## Exchange Rates

#### Exchange Rates

- Measurement of relative exchange rates (to other individual countries, Trade Weighted Index
- Factors affecting the demand for and supply of Australian dollars
- Changes in exchange rates (appreciation, depreciation)
- Determination of exchange rates include fixed, flexible and managed rates
- Influence of the Reserve Bank of Australia on exchange rates
- Effects of fluctuations in exchange rates on the Australian economy

#### Introduction

Exchange rate is price of one currency in terms of another country's currency.

#### Australia's floating exchange rate system

Under floating system, exchange rate determined by free play of market forces of supply



and demand in foreign exchange markets.

Figure 5.1 – Exchange rate determination under a floating exchange rate system

Demand for \$AU represented by those who wish to buy it. Demand affected by:

- Size of financial flows into Australia from foreign investors
- Level of Australian interest rates relative to overseas interest rates
- Availability of investment opportunities in Australia

- Expectations of future appreciations
- Demand for Australian exports- commodity prices, terms of trade, international competitiveness, global economic conditions, tastes and preferences.

The supply of \$AU is represented by those who wish to sell it. Supply is affected by:

- Level of financial flows out of Australia by Australian investors
- Level of Australian interest rates relative to overseas interest rates
- Level of investment opportunities overseas
- Speculators
- Domestic demand for imports- level of domestic income, competitiveness of domestic firms, tastes and preferences.

When \$AU appreciates, value of \$AU increases.



depreciates, value of \$AU decreases.

Appreciation of \$AU	Depreciation of \$AU
• Increase in Australian interest rates,	Decrease in Australian interest rates
decrease in overseas interest rates.	increase in overseas interest rates
Improved investment opportunities	Deterioration in investment
in Australia, deterioration in foreign	opportunities in Australia,
investment opportunities.	improvement in foreign investment
• Rise in commodity prices,	opportunities.
improvement in Australia's terms of	• Fall in commodity prices,
trade	deteriorating Australia's terms of
Improvement in Australia's	trade
international competitiveness	• Deterioration in Australia's
Lower Australian inflation	international competitiveness
Increased demand for exports	Higher Australian inflation
• Expectations of currency	Increased demand for imports
appreciation.	Expectations of currency
	depreciation

Trade weighted index (TWI) is measure of value of \$AU against all other currencies, especially against currencies of major trading partners. Currencies of countries that are more prominent in Australia's trade are given higher weighting so they have greater influence on TWI. One limitation is that it is weighted according to volumes of trade regardless of currency in which exports and imports invoiced.

## Reserve bank intervention in the foreign exchange market

RBA sometimes plays role in influencing value of currency, through smoothing out swings in \$AU relating to short term factors.

## Dirtying the float

When RBA feels that large, short term change in exchange rate will be harmful to domestic economy, it may decide to step into Forex market, either as buyer or seller in order to stabilise \$AU. In order to curb rapid depreciation, RBA will buy \$AU, putting upward

pressure on exchange rate. On other hand, by selling \$AU, RBA may prevent rapid appreciation. RBA's ability to buy \$AU affected by size of foreign exchange holdings.

#### Monetary policy decisions

Indirect way of influencing exchange rate, rarely used. If RBA wants to curb rapid depreciation, it may increase demand for \$AU by raising interest rates. This will attract foreign savings, which must be converted into \$AU. This will increase demand, and put upward pressure on exchange rate. Sometimes RBA intervenes as currency movements can impact economic stability and inflation.

## Fixed exchange rate system

Excess supply of Q1 Q2.

## Fixed exchange rate system:

Under fixed exchange rate system, government or RBA officially set rate, not left up to forces of supply and demand. Government can attempt to maintain fixed exchange rate by either buying or selling foreign currency in exchange for \$AU.



Government needs to hold foreign reserves such as gold. When Australia operated under fixed exchange rate, RBA obtained necessary foreign reserves by insisting all foreign exchange holdings be lodged with them. However, in order to raise value of \$AU, RBA would use up foreign reserves by continually exchanging them for excess supply of \$AU, leading to collapse in currency trade.

## Managed flexible peg

Under this system, RBA would set value of \$AU at 9 am each day, and that price would operate throughout day. Provides more flexibility than fixed exchange rate, but can still allow official rate to drift away from that which would exist under pure market forces.

## Exchange rates and the Balance of Payments

## How the BOP influences the exchange rate

Under floating exchange rate, quantity supplied equals quantity demanded.

