13.4

Interest rates

Saving and borrowing

In society, there are people who have spare money (surplus funds) that they usually save with a financial institution. When they allow their savings to be used by a financial institution, they expect something in return. The **interest rate** on money deposited is the price financial institutions must pay for the use of this money. Alternatively, there are people with not enough money (deficit funds) who need to borrow from financial institutions. They, too, must pay a price for the use of this money. The interest rate on loans (borrowings) represents the price. Financial institutions make a profit by charging a higher rate to borrowers than they pay to depositors.

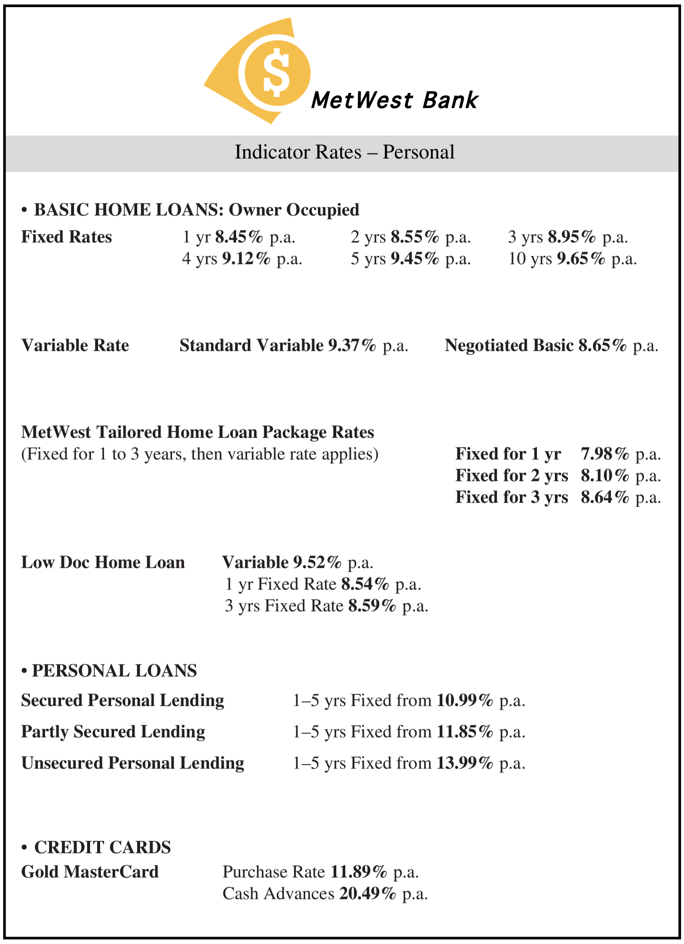
Comfact

The interest rate charged is always expressed as a percentage; for example, 8 per cent per annum. This means a charge of 8 cents for each dollar borrowed over a year. **Comparison rates** are loan interest rates calculated after adding fees and charges to the lender's advertised rate.

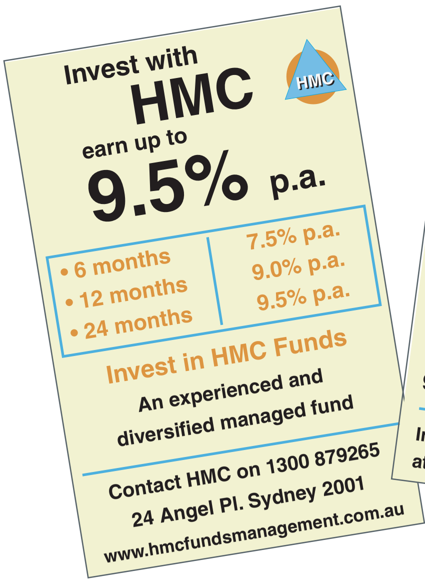
Short-term and long-term interest rates

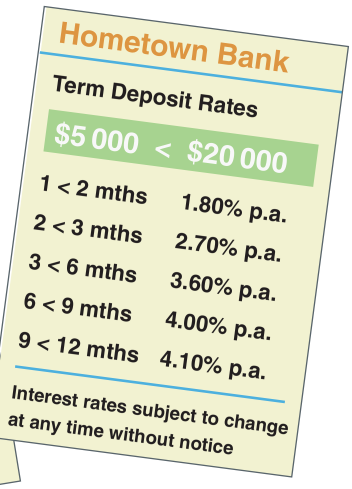
Interest rates can be classified as either short term or long term. For example, you can take out a home loan with the interest rate fixed for 20 years. This is considered a long-term interest rate. You make the same payments over these years, regardless of whether interest rates rise or fall. Alternatively, when you use your credit card or take out a personal loan, you are borrowing money at an interest rate that can change in the short term. As a general rule, short-term interest rates tend to be higher than long-term interest rates, as shown in the MetWest Bank advertisement above right.

The interest rate received by savers also varies according to how long the money is deposited for. As a general rule, long-term interest rates tend to be higher than short-term interest rates, as shown in the HMC advertisement at right.



