

Alternative Mortgage Instruments

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AMI's

- Def: Mortgage instruments other than the standard long term fixed rate amortizing mortgage
- AMI's are generally used during periods of uncertainty as to the direction of interest rates (generally rising rates)
 - Again, what is the primary type of risk in long term fixed rate mortgages?

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Adjustable Rate Mortgage

- ARM's are a mortgage instrument designed to minimize interest rate risk to the lender
 - ARM's have the effect of spreading the risk of interest rate changes between borrower and lender
- An ARM has an interest rate and/or payment which adjusts based on changes in an underlying Cost of Funds index (COFI)



ARM Characteristics

- 1 year ARM's are the traditional adjustable instruments
- Hybrid ARM's are becoming very popular
 - 3/1, 5/1, 7/1, 10/1 Hybrids are most common
 - How do hybrids adjust?
 - These mortgages can serve a dual function since they capture some of the reduction in interest rate risk to lender, but also give a proxy for expected prepayment.



Adjustment Characteristics

- ARM payments adjust based upon changes in the underlying COFI
 - COFI is a proxy for the lenders borrowing cost
 - The index used is typically a short term Treasury rate
 - The Treasury instrument used generally corresponds with the frequency of adjustment
- Adjustments are usually made annually or semiannually.



The Lenders Return

- Were the ARM based solely on the COFI the lender would make nothing on the loan
- In order for the lender to make a profit on the loan a lenders *Margin* is added
- The Margin is generally between 100 and 200 basis points over the index



Spreading Interest Rate Risk

- A Borrower is generally reluctant to assume unlimited interest rate risk
- As a result a combination of Caps (and floors) are applied to the ARM
 - Lifetime (Life of Loan) Caps limit the absolute movement of the fully indexed (contract) rate over the life of the loan
 - Annual or Periodic (adjustment rate) Caps limit the period to period movement of the contract rate



The First Year Contract Rate

- The fully indexed rate is the full rate charged on the loan composed of:
 - COFI index rate
 - Margin added by the lender
- In the first year it is typical to have a short term rate reduction known as a Teaser
 - The Teaser is simply deducted from the fully indexed rate



Calculating an ARM

- Calculate all of the contract rates for the period of analysis
- Consider the effect of Caps
- Calculate the payment in the first year based on the first year contract rate
- Calculate the OMB at the end of the adjustment period
- Input the new contract rate and calculate the new payment
