

Forward Rate Agreements

Overview

Contents

What is a Forward Rate Agreement?	1.0
Features	2.0
How FRAs work	3.0
Application of FRAs	4.0

1.0 What is a Forward Rate Agreement ?

A Forward Rate Agreement (or FRA) is an agreement between two parties to exchange payments usually equal to short term underlying interest rate obligations of those two parties. The notional principal amount (principal amount) of an FRA is used to calculate the interest payment only and is not exchanged.

Fixed payments or receipts can be swapped for floating (or variable) rate payments or receipts and vice versa. FRAs can be used to hedge borrowing costs or investment returns in a number of currencies, and can be tailored to suit your exact requirements. The physical borrowings or deposits which normally underlie these cashflows need not be held with the same financial institution with which the FRA is transacted.

FRAs are a useful tool for managing interest rate exposures on a short term basis. The duration of an FRA is usually equal to one interest rate period. For example, you may wish to stay floating for the long term but wish to lock in the interest rate for a particular interest rate payment period of your borrowing or investment in the future. Say, a 90 day period starting in 2 months time.

FRAs can be an effective hedging instrument for both borrowers and investors however the examples in this brochure concentrate on the borrower's perspective.

2.0 Features

➤ Reduces Uncertainty

Uncertainty in short term interest rates can make it difficult to budget cashflows accurately. By entering into an FRA, you will be guaranteed that short term borrowing costs will not rise above a certain rate for the contract period of the FRA.

➤ Risk management separate from funding source

FRAs do not represent a commitment to borrow a principle sum. Rather they operate in conjunction with but separately to the underlying debt. The FRA is specified in terms of a principal amount, which enables it to be combined with your debt portfolio to achieve a desired interest rate outcome for the specific period.

Therefore, any future decision on your interest rate risk profile will not affect your underlying borrowing and vice versa. This also means that your cashflows under the FRA are quite separate from the cashflows associated with your underlying borrowing.

➤ Easy to Cancel

While FRAs can be an extremely effective tool in managing short term interest rate exposures, having entered into an FRA you are committed to settle the FRA on the agreed date, whether rates move in your favour or against you.

However, should you wish to terminate the agreement, ANZ will arrange to cancel the FRA at current market rates. For a floating rate borrower who has entered into an FRA to provide a fixed rate, this may result in you receiving a payment if market rates have risen or effecting payment to the bank if they have fallen.

➤ Currencies

FRAs are available in Australian Dollars (AUD), New Zealand Dollar (NZD), and United States Dollar (USD), and other currencies upon request, in order to manage exposures that you may have in these currencies.

➤ **Documentation**

ANZ has developed the ANZ Master Agreement for Interest Rate Derivative Transactions, a document which covers Forward Rate Agreement Transactions. This brief document details the obligations and responsibilities of both ANZ and its counterparty in respect of the FRA. It is signed only once, with future FRA deals covered by this document and only the confirmation of settlement details necessary on a deal by deal basis.

For those clients that do not wish to use ANZ's document, standard documentation has been established by the professional markets covering FRAs called the ISDA Master agreement. This master document covers the obligations and conditions of parties to an FRA in the marketplace and must be signed only once by both parties. Future FRA deals are covered by this document with only the confirmation of settlement details necessary on a deal by deal basis.

➤ **Credit Limits**

FRAs create an obligation for both parties of the FRA to make interest rate payments on settlement date to each other (usually netted). A credit limit representing only the net interest amount is therefore required by the Bank to cover the contingent liability this poses to the Bank. Should you not have a current FRA limit in place, please discuss this with your ANZ Markets Representative or ANZ Relationship Manager.

➤ **Matching Basis**

FRAs are a very effective interest rate risk management tool when the underlying borrowing is priced off the stated benchmark rate - BBSW or BBSY rate*. However, a basis risk is undertaken in the event that your underlying borrowing is not priced off the benchmark rate. That is, the movement in rate of your underlying borrowing may not move the same way or to the same extent as the benchmark rate from which the FRA is settled. It is important to be aware of this and minimise this risk as much as possible.

* BBSW rate = the Bank Bill Swap Rate. It is an independently determined and published floating rate benchmark for Australian Dollar Interest Rate Swaps, and is used to settle fixed/floating Australian Dollar interest rate obligations. It is the mid rate between the money market buy and sell rates for bank bill parcels over \$10 million. The BBSY bid rate, often used as a basis for bank bill funding is the money market buy rate for bank bill parcels over \$10 million and is usually 5 points higher than the BBSW rate. FRAs can be priced off a BBSY bid rate benchmark on request.

3.0 How FRAs work

➤ **Terminology**

Two numbers define any particular FRA; the first represents how many months forward the exposure will commence, and the second represents the sum of the first number and the term of the FRA. For example, an FRA commencing three months from now and has a term of 6 months would be described as a 3 x 9 FRA (pronounced "Threes Nines"). That is, 3 months plus 6 months equals 9 months.

