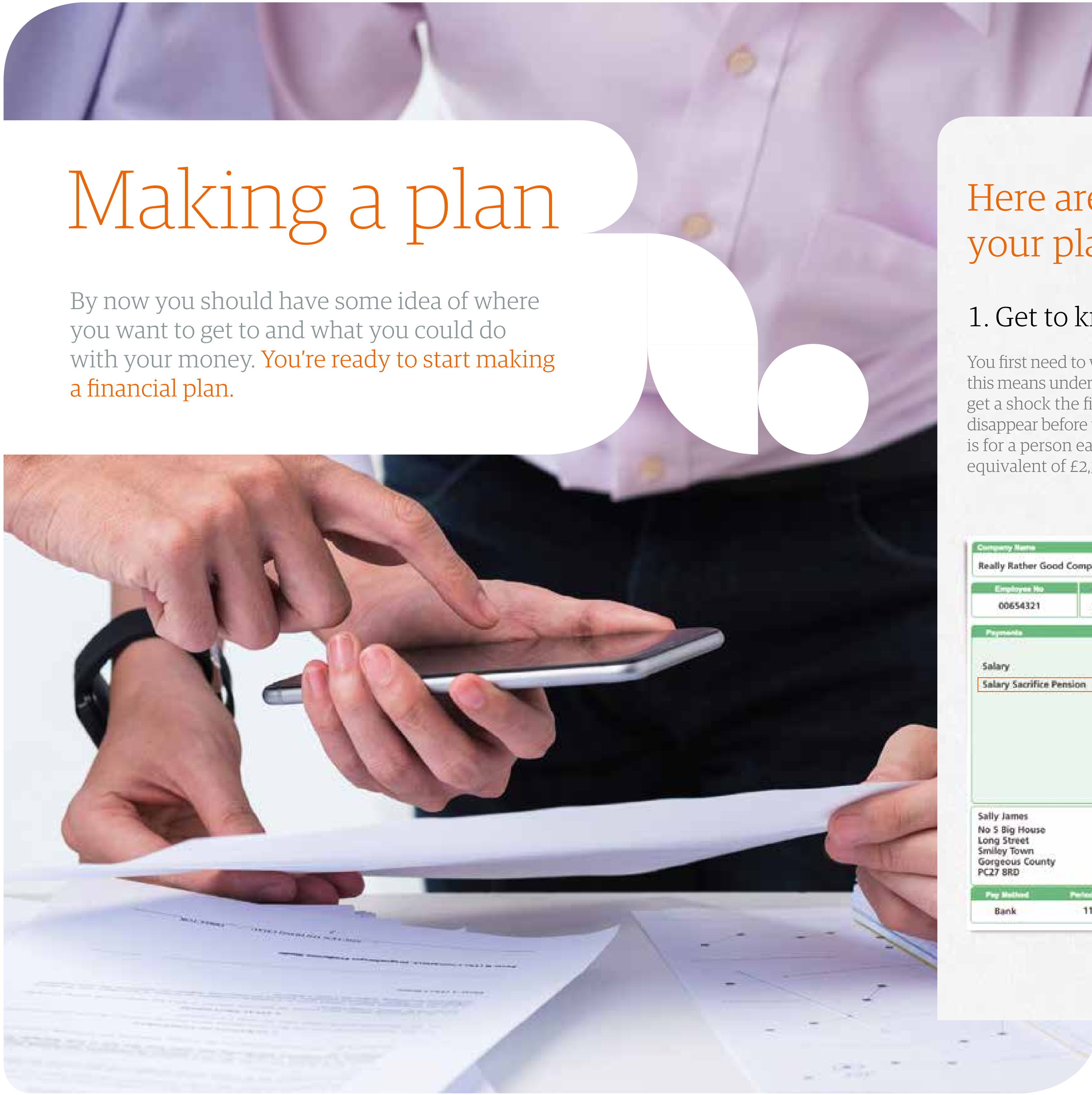
You can also save and invest your money tax efficiently through Individual Savings Accounts (ISAs). Many people sensibly use this as an extension to their pension pot. You have a certain allowance each year that you can put into an ISA and any interest, dividends or capital growth enjoys tax benefits.

While ISAs are not as attractive as pensions in tax terms, they are much more flexible as you can access your savings at any stage.

Junior ISA (JISA)
You have to be 18 to have an ISA but parents and grandparents can set up a JISA for you if you're younger than this.

The new Lifetime ISAs
From 2017 the government introduced Lifetime ISAs for those 40 or under where you can save up to £4,000 per year and the government will give you a 25% bonus. That's £1,000 for free!

This is a bit more restrictive than a normal ISA as the money can only be used towards your first home or your retirement. You can take your money out for other things but you will lose your bonus and any interest, so not such a good idea if you can help it.



Making a plan

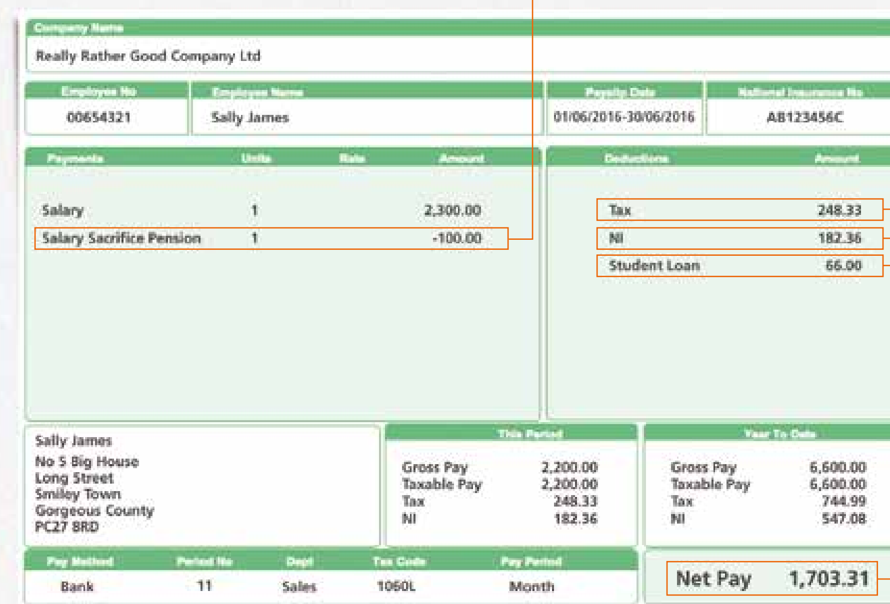
By now you should have some idea of where you want to get to and what you could do with your money. You're ready to start making a financial plan.

Here are four tips to get your plan off to a good start.

> *I've gotta give you, like, four million quid – are you having a laugh?*
>
> Adele, on receiving her tax bill for the album *19*.

1. Get to know your payslip

You first need to work out your actual income. If you're working, this means understanding your payslip. Many people (like Adele) get a shock the first time they see how much of their earnings disappear before they have a chance to spend them. This payslip is for a person earning the average UK salary of £27,600, the equivalent of £2,300 a month.



Company Name			
Really Rather Good Company Ltd			
Employee No	**Employee Name**	**Payslip Date**	**National Insurance No**
00654321	Sally James	01/06/2016-30/06/2016	AB123456C

Payments	Units	Rate	Amount
Salary	1		2,300.00
Salary Sacrifice Pension	1		-100.00

Deductions	Amount
Tax	248.33
NI	182.36
Student Loan	66.00

Sally James
No 5 Big House
Long Street
Smiley Town
Gorgeous County
PC27 8RD

This Period		Year To Date	
Gross Pay	2,200.00	Gross Pay	6,600.00
Taxable Pay	2,200.00	Taxable Pay	6,600.00
Tax	248.33	Tax	744.99
NI	182.36	NI	547.08

Pay Method	Period No	Dept	Tax Code	Pay Period
Bank	11	Sales	1060L	Month

Net Pay 1,703.31

Pension payments come out before tax so you get to keep all of it. This money is still yours, you just can't access it until you are 55 or retire.

For this average earner, income tax is the biggest single deduction.

Your National Insurance payments qualify you for certain benefits, including the state pension.

Student loan payments will be taken once you earn above £21,000.

