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Innovations in Residential Financing: An Analysis of the Shared Appreciation Mortgage and a Comparison of Existing Alternative Mortgage Instruments

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INNOVATIONS IN RESIDENTIAL FINANCING:
AN ANALYSIS OF THE SHARED APPRECIATION
MORTGAGE AND A COMPARISON OF EXISTING
ALTERNATIVE MORTGAGE INSTRUMENTS

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AND A COMPARISON OF EXISTING ALTERNATIVE
MORTGAGE INSTRUMENTS

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INTRODUCTION

The development of alternative mortgage instruments was the financial institutions' reaction to the inadequacies of the standard fixed payment mortgage in an unstable economic environment. The standard fixed payment mortgage was designed to function in a relatively stable economy and was able to do so successfully until the mid-1960s. Since the mid-1960s, the U.S. economy has experienced high and variable interest rates, accelerating inflation, and restrictive credit policies. Exposure to increasing and unstable inflation and interest rates revealed the limitations of the standard fixed payment mortgage.

For the borrower, the standard fixed payment mortgage does not accommodate the changing pattern of family income. (e.g., the rise in income in the early working years, the leveling of income in the middle working years and the decline in income in the retirement years). The interest rate on a fixed rate mortgage incorporates anticipated future increases in interest rates and inflation, placing the highest real payments in the beginning of the mortgage term when the young homebuyer can least afford it. This is a mismatch of the usual pattern of income stream development.

The lender is also damaged by unanticipated inflation since loans are being repaid in lower-valued
dollars. Interest rate variation adversely affects the lenders' profitability because of the practice of borrowing short and lending long in a period where the cost of short-term funds is increasing while the lenders continue to hold long-term fixed rate mortgages in their portfolio.

The main problems facing borrowers and lenders in the mortgage market today are:

1. Housing Affordability
2. Mortgage Money Availability
3. Lender Profitability

The affordability of housing has become a pressing issue as the post-World War II baby boom reaches the homebuying age. This influx of young homebuyers will have a profound effect on the demand for housing in the 1980s. The greater demand for housing will put pressure on home prices, pushing home ownership further out of reach for these low and even moderate income earners. Alternative mortgage instruments are necessary to accommodate the increasing income stream of young homebuyers so that a greater number of people may qualify for and attain home ownership. The increased demand for houses in the 1980s will naturally put pressure on thrift institutions to supply more mortgage
financing.

The availability of mortgage money has been curtailed because of disintermediation by savers and the collapse of the secondary mortgage market. Traditionally, personal savings at savings and loan institutions have been the main source of mortgage funds. In setting the maximum interest that could be paid on passbook saving accounts and allowing savings and loan institutions to pay 1/4% more interest than banks, Regulation Q ensured savings and loans an inexpensive source of funds. The overall effect was that savers, usually the elderly, subsidized homebuyers by supplying cheap money.

Regulation Q became a double-edged sword to the savings and loan institutions. While Regulation Q gave savings and loans preferential treatment vis a vis banks to attract depositors, it also hampered their ability to compete when those depositors sought higher yields. As interest rates rose, savers withdrew their money from the savings and loan institutions to invest in higher yielding money market certificates.

Because rising short-term interest rates led to the erosion of the value of long-term fixed instruments, such as mortgages, the secondary market for mortgages has suffered greatly. No longer able to readily sell off their fixed rate mortgages to
investors, such as insurance companies, savings and loan institutions have been shut off from an additional source of mortgage funds. The squeeze on the supply of mortgage funds has led to prohibitively high mortgage rates and to the withdrawal of some financial institutions from the mortgage market.

In 1980, the Deregulation Act was passed which revoked Regulation Q. In response to the Act, savings and loan institutions are now offering higher yielding accounts to attract back depositors. Unfortunately, this strategy has also substantially raised the cost of funds, thus threatening the earnings of these institutions. Mortgage lenders' earnings are based on the spread between the cost of deposit funds and the income earned on long-term mortgages. This spread has been squeezed by the escalating cost of funds and by the low earnings from fixed rate mortgages made when interest rates were lower. In 1978, high yield accounts (money market certificates, 30-month accounts and jumbo certificates of deposit) represented only 3% of the savings and loans' funds from the public. Today, these accounts represent 55% of funds from the public.

Faced with declining profitability, the thrift institutions are beginning to turn towards alternative mortgage instruments and away from the traditional fixed rate mortgage. Regulatory agencies and consumer
groups are also starting to look to the development of alternative mortgage instruments as the answer to the problems of housing affordability, mortgage money availability and lender profitability.

**ALTERNATIVE MORTGAGE INSTRUMENTS**

In reaction to widely fluctuating short-term rates, increased competition caused by deregulation and escalating operating costs, financial institutions are moving away from the conventional fixed term, fixed rate mortgage. In November 1980, Home Savings and Loan Association, the nation's largest savings and loan association, announced it would stop making long-term fixed mortgages. One month later, Wells Fargo Bank, the 11th largest bank, also decided to stop lending mortgage money for thirty years at a fixed rate. Instead of announcing their plans to withdraw from the mortgage market, other financial institutions have effectively taken themselves out of the mortgage market by setting fixed interest rates out of the reach of the average homebuyer.

**CALIFORNIA ALTERNATIVE MORTGAGES**

In California, state licensed savings and loan associations have several alternatives to the conventional fixed-rate, fixed-term mortgage. State licensed S & L's are allowed to offer
the Graduated Payment Mortgage (GPM), the Variable Rate Mortgage (VRM), the Renegotiable Rate Mortgage (RRM), Reverse Annuity Mortgage (RAM) and the Flexible Payment Loan (FPL). The following is a brief description of the terms of the presently available AMI's. (For a more detailed analysis of the VRM and the GPM, see Consumer Mortgage Information Pamphlet, Working Paper 81-30.)

GPM—Under the GPM, monthly payments start out lower than payments under a conventional mortgage and gradually increase over a five or ten year period. At the end of the graduating payment period, the monthly payment is fixed. The maximum annual rate of increase for a five-year period is 7 1/2% per year and 3% per year for a ten-year period.

VRM—Under the VRM, the interest rate is allowed to fluctuate every six months, except for the first six month-period. The interest rate change is based on the California Cost of Funds index. The minimum change is .10% and the maximum change is .25% for a six month-period; however, the interest rate can only increase 2.5 percentage points over the life of the mortgage.

California was the first state to enact legislation providing for the VRM (1970). The California VRM was also used as the model for the federal VRM proposal. As of May 1981, there are several bills before the California State Legislature which, if passed, would
liberalize the California VRM.

RRM-The renegotiable rate mortgage can be issued for a term of up to thirty years, secured by a mortgage of equal term on which the interest rate is adjusted at intervals of three, four or five years or issued for a term of three, four or five years and secured by a long-term mortgage. Under the latter form, the short-term mortgage is automatically renewable at a renegotiated rate. The maximum rate increase or decrease is .5% per year, with a total maximum increase of 5% over the life of the mortgage. The interest rate changes are based on the FHLBB index of mortgages or the weighted cost of funds for the 11th district, compiled by the FHLBB of San Francisco (McAllister Proposal).

RAM-Under the RAM, a monthly payment is made to the borrower based on his/her equity in the home. The unpaid balance of the loan is payable in full upon the death of the borrower or upon the sale of the property.

FPL-Under the FPL, the borrower pays interest-only monthly payments for up to five years. At the end of the initial period, the borrower's monthly payments increase so that the loan will be fully amortized at the end of the remaining loan term.

California regulations also provide for the fixed-rate, fixed-term mortgage.
FEDERAL ALTERNATIVE MORTGAGES

Federally charted associations are also authorized to issue AMI's. The following mortgage instruments have been approved by the FHLBB for federally chartered S & L's:

GPM-The federal proposal starts out with a low monthly payment which gradually increases over a period not to exceed ten years. At a pre-determined point, the interest rate becomes constant. The annual percentage increase allowed is dictated according to the duration of the graduating payment period. The maximum annual rate of increase for five years or less is 6.5%, 5.5% for six years, 4.5% for eight years, 3.5% for nine years and 3% for ten years. The first interest rate change may not occur within one year of the date of the first regular loan payment.

