Tax and Regulatory Problems Posed by Alternative Nonstandard Mortgages

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I. INTRODUCTION

This report deals with the income tax and regulatory aspects of alternative mortgage instruments. It emphasizes the identification of major issues and problems and the broad lines on which solutions to them might be worked out. It does not pretend to cover the whole range of tax and regulatory considerations that must be faced in designing and implementing the mortgage contracts discussed in the preceding chapters. The objective, rather, has been to identify the major questions alternative mortgages would pose in the context of current law and regulations, and to point out the modifications in mortgage design and/or changes in tax law and various regulations that might be required in implementing these contracts.

There are three primary types of issues:

1. Those related to income taxation.
2. Those related to interest rate limitations.
3. Those related to other regulatory features of mortgage contracts and the financial institutions that offer them.

Of these three areas, particular attention is paid to income taxation which is one of the basic elements of the "rules of the game" in our society. With the interest component of standard mortgages deductible in computing taxable income, alternative mortgages would be severely disadvantaged if they did not receive similar treatment.[1]

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[1]While it has been argued that homeowners enjoy a substantial tax "break" in the nontaxability of the income from their investment, and, therefore do not need the additional boon of mortgage interest deductibility, this point is not relevant to a comparison of the attractiveness of alternative mortgage contracts relative to the standard mortgage whose interest payments are deductible by the homeowner.

From its inception the income tax has been a levy on nominal income (money income).[2] While a tax based on money income is sorely tried by inflation as brisk and protracted as that of the most recent five years, it does not appear that a shift to a real income base is imminent. Moreover, even were the base to be changed to "real" income, the experience of countries most comparable to the United States that have adjusted their income tax for inflation, Canada for example, suggests that the adjustment would be limited to current year's income via indexation of rate brackets and exemptions, without tackling the more difficult task of indexing financial claims (and bringing into account only real capital gains and losses) which would require an additional adjustment.[3] And it is this more complete adjustment that would be required for price-level-adjusted mortgages, and other nonstandard mortgages that involve similar adjustments. Therefore, since the monetary definition of taxable income is likely to persist, we investigate the feasibility of alternative mortgage arrangements under present income tax law and regulation.

However, were the United States ever to adopt thorough-going indexation of the income tax, as in Brazil for example, tax accounting for nonstandard mortgages, PLAMs in particular, would be more straightforward and simpler than the procedures outlined below for our present money income tax base.

The section that follows is concerned with income tax issues. Section III deals with interest rate limitations incorporated in usury laws, and Section IV takes up some other regulatory issues.

II. TAX TREATMENT OF NONSTANDARD MORTGAGE CONTRACTS

Introduction

Three main classes of alternative mortgages are considered in this section.

1. Price-level-adjusted mortgage (PLAM), which incorporates a real interest rate (one which incorporates no premium for anticipated inflation) but has its outstanding principal adjusted in line with changes in some price level index. Therefore, nominal PLAM payments change over

[2]The decision in Bates v. United States [108 F. 2d 407 (7th Cir. 1939), cert. denied, 309 U.S. 666 (1940)] is most explicit on this point. To the taxpayer's argument that no capital gain was enjoyed (and no capital gains tax liability was, therefore, due) on the *nominal* gain he enjoyed on a security purchased prior to the devaluation in 1934, the court held that purchasing power was not a relevant consideration for a nominal income tax: "The standard unit of computation is the money dollar, an abstract unit of account. That standard unit of money has not changed in money value throughout the existence of our monetary system." (Idem at 408.)

[3]See "Inflation and the Federal Income Tax," *Yale Law Journal*, Vol. 82, pp. 716-744, and Roger Brinner, "Inflation, Deferral and the Neutral Taxation of Capital Gains," *National Tax Journal*, December, 1973, pp. 565-573.

time with changes in the index used so as to maintain a constant real payment. For our purposes, it is convenient to view the PLAM as incorporating a nominal rate equal to the real contract rate plus the percentage price change in each period.

2. Variable-rate mortgage (VRM), the interest component of which is determined by a charge dependent on an interest rate index. Scheduled money payments are equal over the life of the mortgage, but are recomputed whenever the interest rate is changed. Therefore, payments vary with the interest rate.

3. Graduated-payment mortgage (GPM), which incorporates a nominal interest rate which may be fixed for the life of the mortgage or varied periodically as with the VRM, but has its *payment* calculated at each point in time as though it were a PLAM with a fixed maturity.[4] Therefore, the GPM payments will be adjusted over time by the difference between the implicit real rate and the current money interest rate. This, in general, will be close to the change in the price level, but not exactly the same.[5]

Illustrative examples for all three classes appear in Table 1. The PLAM appears to cover all the tax complications that face a VRM as well as those that a GPM would have to reckon with. Therefore the discussion that follows concentrates on the PLAM by way of specifics, but its conclusions are applicable to all three classes of nonstandard mortgages.

A. *Standard Mortgage (SM)*

To help in identifying the major tax questions that alternative mortgage instruments would pose, it is useful to contrast them with the standard mortgage (SM) that is the predominant arrangement in residential finance.

Under the SM the loan obtained by the mortgagor is amortized by a series of payments (usually monthly, but taken to be annual for simplicity, in our examples in Table l) of the same dollar amount each period, with the interest component declining in successive periods and the principal portion rising. The stream of monthly payments has a present value, computed at the interest rate specified in the contract, equal to the initial principal of the loan.

The interest component of each payment is deductible by the homeowner in computing taxable income and reportable for tax as interest income by the lender. The 30 annual payments of $1,453 under the SM of Table 1 have a present value of $30,000 when discounted at 6 percent which is the interest rate applying to the contract. Of the $1,453 payment at the end of the first year, $1,200 is interest and the remainder, $253, goes toward the reduction of principal. The borrower would deduct

[4]In the discussion that follows, the GPM incorporates the same variable interest rate as the VRM, i.e., it is the constant-payment-factor VRM discussed in earlier papers.

[5]Cohn and Fischer discuss an alternative GPM where payments are adjusted precisely in accordance with changes in price level. This mechanism requires a variable maturity.

Table 1

EXAMPLES OF COMPUTATION OF ANNUAL MORTGAGE PAYMENTS
UNDER CONVENTIONAL MORTGAGE AND THREE ALTERNATIVE TYPES*

Year	1	2	3	4
Real Interest Rate, r	3%	3%	3%	3%
Rate of Inflation, q	3%	5%	5%	4%
Nominal Interest Rate, i	6%	8%	8%	7%
Years to Maturity	30	29	28	27
Standard Mortgage (SM)				
Beginning Principal	20000.00	19747.00	19748.82	19194.55
plus Interest (6%)	1200.00	1184.82	1168.73	1151.67
less Annual Payment	1453.00	1453.00	1453.00	1453.00
Ending Principal	19747.00	19478.82	19194.55	18893.22
Price Level Adjusted Mortgage (PLAM)				
Beginning Principal	2000.00	20179.61	20742.33	21296.29
plus Interest (3%)	600.00	605.39	622.27	638.89
plus Revaluation of Principal for Inflation	600.00	1008.98	1037.12	851.85
less Payment	1020.39	1051.65	1105.43	1162.02
Ending Principal	20179.61	20742.33	21296.29	21625.01
Variable-Rate Mortgage (VRM)				
Beginning Principal	20000.00	19747.00	19557.06	19351.93
plus Interest (Nominal Rate)	1200.00	1579.76	1564.57	1354.64
less Annual Payment	1453.00	1769.70	1769.70	1614.45
Ending Principal	19747.00	19557.06	19351.93	19092.12
Constant-Payment-Factor Variable-Rate Mortgage				
Beginning Principal	20000.00	20179.60	20742.30	21296.25
plus Interest (Nominal Rate)	1200.00	1614.38	1659.39	1490.74
less Annual Payment	1020.39	1051.65	1105.43	1162.02
Ending Principal	20179.61	20742.33	21296.29	21625.01

*See Lessard and Modigliani for specific assumptions used in calculations.