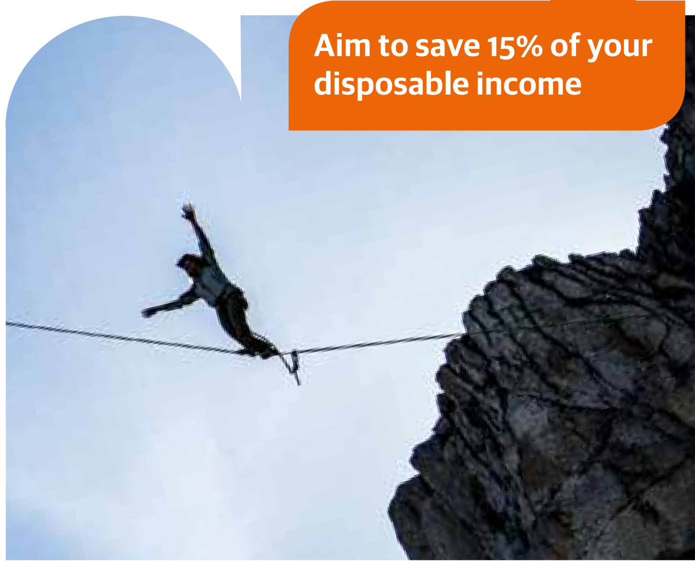
What you actually get in your bank account.

Work out your weekly disposable income

	Example	Your budget
Rent/mortgage	£550	
Home bills (water, electricity, TV licence, council tax, internet, land line)	£160	
Mobile	£30	
Groceries	£100	
Transport	£50	
Other compulsory costs (personal to you)		
TOTAL FIXED COSTS	**£890**	
Net pay (from payslip)	£1,703	
Monthly disposable income (Net pay – total fixed costs)	**£805**	
Weekly disposable income Monthly disposable x 12 (months) ÷ 52 (weeks)	**c. £185**	

Remember this **£185** is to cover things like going out, clothes, holidays and of course savings!

Aim to save 15% of your disposable income

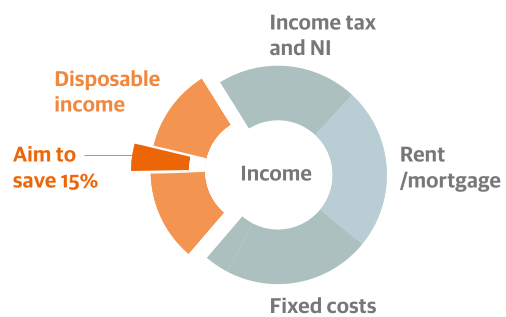


2. Don't forget those inescapable costs

Even with £1,695 in your bank each month, unfortunately it doesn't mean you get to spend it all on what you want. Once you are supporting yourself there are a few costs that you just can't avoid like rent, bills, food and of course tax!

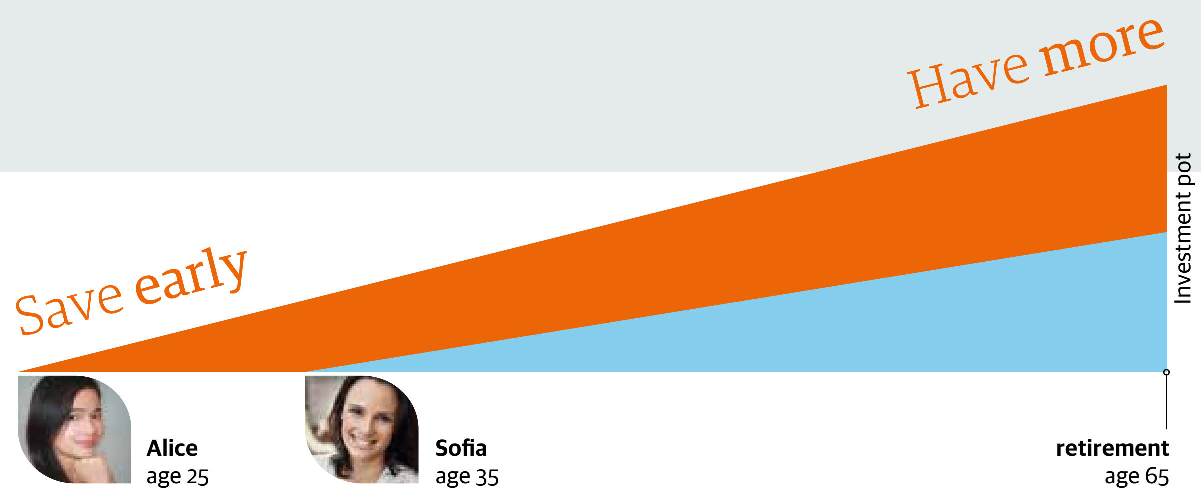
Work out your disposable income – how much you have each week to 'play' with – by deducting these compulsory costs from your net income. These costs are also known as fixed costs.

Follow the example (left) to work out your weekly disposable income:



3. Balance your expenditure and income

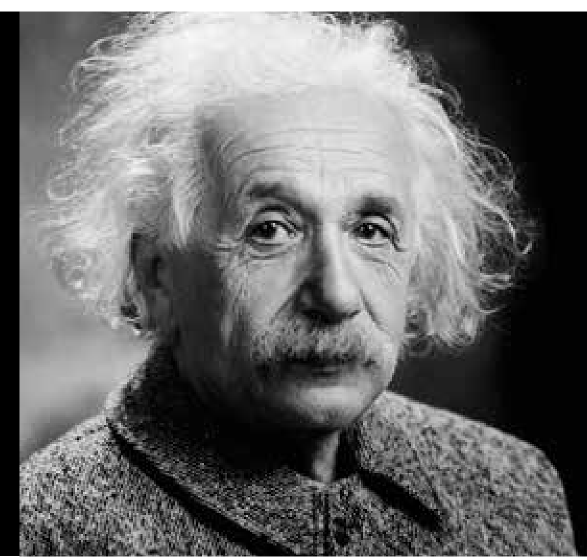
Keep a regular record of what you spend. Budgeting helps ensure you have some money left over to put aside. Internet banking has made it easier than ever to keep an eye on your finances, and there are some useful apps to help you monitor how you spend your money.



4. Get cracking

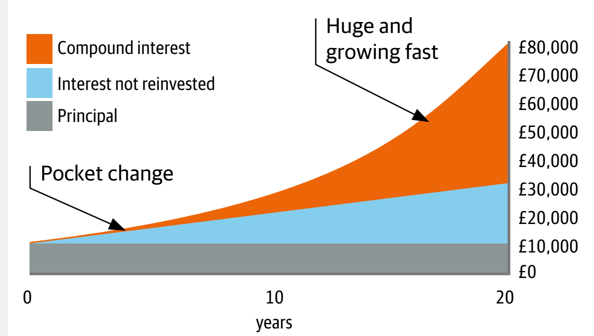
It's obvious that the longer you save, the more you'll have at the end (all else being equal). But it's surprising how much difference even a few years can make. Suppose a 25-year-old and a 35-year-old start putting aside the same amount every month. By the time they reach 65, the person who started putting away their money at the younger age will have approximately double that of the other saver.

It's all down to the power of compounding – the eighth wonder of the universe, according to Einstein (and he should know). When the return from your investment is consistently re-invested alongside your original capital, over time your savings grow more rapidly.



> *The most powerful force in the universe is compound interest.*
>
> Albert Einstein (1879–1955)

£10,000 on compound interest 10% for 20 years



Using other people's money

Shakespeare advised neither a borrower nor a lender be. The great bard was wrong about this one: borrowing and lending play a central role in arranging our finances.

2%

This is the usual difference between banks' lending rates and savings rates.

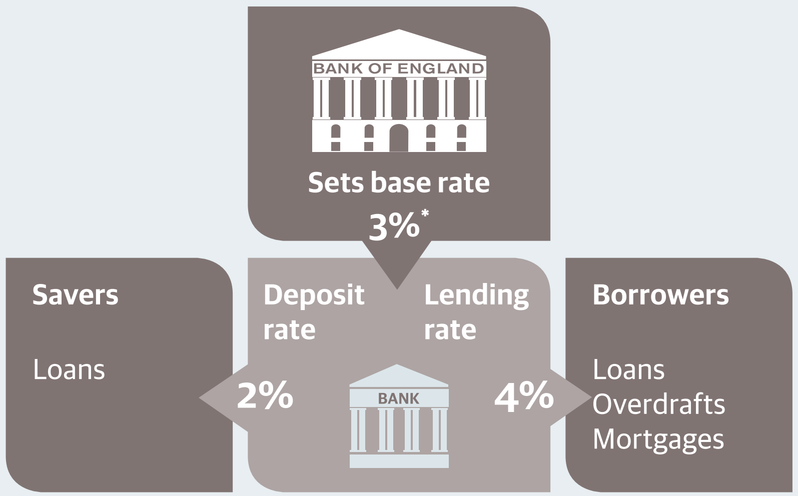
Banks: what are they for?

