

## Topic 7: Using money to make money

After completing this topic, you will be able to:

- understand some ways of using your money to make more money, including:
  - National Savings and Investments (NS&I);
  - Premium Bonds;
  - the National Lottery;
  - shares; and
  - gambling (including the possibility of losing your stake).

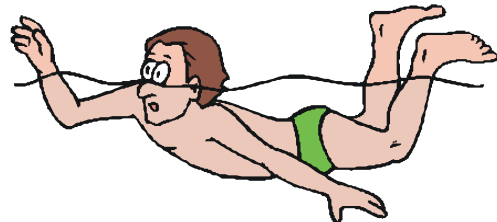
### Taking risks with money

In this topic, we are looking at ways in which you can take a chance to make a lot of money. This means that we need to think about risk.

### Risk and reward

When you take a risk on something, you have to consider whether the potential reward is worth it.

As an extreme example, imagine that you are standing on the edge of a riverbank and across the other side is a bag with £1m in it; to get to it, you have to swim across the river. The water is very fast-flowing, many people have died trying to cross it and you are not a very good swimmer.



**What do you think are the chances of you making it across the river at all and getting the bag of money? Is it 'very likely' or 'not very likely'?**



**Is it worth risking your life for £1m?**



**What are the chances that you will get the bag of money? 'High' or 'low'?**



**Is it worth risking a few broken bones for £50,000?**

When it comes to taking risks with money, you have to ask yourself the same question: is the reward worth the risk? We call this the balance of 'risk and reward'.



If people think that the possible reward is **greater** than the risk, they probably **will** take a chance.

If people think that the possible reward is **less** than the risk, they probably **will not** take a chance.

For all of the examples of taking a chance in this topic, we are going to ask you to consider where they would be on the risk line illustrated below. This is only an opinion, but it will allow you to compare risks.

**HIGH RISK**

**LOW RISK**



**Reward high, but unlikely**

**Reward low, but certain**

The risk line

## Shares

When people choose to invest their money in shares, rather than to put it into a bank or building society account, they are taking a risk with their money – but the potential rewards are much greater than those of an ordinary savings account.

When you put your money in a conventional savings account, you will receive interest and you are also always guaranteed to get your original investment back. The amount of interest might be quite small, but at least your investment is safe.



By investing your money in shares, you are taking a chance that the company in which you have bought shares will be successful. If the company does well, you will receive part of the profits (this is called a 'dividend'), and the value of your initial investment could increase, as the value of the company goes up.

However, the opposite could happen – what if the company in which you have bought shares does not perform very well? Not only will there be no dividends, but also the value of your initial investment could fall, or even be lost altogether if the company goes bust.

So, for example, you could invest your £10,000 in a safe building society account, offering 5 per cent interest, which means that your investment will be worth just over £12,700 after five years. Alternatively, you could buy shares with your £10,000. After five years, you might have doubled your money (or even more) – but you might have lost the lot!

## Premium Bonds

People can win large sums of money if they buy Premium Bonds. National Savings and Investments (NS&I) sells and manages Premium Bonds as a way in which people can save money *and* have the fun of a prize draw every month.

When people buy Premium Bonds, they are lending the money to the government.

Premium Bonds do not pay interest to holders; instead, the interest that is earned on all Premium Bonds is used to fund cash prizes. When people hold Premium Bonds, they are swapping the interest rate that they could earn on the money in a savings product for the chance of winning a big prize. The prizes vary according to the interest rate and the number of Bonds that are eligible for the draw.

The following table shows the estimated Premium Bond prizes from the March 2016 draw, based on an interest rate of 1.35 per cent.

Prize band	Prize value £	Number of prizes
Higher value (7% of prize fund)	1m	2
	100,000	5
	50,000	12
	25,000	21
	10,000	53
	5,000	108
Medium value (5% of prize fund)	1,000	1,339
	500	4,017
Lower value (88% of prize fund)	100	18,370
	50	18,370
	25	2,249,627
<b>Totals</b>	<b>£67m</b>	<b>£2,291,924</b>

Source: [www.nsandi.com](http://www.nsandi.com)

People can cash in all or some of their Premium Bonds at any time. Because NS&I is backed by HM Treasury (a government department), the original amount of money that people put into Premium Bonds is 100 per cent safe – that is, bondholders will always get their money back. Since August 2014, there is more than one £1 million monthly prize.