$1,200 of interest from taxable income; the mortgagee would report $1,200 of interest for income tax purposes. At the beginning of the second year, the homeowner owes the lender $19,747 on which he pays interest at the end of that year of $1,184.82, leaving $268.18 for repayment of principal, etc.

Note particularly that under the SM, the payment scheduled to be made (once a year in our example) is greater than the interest charge on the loan in that period. The homeowner will always have paid to the lender more than the full amount of interest incurred under the contract over that period and, therefore, he can deduct interest charges of that year in full in determining taxable income. This dovetailing of scheduled payments and interest charges inherent in the design of the SM will not, in general, characterize a PLAM, VRM, GPM or any other mortgage for which the current payment is not tied directly to the current interest rate.[6] Payment as scheduled could fall short of "interest due" alone. Would this pose serious difficulties under the Federal income tax, that would preclude the use of such mortgages, or, alternatively, require major modifications of the tax? Our conclusion, developed at length below is "probably not." It appears quite reasonable to expect that those alternative forms of mortgage contract could be accommodated under current income tax law and practice without undue strain. We emphasize *likelihood,* not *certainty.* Nothing would be certain in this connection until the IRS ruled favorably on it. But the prospects appear sufficiently good for a favorable ruling to support the view that alternative mortgage instruments could be accommodated under present income tax law and practice.

B. *Price-Level-Adjusted Mortgage (PLAM)*

Under the PLAM used as an illustration in Table 1 a modest interest rate, 3 percent in this instance, would be charged on outstanding principal, and additional interest (a positive or negative adjustment) would be due as determined by multiplying the outstanding principal by the change in a specified price index (the CPI in this example). At the start of the year the annual payments required to amortize the mortgage over the remainder of its life (constant nominal interest rate of 3 percent) would be calculated, and this amount would be the payment scheduled to be made at the end of that year. The mortgage document would set forth in detail the formula for determining the interest due under the contract each period. It is reasonable to hold that interest determined as explained above would meet the IRS requirements of interest as payment for the "cost of

[6]While it has been suggested that mortgages involving variable interest rates (or their equivalent) could maintain a constant money payment when the rate rose by extending the term of the contract, this procedure would face two difficulties. For one thing, it could run up against the 30-year term maximum permitted on FHLB mortgages. But, more fundamentally, interest rate changes could quite conceivably be so high that constant nominal annual payments would fall short of the interest due each period, and therefore, the mortgage would not be amortized no matter how long the period over which payments were extended.

money unconditionally owed," and, thus, would be a deductible expense to the borrower and interest income to the lender.[7]

In the PLAM example of Table 1, the payment scheduled under the mortgage at the end of the first year is $1,020.39 which is the level payment on a $20,000 mortgage for 30 years at 3 percent. It is convenient for the borrower to know for certain the next payment required under the contract, and it is also convenient to help in easing the transition to a higher periodic payment (if that should be required) to lag the interest adjustment. Therefore, the payment due at the end of the period is that determined by the interest rate in effect at the start of the period. Thus, the initial payment required under the mortgage is the $1,020.39 as determined at the start of the contract. However, under the formula for computing interest under the contract, this payment would be insufficient to cover interest actually charged over the first year. Specifically the interest obligation incurred over the year is calculated at 3 percent of $20,000 plus an additional amount determined by multiplying the outstanding principal by the inflation rate, which in the example in Table 1 is taken to be 3 percent.[8] Summing 3 percent of $20,000 (= $600.00), which is the adjustment of principal for inflation and 3 percent of $20,000 (= $600.00) which is the portion of interest due to the constant 3 percent specified in the contract, yields an interest total for the first year of $1,200.00 which is $179.61 *greater* than the total payments made at the end of that year.

Here, then, is a complication not encountered in the conventional mortgage, viz., the interest charge in a given period may exceed the payment scheduled for that period. This result follows from the lagged adjustment between scheduled payments and interest obligation incurred over a period. Therefore, obviously, one way of avoiding the problem would be to coordinate the interest incurred and the scheduled payment chronologically. However, it suits the convenience of the borrower not to do so, since the lag gives him certainty as to the next payment due, and "smooths" the stream of payments he is called on to make. Moreover, the ability to incorporate chronologically divergent schedules of payments and obligations makes for greater flexibility in mortgage design, and thus is one of the areas of concern for our study.[9] Indeed, a divergence between "obligations" and payments is built into the PLAM and the GPM by design. (See the section on the constant-payment-factor VRM below for more on this point.)

[7]See, for example, D. Bruce Johnstone, *New Patterns for College Lending: Income Contingent Loans,* (Columbia University Press, New York and London, 1972), p. 174.

[8]This is as if the price level index used in making the adjustment rose from 100 at the start of year one to 103 at its end.

[9]For this reason, procedures for handling the divergence between interest obligation and interest payment are analyzed in what follows. However, were the primary concern simply to prevent such a divergence, for a PLAM it could be accomplished simply by lagging the interest adjustment. In this case the mortgage contract would provide that for determining the payment due at the end of the first year the interest rate shall be 3 percent plus the rate of inflation experienced in the prior year, and so on, for each ensuing year.

To return to the example, the difference between the scheduled payment of $1,020.39 and the interest due of $1,200.00 would be considered additional borrowing amounting to $179.61. While the mortgagee, on the accrual basis, would report $1,200.00 of interest, the homeowner, typically on the cash basis, would be entitled to deduct for income tax purposes in year two only that interest he is considered to have "paid," which would be $1,020.39. A cash basis taxpayer is not considered to have "paid" the interest on a loan where payment is made with his own note. To be deductible the payment must be in cash or its equivalent.[10] At the end of year one, then, in the homeowner's books would be two liabilities which aggregate to $20,179.61 — the principal outstanding at the start of the year, $20,000, and the addition to principal, on the score of interest incurred over the period but not paid amounting to $179.61. It would be better practice and more helpful in preparing tax returns in ensuing years to keep separate running tabulations of the original principal and additions to it because of an interest liability incurred but not yet paid.[11] This result — an increase in principal in excess of the amount initially contracted for — illustrates the point aptly made by Norman Ture about the VRM (but equally applicable to the PLAM) when he notes that it "is not a unique or entirely novel type of mortgage loan. It is properly viewed, instead, as one variant of a generic type of renegotiable instrument, in which the lender's authority to change terms is stipulated in the original contract, thus avoiding the need for the execution of a new one as the occasions for such changes arise."[12]

In principle, no additional complications would be posed should the interest charge in the next succeeding year again exceed the payment scheduled for that year. Following the usual convention (which applies in the absence of a specific provision to the contrary in the contract) the payment would be applied first against accumulated interest of the preceding year and the remainder would go toward payment of the current year's interest.[13] Maintaining separate accounts for original principal and

[10]See Rev. Rul: 70-647, 1970-2 C.B. 38 and cases cited therein.