Banks have gained a dreadful reputation over the past decade. The reality is we need them, so it's worth knowing what they offer and how they operate.

Essentially, banks are the middlemen between savers and borrowers. At a basic level:

– savers deposit their capital, in return for interest from the bank.

– borrowers pay the bank interest to use this capital in the form of loans, overdrafts and mortgages.

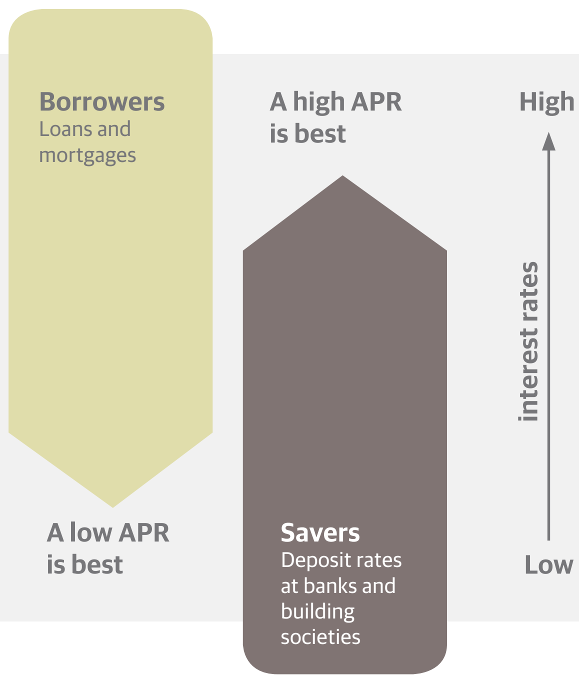


* This is an example of how banks normally operate. Current interest rates are at a historic low which is temporarily distorting the traditional banking model.

Borrowing: how much does it cost; how much can you get?

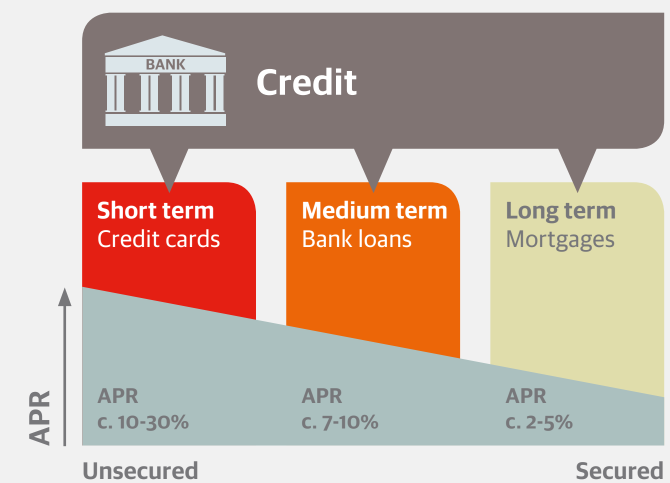
It pays to shop around when borrowing money, but there are some general rules that you should be aware of.

Annual Percentage Rate (APR)
The APR is the annual cost of borrowing and saving. It lets you compare the charges from different lenders, as well as how much interest they offer on deposit accounts.



What determines the cost of borrowing?
Several factors determine how much a bank will charge you in interest, including:

- the length of the loan
- how likely you are to pay the loan back
- whether the loan is secured or unsecured



Secured or unsecured?

A secured loan is when the bank can take possession of an asset if you don't keep up repayments. Mortgages are typically secured against a house, if you don't make the required payments the bank may sell your house to recoup its money.

An unsecured loan is not secured against an asset. This represents a higher lending risk for the bank, so the interest rate will be higher.

How to borrow from a bank

A bank's number one priority is to get its money back (and a little bit more). In deciding whether to lend to you, it may consider the following:

- Do you have a regular and secure income?
- Can you afford your monthly repayments? This includes capital repayments and the interest charged for borrowing the money.
- Do you have additional capital that can act as security if you can't afford to repay the loan?
- Will the bank have security over your assets? (e.g. could it repossess your home if you do not make your mortgage payments?)
- Have you been a reliable borrower in the past? Banks will typically check your credit score.

Credit score

A credit score is a three digit number calculated from your credit history. It is used by lenders to determine your credit worthiness, i.e. how financially reliable you are. You can view your own credit score on websites such as Experian and Equifax.

It is hard to repair bad credit. Fail to pay back what you've borrowed or even just not pay your bills on time and it could prove difficult to secure a loan or mortgage.

Using other people's money

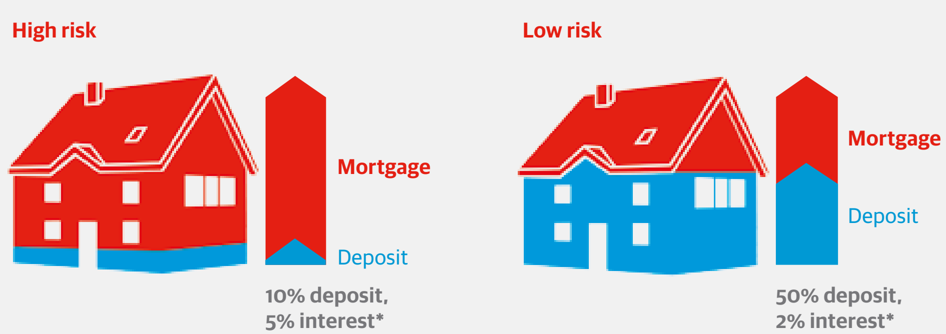
Mortgages

The biggest purchase you will ever make is likely to be your home. Many people borrow money from a bank – in the form of a mortgage – to buy property, paying the debt back over a long period of time (typically up to 25-30 years).

Mortgages are secured against your property which means the bank can sell the house and recover their money if you don't make your repayments. This lowers their risk and means they can charge lower rates of interest than an ordinary bank loan.

There are two main factors that determine how much a bank will charge you in mortgage interest:

1. The size of your deposit
The more money you put down upfront, the lower the risk to the bank and the lower the interest rate they'll charge you. For example, with a 50% deposit, the housing market would have to halve before the bank's capital is at risk.

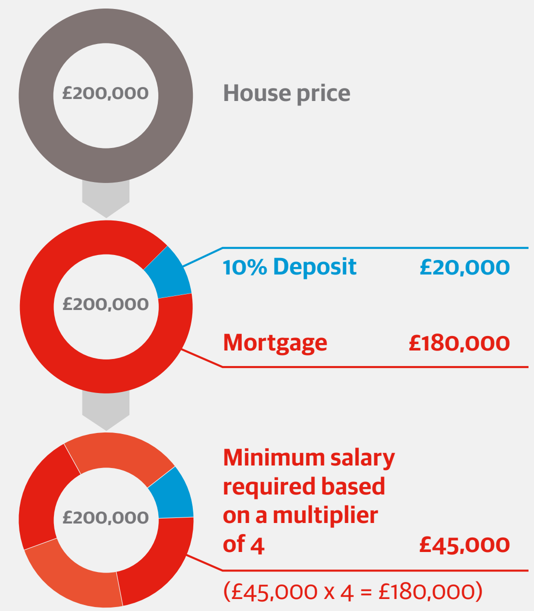


2. Your ability to make repayments
A bank will look at:

– **Your disposable income:** how much is available to make regular repayments, also considering any other loans you may have.
– **Your credit history:** this shows if you have been financially reliable in the past.

*Based on 5 year fixed rate as at March 2016.

How much can you borrow?
Banks may be prepared to lend up to 4.5 times your salary, though it depends on your personal circumstances.



*Interest rates will fluctuate across the 30 years. 5% is used for illustrative purposes only.

How much will it cost?

5% interest on the mortgage = **£966/month**
(First payment is £750 interest and £216 capital)

Over 30 years £966 x 360 months = **£347,760***

Nearly double the £180,000 you originally borrowed!

This might seem expensive, but hopefully the value of your home will have increased over this time and If you didn't have a mortgage, you would most likely be paying rent anyway.

Handing it over

Handing it over

There's an old saying that you should 'never let the tax tail wag the investment dog' – in other words, don't base your investment decisions on their tax implications.

Nevertheless, to plan your finances it's helpful to have a basic grasp of the tax system.