The minimum amount of money that people can put into Premium Bonds is £100; since June 2015 the maximum holding is £50,000. People get a Premium Bond number for every £1 that they invest. Every month, all of the eligible Premium Bond numbers are entered into a draw and winners are selected at random.



**Do you think that someone wins the jackpot every time there is a Premium Bond draw?**

### Did you know?

The machine that randomly selects Premium Bond numbers for prizes is called 'ERNIE', which is an acronym standing for 'electronic random number indicator equipment'.

The machines used to select Lotto numbers randomly are also given names: Amethyst, Moonstone and Opal.



**How likely do you think you are to win a prize on the Premium Bonds?**

## Did you know?

As at February 2016, there were over 21 million Premium Bond holders and more than 900,000 unclaimed prizes, worth over £50m.

Source: [www.nsandi.com](http://www.nsandi.com)

## The UK National Lottery

The government introduced the National Lottery in 1994. The purpose of the Lottery is to raise money for good causes and to collect Lottery duty (a form of tax) for the government. People are encouraged to play the Lottery because they *could* win a lot of money (although this is very unlikely, as we will see later).



Q

**How old do you think you need to be to play the National Lottery games?**

People can play different Lottery games, such as Lotto, Thunderball and scratch cards.

The main game, called Lotto, works as follows.

1. You choose six numbers between 1 and 59, and mark them on a preprinted sheet of paper at a Lottery play point. These play points are found in retailers such as shops, garages, supermarkets, etc.
2. Players pay £2 for each Lottery line that they choose.
3. They hand this sheet of paper to the retailer, who feeds it into a computer terminal.
4. The terminal reads the sheet and prints out a Lottery ticket showing the numbers.

A special machine is used to select the six winning numbers. Great care is taken to make sure that the choice of Lottery numbers is random.

Up to October 2015, there were 49 numbers in the Lotto draw and the odds of winning the jackpot prize were 1 in 14 million. Now there are 59 numbers, the odds of winning the jackpot are much higher – one in over 45 million. However, the odds of becoming a millionaire are better; they are now one in 10 million because a new raffle was introduced with one extra prize of £1 million.

Q

**Do you think that the chance of the Lottery machine selecting a particular number is the same for all numbers between 1 and 59?**

Camelot is the organisation that runs the National Lottery and all of its different games. This organisation works for the government, but is separate from it. Part of Camelot's role is to maximise the amount of money raised for good causes through the Lottery by encouraging people to play.



**Why do you think Camelot spends money to encourage people to play the Lottery?**

### Did you know?

People pay £2 for a Lotto ticket, which is divided up as follows:

- £1 goes to the winners' fund;
- 56p goes to good causes;
- 24p goes to the government in a tax called 'lottery duty';
- 10p is paid to the retailers who sell Lotto tickets;
- 9p is used by Camelot to pay the costs of operating the Lotto; and
- 1p goes to Camelot as profit.

The Big Lottery Fund ([www.biglotteryfund.org.uk](http://www.biglotteryfund.org.uk)) distributes half of the money raised for good causes by the National Lottery – estimated at between £600m and £700m a year. The other half is distributed by other organisations. The Lottery money is used to support good causes in the arts, sport, heritage, health, education, environment, community and charity sectors.



**Do you think that the National Lottery is an effective way of giving to charity?**

### Did you know?

On average, the National Lottery gives £34 million to good causes every week. Some of the big projects that have benefited from this money include:

- the Eden Project;
- Tate Modern; and
- the London 2012 Olympics, including £2.2bn towards the construction of the Olympic Stadium, Velodrome and Aquatics centre.

There have also been many smaller projects, such as:

- renovating a recreation centre in Middlesbrough;
- supporting a disabled children's charity in Glasgow;
- building a new activities park in Swindon;
- providing a training programme for disadvantaged youngsters in Wales; and
- funding research in Northern Ireland to find a way of labelling medicines for visually impaired people.