VRM-Under the federal VRM, the interest rate changes on a yearly basis, with a maximum increase of .5%. The total percentage increase allowed over the life of the loan is 2.5%. There is no limit on the maximum total decrease in the interest rate, although the yearly reduction is limited to .5%. Interest rate fluctuations are tied to the cost of funds index published by the FHLBB for the district in which the property is located. If there is an interest rate
decrease, federally chartered S & L's must decrease the maturity of the loan, although not to less than the original maturity, before they are allowed to adjust monthly payments. As of April 30, 1981, the VRM has been superseded by the Adjustable Mortgage Loan (AML).

RRM-This mortgage instrument was authorized in April 1980. Under the RRM, adjustments in the interest rate are allowed every three, four or five years. Changes in the RRM's interest rate are tied to the national average contract rate for all major lenders for the purchase of previously-occupied, single-family homes. As of April 30, 1981, the RRM has been superseded by the Adjustable Mortgage Loan (AML).

RAM-Under the RAM, the homeowner receives a monthly payment based on the accumulated equity in the home. The loan becomes due either at a specific date or when a specific event occurs, such as the death of the borrower or the sale of the property. If the mortgage has a fixed term, refinancing is required to be made available at the current market rate.

AML-On April 30, 1981, the FHLBB approved the Adjustable Mortgage Loan regulation which authorizes a flexible mortgage instrument. Under the AML, there are no limitations on interest rate variations and monthly payment changes. Interest rate and payment changes can occur as often as monthly, however, the borrower must
be notified at least 30 days prior to a change. The new regulation also provides no overall cap on interest rate changes. Interest rate changes are tied to an index which is not under the control of the lender. The FHLBB has suggested the following indices:

1. Federal Home Loan Bank District Cost of Funds to FSLIC-Insured S & Ls;
2. National average contract mortgage rate for the purchase of existing homes;
3. 3-month and 6-month Treasury bill auction rates; and
4. The yield on Treasury securities adjusted to constant maturities of one, two, three and five years.

The lender is required to reduce the interest rate if the index goes down while interest rate increases are optional.

Since the FHLBB has not specified any limitations, it expects that lenders will adopt interest rate and payment change restrictions so that their mortgages will be competitive in the market as well as acceptable to the public. (see Consumer Mortgage Information Pamphlet for an analysis of the AML)
Adjustable Rate Mortgage (ARM)

ARM-The Comptroller of the Currency approved the Adjustable Rate Mortgage for federally chartered banks. The ARM allows rate adjustments up to 1.0% every six months. A single interest rate adjust can be as high as 5% if there have not been any rate adjustments for the previous two and one-half years. However, there is a limitation on the total interest rate increase over the life of the loan. The interest rate adjustment is dictated by changes in one of the following national indices:

1. The FHLBB's average mortgage rate on occupied homes;

2. FNMA's auction rate on mortgage purchase commitments;

3. Yield on Treasury securities, adjusted to a constant maturity of three years; and

4. Yield on Treasury securities adjusted to a constant maturity of five years.

The selection of the appropriate index is left to the lender. (see Consumer Mortgage Information Pamphlet for an analysis of the ARM)

Currently, several other proposals are under study at the Federal Home Loan Bank Board (FHLBB) and the
office of the Comptroller of the Currency, which governs federally chartered banks. These proposals are designed to ease the strain of persistent high interest rates for first-time and moderate income homebuyers while allowing the lender to pass on some of the risk of inflation to the borrower. Among the more interesting proposals are the Graduated Payment Adjustable Mortgage and the Shared Appreciation Mortgage. The following is a brief description of the GPAM and the SAM:

1. Graduated Payment Adjustable Mortgage (GPAM)

The proposal combines the major features of the GPM with the RRM by allowing for an increase in monthly payments over the mortgage period while also allowing for periodic renegotiation of interest rate terms. The GPAM would have initially lower monthly payments than the fixed-rate mortgage or the RRM. As with the GPM, monthly payments would increase gradually over a period not exceeding ten years. There would also be a 15% limit during the graduation period on the amount by which monthly payments could increase from year to year, since the monthly payment amount can increase during the graduation period by a set percentage and can also change due to fluctuations in the interest rate. The proposal would also
permit changes in the loan interest rate every three, four or five years, based on the index used by the RRM.

3. Shared Appreciation Mortgage (SAM)

See next section for a full analysis of the proposal.

The Shared Appreciation Mortgage (SAM) is one of the more controversial proposals supported by the FHLBB since it allows the lender to have almost an equity interest in the property by sharing in the home's appreciation. The idea of equity participation is not a totally new concept.

EQUITY PARTICIPATION PROGRAMS

In the fall of 1980, the California state legislature developed an equity participation program, called the Homeownership Co-Investment Program (HCI). HCI's goal is to help Californians meet the high cost of homeownership. The program envisions the state advancing up to 49% of the cost of purchasing a home to the homeowner in return for an equal equity interest. The money advanced would be used to increase the downpayment and thus would lower monthly carrying costs. At the time of sale or maturity, the state would share in the proceeds or market value proportionate with its original investment.
As of early 1981, local housing commissions have been accepting applications, although no funds have yet been distributed. The program's first priority is to offer equity sharing to persons displaced by condominium conversions or by conversions of mobile parks to other uses. The program is also limited to families who have not owned property in the last three years and whose income does not exceed the median family income for the county in which they reside. Once the program is implemented, the state expects to realize a profit on the sale of homes. The state eventually plans to pool its investments into a fund and sell shares in the fund to private investors interested in equity participation.

The League of Savings and Loan Associations has also developed an equity program, the Equity Participation Loan. The plan allows the homeowner to split the future equity appreciation in his/her home with a third party investor, such as an insurance company, a pension fund or a savings and loan association service corporation. In return, the homeowner would receive a monthly annuity payment, based on the expected rate of appreciation for the property, which could be used to supplement mortgage payments. The potential homeowner and the third party investor would negotiate how much equity would be given up and at what rate the house would be expected to appreciate.
The plan envisions a five year term, after which time the homeowner would pay the annuity issuer's share of equity. If the home appreciates faster than anticipated, the third party investor would realize an unexpected profit.

Another equity participation plan was developed by a California real estate broker to help meet the housing affordability problem. Under this program, the "Ticket Corporation" matches investors with potential homebuyers. The investors provide all or a portion of the buyer's downpayment in return for a percentage share in the home's equity appreciation at the end of the designated period.

The "Ticket Corporation" prepares the needed documentation for the buyer-investor agreement while the parties negotiate how much money the investor will put up, the investor's share of appreciation and the term of the agreement. Under the "ticket plan" the term can run from one to five years. At the end of the term, if the homeowner has not sold the property, market value is determined by an appraisal. Since September 1979, approximately three to ten agreements are closed each week.

Real estate professionals in other parts of the country have also developed equity participation programs similar to the "ticket plan". Under one program
initiated on the East Coast in late 1980, third party investors became 50% owners in single-family dwellings by paying three-fourths of the downpayment, and one-half of the closing costs, taxes, financing and insurance. In return, the investor receives 50% of the proceeds when the home is sold and also enjoys the tax advantages associated with their share of taxes and interest paid.

While the above equity participation plans provide money to the homeowner, which effectively reduces the cost of homeownership by lowering the downpayment requirement or the monthly payments, the SAM proposal reduces the actual mortgage interest rate, thereby making the home more affordable.

INTRODUCTION TO THE SHARED APPRECIATION MORTGAGE (SAM)

The Shared Appreciation Mortgage is an alternative mortgage which was developed by the FHLBB for federally chartered S & L's. The aim of the proposal is to help solve the growing affordability problem for first-time homebuyers.