[11]Commerce Clearing House, *Standard Federal Reporter* recommends that "because the lender's records do not indicate when and how much interest is actually paid by the individual for purposes of deduction under section 163 of the Code, it is incumbent on the individual to keep his own record of loans, interest and payments." (See 1974, Volume 2, 14.160335, p. 19,018.) While it is desirable for the mortgagor to do so, it is not clear that it would be absolutely imperative in this case, since the information now generally provided by banks to mortgagors could be expanded very easily to provide the additional records the homeowners need. And it would be helpful for banks to do so, as many homeowners have no records other than those the bank furnishes them.

[12]*Variable Rate Mortgages: Issues and Prospects*, a report prepared for the United States League of Savings and Loan Association by Norman Ture, Inc., August 30, 1974, p. 5.

[13]While this is the generally accepted convention it would be wise to avoid any possibility of ambiguity and incorporate a statement to this effect in the mortgage contract, stating specifically that all payments are considered first to be made against interest and then principal.

additional debt because of interest accrued but not yet paid would facilitate crediting of next year's payment first against accumulated interest and then against principal.

Since it is possible for the annual interest to exceed the annual payment over a run of years, it appears that there might be a danger that the PLAM (and it applies to the constant-payment-factor VRM or any other GPM and under some circumstances the VRM, too) would be considered to be an equity position rather than a debt since the initial amount borrowed is not being repaid. If this were to be the interpretation of the IRS or the tax court, the homeowner's payments under the arrangement would not be interest, deductible in computing taxable income, but a rental payment that would not be deductible. But this is not a real problem. A mortgage contract, for a specified number of years, by definition calls for repayment of principal at some specified period (with the final payment a "balloon"), and is, therefore, not likely to be considered anything other than a debt. Thus, for example, interest paid in the current year, although accrued over the ten prior years (and never charged on the books before the current year) was held deductible in the current year.[14]

Reverting to our example, the PLAM of Table 1, as far as the mortgagee (the bank or other financial institution) is concerned, at the end of the first year (start of the second) the basis would be \$20,179.61 resulting from the addition of the unpaid interest to the previously existing principal. The annual level premium on a mortgage of \$20,179.61 at 3 percent for 29 years is \$1,051.65, which would be the payment scheduled to be made at the end of the second year.

In year two, applying the rule that unless expressly agreed to the contrary, payments on a debt shall be considered to apply first to interest and then to principal (or, as recommended, just to be safe, the contract have a provision that so specifies) the homeowner would be entitled to an interest deduction of \$1,051.65 (equal to that portion of last year's interest incurred but not paid in the preceding year of \$179.61 plus \$872.04 of year two's interest charge). The total interest charge in year two would come to \$1,614.37.[15] Therefore the mortgagor would carry over into year three, \$742.03 of interest incurred in year two, but not taken as a deduction in that year. Finally, with the interest charge totalling \$1,614.37 in year two, and aggregate payments of \$1,051.65 made at the end of that year, outstanding principal will rise by the excess of interest over payments or by \$562.72 i.e., from \$20,179.61 to \$20,742.33.

[14]Jungkind Phot Supply Co. v. Rennmel, (DC), 1926. (It was not apparent in this case whether the taxpayer was on the cash or accrual basis.)

[15]Computed as follows:

Nominal interest rate:	a) 3% (\$20,179.61) = \$605.39
Interest via inflation adjustment:	b) (5% x \$20,179.61 - (\$1,051.65 - \$605.39)) = \$1,008.98
Total interest:	c) \$605.39 + \$1,008.98 = \$1,614.37

While the suggested procedure, outlined in the last several paragraphs, might appear to involve homeowners in some rather complicated record-keeping — viz., a running tabulation with annual indexing of interest due ("obligated") but not paid and, therefore, not taken as a tax deduction — most mortgage records are kept and processed by financial institutions, which have information systems that could easily handle this order of complexity. Presently, for standard mortgages the interest and principal components of the current payment, starting and ending principal, and payment due next period are all computed by the lender, and the information is sent to the homeowner monthly.

The mortgagor need not defer the interest deduction in the manner just described, however. He could if he wished (and the bank or some other lender were willing) borrow additionally from the bank adding to his principal (or other debt) prior to the date the payment was due, take the borrowed money into his checking account, and at a later date pay the bank the full amount of interest due in the current year. Specifically with reference to our illustration, before the end of year one he could borrow an additional \$179.61 (raising his principal to \$20,179.61) and put it into his checking account. At the end of year one he would give the bank a check for \$1,200.00, thus paying the interest of that year in full, and putting himself in a position to take the full payment as an interest deduction in that year. The bank would report interest of \$1,200.00, the same as if the mortgagor had deferred a portion of the interest due, and the bank's basis would be \$20,179.61 which is also the same as it would be had the mortgagor deferred paying a portion of the current year's interest.[16]

The tax law appears quite flexible. The mortgagor, being on a cash basis, could defer a portion of the interest or take the interest deduction in full currently. This is a specific illustration of the general point that follows from the fact that "the increasing of a primary debt obligation to meet an interest liability is not considered to be a payment of interest for purposes of tax deduction."[17] Thus a taxpayer on the cash basis has "free choice to make payment or delay payment of interest for tax purposes. Given the economic opportunity and availability of credit, a taxpayer can choose to increase a bank note by the amount of the principal due plus accrued interest liability and thereby delay the deduction until a future taxable year. In the alternative, the taxpayer can have the bank increase the amount of the loan and credit taxpayer's account and the taxpayer

[16]There is no inconsistency in law in this asymmetrical treatment of the borrower and the lender. As Kanter notes ". . . unlike many other areas of tax law, the treatments of the two sides of the transaction are not always identical and the proper treatment of the income receipt by the lender may well be on an accrual basis, while that of the borrower or debtor is on the cash basis; these are not inconsistent." (Burton Kanter, "The Interest Deduction: When and How Does It Work," *26th Annual New York University Institute on Taxation* (1968), p. 91).

[17]*Ibid.*, p. 90.

can separately issue a check against his personal funds to meet the interest liability and thereby insure a current deduction."[18]

To be sure the mortgagor will have to pay due regard to the *form* of the transaction. That is why he was described above as borrowing *before* the interest payment becomes due, and taking the proceeds of the additional loan into his checking account prior to payment.[19]

But while this option is available to the homeowner, it is open to question whether many would choose it. The game may not be worth the candle. Assuming, for simplicity, that the mortgagor's tax bracket would be the same in both years, his net advantage in choosing the loan and payment option is the interest on the tax saving (due to interest deductibility) that would otherwise be postponed to the next year. Thus a mortgagor in the 30 percent bracket who had an additional $179.61 of deductible interest would get a tax reduction of $53.88 a year earlier. With the interest rate at 6 percent this is worth $3.23. Certainly not a large sum; and further, quite possibly, this example overstates the tax saving, since he may be in a higher bracket next year, which would make the deferral of the interest deduction less of a penalty. There is no need to belabor the point. The relevant magnitudes are such that the taxpayer stands to gain relatively little by arranging an explicit additional loan and "paying" the interest in full. Most mortgagors would probably defer the payment in those years where interest exceeded scheduled payments, and this would be simpler for all concerned. But those who wanted to take the deduction in full currently could arrange to do so without stretching the tax law.