➤ **Borrower**

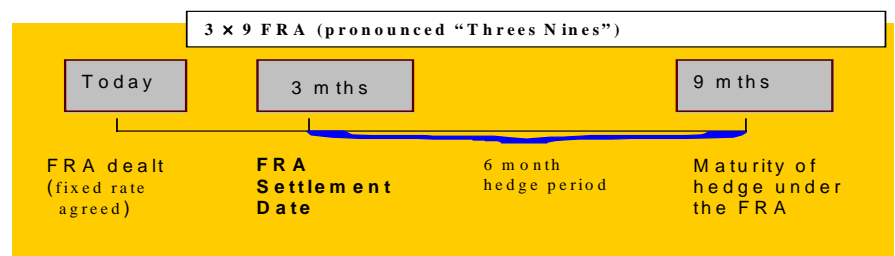
Assume your debt is funded by way of bank bills which are rolled over every 6 months and that your next rollover is due in 3 months time. If you are concerned that rates may rise over this period, you could transact a 3 x 9 ("Threes Nines") FRA, effectively locking in your future rollover interest rate today.

If rates actually rise by rollover date, ANZ would reimburse you for the additional cost incurred by rolling your bank bills over at higher rates, ie. the difference between the agreed rate in the FRA and the BBSY rate on that day. If rates do not rise, but rather fall, you would be required to reimburse ANZ for the difference between the BBSY rate and the FRA rate. In effect, whether interest rates rise or fall, your borrowing costs will be known in advance, based on the FRA rate.

➤ Settlement of an FRA

FRAs are settled at the commencement of the period being hedged by the FRA, sometimes referred to as the 'settlement date' as shown in the following diagram.

Diagram – Time Line



The fixed and floating components of the FRA settlement are calculated and netted to determine the settlement amount. The following formula is used to calculate the net settlement amount :

FRA Settlement Amount

$$= \frac{\text{FRA Principle Amount} \times 365}{(\text{Term} \times \text{FRA rate}\%) + 365} - \frac{\text{FRA Principle Amount} \times 365}{(\text{Term} \times \text{Floating rate}\%) + 365}$$

Example

FRA Rate (benchmark = BBSY):	6.50%
Bank Bill Margin	nil
Contract Period:	180 days
Notional Principal:	\$2,000,000

Table 1 – FRA

	If BBSY = 6.0%	If BBSY = 8.0%
Using Fixed Rate	= \$1,937,881.60 = $(2m \times 365) \div ((180 \times 6.5\%) + 365)$	= \$1,937,881.60
Using Floating Rate	= \$1,942,522.62 = $(2m \times 365) \div ((180 \times 6.0\%) + 365)$	= \$1,924,090.67 = $(2m \times 365) \div ((180 \times 8.0\%) + 365)$
Net Settlement Amount	PAY \$4,641.02 = 1,937,881.60 - 1,942,522.62	RECEIVE \$13,790.93 = 1,937,881.60 - 1,924,090.67

The net amount therefore received by the borrower is equal to the FRA net settlement amount and the bank bill receipts. The effective rate paid on the funds for the term of the FRA is equivalent to the FRA interest rate plus any bank bill margin payable above the BBSY rate (6.5% in our example).

Table 2 – Cashflows

	If BBSY = 6.0%	If BBSY = 8.0%
FRA (Net Settlement Amount)	PAY \$4,641.02 (0.5%) (as above)	RECEIVE \$13,790.93 (1.5%) (as above)
Bank Bill Funding	RECEIVE \$1,942,522.62 $= (2m \times 365) + ((180 \times 6.0\%) + 365)$	RECEIVE \$1,924,090.67 $= (2m \times 365) + ((180 \times 8.0\%) + 365)$
Total Funds Received	RECEIVE \$1,937,881.60 $= -\$4,641.02 + \$1,942,522.62$	RECEIVE \$1,937,881.60 $= +\$13,790.93 + \$1,924,090.67$
Effective Rate	6.5% $= ((2m - 1,937,881.60) \times 365) \div (1,937,881.60 \times 180)$	6.5% $= ((2m - 1,937,881.60) \times 365) \div (1,937,881.60 \times 180)$

A FRA therefore provides effective protection to bank bill borrowers against rising interest rates for the period specified.

4.0 Application of FRAs

➤ Using FRAs for tactical exposure management

You may wish to utilise FRAs as a short term hedging instrument to cover exposures over a period of expected volatility in floating rates. For example, you may have bill funding falling due at or around the announcement of the next balance of payments figures and are concerned that the market will be extremely volatile at this time. You can enter into an FRA now for all or part of your exposures to ensure that borrowing costs do not suffer because of this expected volatility.

Alternatively, you may have a predominantly fixed rate exposure and decide to use FRAs to swap to floating for a short period of time.

➤ Short Term Instrument

FRAs are a useful tool for managing interest rate exposures on a short term basis. However, they do not address underlying longer term structural exposures that may exist.

Interest Rate Swaps (Swaps) are just one tool that can be used to modify longer-term exposures. That is, what can be achieved through FRAs to implement short term, tactical adjustments to working capital, can be achieved for longer-term strategic adjustments to your long-term debt structure through Swaps. In fact, a series of FRAs can be used to replicate a Swap transaction.

The management of financial exposures such as interest rate risk is an ongoing concern. Your ANZ Capital Markets Representative or ANZ Relationship Manager is available to discuss your changing interest rate exposure requirements.

ANZ makes no representation and gives no warranty as to the accuracy of the information contained herein and does not accept any responsibility for any errors or inaccuracies in or omissions from this document (whether negligent or otherwise) and ANZ shall not be liable for any loss or damage howsoever arising as a result of any person acting or refraining from acting in reliance on any information contained herein. No reader should rely on this document, as it does not purport to be comprehensive or to render advice. This disclaimer does not purport to exclude any warranties implied by law, which may not be lawfully excluded.