By lowering the interest rate, and thus the monthly payment, more moderate to low income households would be able qualify for home mortgages. Under the SAM proposal, the homeowner is borrowing against expected home appreciation as a means of achieving homeownership. This proposal would be most acceptable to potential
first-time homeowners, who are willing to give up some equity for the ability to own their own home.

The SAM offers the borrower a lower than market rate of interest over a ten year period in exchange for a specified percentage share of the property's appreciation. The borrower and lender are required to determine the interest rate-equity percentage trade-off along with the term of the loan. The specified share of appreciation, defined as contingent interest, may not exceed 40%. The contingent interest would be payable to the lender at the end of the term (up to ten years) or upon the sale or transfer of the property. If the property has not sold prior to maturity, the amount of appreciation is determined by an appraisal. Since the actual appreciation rate, and therefore the contingent interest payment, cannot be known at the time the loan is made, the actual rate of return for the lender and the actual interest expense for the borrower are unknown. (For a detailed analysis of the SAM proposal, see next section).

The SAM proposal was introduced by Jay Janis, former Chairman of the FHLBB, on September 30, 1980. The FHLBB invited the interested public to comment on the SAM proposal by December 1, 1980. As of May, 1981, the FHLBB has not authorized the SAM although they are still very interested in the concept of equity
participation.

**ANALYSIS OF THE SHARED APPRECIATION MORTGAGE (SAM)**

The following points summarize six suggestions for changes in the Federal Home Loan Bank Board (FHLBB) proposal on the Shared Appreciation Mortgage (SAM) which will make the instrument more attractive to lenders, borrowers, and potential investors:

1. **Tax Treatment**
   a. If the borrower refines with the original lender, the lender should be allowed to recognize contingent interest income as a pro rata share of each payment received rather than at the time of maturity.
   b. The FHLBB should support a change in IRS regulations which would allow the borrower to take a carryforward or carryback of any excess interest deduction.

2. **Accounting Treatment**
   The lender should be allowed to accrue contingent interest over the life of the mortgage instrument.

3. **Public Education -Disclosure**
   The FHLBB has an obligation to educate the general public on all the new alternative mortgage instruments it has authorized. The FHLBB should set aside a budget for consumer education geared to the general public, realtors, lenders, builders, and prospective investors. The education program should include seminars, video tapes, and brochures which would outline the major features of all the new mortgage instruments (see Consumer Mortgage Information Pamphlet), Working Paper 81-30.

4. **Refinancing-Term**
In order to reduce the risk of refinancing, the term should be shortened to eight years with an 18 month to two year option to allow the homeowner to determine when the optimal time would be to refinance in terms of his/her income and the going market rate. This would overcome the problem of refinancing during a time of abnormally high interest rates due to a credit crunch.

5. Marketability

The FHLBB should authorize contingent interest insurance so that a minimum yield (appreciation rate) would be guaranteed.

6. Equity vs. Contingent Interest

To enhance the attractiveness of SAMs, the FHLBB should consider a change in regulations to allow S & Ls the ability to hold equity. Under this arrangement, the S & L could sell its equity share to a third party who would enjoy several tax advantages inherent in holding real estate. The lender would be assured a market rate of interest and the borrower would still have the advantage of a below market rate of interest.

The following analysis includes a description of the SAM proposal along with a study of the major features of the proposal.

**TAX TREATMENT**

**FHLBB Proposal**

In its proposal, the FHLBB commented on the tax implications of the SAM. It determined that the SAM has tax consequences which will differ significantly from those of other residential mortgage instruments:

> (T)he payment of contingent interest by a borrower on maturity or payment in full of the loan or sale or transfer of the property could result in an
income tax deduction for the borrower in excess of his/her taxable income for the year. Any such excess deduction could be neither carried forward nor added to basis. In addition, contingent interest received from a borrower by a lender or secondary market purchaser of the SAM would be taxable income in the year it is received. Moreover, as contrasted to certain widely used non-residential mortgage arrangements involving equity participation by lenders, the portion of the appreciation received by SAM lenders would constitute ordinary income, rather than capital gain.

Comments

The tax treatment, as outlined in the FHLBB proposal, makes the Shared Appreciation Mortgage (SAM) less attractive to lenders and borrowers than it could otherwise be.

Borrower

For the borrower, the contingent interest payment at the time of maturity, sale, or transfer of the property could result in an income tax deduction for interest in excess of his/her taxable income for that year. Under present IRS regulations, any such excess interest deduction could neither be carried forward nor added to the home's basis. For the borrower, the potential inability to use the entire tax shield at the time of maturity, sale, or transfer is a major drawback of this proposal.

According to recent tax research done on SAMs, if the borrower, at the time of maturity, refinances with the original lender, the deduction for contingent
interest can be claimed over the term of the new mortgage, instead of at the time of maturity. In an effort to make SAMs more attractive to borrowers, the FHLBB should actively lobby for a change in IRS regulations to allow for a carryforward and/or carryback of the excess contingent interest deduction. This would support the American goal of home ownership and eliminate one of the most negative features of this proposal.

**Lender**

The FHLBB has also taken a negative approach concerning the lender's tax treatment. According to the FHLBB's interpretation, contingent interest would be taxable income in the year it is received, and would constitute ordinary income, not capital gains. Based on recent tax research done on SAMs, for a cash basis taxpayer, contingent interest income could be recognized as a pro rata share of each payment received if the borrower refinances with the original lender. If the borrower does not refinance with the original lender, contingent interest would be taxable income for the cash basis lender upon receipt.

For the accrual basis lender, contingent interest is not recognized income until (1) all events have occurred to fix the right to receive income and (2) the contingent interest can be determined with accuracy (e.g. upon sale, transfer, or maturity-Sec. 1.451-1
U.S. Treasury Department Regulations). At that time, the total contingent interest amount is recognized as income.

**Secondary Market**

If a savings and loan association decides to pool shared appreciation mortgages for sale to the secondary market, there are tax consequences that the financial institution should be made aware of. The mortgage "pool" will be generally classified as a trust by the IRS with each investor treated as the owner of an undivided interest in the entire trust. The cash basis investor would report his/her pro-rata share of mortgage interest as it is collected by the selling institution, while the accrual basis investor would report income when the interest becomes due.

If the investor sells his/her interest in the pool substantially ahead of maturity, the gain from the sale could be treated as capital gains rather than accrued interest (ordinary income), since the investor does not have an accrued right to the appreciation interest until maturity. This interpretation is based on Fisher v. Commissioner 209 F.2d 513, Jaglom v. Commissioner 9 AFTR 2d 1686 and Real Estate Investment Trust of America 40 TC 921. These cases held that gains from the sale of an asset that has appreciated in value are capital gains while gains flowing from the sale of an
accrued right to collect income are ordinary income.

However, if an investor relying on the findings of the above cases, attempts to sell his/her participation mortgage interest shortly before maturity, the IRS will likely ignore the date the contingent interest accrues and assert that the interest has economically accrued since the subsequent purchaser faces little risk of loss between the date of purchase and the date of payment. Thus the gain on sale due to the appreciation interest would be taxed as ordinary income.

If the secondary investor holds his/her interest in the shared appreciation mortgage pool until maturity, the appreciation interest received will be taxed as ordinary income. The savings and loan association will also realize ordinary income when it sells participation interests in a SAM pool.

The savings and loan association may also elect to sell its mortgages to an investment partnership as a tax shelter mechanism for the partners. The savings and loan association could sell the shared appreciation mortgages to the investment partnership at face value in return for a partnership note at current market rate, collateralized by the mortgages. Prior to maturity, the partnership could then sell its participation interest at face value plus anticipated contingent interest to the selling institution or to another
investor. As with participation interests in a SAM pool, capital gains treatment would be allowed as long as the investor or investment partnership sells its interest substantially prior to maturity of the mortgage instrument.

The above interpretation of the tax treatment vis a vis the lender, borrower and secondary market participant should be reviewed and adopted by the FHLBB to insure that the SAM will be an attractive and viable alternative mortgage instrument.