C. *Variable-Rate Mortgage (VRM)*

The discussion in the preceding section holds in general for VRMs as well.

Turning to the example in Table 1, with the VRM taken out in the first instance at 6 percent, the payment due at the end of the year would be the same as in the SM for 30 years at 6 percent. And, as with the conventional mortgage, of the $1,453 payment to the mortgagee made at the end of year one, $1,200 would be interest reported as income by the bank and deductible by the mortgagor, and $253 would go toward reducing

[18] *Ibid.*, pp. 90-91.

[19] Kanter cites two cases that illustrate the importance of the form in which the transaction is cast. Both appear similar in substance, but differ in form. And under one interest was not deductible, while under the other it was. In the nondeductible case the taxpayer applied for an increase in the loan on his property, which additional loan when granted was paid out in separate checks, one for the principal payable to him, the other by the financial intermediary for the interest payable to itself. The Tax Court held this arrangement to be essentially the renewal of the note for an amount including the interest that had accrued. In the other case, the cash basis taxpayer owed $200,000 together with interest. He arranged for an additional loan prior to the date the interest payment was due, had the proceeds transferred to his account and then, at the appropriate time, "paid" the interest. He was held to be entitled to deduct the interest in full. (p. 92)

principal. In the second year, because the pace of inflation has stepped up to 5 percent, the application of a nominal rate of 8 percent to the outstanding principal of the loan is required. Interest at 8 percent on principal of $19,747 comes to $1,579.76. However, the payment also is adjusted upward to $1,769.70.

D. *Graduated-Payment Mortgage (GPM)*

The example under this category in Table 1, which is the study's "preferred" arrangement (see preceding sections of this volume), is a particular version of this general class which embodies features of both a PLAM and a VRM. It is the constant-payment-factor variable-rate mortgage. As with a VRM, the interest *charges* on the outstanding principal would vary over time with market rates. But this variable interest charge would have relatively little impact on monthly payments since these are escalated (upward or downward) according to the difference between the current interest rate and the implicit real rate. This means that although payments would rise over time in money terms, they would remain roughly constant in terms of purchasing power (depending on the index).[20] And, in addition, under this arrangement it is possible for the periodic payments (annual in our example, but monthly in practice) to start at a considerably lower level than is required under the standard mortgage in a period of high interest rates and inflation.

A divergence between the amount of interest the homeowner is "obligated for" and the amount of interest included in his periodic payment is inherent in the design of this arrangement. But this matter has already been taken up at length above in the discussion of the PLAM, and need not be repeated here. No new issues of principle or practice are posed on this score with respect to the GPM.

Since a difference between interest due and interest paid is built into this version of the GPM, this gap would tend to be more pronounced and more protracted than the discussion of the PLAM example would suggest. Therefore, more homeowners might want to arrange to borrow and pay the interest each year to get the full deduction. Thus it might be desirable for the lending institution to formalize this possibility by providing a line of credit for a separate account for each GPM mortgagor that could be used for this purpose.

E. *Decline in the Price Index*

Tax consequences of sharp declines in the price index (CPI or whatever else is chosen) pose an additional problem for PLAMs, because a decline greater than the constant nominal rate of the contract (3 percent in our example) would lead to "negative" interest for the period. While a fall in the CPI (or any other index that could reasonably be used as a basis

[20]As noted in the introduction, an alternative form of the GPM would involve payments tied directly to the price level and therefore, not influenced by current interest rates. However, it would of necessity have a variable maturity.

for adjusting principal) would be expected to occur less frequently (and be less pronounced) than a rise, it could happen, so the tax accounting consequences thereof must be faced.

With reference to the PLAM of Table 1, assume that instead of increasing by 3 percent in year one, the index had *declined* by 10 percent. The scheduled payment of $1,020.39 (of which $600 was interest on the $20,000 initially borrowed) would be subtracted from an adjusted principal of $18,000 (.9 x $20,000). Thus, the homeowner would owe the bank only $16,979.61. If the homeowner chose this occasion to prepay his mortgage (and assuming no prepayment penalty to keep the example simple) he would in effect be cancelling an indebtedness of $20,000.00 with a payment of $18,000.00, and thereby realizing $20,000.00 of income.[21] The lender would report a loss of the same amount.

Suppose, however, that the mortgagor does not prepay, but simply carries on with the mortgage. Would the doctrine of constructive receipt apply with the consequence that income would be recognized at the time of the principal adjustment? Or would the reporting of income be deferred, to be taken into account, if relevant, in the final settlement when the mortgage is paid off in the regular course? The latter would be the more appropriate treatment for taxpayers on the cash basis, for it is only at prepayment or final payment that the income represented by this negative interest (if any) would be enjoyed when they pay off an obligation at less than its face amount. At this time the income would show up in the taxpayer's cash flow, and it would seem therefore to be the appropriate time to recognize it for tax purposes.

If the mortgage is not prepaid or closed out, the negative interest reflected in the downward adjustment of principal in response to a decline in the price index would probably not be considered income at the time the adjustment is made. The doctrine of constructive receipt would not seem to be applicable, for the same reason that it does not apply to the analagous situation of an increase in the cash surrender value of a life insurance policy. Constructive receipt applies when income could be realized unconditionally, without any loss, hardship, cost or change in underlying relations. But to enjoy the increase in cash surrender value of the insurance, the policy would, in fact, have to be surrendered. Analagously, then, for the PLAM, on a decline in the index, income should be recognized on prepayment or when the mortgage is closed out, but if the homeowner continues under the mortgage, recognition of income should be deferred. This is all the more likely to be the tax treatment since the "income" could be short-lived, disappearing in the face of a price increase (or the accumulated nominal interest charge of ensuing periods) in the future.

[21] IRC Section 61 (a) (12). United States vs. Kirby Lumber Co., 284 U.S. 1 (1931).

For homeowners who remained under the PLAM when principal was adjusted for a decline in the price level, if recognition of income is deferred as suggested, symmetry of treatment would require that the negative interest represented by the decline in the principal be netted against interest payments of succeeding years and that the taxpayer be permitted to deduct only the excess of these interest payments over the accumulation in the negative interest account. In other words, to the extent that the decline in principal exceeds the interest paid that year, a "negative interest" account should be set up and carried over into the following year. And in that next year interest would be deductible only to the extent of the excess of interest paid over the accumulated "negative" interest of preceeding years. The interest of ensuing years would not be deductible except to the extent paid and in excess of the "income" (negative interest) of earlier years.