These are the main taxes that are relevant to your financial planning:

Income tax
A tax on your earned income, savings, investment income and some state benefits. The rate of taxation rises as your income increases.

National Insurance (NI)
A tax on your earned income, similar to income tax. The intention is that this money supports your state pension when you retire.

Capital gains tax (CGT)
A tax on profits from the sale of an investment, e.g. equities or a buy-to-let property. You don't have to pay this tax when you sell your main home.

Inheritance tax (IHT)
A tax on the value of a person's estate at death. There's no IHT to pay when assets pass to a spouse or civil partner.

Value added tax (VAT)
A tax paid on the goods and services you buy. The standard rate is 20%. Some goods are exempt (e.g. children's clothes); others carry a lower rate (e.g. energy-saving materials, like insulation).

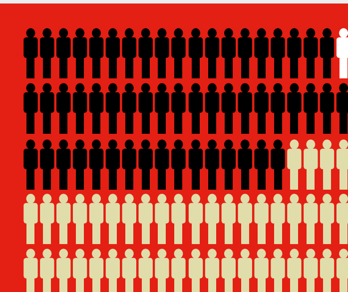
Where does the money go?

The main things the government spends your taxes on are:

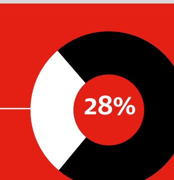
- Welfare
- Health (NHS)
- Education
- Defence
- National debt







The top 1% of UK earners contribute 28% of the UK's total income tax receipts



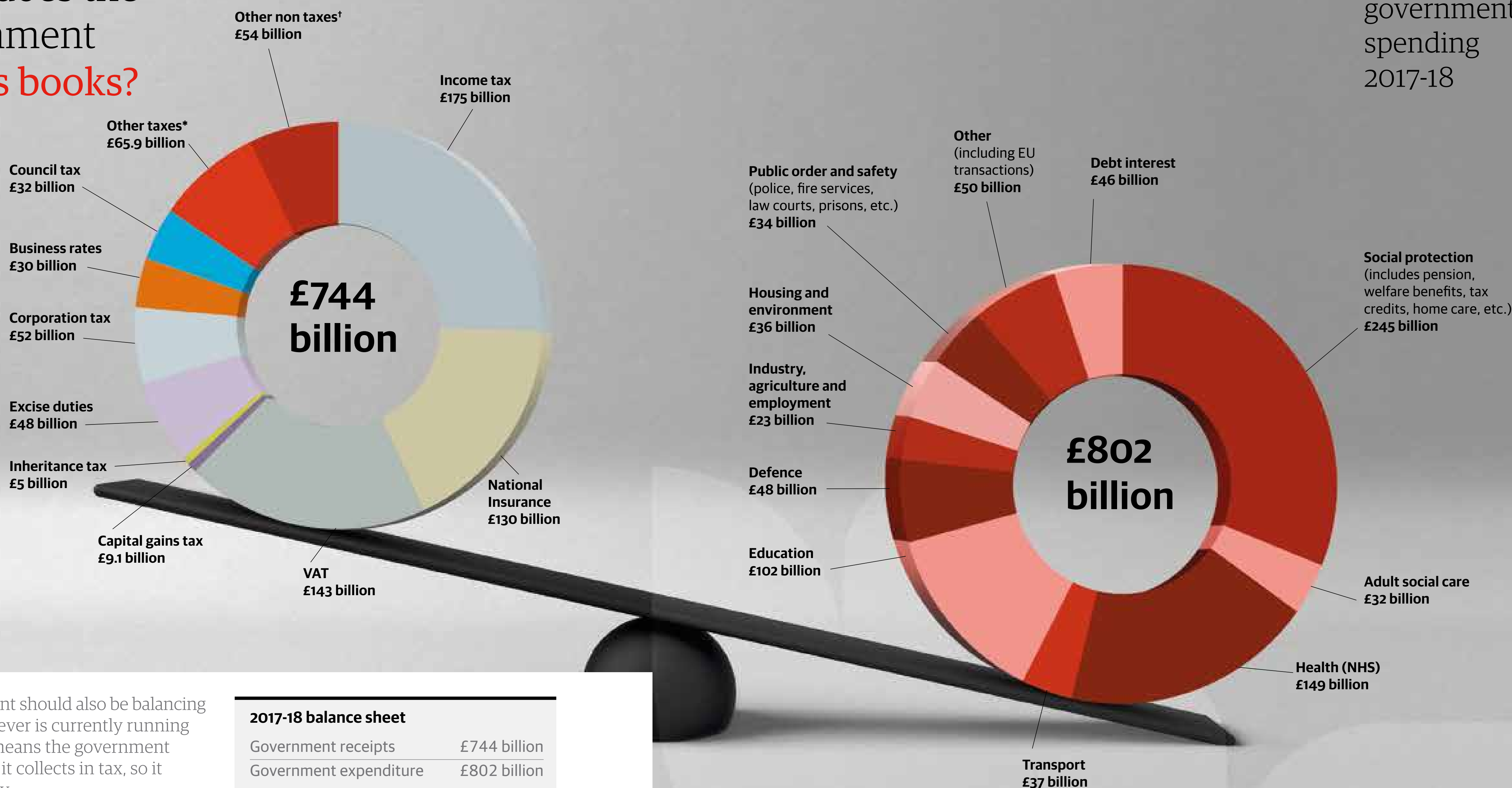
44% of working age adults in the UK don't pay tax

Source: Institute for Fiscal Studies

How well does the UK government balance its books?

Expected government receipts 2017-18

Expected government spending 2017-18



Like you the government should also be balancing its books. The UK however is currently running a budget deficit. This means the government is spending more than it collects in tax, so it needs to borrow money.

It does this by issuing gilts (see page 39 for more on gilts). If the government collects more than it spends (not that it has happened in a while!) it is called a budget surplus.

2017-18 balance sheet

Government receipts	£744 billion
Government expenditure	£802 billion
Budget deficit	**£58 billion**

The accumulation of the budget deficit is called the **national debt**. As of early April 2017, it was around £1.8 trillion and rising by an estimated £5,170 per second.

* **Other (taxes)** includes capital taxes, stamp duties, vehicle excise duties and other smaller tax receipts.
† **Other (non-taxes)** includes interest and dividends, gross operating surplus and other smaller non-tax receipts.

Source: UK government budget 2017.

Putting your money to work

Putting your money to work

So, you know what you want, you know how much you need to get it, you've been saving up, you've got a grip of banking, savings and taxation. You're ready to invest. But in what?

Basic concepts

There are two essential questions you need to ask before making any investment decision:

- what's the risk?
- what's the expected reward?

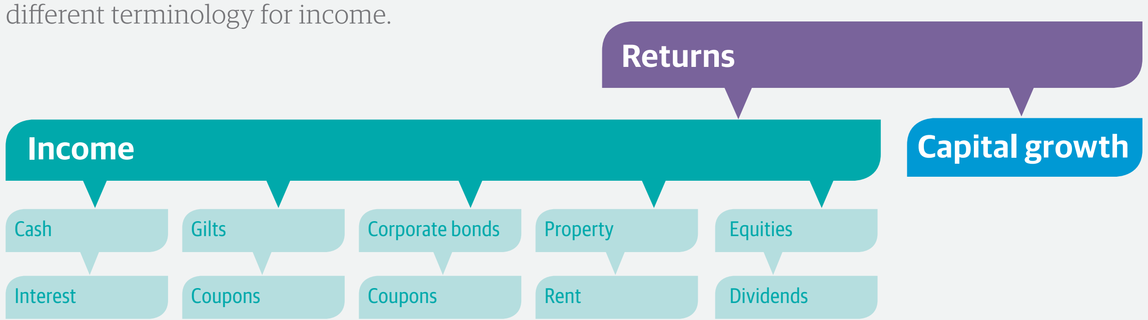
Risk and reward are the fundamental concepts of investing. Different investments will have different combinations of the two, though usually:

Higher expected reward means higher risk.

Your overall goal is to try to maximise reward and minimise risk.

What do people mean by 'reward'?

The reward is the return on your investment. This normally includes income from your investment and/or capital growth. Confusingly, asset classes use different terminology for income.



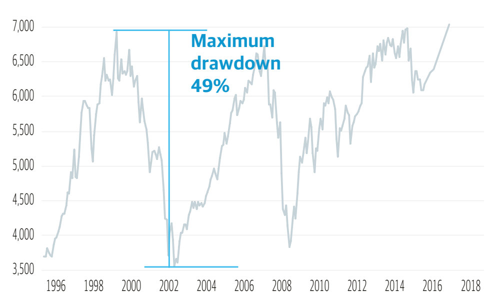
What do people mean by 'risk'?