ACCOUNTING TREATMENT

FHLBB Proposal

Under generally accepted accounting principles, contingent gain, such as contingent interest payable on a SAM, should not be recognized as income prior to its realization. With the SAM this would be the earlier of the maturity or payment in full of the loan or the sale or transfer of the property. Fixed interest over the term of the loan would be recorded as received at the stated rate on the mortgage note.

The Board has determined that the above treatment of contingent interest would be proper under section 563.23-3 of the Rules and Regulations of the Federal Savings and Loan Insurance Corporation, which require that savings and loan associations prepare financial statements and reports to the FHLBB under generally accepted accounting principles.
Comments

The FHLBB has taken a conservative position in its interpretation of the accounting treatment of the SAM. According to the FHLBB, contingent interest on a SAM cannot be recognized as income prior to its realization. This would be the earlier of the maturity or payment in full of the loan or the sale or transfer of the property. Fixed interest over the term of the loan would be recorded as received at the stated rate on the mortgage note.

SAMs will not be attractive to the lender unless an adjustment is made in the accounting treatment to allow a partial recognition of the appreciation income (contingent interest). To this end, the FHLBB should press the AICPA (American Institute of Certified Public Accountants) for accounting changes regarding recognition of contingent interest.

A formula should be worked out so that the lender would be able to book some income before maturity, sale or exchange. One proposed idea is that the S & L be allowed to book a portion of the appreciation as income based on the difference between the market rate for the year of the loan and the instrument's fixed rate. A second workable proposal would be to use regional statistics on average home appreciation to determine contingent interest income due to yearly appreciation.
A third proposal would be to allow the association to book as income from contingent interest the first 4% of the annual appreciation, and, as a "kicker", 10% of the excess appreciation over 4% determined at the time of maturity. For example, if a home purchased for $100,000 appreciates 15% in the first year ($15,000), the association would book $4000 as contingent interest income. If the home is then sold at the end of the first year, the association would also be able to book 10% of $11000 ($1100) as interest income in the year of sale.

Some mechanism, such as the proposals outlined above, needs to be developed to allow the lender to accrue contingent interest before the final year of the mortgage instrument. If this cannot be accomplished, SAMs will be less attractive to the lender.

LOAN TERM

FHLBB Proposal

In drafting the SAM proposal, the FHLBB seems to have been aware of the problems inherent with a long-term maturity. These problems include, the accumulation of a potentially significant amount of contingent interest, the borrower's inability to refinance after 30 years, and the association's lack of liquidity due to holding a below-market rate mortgage for up to 30
years. To avoid these problems, the Board has proposed a maximum term of ten years with the option of offering SAM's with a shorter term.

Comments

The term of ten years or less has addressed the problems associated with a long-term maturity and seems to be a good compromise for the parties involved. A longer term would defer the contingent interest too long for the lender or investor, would lead to an astronomical payment for the borrower, and would increase the secondary market investor's exposure to risk. A possible suggestion would be to make the term eight years with an 18 month to two year option to allow the homeowner to determine when would be the optimal time to refinance. This would benefit the borrower in the event of a credit crunch and would be advantageous to the savings and loan association or to the secondary market investor since a shorter term would reduce risk.

TRADE-OFF

FHLBB Proposal

The FHLBB proposal limits contingent interest to a maximum of 40 percent of net appreciated value. It does not establish a formula for relating the below-market rate of fixed interest to the percentage of net
appreciated value to be paid by the association. The Board simply states it anticipates that savings and loan associations will balance fixed interest and contingent interest to produce an overall competitive rate of return.

Comments

The 40 percent maximum share of appreciation is more acceptable to the homeowner and to consumer groups than if the proposal had no ceiling on the percentage of appreciation shared with the association. The 40 percent maximum also protects the association from possible litigation concerning their "equity investment."

In not establishing a formula for relating interest rate discount to appreciation percentage, the FHLBB is allowing the market to determine, on an individual basis, an equitable trade-off. One widely proposed formula, used by Advance Mortgage Corporation and Coast Federal Savings and Loan Association, is a 1/3 interest rate subsidy for a 1/3 appreciation share. This formula is unfavorable to the lender because the association needs extra compensation to offset the additional risks it incurs by offering SAMs.

The formula for relating below market rate interest to appreciation share should follow the ratio used in "equity kicker" loans in the commercial real
estate market. The trade-off for these loans has usually been a 30% to 50% equity interest for a 200 basis point reduction.

A similar trade-off is calculated in Exhibit 1 where there is a 200 basis point reduction in interest rate for a 33 1/3% share of appreciation. For comparison purposes, the 33 1/3% reduction in interest rate for 33 1/3% share of appreciation was also calculated. (See Exhibit 2). Under the 200 basis points - 33 1/3% trade-off example, a yearly home appreciation rate of 7.15% is required for ten years to break-even, while under the 33 1/3% - 33 1/3% trade-off, the yearly home appreciation rate required is 11.10%.

According to FHLBB statistics on national average house prices for the month of July, the yearly appreciation rate has been 8.95% for new homes and 7.66% for existing homes over the past 16 years. (See Exhibit 3). In California, the yearly appreciation rate over the last five years has varied from 12.7% to 29.6%, with an average appreciation over the five year period of 18.2% (see Exhibit 4). Based on these yearly appreciation rates, the probability of exceeding the 7.15% break-even appreciation rate is favorable. The 200 basis point - 33 1/3% trade-off looks even more attractive to the lender when the tax implication of lower income from the SAMs is taken into account with
BREAK-EVEN APPRECIATION FOR 10% SAV v. 12% FIXED INTEREST

TRADE-OFF FORMULA: 200 BASIS POINTS FOR 33 1/3% APPRECIATION

ASSUMPTIONS:
$100,000 home cost  
$80,000 loan  
30 year amortization  
10 year term  
10% SAV  
12% Market Mortgage Rate

***  
***  
***  
***  
***

At 10%:

Monthly payments $702.06
Accumulated interest paid (at the end of 10 years) $76,996.96
Principal paid $7,250.24
Unpaid principal $72,749.76

A. To discount 10% mortgage to yield 12%:
1. Take the present value of the 120 monthly payments from the 10% SAV plus the unpaid principal, discounting them at 12%:
   = $48,933.95 + $22,042.80 = $70,976.75
2. Subtract the present value from $80,000 to get the discount:
   = $80,000 - $70,976.75 = $9,023.25

B. Take the future value of the discount in 10 years, compounding at 12%:
   FV of $9,023.25 in 120 months at 12% = $29,780.22

C. If the savings and loan association gets 33 1/3% of the appreciation, the net appreciation at the end of 10 years must be:
   $29,780.22/33 1/3% = $89,340.65

D. At maturity (10th year), if the homeowner does not sell, the home's market value would have to have increased to $199,491 to yield an appreciation of $89,340.65:

   Appreciation $89,341
   Home cost 100,000
   Capital improvements 10,000
   Appraisal fee to determine market value 150

   BREAK-EVEN MARKET VALUE $199,491

***  
***  
***  
***  
***

E. If the home cost $100,000 and must appreciate to a value of $199,491, what would be the necessary yearly appreciation rate?

   \[ \text{PV} = \text{FV} \times (1 + r)^n \]
   \[ \text{FV} = \text{PV} 	imes (1 + r)^n \]
   \[ n = \text{10 years} \]
   \[ i = 7.15\% \]

   = ANNUAL HOME APPRECIATION TO BREAK-EVEN
BREAK-EVEN APPRECIATION FOR 8% SAM V. 12% FIXED INTEREST

TRADE-OFF FORMULA: 33 1/3% LOWER INTEREST FOR 33 1/3% APPRECIATION

ASSUMPTIONS:
$100,000 home cost
$80,000 loan
30 year amortization
10 year term
8% SAM
12% Market Mortgage Rate

At 8%:
Monthly payments $ 587.01
Accumulated interest paid (at the end of 10 years) $60,621.29
Principal paid $9,819.91
Unpaid principal $70,180.09