The treatment suggested here seems reasonable and consonant with present law. However, it would be the better part of wisdom to spell it out in the mortgage contract. Thus, for example, it could be specifically provided that if the negative adjustment exceeds 3 percent (or whatever the constant annual interest rate is) the excess shall be carried over as a credit against the interest that may be deducted in future years.

While the borrower is characteristically on a cash basis, the lender would generally be on an accrual basis. Would the lender, then, report a regular loss, measured by the decline in principal, which resulted from the borrower's having to pay, in effect, a negative amount of interest? The answer is arguable, but appears to be "most probably not." Under the "all events" test in the accounting provisions of the Internal Revenue Code an accrual basis taxpayer cannot take a loss until all events are definite and certain. The IRS might well hold that this is a continuing arrangement until the end of the mortgage term, and that it cannot be determined whether there is a loss or not on this arrangement until the last payment has been made. On the other hand, the taxpayer could argue that he has to file a return on a yearly basis, and therefore must report income to the best of his ability.

While there is merit in both arguments, because of the inherent variability of PLAM annual interest charges, and the strong likelihood that sharp price level declines, which give rise to the problem, will be relatively infrequent events over the full term of the mortgage, we lean toward the view that the "all events" test would probably prevail.[22]

F. *Indexed Deposits*

For financial institutions PLAMs would be an asset that would permit the issuance of indexed liabilities, i.e., notes or deposits which would

[22] *Federal Tax Regulations, 1974,* § 1.446-1 [c(ii)] provide that ". . . deductions are allowable for the taxable year in which all the events have occurred which establish the fact of the liability giving rise to such deduction and the amount thereof can be determined with reasonable accuracy."

carry a specified and low rate of interest, say 2 or 3 percent, plus additional interest (positive or negative) as determined by the application of the percentage change in a price index to the amount on deposit. This arrangement should be attractive to savers in periods of inflation, and could serve to increase the supply of mortgage funds. We have not studied such deposits in depth. The brief discussion of their tax treatment, therefore, presents a course of action that seems "reasonable," but cannot be put forward as "likely" without more careful study.

As regards indexed deposits, the inflation adjustment in connection with price level increases would constitute interest income to the depositor when that adjustment is made — whether the depositor is on the cash or accrual basis — because of the doctrine of constructive receipt under which, for example, interest accruing on savings bank and savings and loan certificates over a period of years is taken into the depositor's income annually for tax purposes even though it is not paid out to him.

With respect to price level declines sufficiently severe for the negative interest determined thereby to be greater than the amount due on the score of the fixed nominal rate, the depositor might well be treated as is the purchaser of a security whose price has declined, i.e., it would be held that a realizable taxable event has not occurred.

Positive interest and negative interest would be treated differently. Positive interest would be a constructive receipt of income; negative interest would not be a deductible loss because a realizable taxable event had not occurred. If the depositor, however, closed out his account at this latter juncture, then the loss (negative interest) would be deductible.

On the other side, with the depositor suffering negative interest, the financial intermediary could be considered to have income, even though in future periods just the opposite might well occur. The difference between this treatment of deposits and that suggested above for PLAMs in the event of a decline in the price index (the "all events" doctrine) is that deposits are payable on demand, whereas the mortgage contract runs over a period of time.

III. USURY LAWS

Usury laws which establish interest-rate ceilings on the basis of tradition and legal norms and adjust to economic conditions slowly and imperfectly, could pose major difficulty for nonstandard mortgages.[23]

Without intending in any way to underestimate the importance of this obstacle and the need to study it further, the following general considerations appear to offer a measure of comfort.

[23]For a complete listing of usury laws by state see Norman N. Bowsher, "Usury Laws: Harmful When Effective," *Federal Reserve Bank of St. Louis Monthly Review,* August 1974, pp. 16-23.

". . . it is an established point of law that if payments are conditioned on future events (e.g., future income) and the minimum possible rate of interest is under the legal rate, the contract is not usurious merely because the maximum possible rate might exceed the legal rate. Presumably a plan can avoid conflict with usury laws if: (1) the relationship between actual interest rates and hypothetical incomes is deemed reasonable and actuarily sound; (2) borrowers know beforehand a range of possible interest rates corresponding to hypothetical income streams (which they must be told to comply with Federal truth-in-lending anyway); (3) the minimum — and probably the 'average expected' — rate of interest is within legal limits; and (4) the lender will not receive an overall rate of return in excess of the legal limit."[24]

For reasons more specifically related to the application of usury laws to mortgage contracts it appears that the alternative mortgage instruments studied in this report might well survive challenges based upon state usury laws. However, the particular nature of each state's laws and legal system makes it impossible to generalize with any certainty across the whole United States. Some states have already addressed themselves to the question of variable interest rates in mortgages.

For example, California Civil Code § 1916.5 regulates the use of variable interest rate clauses in mortgages. Any variable-rate mortgage fulfilling its requirements will survive judicial scrutiny. Other states, although not yet regulating VRMs as such, have statutes under which mortgages in whole or in part, are exempted from usury laws (or have more lenient laws applying to them). In Connecticut mortgages of $5,000 or more, secured by real property, are exempt from usury limits. Approximately 30 other states exempt FHA-insured home mortgages from their usury law. Thus in a majority of states the statutory trend is towards exempting mortgage interest rates from state usury laws.

In those states where mortgages have not been so exempted, nonstandard mortgages may be subject to attack under usury statutes. However, there are some solid legal grounds for their defense. The case of *Helm* v. *Jessie* 28 Ky 428 (1831) might be used in support of price level adjusted mortgages since it was held that where the *value* loaned and repaid are identical, no violation of usury statutes has occurred. This same line of reasoning could be used by analogy with respect to mortgages, under which the *value* of the interest plus principal collected remains the same.

A further argument in defense of nonstandard mortgages could be presented on the basis of the borrower and the public policy focus of usury laws. The alternative mortgages are clearly not intended as a vehicle for evading the usury laws. The absence of proof of usurious intent was held

[24] D. Bruce Johnstone, *New Patterns for College Lending: Income Contingent Loans*, Columbia University Press, 1972, pp. 171-72.

critical by the court in affirming a verdict for the obligee in *Stark* v. *Coffin,* 105 Mass. 328(1970) (cf. also *Rhodes* v. *Fullenwider,* 25, N.C. 415 (1843)).

Usury laws are designed to aid and protect the borrower; nonstandard mortgages it can be argued would aid the would-be borrower by making funds available to him that would otherwise not be forthcoming. Thus there appears to be strong public policy argument in favor of holding alternative mortgages not subject to usury laws. Since their existence could be beneficial to the mortgagee, it might be difficult for the court to rationalize striking them down under a law designed to aid the borrower.

An additional, but less convincing argument, can be based on the contingent nature of nonstandard mortgage arrangements. There is a line of cases in which it has been held that if payment of the *full* legal interest is subject to a contingency, the interest need not be limited by usury statutes. *Miley Petroleum Corp.* v. *Amerada Petroleum Corp.,* 63 P.2d 1210 (1936); but see *Jameson* v. *Warren,* 267 Pac. 372(1928). It may be possible to defend PLAMs and VRMs (whether payments are level or graduated) analagously since their interest is contingent on an independent occurrence (variations in the rate of inflation, etc.).

