

JAMES A. GRAASKAMP COLLECTION OF TEACHING MATERIALS

V. INDUSTRY SEMINARS AND SPEECHES - SHORT TERM

I. Other Presentations In Which Either The Date And /  
Or Sponsoring Organization Is Missing

6. Real Estate Finance/Mortgage Banking/Mortgage  
Guaranty Insurance

u. "Variable Rate - Indexed Mortgage  
Instruments", no date

## VARIABLE RATE - INDEXED MORTGAGE INSTRUMENTS

- I. The long term rise in long and short term interest rates and the frequent tendency for short term rates to be higher than long term has exaggerated the vulnerability of savings institutions to withdrawals of existing deposits and loss of access to new deposits. These effects are often referred to as:
  - A. Disintermediation - - the shift of funds from one type of intermediate institution to another, such as savings and loans to banks.
  - B. Disintermediation - the bypassing of all intermediate organizations in favor of direct investment by savers, such as who buy treasury paper.
  - C. Since mortgages are long term commitments, it takes time to turn over the portfolio and reinvest at current rates so that the yield on mortgages at fixed interest rates is a long term moving average. Investors on the other hand want to invest at the margin, i.e., at the best rate, and at the current rate is too far above the average rate, the investor will bypass his traditional institutional pooling manager and take the extra trouble to make his own investments.
  - D. As Americans have become more sensitive to interest rates and money markets more efficient, savers have shifted from an attitude of defensive inertia to protect the corpus of their savings to aggressive pursuit of the best income to protect the purchasing power of their savings.
- II. The variable rate or indexed mortgage may offer practical relief to institutions which invest heavily in mortgages. Of course, it removes the opportunity for transfer of purchasing power from savers to borrowers; there are more borrowers (consumers) than savers so there is strong resistance from organized labor, consumer groups, and even home builders who fear the law of a major incentive to home ownership, namely the rip-off of the little savers with pass book at the savings and loan.
  - A. Some borrowers might not qualify for variable rate mortgages and others might not be able to manage the financial planning required of rapidly changing loan payments.
  - B. Borrowers also experience the tilt effect - at the time of purchase they use the maximum part of income to purchase a home but as incomes rise the constant debt represents a declining portion of purchasing power. Rising income may be the result of inflation and inflation causes rising interest rates which could increase mortgage payments and take away the relief of the tilt effect.
  - C. Over the long run the majority of the borrowers, however, should enjoy more reliable capital flows into mortgages and therefore greater ease in financing a home.

III. Variable interest rate mortgages can be developed by altering four major elements of the repayments terms.

A. The contract interest rate can be real or nominal

- 1. A nominal rate is one which includes a premium for inflation, a presumption of current interest rates.
- 2. A note with a real interest rate excludes any premium and instead adjusts the outstanding principal balance for loss of purchasing power.

B. The contract interest rate can be fixed or variable

- 1. Flexible rates should be indexed to some reference rate, and it is here the consumer and the lender cannot agree. Short term rates are more reflective of the cost of funds but would be undesirable to borrowers because of greater volatility and in the early years would eliminate any amortization of principal and could cause negative amortization. The latter holds many risks for the lender including the assumption of loan to value ratio, loss of cash flows from the portfolio, loss of rapport with the buyer, etc.

C. Periodic payment can held constant or modified from time to time by prearranging in the contract.

D. Any combination of the above

E. Each of these various combinations has a acronym among lenders that you should know:

- 1. GPM - graduated payment mortgage you have already seen in the FLIP plan.
- 2. SAM - shared appreciation mortgage - the mortgage lender receives a nominal interest plus 50% of appreciation in the home price when the property is sold or refinanced.
- 3. PLAMS - price level adjusted mortgage where periodically the principal balance is adjusted for inflation in some accurate manner. It is common in inflation wracked countries such as Brazil and Israel but is novel to the United States.
- 4. VRM - a variable rate mortgage in which the interest rate is indexed on a nominal base to solve the lenders cash flow problems but it does not necessarily solve the loss of purchasing power in the long run.

IV. In the U.S. most of the experimentation with VRM has been with the following types:

A. Type E (Vernor) is a variable rate mortgage in which the monthly payment is held constant but the interest rate is allowed to vary within that level so that the maturity date for amortizing payment is changing. A loan with a 10% constant means you would pay 1% a month and the interest could vary between .67 and 1% so that for some periods there would be no reduction of principal. Borrowers prefer the stability of monthly payment and presumably that leaves the risk of default unchanged to the lender. However, sharp increases in market rates may easily exceed the ability to adjust maturity sufficiently to compensate. It does not increase lender cash flow enough to pay substantially higher dividends in the short run.

Level payment does nothing to prevent tilting and modification of prepayment opportunities hurts the sale price in the secondary market.

- B. In the U.S. the more popular VRM with lenders has been the variable nominal interest variable payment mortgage in which change is necessary to the amortization schedule are accomplished in changing the monthly payment. It appeals to the lender because it comes closer to matching current interest income receipts with current interest expense on saving accounts as well as maintaining its resale value against discounts in the secondary mortgage market. The problems are:
  - 1. Sharp changes in monthly payment could increase the default rate
  - 2. Selection of the index and the frequency of adjustment must consider the borrower viewpoint.
  - 3. An index of long term rates would be less volatile and might permit quarterly or annual revision. Short term rates are volatile but more appropriate to savings rates.
  
- C. California law has had the most effect because it governs state S&L and the largest S&L in the country is Home Savings and Loan, where at least 80% of mortgages are VRM's. Cal. law requires S&L VRM's to index the interest rates with a weighted average cost of capital index as determined every 6 months by the FHLB of San Francisco. Rate increases are limited to 25 basis points maximum, no more frequently than every 6 months and borrowers must be permitted prepayment without penalty for 90 days after notification. Note the tie to regional areas and an effort to pick an index which cannot be manipulated by lenders.
  
- D. The finance types are still debating a variety of alternative indexes as appropriate to VRM's. Whichever one they choose will be complex and then consider the implications in terms of responsibility of the lender to explain the possibilities to the borrower under the truth and lending law! For the responsibilities of the lender for borrower education under the equal credit opportunities law!