A. To discount 8% mortgage to yield 12%:
1. Take the present value of the 120 monthly payments from the
   8% SAM plus the unpaid principal, discounting them at 12%:
   = $40,914.90 + $21,264.20 = $62,179.10
2. Subtract the present value from $80,000 to get the discount:
   = $80,000 - $62,179.10 = $17,820.90

B. Take the future value of the discount in 10 years, compounding at 12%:
   FV of $17,820.90 in 120 months at 12% = $58,815.86

C. If the savings and loan association gets 33 1/3% of the appreci- 
ciation, the net appreciation at the end of the 10 years must be:
   $58,815.86/33 1/3% = $176,447.58

D. At maturity (10th year), if the homeowner does not sell, the 
   home's market value would have to have increased to $286,598 
   to yield at appreciation of $176,447.58
   Appreciation $176,448
   Home cost 100,000
   Capital improvements 10,000
   Appraisal fee to determine market value 150

BREAK-EVEN MARKET VALUE $286,598

E. If the home cost $100,000 and must appreciate to a value of 
   $286,598, what would be the necessary yearly appreciation rate?
   PV = $100,000
   FV = $286,598
   n = 10 years
   i = 11.10% = ANNUAL HOME APPRECIATION TO BREAK-EVEN
### AVERAGE PURCHASE PRICE - UNITED STATES

**FOR ALL MAJOR TYPES OF LENDERS**

*(Based on the month of July)*

<table>
<thead>
<tr>
<th>YEAR</th>
<th>NEW HOMES</th>
<th></th>
<th>EXISTING HOMES</th>
<th></th>
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<td>24,900</td>
<td>8.8</td>
<td>22,100</td>
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</tr>
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<td>1966</td>
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<td>4.2</td>
<td>31,000</td>
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<tr>
<td>1971</td>
<td>36,800</td>
<td>1.4</td>
<td>31,600</td>
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</tr>
<tr>
<td>1972</td>
<td>37,300</td>
<td>(0.8)</td>
<td>33,800</td>
<td>(1.5)</td>
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<tr>
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<td>9.5</td>
<td>33,300</td>
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<td>36,200</td>
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<td>1980</td>
<td>90,100</td>
<td></td>
<td>68,800</td>
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</tr>
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</table>

**YEARLY APPRECIATION OVER 16 YEARS**

|  | 8.95% | 7.86% |

**SOURCE:** [FHLBB](#)
EXHIBIT 4

AVERAGE PURCHASE PRICE - CALIFORNIA
(Based on the month of August)

YEAR                  EXISTING HOMES

                      $ Avg. Price   % Apprec.
1975                  43,000          -
1976                  48,918          13.8
1977                  63,394          29.6
1978                  71,452          12.7
1979                  85,309          19.4
1980                  99,222          16.3

YEARLY APPRECIATION OVER
5 YEARS                18.2%

SOURCE: California Board of Realtors
taxes added to the analysis, a 5.29% yearly appreciation rate is required to break-even. (See Exhibit 5)

**NET APPRECIATED VALUE**

**FHLBB Proposal**

The following is a description of how the FHLBB's proposal calculates net appreciated value:

Calculation of net appreciated value depends on how market value is determined, which in turn depends on whether the loan goes to maturity or is prepaid in full or the security property is sold or transferred prior to maturity. In the event of sale or transfer, the Savings and Loan Association would be able to choose to accept the net sales price as a determination of market value. Net sales price, or amount realized on the sale under the Internal Revenue Code, is the gross sales price less expenses of sale such as commissions, advertising, transfer and stamp taxes, legal, escrow and recording fees, and other similar payments if made by, or charged to, the borrower.

If the association does not choose to accept the net sales price as market value, or if the loan matures or is paid in full prior to sale or transfer, the market value would be determined by appraisal.

Net appreciated value is calculated by subtracting from the market value (net sales price or appraisal value) of the property (1) the cost of the security property to the borrower; (2) the cost of any capital improvements made to the property by the borrower, and (3) the cost of any appraisals needed to determine market value. Cost of the security property to the borrower includes commissions, cost of title search or title insurance, legal, appraisal and inspection fees, and payments to clear title of prior liens. The downpayment made by the borrower on purchase is part of the cost of the property and is not shared with the savings and loan association.
EXHIBIT 5

BREAK-EVEN APPRECIATION FOR 10% SAM v. 12% FIXED INTEREST
WITH ADJUSTMENT FOR TAX SAVINGS

TRADE-OFF FORMULA: 200 BASIS POINTS FOR 33 1/3% APPRECIATION

ASSUMPTIONS:

$100,000 home cost
$80,000 loan
30 year amortization
10 year term
Lender's tax rate = 35%
Present value of tax savings discounted at 12%

<table>
<thead>
<tr>
<th>YEAR</th>
<th>10% SAM</th>
<th>12% FIXED</th>
<th>DIFFERENCE</th>
<th>TAX SAVINGS</th>
<th>PV-TAX SAVINGS</th>
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<td>$7979.97</td>
<td>$9584.38</td>
<td>$1604.41</td>
<td>$561.54</td>
<td>$501.38</td>
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<td>7933.40</td>
<td>9547.57</td>
<td>1614.17</td>
<td>564.96</td>
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<td>3</td>
<td>7881.98</td>
<td>9506.69</td>
<td>1624.11</td>
<td>568.44</td>
<td>404.60</td>
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<tr>
<td>4</td>
<td>7825.12</td>
<td>9459.33</td>
<td>1634.21</td>
<td>571.97</td>
<td>363.50</td>
</tr>
<tr>
<td>5</td>
<td>7762.36</td>
<td>9406.66</td>
<td>1644.30</td>
<td>575.51</td>
<td>326.56</td>
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<td>9347.32</td>
<td>1654.34</td>
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<td>9280.39</td>
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<td>588.67</td>
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<td>7334.91</td>
<td>9024.42</td>
<td>1689.51</td>
<td>591.33</td>
<td>190.39</td>
</tr>
</tbody>
</table>

\$3242.44

A. The present value of tax savings from SAM is used to reduce the discount calculated in Section A.2. of Exhibit 3 $9,023.25 - \$3,242.44 = \$5,780.81

B. Future value of $5,780.81 in 10 years, compounding at 12%:

FV of $5,780.81 in 120 months at 12% = $19,078.91

C. Is the savings and loan association gets 33 1/3% of the appreciation, the net appreciation at the end of the 10 years must be:

$19,078.91/33 1/3% = $57,236.73

D. At maturity, the home's market value must be:

- Appreciation $57,237
- Home cost 100,000
- Capital improvements 10,000
- Appraisal fee to determine market value 150

BREAK-EVEN MARKET VALUE $167,387

E. If the home cost $100,000 and must appreciate to a value of $167,387, what would be the necessary yearly appreciation rate?

\[ \text{PV} = \$100,000 \]
\[ \text{FV} = \$167,387 \]
\[ n = 10 \text{ years} \]
\[ i \approx 5.29\% \]

ANNUAL HOME APPRECIATION TO BREAK-EVEN
In the event that the loan is used to refinance a property, the cost of the property would be determined by an appraisal performed at the time of the origination of the loan. Capital improvements include new structures or permanent improvements to existing structures. . . The Board (FHLBB) notes, however, that borrowers will be required to establish costs associated with purchase and the amounts of capital expenditures.

Comments

Net appreciated value is the easiest and most equitable method of calculating contingent interest. The FHLBB calculation follows the Internal Revenue Service's calculation of gain or loss on sale of a residence in its determination of net sales price, cost of the property, and cost of capital expenditure. By adopting the IRS method of calculation of gain or loss on sale of a residence, the value placed on improvements is not subject to manipulation and is an objective method of reflecting changes in value due to borrower improvements. By subtracting out all dollar expenditures associated with the initial purchase and subsequent sale (down payment, sales commission, termite inspection, title insurance, etc.), the borrower does not have to pay appreciation on these items.