If value of imports increased, while exports remained same, it will result in deterioration of CAD. This will cause increase in supply of \$AU, because importers will be selling more \$AU in order to buy foreign currencies, resulting in depreciation of the \$AU.

Increased outflow of funds on current account will most likely lead to depreciation of \$AU, increasing surplus of Capital financial account. Improvement in CAD will result in appreciation of \$AU, and decrease in surplus on capital financial account.

Effect of BOP on exchange rate also depends on perceptions of financial markets. If financial markets concerned that increase in CAD not sustainable, they may be less willing to buy Australian assets, causing value of \$AU to fall further as capital inflow reduced.

## Effects of an APPRECIATION on the exchange rate

Negative	Positive
• Exports less competitive, leading to	Consumers buy more overseas
decrease in export income and worsening	produced goods with same quantity
CAD	of \$AU.
• Imports less expensive worsening BOGS.	Decreases interest servicing costs on
Higher import spending and reduced	foreign income debt because
export revenue reduces economic growth	Australian's can buy more foreign
rate.	currency with same amount of \$AU.
• Foreign investors find it more expensive	This will reduce outflow on net
to invest in Australia, leading to lower	primary income component of
financial inflows. Financial inflows may	current account, reducing CAD.
continue if foreign investors expect	<ul> <li>It will reduce \$AU value of foreign</li> </ul>
currency to continue rising.	debt that has been borrowed in
<ul> <li>Reduces \$AU value of foreign income</li> </ul>	foreign currency- valuation effect.
earned on Australia's investments,	Inflationary pressures in Australia will
deteriorating net primary income	be reduced as imports become

	component.	cheaper. It is likely to reduce pressure
•	Appreciation will reduce \$AU value of	on RBA to raise interest rates to
	foreign assets- valuation effect.	defend inflation target.

The valuation effect is where an appreciation (or depreciation) of currency causes an immediate decrease (or increase) in the \$AU value of foreign debt that is borrowed in foreign currencies.

# Effects of a depreciation on the exchange rate

Negative	Positive
Consumers buy fewer overseas	Australia's exports become cheaper,
produced goods with same quantity of	leading to increase in export income.
\$AU.	Imports more expensive, discouraging
Increases interest servicing cost on	import spending.
Australia's foreign debt because	• Lower import spending and greater
Australia can buy less foreign currency	export revenue will increase Australia's
with domestic currency. It increase	growth rate, but may not happen if
income outflow on net income	Australia unable to replace imports with
component on current account.	domestically produced goods.
Depreciation will raise \$AU value of	• It increases \$AU value of foreign income
foreign debt that has been borrowed in	earned on Australia's investments, and
foreign currency as expressed in \$AU	would cause improvement in net
terms- valuation effect.	primary income component.
Inflationary pressures in Australia	• Increases value of foreign assets in \$AU
increase as imports would now more	terms- valuation effect.
expensive. May increase pressure on	• Foreign investors will find it less
RBA to raise interest rates to defend	expensive to invest in Australia, leading
inflation target.	to greater financial inflows. Financial
	inflows may dry up if foreign investors
	expect currency to continue falling.

By increasing currency value, exports will decline. This is because exports become more expensive and harder to sell. Imports will become less expensive which will encourage import spending. As import debits are greater than export credits, this will lead to higher BOGS deficit.

During appreciation, income going into economy will decline. There will be lower financial inflows as overseas investors find it more expensive to invest in Australia. Net primary income will deteriorate as \$AU value of foreign investment decreases. It will decrease foreign debt servicing cost which will result in lower interest payments on debt, and cheaper servicing costs on equity.

Appreciation may lead to higher levels of capital outflows from Australia, as domestic assets become more expensive and less attractive compared to foreign assets. This may decrease FDI and portfolio investment within Australia. Australian's may increase investment overseas as it has become cheaper, leading to higher outflows in financial account, increasing value of \$AU.

During depreciation, imports more expensive as Australian's can buy fewer imports with same amount of \$AU, which will reduce import spending. Exports become cheaper and easier to sell, increasing exports. As import debits lower than export credits, it will result in lower BOGS deficit.

During depreciation, income going into economy will be higher. There will be increase in financial flows as overseas investors find it cheaper to invest in Australia. Net primary income higher as \$AU value of foreign investment increases. Foreign debt servicing costs increase as there is higher interest payments on debt.

Depreciation may result in higher levels of financial inflow into Australia as domestic assets become cheaper relative to foreign assets. This may reduce level of foreign debt and increase FDI and portfolio investment into Australia.