Conclusion

In brief summary, in states whose legislatures have come to grips with the problems of mortgage interest rates the resulting legislation has been of a type that would allow the implementation of alternative mortgages despite a general usury statute. In other states it would appear that nonstandard mortgages might be successfully defended from challenges under usury statutes through arguments based on 1) the *constant* value of the interest charged, 2) the intent of the mortgagor, 3) the public policy behind usury laws, or 4) the contingent nature of the interest charged.

IV. SOME ADDITIONAL REGULATORY PROBLEMS

With a number of different types of financial institutions each subject to a particular set of regulations offering mortgages, with a variety of regulatory bodies particular to each institution and/or a particular regulatory objective, and with the Federal Government and the 50 states both involved in the regulatory process, it is not surprising that a very large and complex set of regulations bear on mortgages.

Out of this set our discussion has singled out the Federal income tax as of paramount importance, and has taken up also, but in more perfunctory fashion, the usury laws. In this section we list and discuss briefly a few more regulatory problems relevant for nonstandard mortgages.

A. "*Truth-in-Lending*"

The Federal Consumer Credit Disclosure Act, 1968 ("Truth-in-Lending") includes the following among its provisions:

1. The lender must inform the borrower of the annual rate of interest to the nearest one-fourth of 1 percent [U.S. Code 15— § 1606(c)].

2. There must be a periodic disclosure, with each billing cycle, of the annual percentage rate of the total finance charge, the date by which payment must be made to avoid penalty, the outstanding balance, the total amount of interest, etc. [U.S. Code 15— § 1636(1-2), § 1637(a-b)].

In the general case, under nonstandard mortgages neither party can know at the start of each period what the interest charge will be over the period. Therefore, it appears that lenders would not be able in a strict sense at least, to carry out the "Truth-in-Lending" law requirements.[25]

But a strict interpretation may not be in order to serve the purposes of "truth-in-lending" legislation which are to permit borrowers, with full knowledge of costs, to make comparisons,[26] and to "shop for credit."[27] Therefore, a good faith effort on the part of the lender to show the borrower the costs of his mortgage under different contingencies might well be considered in compliance with the Federal "truth-in-lending law" (or the state versions where they applied).

In support of this conclusion, Johnstone cites the general example of college tuition loans whose pattern of repayment is contingent on the income of the borrower over the course of the loan, and notes specifically that for Yale's Tuition Postponement option a statement outlining the range of income possibilities and related interest charges has "been declared in full compliance with the Federal law."[28]

B. *Some Miscellaneous Points*

Finally we note a few other areas in which legal problems would arise with nonstandard mortgages. This is simply a miscellaneous listing, and does not claim to cover all remaining areas in which problems might be expected.

1. Various provisions that limit the maximum amount of a mortgage would present difficulties for nonstandard mortgages under the terms of which the amount of the principal could increase and exceed the legal limit.

Examples of such provisions at present are:

a). The maximum mortgage of $30,000 on one-family dwellings under FHA [Title II: Sec. 203(b)].

b). The requirement that federally chartered savings and loan associations may not make loans on security of one-family dwellings in amounts in excess of 95 percent of value. [FHLBB Revision of 1971, Sec. 545.6-1(a)(5)].

[25] Provisions of the various state laws are substantially similar to the Federal statutes.

[26] Burgess v. Charlottesville Savings and Loan Association C.A. Va. 1973 477 F.2nd 40.

[27] Mourning v. Family Publications Service, Inc. C.A. Fla. 1971, 449 F.2nd 235.

[28] D. Bruce Johnstone, *op. cit.*, p. 173.

2. In some states savings and loan association codes "provide that initial loan contract shall not provide for any subsequent monthly installment of interest and principal of an amount larger than any previous monthly installment with certain specified exceptions."[29] The upward adjustment in payments discussed in detail in the PLAM example earlier in this chapter would violate these code provisions.

3. In connection with the regulations applicable to the insurance of savings and loan accounts, the FSLIC Regulations (Section 561.16) define "slow loans" in such a way that the periodic adjustment of the interest charge under nonstandard mortgages would bring into the "slow loan" category "a contractionally delinquent loan which is less than two years old . . . even if the loan is only one day delinquent when the option to increase the rate is invoked. . . ."[30]

4. Bennewitz notes an additional problem area in connection with negotiability. A variable or contingent interest charge could make the mortgage "note non-negotiable under Sections 3-105 and 3-106 of the Uniform Commercial Code."[31] While this difficulty could be obviated in most jurisdictions by embodying the interest adjustment provision in the "mortgage as a covenant rather than in the note," in some jurisdictions (a small number) even this procedure would not make the mortgage negotiable.[32]

[29] Dallas J. Bennewitz, *Methods of Interest Adjustment,* United States Savings and Loan League, 1970, p. 6.

[30] *Ibid.,* p. 6. Bennewitz has an extended discussion of this point.

[31] *Ibid.,* p. 7.

[32] *Ibid.,* p. 8.

Discussion

Jeremiah Buckley*

I am neither an economist nor a mathematician, and I must confess that as we proceeded through some of the blackboard exercises yesterday afternoon, I began to wonder what I was going to be able to say to this group. And my embarrassment is further compounded by the fact that my fellow discussant on Professor Holland's paper is the man who wrote my law school text in tax law. Since I have not specialized in tax law since my graduation from law school, I think I would probably do better to leave the elucidation of this subject to Professors Holland and Surrey.

That leaves me with about a page and a half of Professor Holland's paper which deals with the subject of usury laws. I studied several law review articles on the subject of state usury laws, and I was unable to find any treatment of the subject of how usury laws would affect the legality of a mortgage contract involving a PLAM or a VRM. I did find an interesting article by James R. Cooper in *American Business Law Journal,* vol. 8, page 165, published in 1971. He makes an interesting observation regarding the 1969 credit crunch, which I thought I would share with you. It reads as follows: "In a recent study" — now remember, this was written in 1970 — "it was shown that homebuilding in the United States in the first half of 1969 fell to the second lowest level since World War II. This shortly followed the disastrous 1966 credit crunch. More importantly, the study showed that the decline in home building activity was concentrated in the nine states where buyers were prohibited by usury ceilings from paying more than 7 1/2 percent. There was no decline in the states where buyers were free to pay whatever interest rates the market required. It is socially significant that apartment building starts by corporate borrowers, on the other hand, were at an all-time high, 27 percent higher than in the previous record year; and apartments make up nearly 55 percent of urban housing starts. It is an economic reality that as interest rates rise they will eventually intersect with our relatively inflexible state usury laws." That information was contained in a study prepared for the Advanced Mortgage Corporation in Detroit, and I thought it might interest you.

If PLAMs and VRMs are to originate on a national basis, some may ask if it wouldn't be simpler for the Federal Government to override state usury laws, at least with respect to PLAMs and VRMs. The farthest the Congress has gone down the road to a Federal override of state usury laws was the enactment of Public Law 93-501 in October of last year.