## How likely are you to win a prize on the Lottery?

The chance of any one ticket winning the Lotto jackpot is one chance in over 45 million. So somebody would need to buy 45,057,474 tickets (one of each combination of six numbers between 1 and 59) in a Lotto draw to be certain of winning the jackpot. Of course, the winning ticket could be the 8,000th they bought, or the 1,000,000th, or the last. They simply cannot know until the draw is made.



Number of matching numbers	Odds
Jackpot: matching all six numbers (typical prize £2 million)	1 in 45,057,474
Match five main numbers + bonus ball (typical prize £50,000)	1 in 7,509,579
Match five main numbers (typical prize £1,000)	1 in 144,415
Match four main numbers (typical prize £100)	1 in 2,180
Match three main numbers (fixed cash prize £10)	1 in 96.2
Match two main numbers (fixed prize of a 'Lucky Dip' in the next draw)	1 in 10.3
Raffle ticket code (issued with each 6 number ticket: one prize £200,000; one prize £1 million)	Depends how many tickets sold for that draw

The overall odds of winning any prize when there were 49 numbers were 1 in 54. Under the updated rules, the odds of winning any prize are 1 in 93.

Apart from the fixed prizes for matching three main numbers or two main numbers, the amount that you win for the other prizes depends on the number of Lottery tickets bought for that draw and how many other people matched those numbers. For example, the total amount of prize money is half of the value of ticket sales for that draw. The prize money at each level (for matching four main numbers, five main numbers, etc) is shared equally between all winning tickets.



***Does someone win the jackpot every time there is a Lottery draw?***

***Some people buy Lottery tickets only when there is a rollover. Why do you think they do this?***



### **Activity 7a**

***a) What are the main differences between the National Lottery and Premium Bonds?***

***b) Where would you place each of them on our risk line?***



## Gambling

The key feature of gambling is that people are taking a chance: they could win or they could lose. Gambling, such as casino games, the National Lottery and betting on sports events, tends to have a high element of risk: people simply do not know what the outcome of their bet will be, so they could lose their money. The amount that people *could* win – that is, the reward – may be high, but actually winning can be very unlikely.



When people gamble, they take the risk that they could lose the money with which they play. For example, in the National Lottery, the cost of playing is the £2 that it costs to buy the ticket. If you do not win anything, you do not get your £2 back; rather, it is lost forever.

When people decide whether or not to gamble, they are weighing up the effect of the risk that they are taking against the possible reward that they could win. The risk is that they lose all of the money that they gambled.

Other forms of gambling involve money placed as a bet, called a 'stake'. For example, people who bet on horse racing pay a stake to the bookmaker. If their horse wins, they get back their stake and extra money on top. If they lose, they lose their stake.



### Case study

Jimmy has bet £10 on a horse called 'Jenny's Choice' to win the 3.30pm race. His horse is first past the post, so Jimmy gets back his stake and has winnings on top.



#### Why do you think people gamble?

Gambling can be addictive. When they lose a bet, some gamblers then try another bet, with higher potential winnings, to try to win back the money that they have already lost. The trouble is that each time they lose and go for another bet to get their money back, they are choosing bets with higher and higher potential winnings; as we know, the higher the potential reward, the less chance there is of winning it.



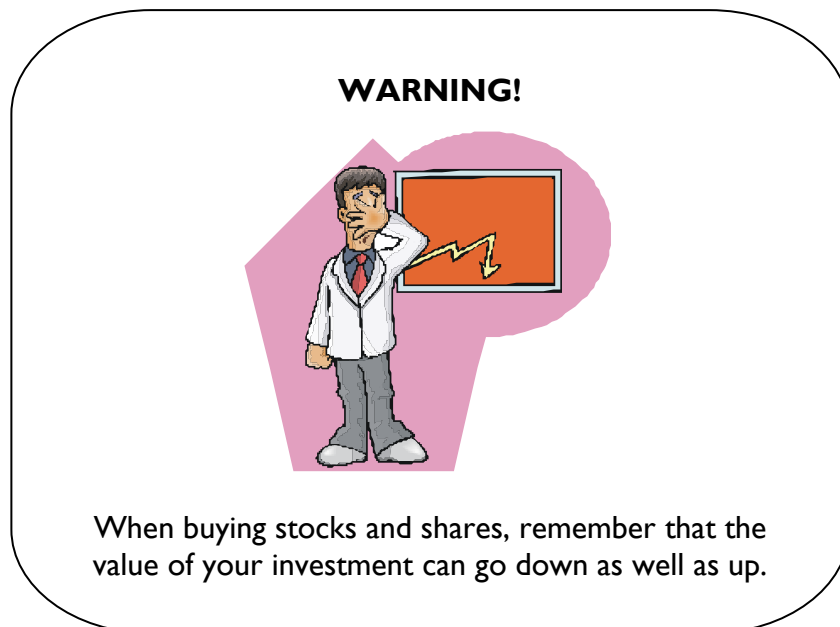
Some people study horses and racecourses, and look at the outcome of other races to try to predict which horse is going to win. Because they have done some research, they think that they have a better chance of choosing a winner and are more tempted to gamble more money on it. But this means that if their horse does not win, they have lost more money.