Home and personal loan interest rates





Short-term and long-term interest rates for term deposits and managed funds

Fixed and variable interest rates

Once you have decided how much you want to borrow, you can select one of two main rates of interest for your loan.

1. *Fixed interest rate* — the interest rate is set (fixed) for the entire **term** of the loan. The main advantages are:
   - protection from unexpected interest rate increases
   - predictable payments, which make it easier to budget.

   The main disadvantages are:
   - you cannot take advantage of a fall in interest rates
   - an early payout penalty if you want to clear the loan before the fixed term has expired.
2. *Variable interest rate* — the interest rate moves up or down over the term of the loan. The main advantages are:
   - if interest rates fall, your repayments reduce
   - you can shorten the term of your loan if you maintain the higher repayment
   - additional repayments can be made without penalty.

   The main disadvantages are:
   - if interest rates increase, your repayments will rise
   - you may be forced to increase your repayments if the loan cannot be paid back within the agreed term.

   Most financial institutions also offer:
   - Combination loan — the interest is fixed for an initial period, usually up to 10 years, then reverts to a variable rate.
   - Split loan — where part of your loan is fixed and the remaining portion is variable. For example, imagine you borrow $150 000. You may decide to fix $100 000 over seven years and leave the remaining $50 000 at a variable rate.

   By using either of these methods, you can try to protect (hedge) against rising interest rates.

How financial institutions make a profit

Glossary

comparison rate loan interest rates calculated after adding fees and charges to the lender's advertised rates

interest rate the annual cost of borrowing credit or the annual return on invested savings; the price of money

term the length of time allowed to repay a loan

Activities

Understand

1. What is meant by the terms 'surplus funds' and 'deficit funds'?
2. Explain the difference between *fixed* and *variable* interest rates.
3. List the advantages and disadvantages of fixed and variable interest rates.
4. Why is the interest rate often referred to as the 'price of money'?
5. If you borrow $10 000 for one year at 7 per cent per annum, how much do you pay in interest?
6. Examine the MetWest advertisement on page 286 and then answer these questions.
   (a) What is the fixed home loan rate for owner occupied for ten years?
   (b) What is the standard variable home loan rate for owner occupied?
   (c) Which is larger, the secured or unsecured fixed personal loan rate?
   (d) Which type of loan has the highest interest rate?

Communicate

7. In small groups, decide whether you would prefer a fixed or variable interest rate if you were taking out a $250 000 home loan. Give reasons for your selection. Choose a spokesperson to share the group's comments with the rest of the class.
8. Using newspapers and magazines, make a collage that shows a range of interest rates from a variety of sources.

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9. Assume you have $1000 in a Commonwealth Keycard account and you owe $500 on your Commonwealth Mastercard. What interest are you:
   (a) earning on your savings
   (b) paying on your credit card?

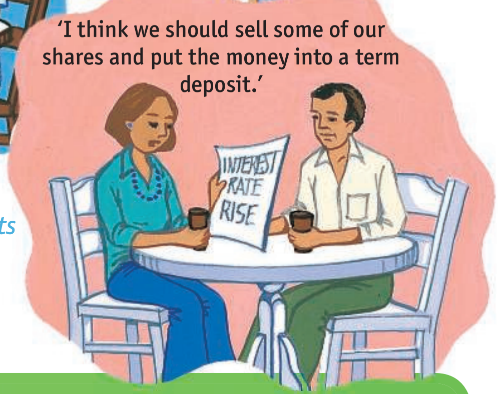
   To help you, use the **Commonwealth Bank** weblink in your eBookPLUS.

Worksheet 13.3 Compare your investment options among four major banks.

13.5

Effects of rising and falling interest rates

Rising and falling interest rates will directly affect consumer and personal financial decisions. Rising interest rates make saving relatively more attractive and borrowing relatively more expensive. Falling interest rates have the opposite effect. Consequently, the effect of an interest rate rise or fall will depend on whether you are a saver or a borrower.



The repayment of debt

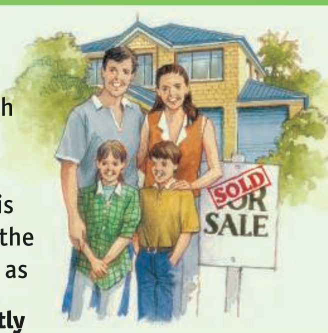
The level of interest rates has a direct effect on a consumer's ability to repay a loan. For example, when interest rates are low, people are willing to borrow because they find it relatively easy to repay their debt.

A rise or fall in interest rates affects consumers and personal finance decision making.