APPRAISAL

FHLBB Proposal

The borrower and lender are required to select the appraiser from a list of appraisers approved by the
Federal Home Loan Mortgage Corporation and the Federal National Home Mortgage Association. The appraiser chosen would then estimate market value from which net appreciated value would be calculated. If the borrower and the association are in disagreement over the choice of an appraiser, each party would choose their own appraiser, and market value would be determined by an average of the two appraisals. If the borrower does not select an appraiser within 30 days of receipt of the notice of maturity sent by the association, only the appraiser selected by the association would perform the appraisal.

The FHLBB's proposal defines market value as the amount realized on the sale or transfer of property. This definition of market value has traditionally been accepted by Federal housing and financial regulatory agencies and the appraising profession.

Comments

Cost of capital improvements is the most objective method of determining value because appraisals of individual capital improvements are difficult to calculate and are susceptible to subjective determination. For example, the value of a newly installed patio or deck would depend on the workmanship of the improvement, the neighborhood, the location and the overall condition of the home.
However, the cost approach could work against both the borrower and the lender. In the case of the borrower who does his/her own capital improvements, he/she will only be credited for actual expenditures incurred and not for the time and labor involved in the project. In addition to not being compensated for time and labor, the borrower gets no credit, other than cost, for the increased value of the home due to capital improvements. On the other hand, in the case of the lender, some improvements add less to the value to the home than their cost. For example, a swimming pool which costs $15,000 typically only adds $7000 to $8000 to the value of the home.

Consumer groups are also concerned about the credibility of appraisers. They feel that since appraisers work closely with financial institutions, appraisers could be easily influenced by them. Some consumer groups have even suggested that the only way to protect the consumer would be for the federal government to create an agency within HUD which would perform and verify appraisals. Although their concerns might be justified, the proposed solution is naive given the current political atmosphere and the unstructured nature of the appraisal profession.

Nondiscrimination Requirements
FHLBB Proposal

The FHLBB proposal states that SAMs will be subject to the nondiscrimination requirements of Part 528 of the Bank System Regulations (12 CFR Part 528). These regulations prohibit discrimination on the basis of age, race or sex of the applicant or on the basis of the age or location of the security property, in the extension of credit and in the terms and conditions of the loan. Although the proposal does prohibit a savings and loan from limiting the availability of the SAM to certain neighborhoods, the proposal does state that, based on "sound business practice", a savings and loan association may want to concentrate SAMs in areas or types of housing that it believes will experience rapid appreciation. With regard to other limitations on the availability of the SAM, the proposal states:

or a certain history of appreciation, are not per se prohibited, but may prove objectionable if they are discriminatory in effect. A lending policy limitation will be discriminatory in effect if it has a disproportionately adverse impact on lending to protected classes or individuals. To the extent a policy is discriminatory in effect, an association must be prepared to demonstrate that its policy achieves a genuine business need which cannot be achieved by means which are either not discriminatory in effect or less discriminatory in effect.

Comments

The problem of discrimination may arise when a savings and loan association uses different trade-off
formulas depending upon the geographical region and neighborhood. This practice may be labelled "redlining" unless the savings and loan association can prove to the satisfaction of the FHLBB that its policy meets a "genuine business need" which can not be achieved by another nondiscriminatory policy.

Financial institutions will be less willing to make Shared Appreciation Mortgages in areas that have not experienced a high appreciation rate to minimize risk in an uncertain market. Although this practice may appear to be discriminatory, it is in fact "good business practice" for the savings and loan association that wants to minimize risk and make the SAM a more attractive instrument to the secondary market.

If a lender wants the same expected yield across neighborhoods to facilitate packaging to the secondary market, a "good business practice" approach would be to offer lower interest rates in areas with the greatest expected appreciation. Assuming the loan term is three years, the lender's share of appreciation is 30%, the down payment is 20%, and the market rate is 12.5%, a lender could offer an interest rate of 7.03% to a borrower in an area which is expected to experience annual appreciation of 16% and earn a break-even yield of 12.5%. Given the above assumptions, a lender could only offer an 11.3% interest rate to the same borrower.
for the same house if the neighborhood is expected to experience 4% annual appreciation. (See Exhibit 6)

The lender must design the contractual arrangements of the SAM to at least break-even since the source of contingent interest is estimated appreciation. Because the lender must be compensated for assuming a riskier mortgage, "good business practice" would dictate a return greater than the yield on a fixed rate mortgage.

A savings and loan's business practices may come into direct conflict with some consumer groups which are recommending that the financial institution allocate a percentage of the Shared Appreciation Mortgages per area to avoid any trace of discrimination. These consumer groups also support an across the board trade-off formula to protect low income borrowers.

The across the board trade-off formula may not be necessary according to a study done by Wallace Smith on house values in Oakland. The study found that the percentage price increase for houses from 1930 to 1964 was greatest in the poor neighborhoods of Oakland.

A savings and loan association could also run into difficulties with the FHLBB if a borrower's future income is examined to determine if the borrower will be able to meet refinancing payments. The applicant could
**EXHIBIT 6**

BREAK-EVEN INTEREST RATE SCHEDULE FOR THE SAM UNDER DIFFERENT ASSUMPTIONS OF APPRECIATION

<table>
<thead>
<tr>
<th>Estimated Annual Home Appreciation</th>
<th>Lender's Share of Appreciation</th>
<th>Interest Rate (Market Interest Rate 12.50%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4%</td>
<td>10%</td>
<td>12.11%</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>11.71</td>
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<tr>
<td></td>
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<td></td>
<td>40</td>
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**SOURCE:** U.S. League of Savings Associations
charge the savings and loan association with age discrimination.

REFINANCING REQUIREMENTS

FHLBB Proposal

The FHLBB proposal provides for guaranteed refinancing of the outstanding principal plus contingent interest if the home is not sold or transferred prior to maturity. The home may be refinanced using any type of mortgage instrument available, other than the SAM. At present, available mortgage instruments include the standard fixed-payment mortgage, the graduated payment mortgage, the variable rate mortgage, the renegotiable rate mortgage, and the reverse annuity mortgage.

The new mortgage would be offered at the prevailing market rates for residential first mortgages. At the time of refinancing, the minimum term which could be offered would be 30 years. The FHLBB proposal also provides that fees associated with refinancing, except for appraisal cost, will be borne by the association.

A savings and loan association would be required to offer refinancing of the SAM without regard to the forecast of the borrower's income. However, an association could require the borrower to satisfy any intervening lien against the property arising since the SAM was made, prior to refinancing the loan. The FHLBB
proposal also limits guaranteed refinancing if it is in violation of other lending regulations, such as loan-to-value limitations, limits on term, escrow requirements, and amount of monthly installments.

Comments

Guaranteed refinancing is a necessity for the Shared Appreciation Mortgage. Without guaranteed refinancing, SAMs will not be an attractive instrument for the potential borrower and mortgage insurance will be more difficult to obtain. However, there is a major problem with required refinancing. The problem centers on the secondary market's reaction to required refinancing. Many investors see refinancing as the major drawback of the SAM, and would not be interested in the SAM if refinancing is required. (See Marketability Section).

If guaranteed refinancing is required, the lender should be able to choose which refinancing instruments would be offered to the potential borrower. At the lender's discretion, SAM's should be among the options available.

MARKETABILITY

FHLBB Proposal
The FHLBB believes the SAM will be most attractive to the first-time homebuyer who has been increasingly priced out of the market today. The SAM may also help elderly homeowners refinance existing homes as a means of reducing their monthly payments. In its proposal, the FHLBB anticipates that SAMs will be pooled for sale directly or through pass-through securities to the secondary market.

Comments

Primary Market

Due to the growing affordability problem, there is a demand for a mortgage instrument which will lessen the initial costs of home ownership. SAMs will be most attractive to first time home-buyers who have a difficult time getting into the market during periods of rising interest rates and house prices. This segment of the homebuying market would be willing to give up a portion of their home's appreciation for the ability to own their own home. SAMs' great appeal has already been demonstrated by the public's overwhelming response to the Oppenheimer program.