Risk can be defined in numerous ways: volatility, tracking error, beta, Sharpe Ratio, to name only some of them. For our purposes, let's focus on risk being the possibility of losing money.

In fact, financial advisers often use the caveat that past performance of an investment cannot be used to predict future performance, but in many ways by looking historically we can get an idea of how much money we could potentially lose. We can do this by looking at the maximum loss for an investment over a certain time period, known as the drawdown.

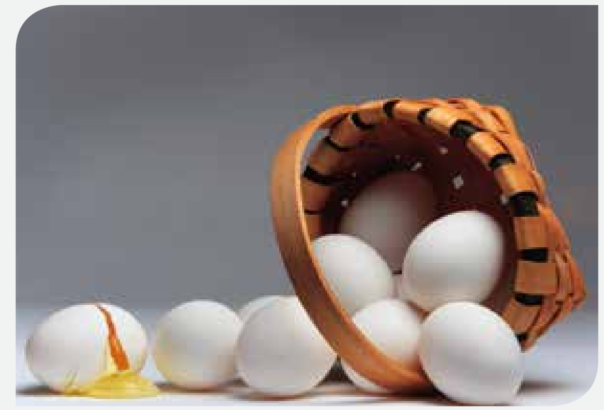
This chart shows the historical performance of the FTSE100 index, which tracks shares in the biggest UK companies. The maximum drawdown in this period was nearly 50%, showing equities can be high risk.

The historical performance of the FTSE100 index, 1996-2017



Source: Datastream

Managing risk



Don't put all your eggs in one basket

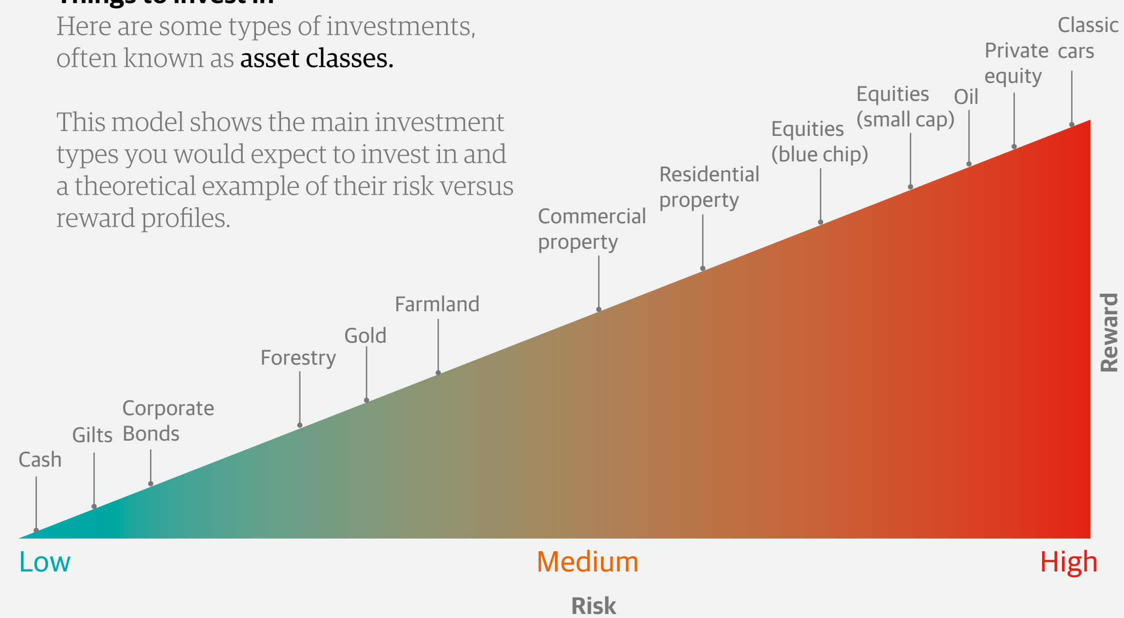
The key to managing your investment risk is diversification.

By blending various investment types you can achieve the level of risk and return that's right for you.

Things to invest in

Here are some types of investments, often known as **asset classes.**

This model shows the main investment types you would expect to invest in and a theoretical example of their risk versus reward profiles.



Choosing investments

Let's look at some of the main asset classes and their relative merits and limitations.

Lower risk assets

Cash
Banks are thought to be a safe place for your long-term savings. However, the financial crisis of 2009 proved that they are not risk free. Several well-known banks have had to be rescued by the government. Nevertheless cash is still viewed as a minimal risk investment, so the return it offers (i.e., the interest rate you'll earn on bank deposits) is low – currently about 1% a year.

Gilts (UK government bonds)
The government borrows money by selling gilts, which are a bit like IOUs. This is much the same as an individual going to a bank and taking out a loan, though the 'bank' in this case is the investors.

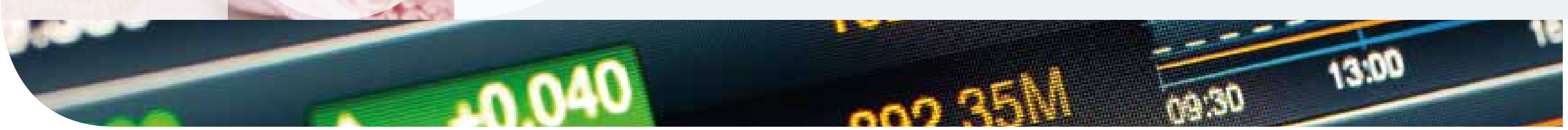
Things you should know about gilts:

- they are normally issued for a specific time period, e.g. 10 years, after which the original capital is repaid to the investor.
- the return on gilts, i.e. the interest rate, is called a coupon.
- they are regarded as pretty close to zero risk as the UK government has never defaulted on its debt. Consequently, coupons tend to be very low.
- gilt is a UK term. Internationally, the equivalent securities are usually known as sovereign bonds or sovereign debt.

Corporate bonds
Corporate bonds are similar to gilts except they're issued by companies. They're one of the ways businesses borrow money to finance their expansion plans.

Things you should know about corporate bonds:

- as with gilts, they are normally issued for a specific time period, say 5-10 years, after which the original capital is repaid to the investor.
- in the interim investors receive a regular interest payment, known as a coupon.
- they are seen as higher risk than gilts, so the coupons are higher.
- coupons on the corporate bonds of strong companies tend to be lower than those on the bonds of businesses investors perceive as riskier (i.e. more likely to go bust).



Medium risk assets

Property

Many people feel comfortable with the concept of investing in bricks and mortar. The two principal property types are residential and commercial; the latter includes shops, offices and industrial warehouses. There are a couple of key criteria to look for in a property investment:

– secure and rising rental income.

– the prospect of increasing capital value.

The pros and cons of investing in residential property

Pros

– It's a real asset with a practical function – you can live in it, rent it out, or do it up to improve its value.

– It's been a strong investment for over 25 years (though the past isn't a guide to the future).

– Rents tend to increase faster than inflation.

– It's relatively affordable because interest rates are at historic lows (for now).

– Most house purchases are partially financed by borrowing (i.e. mortgages). Borrowing magnifies gains or losses, which is appealing to some investors.

Cons

– Buildings are illiquid, which means they're difficult to sell quickly.

– It's difficult to justify today's high UK house prices. Can they continue going up, especially if interest rates rise?

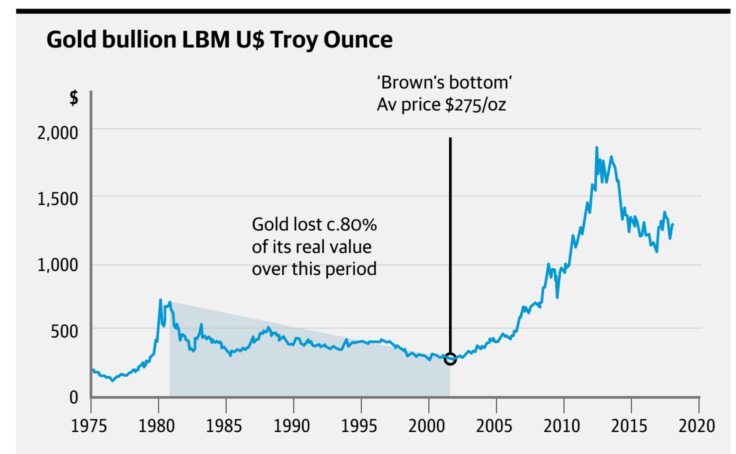
– Rental yields are historically low due to high house prices.