Case*study*

The Vlahos family

The Vlahos family has just moved into a new home in Caroline Springs. Chris and Kathy both work full time, and the children go to school in the area. The family has just taken out a mortgage for $275 000; most of Kathy's wage is used to pay for it. The Vlahos family is feeling the pressure of high mortgage repayments as well as the cost of education, food, utilities and keeping two cars on the road. Increases in the price of fruit and vegetables, private health insurance and petrol have meant that living expenses have risen significantly over the past few months. The family currently pays an interest rate on the mortgage of 7.25%, but hopes that the Reserve Bank may drop interest rates in the future.



Home-loan repayments calculator — fortnightly

Loan $	Interest rate %										
	5.5	5.75	6.0	6.25	6.5	6.75	7.0	7.25	7.5	7.75	8.0
100 000	307.04	314.55	322.15	329.83	337.60	345.46	353.39	361.40	369.50	377.66	385.91
125 000	383.80	393.19	402.69	412.29	422.00	431.82	441.74	451.75	461.87	472.08	482.39
150 000	460.57	471.83	483.23	494.75	506.40	518.18	530.09	542.10	554.24	566.50	578.87
175 000	537.33	550.47	563.77	577.21	590.80	604.54	618.44	632.45	646.61	660.92	675.35
200 000	614.10	629.11	644.31	659.67	675.20	690.90	706.79	722.80	738.98	755.34	771.83
225 000	690.86	707.75	724.85	742.13	759.60	777.26	795.14	813.15	831.35	849.76	868.31
250 000	767.63	786.39	805.39	824.59	844.00	863.62	883.49	903.50	923.72	944.18	964.79
275 000	844.39	865.03	885.93	907.05	928.40	949.98	971.84	993.85	1016.09	1038.60	1061.27
300 000	921.16	943.67	966.47	989.51	1012.80	1036.34	1060.19	1084.20	1108.46	1133.02	1157.75

When interest rates are high, people are reluctant to borrow because repayments on loans cost more. Some consumers may even find it difficult to meet their existing loan repayments, especially if interest rates increase faster than the rise in a consumer's income. If interest rates rise sharply and stay high for a long period, some consumers will **default** on their loans.

The choice of fixed or variable interest rates

When interest rates continually rise, you can protect yourself from having to make larger repayments by taking out a fixed loan. Conversely, when interest rates fall, your repayments will be lower if you select a variable interest rate loan. The difficulty you and all consumers face is trying to accurately predict whether interest rates will increase or decrease in the future.

The choice of a personal investment strategy

When you invest, you want to achieve the highest return for the most acceptable risk. Therefore, there will be times when you will switch from one investment product to another. The level of interest rates will be one factor you will take into account when selecting an investment product. For example, when interest rates rise, demand for housing slows and prices fall. At the same time, saving money in a financial institution becomes more attractive. If you expect this situation to continue for some time, you may move out of property and place your money in a term deposit. Alternatively, you might decide to sell some shares because a term deposit offers a better return for much less risk. When interest rates are falling, you may decide on the opposite course of action.

Activities

Understand

1 What effect do falling interest rates have upon (a) savers and (b) borrowers?

2 What benefits or problems are created for people in the following situations when interest rates rise?
  (a) A small business with a large, variable short-term loan
  (b) A young person with a small, fixed personal loan
  (c) A retiree with money invested in a managed fund with a fixed rate of interest
  (d) A young couple with a mortgage where the interest rate has been fixed for five years
  (e) A middle-aged couple with a mortgage where the interest rate is variable

Think

3 'Interest is both a reward and a cost.' Explain this statement.

4 Imagine you are a financial adviser. Write a reply to the following letter.

> Dear financial adviser,
> Recently there has been a lot of media speculation about a possible rise in interest rates. I have 16 years left on my 20-year home loan. With interest rates likely to increase should I refinance the loan to a fixed rate so that I know exactly what my repayments will be? Are there any fees or charges if I decide to refinance? Please advise me.
> *Gemmina*

5 Refer to the case study on the Vlahos family, then answer these questions.
  (a) Use the home loan repayments calculator to find the monthly repayments for the Vlahos family.
  (b) If interest rates (i) fell and (ii) rose by 0.75 per cent, what effect would this have on their mortgage repayments?
  (c) If interest rates were to fall, what should the Vlahos family do with the extra money? Give reasons for your answer.

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6 Many of the major banks provide a variety of loan calculators on their websites to help people work out how much they can borrow, and what the possible repayments might be. Use the **Calculator** weblink in your eBookPLUS to answer the following:
  (a) You have just bought your dream home with a $480 000 loan from a bank. Calculate the monthly payments required if:
    (i) the interest rate is 8 per cent and the loan is for 25 years.
    (ii) you wish to repay your loan, which has a rate of 7.5 per cent, in ten years.
  (b) Imagine you decide to repay your $480 000 over 30 years.
    (i) Your initial interest rate is 8.75 per cent. Calculate your monthly repayment.
    (ii) The bank announces a 0.50 per cent increase in interest rates. Calculate the new monthly repayment.
    (iii) If interest rates increased to 12 per cent, calculate how much more you would need to meet your repayments.

Glossary

default the inability to repay borrowed money