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That act was passed at the urging of Senator Brock of Tennessee because of the problems created by the usury provisions of the Tennessee constitution which could not be quickly changed. The report on that bill states, "Title I of this Bill would amend the national housing act, the FDIC Act . . . to permit national banks, federally insured state chartered banks, savings and loan associations, savings banks and small business investment companies to charge interest on business and agricultural loans in the amounts of $25,000 or more, notwithstanding any state constitution or statute, at a rate of not more than 5 percent in excess of the discount rate on 90-day commercial paper in effect at the Federal Reserve bank in the Federal Reserve District in which that institution is located. The amendment under this Title will not apply to loans made after July 1, 1977. . . ." And then the report states "Home mortgage, consumer, and other interest rate ceilings established by any state would not be disturbed." That language is extremely important. I talked with Senator Brock's counsel on the Banking Committee, and he said that Senator Brock had to do a tremendous education job with the newspapers and others in Tennessee before he could propose a waiver of the state usury law with respect to business loans. I think that it would be politically unrealistic to expect any further changes, especially with respect to mortgage loans. I do not believe that the Congress will be inclined to override state usury ceilings with respect to mortgage loans, and that the usury problems that arise regarding PLAMs and VRMs will have to be resolved at the state level. You heard last night about Senator Proxmire's experience with a variable-rate mortgage and I have heard Congressman Patman go on for 45 minutes in one Conference Committee meeting preaching against variable-rate mortgages.

It must be kept in mind there is always the possibility that a Federal usury law or its equivalent would be enacted. For example in 1973, Congressman Harrington from our own Commonwealth of Massachusetts introduced HR 10160, a bill to amend the Economic Stabilization Act of 1970. Section 204 of that bill, which was never passed, provides as follows: "Notwithstanding any other provision of this act, a ceiling is imposed on all prices and interest rates at levels no higher than that prevailing on September 12, 1973. . . . Immediately, but not later than 60 days after the enactment of this section, the President shall by written order stating in full the considerations of his action, roll back prices and interest rates to levels lower than those prevailing on September 12, 1973." I don't expect that this type of legislation is going to be enacted in the 94th Congress, but if it were, the effect on variable-rate mortgages would of course be significant.

I'd like to turn briefly to the subject of Regulation Q. Regulation Q authority was extended in October of last year until December 31, 1975, and so its re-extension will have to be considered within the next 12 months. The Financial Institutions Act, which in the 93rd Congress had the number S2591, contained a provision for a five-year phase-out of Regulation Q, and this bill was reported by our Financial Institutions Subcommittee in the fall of the year. However, when the proponents of the bill requested a full Banking Committee review before the end of the 93rd Congress, this stirred up the National Association of Home Builders who secured time to testify before the markup session on the proposed Act, specifically to testify against the phase-out of Regulation Q. After the Home Builders' testimony the bill was put aside without prejudice. However, it has become apparent that Regulation Q will not be phased out without a fight.

You may be interested to learn that the Norwegian plan was considered by the Senate Committee and an experiment along these lines by the Farmers Home Administration was authorized in the Senate version of the 1974 Housing Act. However, this provision was dropped in conference with the House Committee.

A variable-rate mortgage experiment with FHA-insured mortgages was also authorized in the 1974 Housing Act in the version that passed the Senate, but this provision was dropped in conference with the House.

I am told that the Federal Loan Bank Board would like to go ahead with the issuance of regulations regarding variable-rate mortgages. But I understand that there is an agreement with the Banking Committees of the House and Senate that these regulations will not become effective if there is substantial congressional opposition.

There is one question which occurred to me in the course of the conference which I would like to put to you for your consideration: what would be the role of mortgage insurance, either FHA or private, in connection with PLAMs and VRMs, and can the risks involved in such mortgages be actuarily determined? I don't know whether many thrift institutions would offer VRMs or PLAMs to moderate or middle income homebuyers unless they had mortgage insurance or very large downpayments.

Of course, other general questions occur to the person who works in the political world. For instance, listening to your discussion one gets the feeling that we're accepting inflation as inevitable. It's awfully difficult for a politician to say, "This is a great idea because it's a way of avoiding shortages of mortgage credit in times when we have terrible inflation." His constituents may ask, "Well why don't you address the problem of inflation?" And of course, when the politicians try to address the problem of inflation, they run into the problem of unemployment, and so forth. As you probably noticed, there are very few answers being offered with confidence from Washington. On the other hand, there is probably no consensus in Cambridge about what ought to be done.

I certainly would be happy to answer any questions you might have regarding congressional action on any of the proposals you are considering and I want to thank Professor Modigliani for inviting me to attend this Conference.

Discussion

Stanley Surrey*

Thank you very much. Mr. Buckley gave a disclaimer about knowing anything about tax law, and I'll give a disclaimer about knowing anything about usury law, regulatory law, economics, or anything else. As a matter of fact, since I'm on a sabbatical, I'm off duty on tax matters, and can give a disclaimer as to tax matters.

I'm not clear as to why the people who arranged this program left tax aspects to the last. Does everything build up to it, or is it just a minor detail? At least, however, it's wonderful to see an academic like Dan Holland struggling to maximize tax preference benefits for people in this world. He can really seek admission to the club of those who tailor real estate and other arrangements into attractive tax shelters, at least attractive on computer print-outs. He might do better if he contracted out this whole assignment to an investment house specializing in these tax shelters, who do seek to maximize interest deductions for their clients, and they might really sell this MIT instrument on that basis.

But seriously, I think it is right to have left the tax aspects to the end; and not because it's the grand climax, but for just the opposite reason. I think the real job in all of this, for those who are doing the research, is to tailor and work out the mortgage instrument that they want to meet the tasks or goals that should be assigned to such a mortgage instrument as an aspect of our housing policies and related policies. And I gather that that is what we have been debating for most of this time — just what the design of this mortgage instrument should be, what are all the alternative designs. As a lawyer listening to economists, I sense you're quite a long way from any final decisions on the appropriate design and actual mechanics of the mortgage instrument. Certainly there has not been a good deal of attention paid to the structural details of these particular instruments, but rather more to the theoretical and overall concepts. I am not criticizing that. All I am saying is that once the economists get the right answers as to what they want as to the mechanics, at least as right as any answer can be, then we can ask the question: What constraints must be considered to come from other worlds and other disciplines?

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What constraints come from the tax world, from the accounting world, from the regulatory world, and from the consumer understanding world? Obviously, the aspect of consumer understanding is important, so that the consumer can make rational choices. It seems to me that there is a need for research on this, with some analogies with respect to other complex financial choices such as insurance policies and how they have worked out in our society, so that we can learn something as to what can be done here to make any new mortgage instrument understandable to the consumer.