– If interest rates rise, mortgage costs will increase, making house prices less affordable.

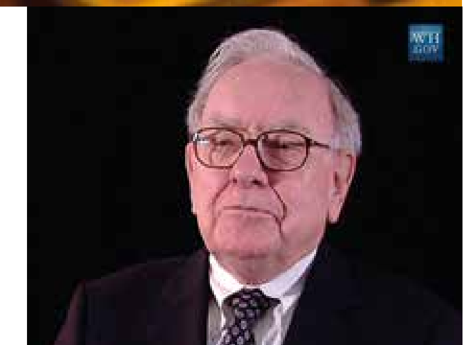
– Transaction costs are high on property, especially stamp duty.

Gold

A lot of investors see gold as the go-to asset in times of economic and political stress. There is also a perception that it protects against rising prices. This is debatable. If you had held gold from the early 1980s to 1999, it would have lost around 80% of its value after inflation. Another drawback is that gold produces absolutely no income.



Source: Thomson Reuters Datastream



Buffett's take on gold

"For [the value of all the gold in the world], we could buy all U.S. cropland, plus 16 Exxon Mobils. After these purchases, we would have about $1 trillion left over for walking-around money. A century from now the farmland will have produced staggering amounts of corn, wheat, cotton and other crops. Exxon Mobil will probably have delivered trillions of dollars in dividends. The gold will be unchanged in size and still incapable of producing anything."

Warren Buffett, letter to shareholders 2011 (abridged)

Higher risk assets

Equities

When you buy equities (aka stocks and shares), you become a shareholder and own a percentage of the company. If the company does well, you're entitled to a share of its profits. Investors in shares should look for:

- a secure and growing income stream. Income from shares is known as dividends.
- potential for the price of the shares to go up.

While each company must be viewed on its merits, equities are generally considered higher risk and therefore give a potentially higher return over the long term.

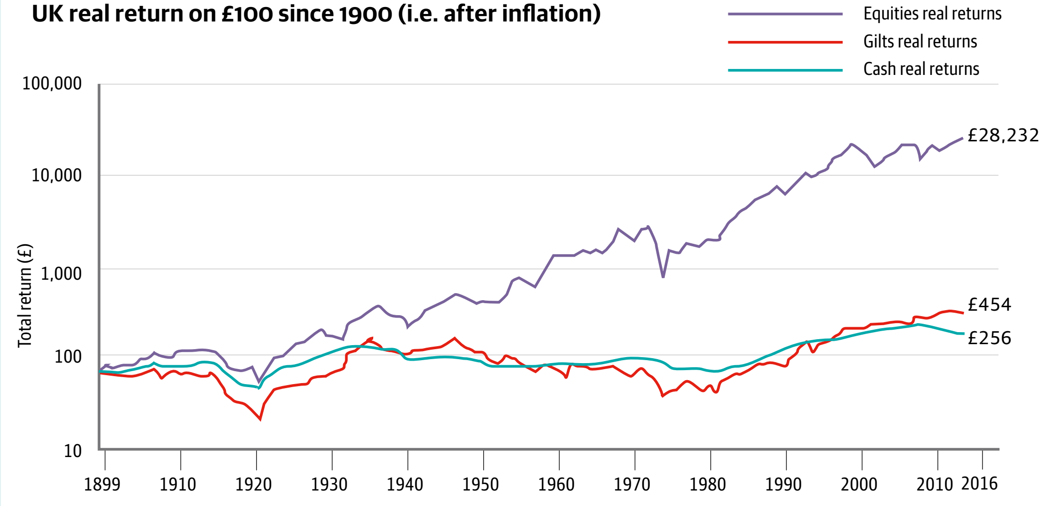
Historical performance

Over a long period shares have outperformed some less risky investments, though you always have to be careful in assuming past trends will continue.

The Barclays Equity Gilt Study (chart below) has been following the fortunes of UK shares, gilts and cash since 1899. Over this period:

- the returns from equities have massively exceeded those of gilts and cash.
- equities have been one of the most useful asset class to combat inflation.

UK real return on £100 since 1900 (i.e. after inflation)



Source: Barclays Equity Gilt Study 2016

Picking stocks: how the pros do it

In choosing which company to invest in, professional investors often try to value the business.

To follow the fortunes of companies you will need to have a basic understanding of some of the terminology and valuation tools used.

Payback period

The expected number of years before the profits of an investment pays back your original investment. Consider the simple example (right):

Price earnings (PE) ratio

The price earnings (PE) ratio is basically the same as the payback period: i.e. the number of years before profits return your initial investment.

Buy a marquee for £10,000. Rent it out for weddings @ £1,000

10 Weddings per annum payback in year 1

5 Weddings per annum payback in year 2

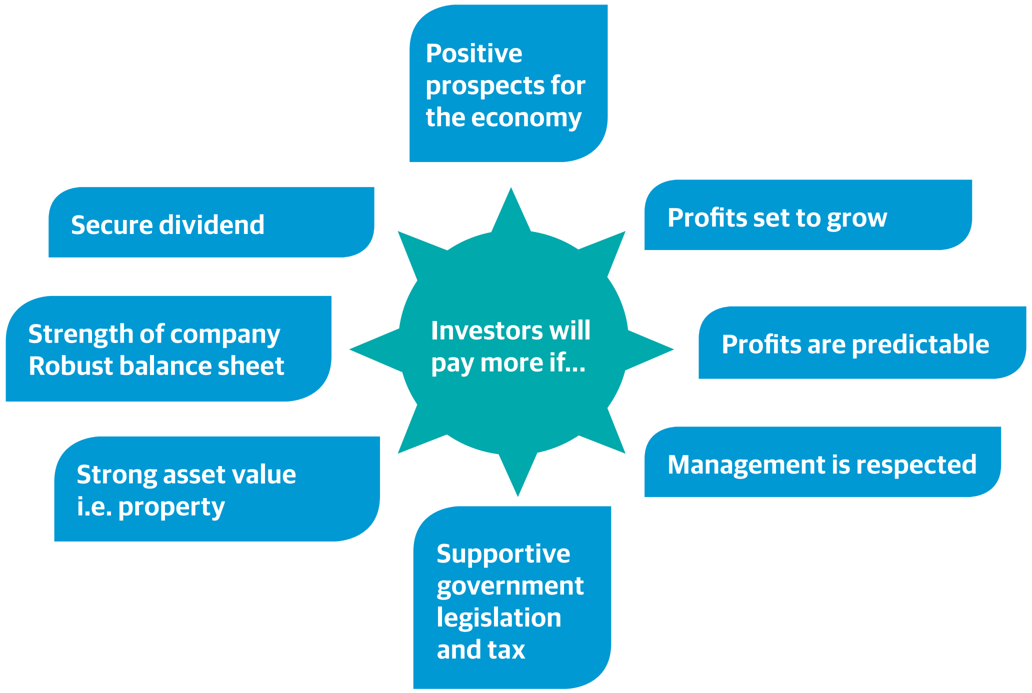
1 Wedding per annum payback in year 10

Shorter payback or Low PE ratio → Better value

$$\textbf{PE ratio} = \frac{\text{Price / value of a company}}{\text{Annual profits after tax}} \quad \text{or} \quad \textbf{PE ratio} = \frac{\text{Share price}}{\text{Earnings per share}}$$