## Stocks and shares

As well as savings accounts, financial services providers offer people the chance to invest their money in other companies. This type of investment is called 'buying shares in the company'. Share prices are quoted on the London Stock Exchange, in newspapers and on websites. If you invest in shares, you hope that their price will go up and that you will be able to sell them at a profit. But the opposite could happen: the share price could fall and you could make a loss. This risk can be reduced by using an expert to choose the companies for you.

With most investments in shares, you are not guaranteed to get your money back; nor can you guarantee a certain rate of return.

Some companies pay a dividend to shareholders; this is their share of the company's profit. However, whether a dividend is paid and how much it will be depend upon the company's performance and whether it makes a good profit.



There are a number of ways of investing in shares.



### ***Can you think of any different ways of investing money?***

Different types of investment have different levels of risk:

- buying stocks and shares in a particular company can be very risky, because the investor could lose all of their money if the company fails;
- buying into a pooled investment (such as a unit trust) – that is, a fund in which many investors put their money together to buy a range of stocks, shares and bonds – is less risky.

The idea behind pooled investments is that of 'not putting all of your eggs in one basket' and is called 'diversification'. Risks are reduced because it is *unlikely* that all of the investments will lose money and *likely* that some will earn money.





## Review questions

1. What is 'risk' in this context?
2. What is the 'balance between risk and reward'?
3. What is 'gambling'?
4. Why did the government introduce the National Lottery?
5. What are the approximate odds of winning the Lotto jackpot?
6. Why does putting money into Premium Bonds have a lower risk than playing the National Lottery?
7. Who sells and manages Premium Bonds?
8. What is the biggest monthly prize that holders of Premium Bonds can win?
9. Why are savings accounts a lower-risk savings option than Premium Bonds?
10. What are shares and how do people make money from investing in shares?

## Learning activities



### Internet

- Visit [www.national-lottery.co.uk](http://www.national-lottery.co.uk) and look at the different games that can be played, along with some of the stories about winners. What does this tell you about the risk and reward? Why are people prepared to risk losing money on the Lottery?
- Visit [www.bbc.co.uk/news/business/](http://www.bbc.co.uk/news/business/) and select the 'Market data' section. Choose a few companies and look at the changes in the share price over the last year.



### Group

Discuss whether you would prefer to invest your money in a bank or building society account, from which you are guaranteed to receive some interest (even if it is only a small amount), or whether you think it is better to buy Premium Bonds, which offer the opportunity to win a bigger amount.



### Individual

Ask the adult members of your family how much money (if any) they spend on National Lottery tickets each week. Ask them how much they think they have spent on National Lottery tickets since it was first launched in 1994 and how much they have won in total over that time. Would they have been better off if they had saved the money in a building society account?



## Key points for Topic 7

You should now understand:

- what 'Premium Bonds' are;
- how to buy Premium Bonds;
- how Premium Bond prizes are worked out;
- why Premium Bonds might be considered to be the least risky of the items studied in this topic;
- what the 'National Lottery' is;
- who manages the National Lottery;
- how you buy a ticket for the National Lottery;
- what happens to the money collected by the National Lottery;
- what 'gambling' is;
- why placing bets could be considered to be the most risky of the items studied in this topic;
- what 'shares' are;
- how people can make money from buying and selling shares;
- how the risk of investing in shares can be reduced by buying pooled investments and by employing an expert to choose the shares.