But back to the tax world. Overall, I doubt that the tax constraints are significant, which is the same conclusion that Professor Holland makes. Clearly in a tax world that gives a deduction to the consumer for mortgage interest, those who deal in mortgages and are selling houses want to make sure the deduction for interest is at least not lost or seriously reduced in any new type of instrument that is devised. But I doubt that there is a real problem here, and I imagine that the tax lawyers can readily handle any rationally designed instrument that the economists produce. Variable interest rate mortgages shouldn't give much of a problem. They exist today. The price level adjusted mortgages, as described in the optimum way yesterday by Professor Cohn if I understood him, seems to me not to be an adjustment of principal, but rather a way of seeing how best to vary the rate of interest. Hence we're still within the interest orbit, and we are adjusting the rate of interest, and we're not really affecting the principal. Dan Holland has talked about some rather complex situations that could arise if you get into a negative interest rate and so forth. But I don't think it's worth time really pursuing those matters at this stage. The real overall goal to keep in mind is, that whatever instrument is designed, as long as the amounts are properly and rationally identified — and the identification between principal and interest must be the same for the borrower and the lender — there is flexibility certainly as to how to arrange the stream of payments, how to divide between interest and principal. But as long as they're clearly identified, then I don't think there are any real tax problems in this area. So that I don't see any need at this stage to go into esoteric cases. You can get to the extremes, you can get to the case where the interest rate turns negative. Of course this does offer some new conceptual problems to tax lawyers. You might have to think of new ways of how to handle that, such as perhaps a carryforward of negative interest to offset positive interest, and other approaches. You can end up with some cases where the principal the person has to pay might be lower than he contracted to pay. We would then have to, as tax lawyers, see how to treat this cancellation of indebtedness. While Dan Holland said it would probably be treated as income, I think we'd pretty soon say, no, we'll treat it as a reduction in the cost of the asset that's been purchased with the mortgage, which is the house itself, which I think would be the more rational treatment.

But the point is that I can stand up here and give you a lot of esoteric tax talk and you would feel just the way I feel when the economists go to the blackboard and put a lot of equations on the blackboard that I don't understand. Well, I can play the same game, too. I can give you a lot of sections of the Internal Revenue Code and a lot of cases and a lot of tax terms and you wouldn't be any the wiser. But there's no point to doing that right now.

As an aside, the tax reformers do want to reduce the preference being given today for the interest deduction. After all, it is a crazy world, in which we subsidize home ownership by giving the largest subsidies, in the tax system, to those people who are best-off in this world. Which is exactly what we do today, because obviously if you can deduct interest and you're in a 70 percent tax bracket, you're in a lot better position than if you can deduct interest and you're only in a 20 or 14 percent bracket, or you're a non-paying taxpayer and don't get any value from your interest deduction. You see, you have to keep in the back of your mind that the interest deduction which Dan Holland is trying to preserve is an interest deduction which tax reformers don't think very highly of as a method of subsidizing housing in the United States. It's quite possible that with increases in the standard deduction, fewer and fewer people will make the identification of this amount as interest, because they will simply be electing their standard deduction. There are tax reformers who want to reduce the amount of interest that can be deducted, restricting it to the principal residence and so forth. So I just want to acquaint you with that aspect of tax life and to recognize that we are dealing here with a subject which many people think is one of the very poor methods of subsidizing housing in the United States, as far as the interest deduction is concerned. But I suspect that the deduction will be around for some time, upside-down and crazy as it is.

We have heard from our Canadian friend about a similar crazy tax policy that other countries adopt. To say that the first thousand dollars of interest should be tax free and so forth is just simply giving an upside down bonus in view of the progressive rates of tax, and it seems to me that the Canadians wander around between rational direct subsidies and highly irrational tax subsidies.

Back to my main subject, we are essentially asking here how a tax system that is still based on nominal dollars should accommodate and treat an indexed instrument. We don't have much experience on that where the indexing begins to present complex problems, because we haven't had these problems arise under our tax system. We have been able to live with a tax system that is based on nominal dollars and we have been able to live with the rest of the world that is nominal. But when you ask how, while still keeping the tax system nominal, do you start working out its application to indexed instruments, then you are getting into a new world which we haven't been into yet. But I doubt that the mortgage indexing that we've talked about here will get that complex. I think, however, the research should explore not only how this would be related to the tax world but also how accountants who still live in a nominal world would also treat these matters and how they would treat indexed mortgages. Now this does take us to a somewhat new twist because the accounting profession may soon go to an indexed world. The Financial Accounting Standards Board has a proposal that public corporations must offer two sets of accounts — one nominal and one indexed. The question would be, and I think it would be a useful aspect of research here, to see what, if any, would be the problems of accounting in this indexed mortgage area on both sides — both the borrower and the lender — and especially if the accounting itself becomes indexed which might well occur within a couple of years.

I haven't said much here about the tax problems of the lenders and my guess is that they can be solved once the lawyers for these institutions simply get to work and know what it is that they have to work on. I gather from talking to a few of the people here who work for these institutions, that none of their lawyers have thought about these problems at all. This is too far off in the future to really get down to the complex questions of what's ordinary gain and what's capital gain and when do you accrue and so forth. I repeat, if the economic and institutional solutions to the problem are rational, then I think rational tax treatment will follow in one way or another — whether you get the answer from the Internal Revenue Service giving an overall ruling on various types of indexed mortgages, whether you get it through regulations or whether you get it through legislation if it turns out that legislation is necessary. But obviously if institutions come to the conclusion that an indexed mortgage is necessary and useful in the United States, then the tax system is going to adjust and make sure it is a useful instrument. So that I don't think taxes are a constraint.

Another aspect to research, however, in this regard is how the indexed mortgage would look in a tax-indexed world. I spoke of an accounting indexed world, but one might have to think about a tax-indexed world especially if indexing is initiated as to capital assets. Obviously our tax system is still based on nominal dollars, but that is a matter that is being debated now and certain groups are seeking to index the tax system itself largely where it will help them. These are principally the investment houses and the Stock Exchange in respect to capital gains on the sale of securities. Here they would like to index the cost of these assets because it would reduce the capital gains. They forget about indexing the liabilities on the money borrowed to carry the securities. But in any event they are drifting to a consideration of the indexing of capital assets in the tax system, and consequently I think the research here should see whether there are any interrelationships if the tax system starts to index capital assets.

Consequently, all I can say is that it is desirable to continue to research the tax, accounting, and regulatory aspects, but it is easier and wiser to do so in the light of whatever the definitive mechanics and details are for the range of instruments that are deemed desirable. It would also probably be useful to look at the foreign tax and accounting experience just to see how all of the various instruments that we described this morning are handled under the foreign tax systems and under foreign accounting systems. Certainly insofar as the lenders are concerned, the tax and accounting rules don't differ from one country to another. They are pretty standard. As far as the borrowers are concerned, some countries obviously do not give a deduction for consumer borrowing and therefore there is not a deduction for interest. On the other hand, it seems to me in some of these countries the borrowers must be commercial people and business people where they do get a deduction for interest, so therefore you would be able to research the foreign accounting and tax treatment on the borrowing side as well as on the lending side. I think that would be useful to do and I gather it apparently has not been done as a part of looking at the foreign experience.

Let me just say one non-tax word. I would hope there would be a study as to how an indexed mortgage with a rise in payment fits with all the other household expenses. In other words, if all other payments are rising, such as those with respect to children, education and other consumption desires, then what is the effect of changing the housing payment stream so that it also rises. I guess this really involves the relationship of these other expenses to inflation, and in the end may simply be an aspect of the clear articulation of just what choices are being offered to the consumer through the various mortgage instruments, so he can fit it in to whatever life pattern he thinks he will have with respect to his expenses and his income. But this as I said is a non-tax subject and my contract really doesn't commit me to raise non-tax subjects at this time.