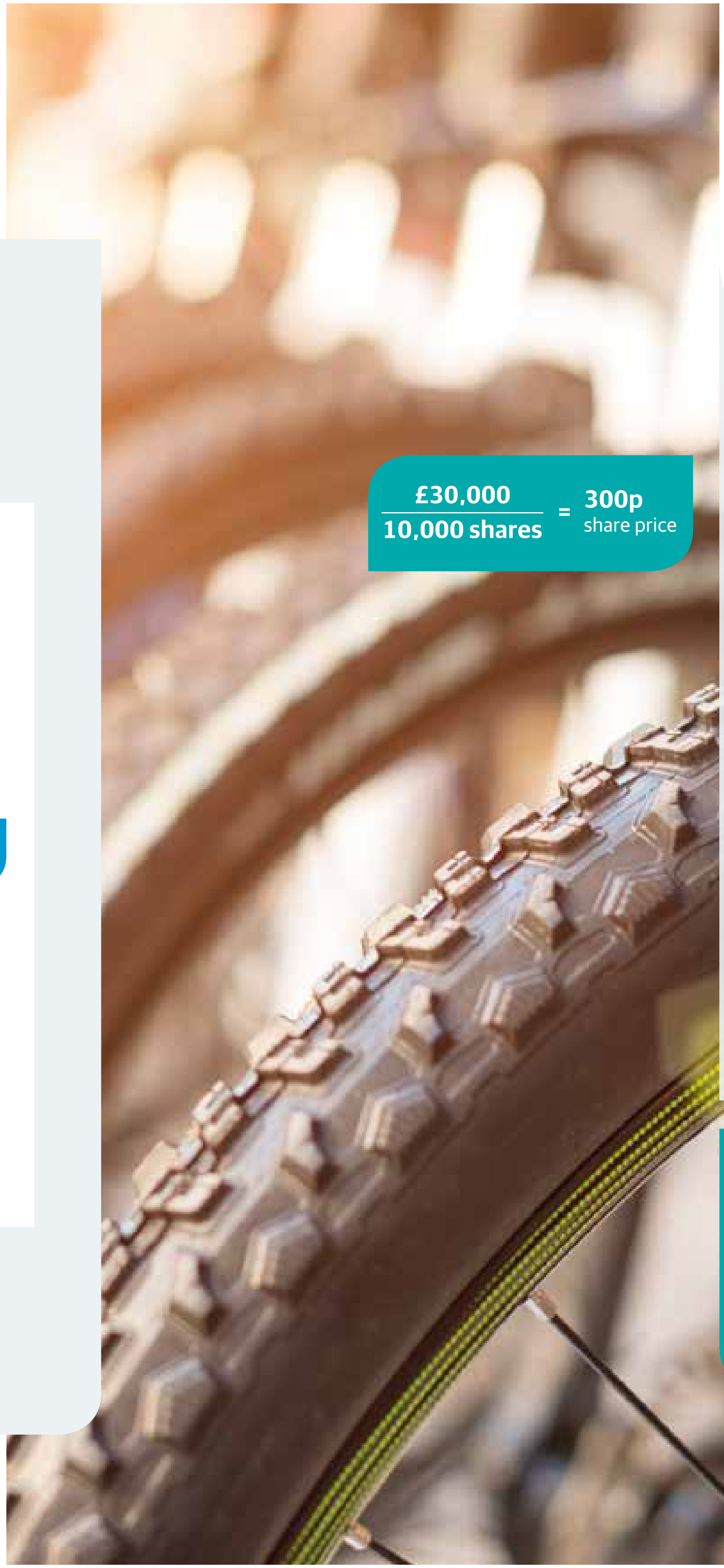
Why would investors buy a share with a higher PE ratio?

A company's valuation isn't the only consideration for investors. There are several reasons people may want to buy shares with a higher PE ratio i.e. shares thought to be relatively expensive. Normally it is because the company's prospects are expected to improve.



Ethical investments

Another reason people may choose to invest in a company with a higher PE ratio is for ethical reasons. Some investors want their investments to not just make them money but to also have a positive social or environmental impact.



Case study

Penny Farthing Plc

Penny Farthing Plc is a bike shop near the Olympic Park in London. It raised £30,000 from 10,000 shareholders to expand the business. Its shares are therefore worth 300p each.

Simple profit and loss account

Sales/revenue	£10,000		(sells 100 units @ £100)
Variable costs	£3,000		(cost of raw materials for each bike = £30)
Gross profit		**£7,000**	
Administration costs	£2,000		(office, marketing, insurance)
Profits before tax		**£5,000**	
Corporation tax @20%	£1,000		
Profits after tax		**£4,000**	
EPS (earnings per share)		**40p**	£4,000 (10,000 shares)
Dividend paid		**20p**	

Most companies pay a **dividend** to their shareholders as part of the return (reward) for their investment.

Investors are attracted to companies which will consistently pay and grow their dividends over time.

Case study – Penny Farthing Plc

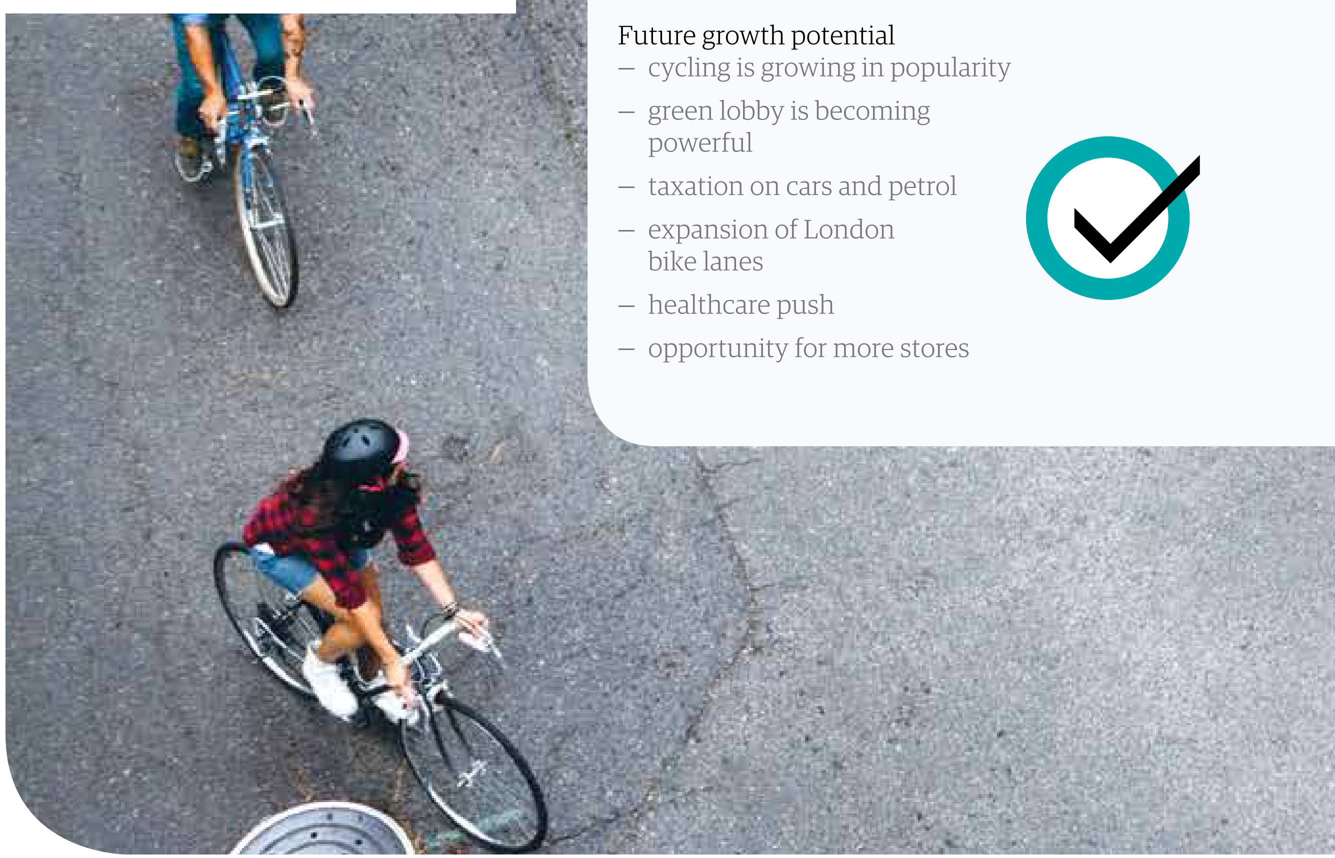
Your initial decision process

You should only consider an investment if the prospective returns:

– are higher than the cost of borrowing

AND

– are sufficient compared to the risk being taken.



Other considerations

Does the business have a unique product?

– Penny Farthing Plc is located next to the Olympic Velodrome.

– it is in negotiation with a local health insurance company for a Ride to Work Scheme for which participants receive lower premiums.

– exclusive franchise for a very long-life battery-assisted bike.

Is there potential future growth?

Historical performance

The company has shown consistent growth for the last five years.

Future growth potential

– cycling is growing in popularity

– green lobby is becoming powerful

– taxation on cars and petrol

– expansion of London bike lanes

– healthcare push

– opportunity for more stores

Competitors

– large competitors are advertising aggressively

– they can bulk buy and are going to mass market

– however Penny Farthing Plc has unique selling points

  – the long life battery
  – proximity to the Velodrome

Financials

How secure is the company? Historical accounts show:

– healthy balance sheet

– five years of dividend and EPS growth of 20%

– competitors sell on 13x PE, Penny Farthing is 7.5x

Management

CEO is an entrepreneur that has made five fortunes and lost four.

