

# Worksheet: Exchange Rates and Interest Rates

The following worksheet focuses on exchange rates and how they are affected by interest rates. Some prior knowledge of exchange rates, the foreign exchange market, interest rates and the current account would be useful. It is targeted at economics teachers, years 11–13.

1. Define the term 'exchange rate'. Explain what an appreciation and depreciation of the exchange rate means.
2. If our exchange rate is AUS\$0.92, what does this mean?
3. Find out what New Zealand's current exchange rates are with our major trading partners.
4. Draw a supply and demand graph that illustrates our foreign exchange market. Identify and explain the factors that affect the supply of and demand for New Zealand dollars in the foreign exchange market.
5. Draw four sketch graphs of the foreign exchange market. For each graph, show the effect of one of the following:
  - An interest rate increase
  - Japanese tourists in New Zealand for a skiing holiday
  - Another outbreak of mad cow disease in Britain
  - The New Zealand Government reduces tariffs on imported shoes from China

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## APPLYING YOUR KNOWLEDGE

6. Draw a flow diagram that illustrates the effect of an increase in interest rates on New Zealand's exchange rate. The diagram has been started for you.



Repeat for a decrease in interest rates.

7. Write a paragraph explaining the effect of an appreciation and depreciation in our exchange rate on exporters and importers. Identify who benefits and who loses in both situations and explain why. Find a story in your local newspaper about a firm that has been affected.
8. Using your paragraph in question 7, identify and explain how an appreciation and depreciation in our exchange rate would affect New Zealand's current account and overall balance of payments.

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## APPLYING YOUR KNOWLEDGE

### New currency guidelines for Reserve Bank

The Reserve Bank has been given new guidelines for trading in the Kiwi dollar that could help it drag the currency down off its pedestal. The new rules will allow the bank to gradually sell – and buy – on top of its high-profile interventions aimed at driving the dollar down. The bank's new, more "passive", currency trading would not necessarily affect the exchange rate. But it would send "concrete signals regarding the extent to which the exchange rate is seen as over or under-valued. That may indirectly affect the exchange rate by discouraging speculators from pushing the currency to extreme levels".

*Extract - Timaru Herald: 14 July 2007*

1. Use the article above to help you answer this question. Recently the media has published information about the new guidelines that the RBNZ has been given for trading in the Kiwi dollar. Research these new guidelines (try newspaper websites for July 2007 as a starting point) and write a paragraph explaining what these new guidelines are and how they will affect our exchange rate.
2. Investigate how New Zealand's exchange rates with our major trading partners have changed over time. Graph these on a multi-line graph. Identify trends and explain why changes occurred. Consider what events would have contributed to these changes. Make a prediction on what you think will happen to New Zealand's exchange rate in the next six months and justify your thoughts.
3. Use the following information and the exchange rates from question 2 to identify if there is a relationship/correlation between changes in New Zealand's exchange rate and the amount of our exports and imports. Write a one page report on this relationship.

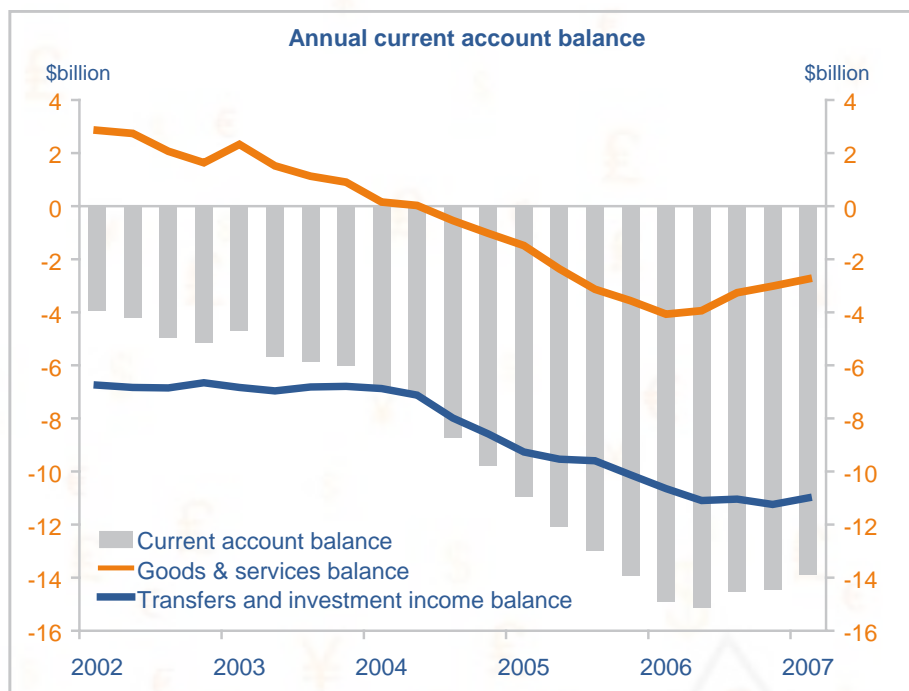
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## APPLYING YOUR KNOWLEDGE

Year ended	Value of exports (\$ millions)	Value of imports (\$ millions) 20,799	Trade balance (exports – imports) (\$ millions)
April 1995	20,856	21,540	57
April 1996	20,542	21,469	-998
April 1997	20,963	22,369	-506
April 1998	21,941	23,877	-427
April 1999	22,642	28,292	-1,235
April 2000	24,927	31,541	-3,365
April 2001	30,981	32,141	-561
April 2002	32,661	32,141	520
April 2003	29,994	31,916	-1,922
April 2004	28,797	32,724	-3,927
April 2005	31,198	35,501	-4,303
April 2006	31,314	38,203	-6,889
April 2007 (P)	35,472	41,492	-6,020

(P) Provisional

Source: Statistics New Zealand website



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