The real question is "Can the lender afford to offer SAMs?" One way to overcome the cash flow problem inherent in SAMs, and thus make SAMs more attractive to lenders, is the ability to sell it in the secondary
market.

Secondary Market

Since the mortgage market is related to the overall capital market, SAMs potential marketability hinges on its ability to compete within the overall capital market.

Regarding SAMs' marketability, Pension Fund Administrators and Insurance Company Representatives felt that, although the SAM is an interesting idea in theory, there are too many problems and risks associated with the instrument as it is now proposed by the FHLBB:

1. Public relations problem and potential litigation risk

Investors feel if the public is not adequately educated concerning SAMs, they will face the possibility of litigation and negative publicity at the time of maturity if the borrower is forced to sell the home due to an inability to meet increased payments. Will Clardy of Prudential Life Insurance specifically expressed a philosophical objection to SAMs and stated in a public hearing before the California Senate Committee on Insurance and Financial Institutions that he would not buy SAMs. James M. Wooten of Lomas & Nettleton Company opined that SAMs could create the feeling
that "the family" is being taken advantage of if the borrower forgets the original terms and conditions of the loan at maturity. Other investors also expressed the opinion that an individual's home represents the "last frontier" and therefore should not be infringed upon by a corporate entity.

2. **Refinancing Risk**

Required refinancing is an undesirable feature since it removes the lender's option of eliminating an unsatisfactory borrower from its portfolio and exposes the lender to additional credit risks. Forced refinancing would also create a severe problem for the lender if the 10th year coincides with a credit crunch and no money is available for lending.

3. **Ten Year Maximum Term**

Investors believe the ten year maximum term is too long. They would prefer a three to five year term to minimize the uncertainty of return. Insurance companies are looking for investments that will provide them with flexibility and liquidity since they are experiencing a reduction in cash flow due to a change in the nature of their business (less whole life insurance policies and more term insurance policies). Pension funds are also looking towards short term and medium term instruments.
4. Uncertainty of Return

Pension funds and insurance companies feel there is too much uncertainty involved in a return based on a future appreciation rate. They believe that SAMs are predicated on the assumption that inflation will continue. Therefore, if inflation is brought under control, and appreciation is reduced, SAM's will become a less desirable instrument.

5. Valuation of Home Improvements

The institutional investors feel there is a basic problem with the FHLBB proposed valuation of improvements. They contend that the value of an improvement is not always equal to its cost. An improvement can add more or less than cost to a home's value. Some potential investors also feel that the lender should have control over improvements and maintenance to insure that the home's value at maturity will not be negatively affected.

FNMA was also contacted concerning the marketability of SAMs. FNMA feels the ten year term is prohibitive and would insist on a seven year call option. FNMA also objects to the required refinancing because it is not in the position to act as a lender.

The secondary market representatives were equally restrained when asked about the possibility of
splitting the instrument in two parts and selling the appreciation rights separately to the secondary market. Institutional investors are primarily concerned with how the appreciation rights would be priced. They also feel that there could be a legal problem because of the uncertainty in classifying the rights and in meeting the "prudent man rule."

**Suggestions to Improve Marketability**

1. One suggestion which would make SAMs more attractive to the secondary market, particularly private investors, would be to change the rules governing S & Ls to allow them to hold equity. Under this scenario, the S & L could sell its equity share to a third party who would be able to take interest deductions, depreciation, and capital gains. The lender would be ensured a market rate of interest from the homeowner and the investors and the homeowner would still have the advantage of a below-market interest rate. The problem with this proposal is that investors would not have control over improvements made or the timing of a sale or transfer. Also, the investor would be exposed to liabilities as a co-owner of the property. If the S & L does not sell its equity share, it would be subject to the same liabilities.

2. Another suggestion would be to allow the association to sell the appreciation rights separately from
the mortgage. The appreciation rights could be sold to an individual investor for the difference between the market interest rate and the SAM interest rate, plus servicing fees. Upon sale or refinancing of the property, the investor would receive all the appreciation benefits that would have otherwise accrued to the association. This would be an attractive investment to an investor assuming tax legislation is enacted allowing capital gains treatment for the investor at maturity.

3. The FHLBB should authorize contingent interest insurance so that a minimum appreciation rate, based on historic appreciation data, is guaranteed. This would make SAMs more attractive to institutional investors. The FHLBB could authorize contingent interest insurance so that a minimum appreciation rate, based on historical appreciation data, is guaranteed.

4. The FHLBB should overcome the secondary market's fears concerning adverse publicity and the possibility of litigation by appropriating a budget for consumer education.

5. The ten year term should be changed to an eight year term with an 18 month to two year option which would lessen the refinancing risk for the lender-investor.

If the above suggestions are implemented by the
FHLBB, SAMs will be a more attractive investment.

MISCELLANEOUS FEATURES

FHLBB Proposal

Prepayment

In order to facilitate refinancing at the end of the mortgage instrument's term, the FHLBB proposal prohibits prepayment penalties. In California prepayment penalties have been ruled illegal by virtue of the Wellenkamp decision.

Preemption of State Law

The FHLBB proposal preempts all state laws that would restrict a Federal association from making, purchasing or participating in a SAM. The proposal, however, does not preempt interest rate ceilings set by state usury laws.

Required Covenants

A Savings and Loan Association must provide the following covenants in the SAM instrument to insure that the appreciation payable will be considered to be payment for the use of money rather than an equity investment and that the borrower, not the lender, will enjoy all the rights and burdens of ownership:
1. The property securing the loan must be occupied by the borrower;

2. the relationship between the borrower and the association is that of debtor to creditor and is not considered to be a joint venture or partnership;

3. the instrument is intended to secure the obligation of the borrower to repay the loan, including contingent interest; the interest of the association in the security property is not that of an owner;

4. the obligation to pay any real property taxes, insurance premiums, or any other charges relating to the ownership of the security property shall be the sole responsibility of the borrower;

5. the borrower's right to sell, transfer, encumber, improve or otherwise use the security property may be exercised by the borrower without prior consent of the association; and

6. the association shall not be liable to the borrower for any reduction in market value of the security property.

Comments
The covenants specified by the FHLBB proposal, especially covenants #4, #5, and #6, should be disclosed in material given to a potential borrower prior to closing. Despite the specific covenants identified by the FHLBB proposal, there are several areas that the FHLBB's proposal did not address concerning the savings and loan's security interest in the underlying property. The following questions have not been discussed in the FHLBB proposal:

1. How would foreclosure be dealt with under a SAM?

2. If the property is foreclosed, would contingent interest have priority over any payment to the homeowner?

3. What happens if there is a natural disaster? Would a natural disaster accelerate payment of the contingent interest?

4. If the homeowner rebuilds after a natural disaster, what will be the new basis of the home to determine future appreciation?

5. How does the savings and loan enforce the owner-occupied clause? If the owner rents the house and moves out, will the courts interpret contingent interest as equity and impute corporate liability on the savings and loan or secondary holder of the SAM for the landlord-tenant relationship?
These questions should be properly addressed before the Sam proposal is implemented by the FHLBB. If these questions, and other legal issues concerning the rights of the Association and the rights of the borrower are not adequately addressed, costly litigation will most likely ensue.

DISCLOSURE

FHLBB Proposal

The proposal requires that a savings and loan association which offers the SAM, provides to an applicant, at the time an application is requested, detailed disclosures setting forth the terms and conditions of the mortgage. The disclosure should include a comparison of the SAM and conventional mortgages under different assumptions regarding term and appreciation rates. The comparison should also project total interest cost to the borrower under various alternative mortgages.

In addition, 90 days prior to the maturity date, the Association must send the borrower written notification of the due date, the method of determining contingent interest, and the terms of refinancing.

Comments

Disclosure is of prime importance since the Shared
Appreciation Mortgage is a new instrument whose terms are unfamiliar to the general public. The advantages and disadvantages of the SAMs must be fully disclosed to the potential homebuyer so that he/she can make an intelligent decision concerning financing. (See Consumer Mortgage Information Pamphlet) Full disclosure will also help the lender avoid potentially costly litigation.