His last company folded under an accountancy scandal.

Warning, walk away!

Other high risk assets

Private equities

Private equity is an asset class consisting of equity and/or debt in private companies, i.e. not traded on the main stock exchanges.

These are seen as higher risk investments but are proven to show high returns.

Oil

Crude oil prices react to a variety of geopolitical and economic events. It is incredibly volatile and thus seen as a high risk.

Between 1997 and 2007

Oil prices increased 500%

Between Autumn 2014 and Spring 2016

Oil prices fell 75%

Classic cars

Classic cars are seen as one of the 'passion investments'. As well as any appreciation in value, they are sure to provide huge enjoyment.

They have the potential for high returns but can be a risky investment. You've got to choose the right car, be wary of mechanical costs and, ultimately, not crash it!

A 1962 Ferrari 250 GTO sold for £22 million in 2014. The classic car market has shown near 500% returns over the last decade.

Over to you

We hope this booklet has helped you make a start in sorting out your finances.

No one knows what tomorrow holds. As Woody Allen famously said, "if you want to make God laugh, tell him your plans".

But armed with a bit of knowledge, a level head and a long-term perspective, you'll have everything you need to adapt your financial strategy for whatever life sends your way.

Above all, don't worry too much. The inspiring young people we've met through the Rathbones Financial Awareness programme have given us every confidence the future is in good hands.

The hard part – and the most important – is the 'personal' bit: figuring out what you want your life to be, so that you can arrange your finances accordingly.

Rathbones. Look forward with us.

Managing more than £34.2 billion* for our clients, we are one of the UK's leading investment managers. We are here to help you look forward with confidence.

When making plans for the future, or to pass money on from one generation to the next, it's important to know your investment manager has a long track record of success.

Rathbones has been in business since 1742. Looking forward has carried us and our clients safely through many eras. We continue to move with the times, blending new ideas and the latest technology with our long-standing investment experience and constant values.

We are about more than just investment management. When looking for complete wealth management, our financial planning, tax and trust experts** are on hand to give advice focused on lifestyle aspirations and intentions for the next generation. If you already have an adviser, we're happy to work with them, complementing their services.

Our clients are busy professionals, entrepreneurs, families, people in retirement and those just starting out in life. As we go to print our youngest client is 5 weeks old and our oldest is over 100. We also work with charities, large and small, and in partnership with professional advisers.

No two clients are the same. Each has different priorities. What they all have in common however is that they want to take care of the future. And they would like their money to be managed by someone who will care for it as much as they do and have an investment solution uniquely created for their personal circumstances.

For more about how we can help, call **020 7399 0000**, email **enquiries@rathbones.com** or visit our website, **rathbones.com**

*As at 31 December 2016. Includes funds managed by Rathbone Unit Trust Management.
** Tax and trust services are provided by Rathbone Trust Company.

Glossary

APR
Annual Percentage Rate is the interest rate for a whole year (annualised), allowing borrowers and savers to better understand and compare deals.

Asset class
A collective term for assets of a similar type. The main asset classes are equities (shares), bonds, cash and property.

Bond
A debt investment. You loan money to an issuer, such as a company or a government. In exchange for your money. The issuer will pay you a pre-determined rate of interest (the coupon) and return your capital (principal) on a specified date.

Budget deficit
The annual amount the government has to borrow to meet the shortfall between current receipts (tax) and government spending. See pages 32 and 33.

Budget surplus
A situation in which the government's income exceeds expenditure.

Corporate bonds
A debt instrument created for the purpose of raising capital by a company. Investors get a return in the form of coupons. See page 39.

Compounding
The ability of an asset to generate earnings, which are then reinvested in order to generate their own earnings, resulting in faster investment growth. See page 23.

Credit score
A three digit number calculated from your credit history used by lenders to determine your credit worthiness. To see your own credit score search 'Experian' or 'Equifax'. See page 27.

Diversification
A method of portfolio allocation and management aimed at balancing risk and return by spreading investments among different securities or sectors.

Dividend
A payment from a company to its shareholders. If a company issues a 20p dividend, investors receive 20p for each share that they hold.

Dividend cover
Indicates how robust and reliable a dividend payment will be. It is the ratio of a company's earnings (net income) over the dividend paid to shareholders. The higher the ratio the better.

Dividend yield
A financial ratio that indicates how much a company pays out in dividends each year relative to its share price. It is often expressed as a percentage.

Drawdown
The maximum loss for an investment over a specific recorded period. Usually quoted as a percentage between the peak and trough. See page 36.

Earnings per share (EPS)
A common way of expressing company profits, calculated by dividing profits after tax by the number of shares issued.

Equities (also known as Shares)
A stake in a company which gives the holder ownership rights and represents a claim on a proportionate share in the corporation's assets and profits. See page 42.

FTSE 100 Index
A weighted arithmetic average of the stock market value of the 100 largest UK quoted companies, as measured by market capitalisation.

Gilts
Bonds that are issued by the British government to meet the budget deficit shortfall. They are generally considered low-risk investments. See page 39.

Inflation
Is a general increase in prices and fall in the purchasing value of money. See page 15.

Interest
The return earned on funds which have been loaned or invested, i.e. the amount a borrower pays to a lender for the use of his/her money.

ISA
Individual Savings Account. A tax wrapper available to UK residents that allows you to invest in either cash or stocks and shares. You don't pay tax on most of the income and the profits don't attract capital gains tax. See page 19.

Mortgage
A loan taken out for the purchase of property, typically for 25-30 years. This is a secured loan meaning the bank can take ownership of the property and sell it if you are not able to keep up your repayments. See page 28.

National debt
The total amount of money the British government owes to the private sector and other purchasers of UK gilts. See page 32.

National Insurance
Contributions to the government to qualify for certain benefits including the state pension.

PE ratio
The price earnings ratio (PE Ratio) is the ratio for valuing a company that measures its current share price relative to its per-share earnings. See page 43.

Pension
An amount of money saved up through a person's lifetime (through personal or National Insurance contributions) that can be accessed in retirement. See page 18.

Reward
The return on your investment. This normally includes income from your investment and/or capital growth. See page 35.

Risk
The chance that an investment's actual return will be different than expected. Risk includes the possibility of losing some or all of the original investment. See page 36.

Shares – see Equities.

Important investment calculations

Share price
If we assume a company is worth £30,000, and there are 10,000 shares.

$$\frac{\text{value of company}}{\text{No. shares}} = \frac{£30{,}000}{10{,}000} = \textbf{300p}$$

Profits and earnings per share (EPS)
Profit – normally take the after tax profit (in this example £4,000).

$$\frac{\text{profits after tax}}{\text{No. shares}} = \frac{£4{,}000}{10{,}000} = \textbf{40p}$$

Dividend per share (DPS)

$$\frac{\text{annual dividend}}{\text{No. shares}} = \frac{£2{,}000}{10{,}000} = \textbf{20p}$$

Price earnings ratio (PE ratio)

$$\frac{\text{value of company}}{\text{profits after tax}} = \frac{£30{,}000}{£4{,}000} = \textbf{7.5x}$$

or

$$\frac{\text{share price}}{\text{earnings per share}} = \frac{300\text{p}}{40\text{p}} = \textbf{7.5x}$$

Dividend yield

$$\frac{\text{dividend per share}}{\text{share price}} = \frac{20\text{p}}{300\text{p}} \times 100 = \textbf{6.7\%}$$

Dividend cover

$$\frac{\text{earnings per share}}{\text{dividend per share}} = \frac{40\text{p}}{20\text{p}} = \textbf{2x}$$

Your notes

Your notes

Important information
The contents of this document is for educational purposes only.
Rathbone Investment Management is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. Rathbone Unit Trust Management is authorised and regulated by the Financial Conduct Authority. Rathbone Trust Company is authorised and regulated by the Solicitors Regulation Authority. Rathbone Investment Management International is regulated by the Jersey Financial Services Commission. Nothing in this document should be construed as a recommendation to purchase any product or service from any provider, shares or funds in any particular asset class or weighting, and you should always take appropriate independent advice from a professional, who has made an evaluation, at the point of investing. The value of investments and the income generated by them can go down as well as up, as can the relative value and yields of different asset classes.
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