The following should be the type of information that is disclosed to the borrower:

1. The homeowner will be unable to get a full deduction for the contingent interest payment if the interest paid exceeds taxable income. This could be a major drawback if the contingent interest payment is large.

2. The homeowner will have a more difficult time of "trading up" because less income will be received at the time of sale.

3. The homeowner will only be allowed to deduct the cost of home improvements. The homeowner's own "sweat equity" will not be deductible. Adequate records must be kept to verify all improvements.
4. The homeowner will have lower interest tax deductions during the ten years which may lessen the attractiveness of the lower monthly payments. (See Exhibit 7).

An information booklet should be given to the potential borrower which includes actual examples of the effects of SAMs on the potential borrower according to income, marginal tax bracket, intended period of ownership, house value and appreciation rate.

The brochure should also compare a homeowner's position at the end of the ten year period under a SAM with his/her position under a higher fixed interest rate mortgage. (See Exhibit 8)

As part of the information process, the FHLBB should fund a program to educate the public about all the new alternative mortgage instruments that have been authorized. (See Consumer Mortgage Information Pamphlet for a proposed analysis of the SAM, VRM, AML, ARM and GPM). The program should develop videotapes, brochures, and seminars aimed at homebuyers, realtors, lenders, builders, and potential investors. The FHLBB could then distribute the videotapes and brochures to interested S & Ls and to consumer groups to aid the education campaign.
EXHIBIT 7

FIRST YEAR TAX AND CASH FLOW CONSEQUENCES

FOR THE BORROWER OF A 10% SAM

ASSUMPTIONS:
Based on assumptions in Exhibit 3
Married couple, two children
Adjusted gross income (AGI) = $30,000

A. TAX LIABILITY

<table>
<thead>
<tr>
<th></th>
<th>10% SAM</th>
<th>12% FIXED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted Gross Income</td>
<td>$30000</td>
<td>$30000</td>
</tr>
<tr>
<td>Less: Itemized Deductions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest paid on the 10% SAM</td>
<td>$7980</td>
<td>12% Fixed 9584</td>
</tr>
<tr>
<td>(Zero Bracket Amount)</td>
<td>($3400)</td>
<td>4580</td>
</tr>
<tr>
<td>Adj. Inc. before Exemptions</td>
<td>$25420</td>
<td>$23820</td>
</tr>
<tr>
<td>Personal Exemptions</td>
<td>4000</td>
<td>4000</td>
</tr>
<tr>
<td>Taxable Income</td>
<td>21420</td>
<td>19820</td>
</tr>
<tr>
<td>Tax Liability Using 1980 Tax Rate Schedules</td>
<td>$3615</td>
<td>$3182</td>
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</tbody>
</table>

INCREASED TAX LIABILITY UNDER 10% SAM = $433

B. CASH FLOW

<table>
<thead>
<tr>
<th></th>
<th>10% SAM</th>
<th>12% FIXED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortgage Payments for the First Year</td>
<td>$8425</td>
<td>$9875</td>
</tr>
<tr>
<td>Tax Liability</td>
<td>3615</td>
<td>3182</td>
</tr>
<tr>
<td>Total Cash Flow</td>
<td>$12040</td>
<td>$13057</td>
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</tbody>
</table>

CASH FLOW BENEFIT FROM 10% SAM = $1017
EXHIBIT 8

ECONOMIC CONSEQUENCES FOR THE BORROWER
OF A 10% SAM AT MATURITY (10th Year)

ASSUMPTIONS:
Based on assumptions in Exhibit 3
7% increase in income compounded annually over the 10 year period
7.15% annual compound house appreciation

A. Could the household afford the larger monthly payments after
refinancing the unpaid principal plus the appreciation due
the lender (contingent interest)?

Unpaid principal balance $72,750
Contingent interest due 29,780
NEW LOAN AMOUNT $102,530

New Loan Terms:
Fixed interest loan $102,530
Market interest rate 15%
Term 30 years

Monthly Principal(P)+Interest(I) $ 1,296

Household information:
Est. monthly Calif. prop.taxes(T)+Ins.(I) $ 300
Yearly gross income 59,015
Monthly gross income 4,918
Other fixed payments 300

Underwriting requirements:

\[
\frac{P + I + T + I}{\text{GROSS INCOME}} = \frac{($1,296 + $300)}{4,918} = 32\%
\]

\[
\text{FIXED PAYMENTS} = \frac{($1,596 + $300)}{4,918} = 39\%
\]

CONCLUSION: The borrower will be able to afford the larger
monthly payments after refinancing the unpaid
balance plus contingent interest due assuming
the household's income increases by 7% com-
ounded annually for 10 years.
EXHIBIT 8

ECONOMIC CONSEQUENCES FOR THE BORROWER
OF A 10% SAM AT MATURITY (10th Year)
(Continued)

ASSUMPTIONS:
Based on assumptions in Exhibit 3
Married couple, two children
Adjusted Gross Income = $59,015

*** *** *** *** *** ***

B. Tax consequences for the borrower at maturity (10th year)

<table>
<thead>
<tr>
<th></th>
<th>10% SAM</th>
<th>12% FIXED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted Gross Income</td>
<td>$59,015</td>
<td>$59,015</td>
</tr>
<tr>
<td>Less: Itemized deductions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest paid on the 10% SAM</td>
<td>7,335</td>
<td>12% FIXED</td>
</tr>
<tr>
<td>Contingent interest on 10% SAM</td>
<td>29,780</td>
<td></td>
</tr>
<tr>
<td>(Zero Bracket Amount)</td>
<td>(3,400)</td>
<td>(3,400)</td>
</tr>
<tr>
<td>Adj. Inc. before Exemptions</td>
<td>25,300</td>
<td>53,391</td>
</tr>
<tr>
<td>Personal Exemptions</td>
<td>4,000</td>
<td>4,000</td>
</tr>
<tr>
<td>Taxable Income</td>
<td>21,300</td>
<td>49,391</td>
</tr>
<tr>
<td>Tax Liability Using 1980</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tax Rate Schedules</td>
<td>3,581</td>
<td>14,480</td>
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</tbody>
</table>

TAX BENEFIT FROM 10% SAM IN THE 10TH YEAR = $10,899
CONCLUSION

In our study we attempted to critically analyze the Shared Appreciation Mortgage and to suggest changes which would improve its acceptability to the lender, the borrower, and the secondary market. We recommended that the FHLBB adopt a more liberal tax and accounting treatment for the lender, sponsor a public education program, revise equity regulations, and develop policies which would make the SAM more attractive to the secondary mortgage market. (See suggestions on pp. 18-19). We also analyzed different trade-off formulas and determined that the 200 basis points for 33 1/3% appreciation was most attractive to the lender, especially taking into consideration tax savings. This trade-off formula, with an assumption of 7.15% annual home appreciation and 7% annual growth in income, is also affordable for the borrower. (See Exhibits 5, 8).

Since the concept of equity sharing, encompassed in the SAM proposal, is a new and potentially explosive issue in residential financing, a public education program must be implemented. In the second part of our study, we created a consumer mortgage information pamphlet which could be used as part of an education program. Our pamphlet describes all the new AMIs, including the SAM, vis a vis the traditional fixed interest rate mortgage. We also developed a table (See Working Paper 81-30)
which compares the monthly payment, interest rate and loan balance for each AMI from 1975 to 1980. By reading our pamphlet, graphs and table, a potential homebuyer will have more information with which to make an intelligent decision concerning home financing. This decision will depend on the homebuyer's economic outlook, attitude towards uncertainty, and acceptance of equity sharing and negative amortization.

The AMIs represent one way of adapting to today's environment of high and variable interest rates, accelerating inflation and restrictive credit policies. As was noted by John G. Heimann, the Comptroller of the Currency, AMIs are not a cause of inflation or the affordability crisis, but a response to them.
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