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ALFRED P. SLOAN SCHOOL OF MANAGEMENT

TAX ASPECTS OF ALTERNATIVE MORTGAGE INSTRUMENTS*

Daniel M. Holland

WP759-74 December 1974

*This paper is as it appeared in "New Mortgage Designs for Stable Housing in an Inflationary Environment" - Conference Series No. 14, Jan. 75. Sponsored by the Federal Reserve Bank of Boston
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Tax and Regulatory Problems Posed by Alternative Nonstandard Mortgages

Daniel M. Holland*

1. 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

*Professor of Finance, Massachusetts Institute of Technology. The author wishes to thank William Andrews, Donald Lessard and Gary Schaberg for their continued interest, guidance and instruction during the preparation of this paper. They have, of course, no hand in the errors of fact or judgement that remain, and do not necessarily agree with the conclusions reached or suggestions made herein. The author is pleased also to acknowledge the advice of Harvey Berger, Elliott Cari, Richard Cohn, Walter Fiesson, James Freeman, Richard Glennon, John Kirk, Saul Klamann, Oliver Oldman, David Pastilnik, Eli Shapiro, Stanley Surrey, and Kenneth Thygerson.

1While it has been argued that homeowners enjoy a substantial tax "break" in the non-taxability 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.

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From its inception the income tax has been a levy on nominal income (money income). 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. 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

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2 The decision in Bates v. United States [109 F. 2d 407 (7th Cir. 1940), 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 gain-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.)

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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. 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.

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 1) 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

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.

'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>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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</thead>
<tbody>
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<td>3%</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
</tr>
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<td><strong>Rate of Inflation, q</strong></td>
<td>3%</td>
<td>5%</td>
<td>5%</td>
<td>4%</td>
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<td>8%</td>
<td>8%</td>
<td>7%</td>
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<td><strong>Years to Maturity</strong></td>
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<td>29</td>
<td>28</td>
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<td><strong>Standard Mortgage (SM)</strong></td>
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<tr>
<td>Beginning Principal</td>
<td>20000.00</td>
<td>19747.00</td>
<td>19748.82</td>
<td>19194.55</td>
</tr>
<tr>
<td>plus Interest (6%)</td>
<td>1200.00</td>
<td>1184.82</td>
<td>1168.73</td>
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<tr>
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<td>1453.00</td>
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<td>20179.61</td>
<td>20742.33</td>
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<td>plus Interest (3%)</td>
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<td>605.39</td>
<td>622.27</td>
<td>638.89</td>
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<tr>
<td>plus Revaluation of Principal for Inflation</td>
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<td></td>
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<td></td>
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<tr>
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<td>1020.39</td>
<td>1051.65</td>
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<td>20742.33</td>
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<td>21625.01</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>19747.00</td>
<td>19557.06</td>
<td>19351.93</td>
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<td>plus Interest (Nominal Rate)</td>
<td>1200.00</td>
<td>1579.76</td>
<td>1564.57</td>
<td>1354.64</td>
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<td>1769.70</td>
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<td></td>
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<td>20179.60</td>
<td>20742.30</td>
<td>21296.25</td>
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<tr>
<td>plus Interest (Nominal Rate)</td>
<td>1200.00</td>
<td>1614.38</td>
<td>1659.79</td>
<td>1490.74</td>
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<td>Ending Principal</td>
<td>20179.61</td>
<td>20742.33</td>
<td>21296.29</td>
<td>21625.01</td>
</tr>
</tbody>
</table>

*See Fessard 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. 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 remaining 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

*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 FHA 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.

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. 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. 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.)


4This 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.

5For 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.
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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. At the end of the 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. 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


11Commerce 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 mortgagee 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 mortgagees 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.


13While 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.\(^\text{14}\)

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.\(^\text{15}\) 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.

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\(^{14}\) Jungkind Phot Supply Co v. Remmel, (DC), 1926. (It was not apparent in this case whether the taxpayer was on the cash or accrual basis.)

\(^{15}\) Computed as follows:

<table>
<thead>
<tr>
<th>Nominal interest rate:</th>
<th>a) (3% \times $20,179.61 = $605.39)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest via inflation adjustment:</td>
<td>b) ((5% \times $20,179.61 - ($1,051.65 - $605.39)) = $1,008.98)</td>
</tr>
<tr>
<td>Total interest</td>
<td>c) $605.39 + $1,008.98 = $1,614.37</td>
</tr>
</tbody>
</table>
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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.¹²

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.¹³

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 mortgagor 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

¹²Ibid., pp. 90-91.

¹³Kanter 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 non-deductible 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). 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

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8 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 (0.9 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. 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 analogous 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. Analogously, 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.

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

22Federal Tax Regulations, 1974, § 1.456-1 (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 over 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 if 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 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. 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 actually 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 locus 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

critical by the court in affirming a verdict for the obligee in Stark v. Coffin, 105 Mass. 328 (1870) (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) analogously 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)].

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2. There must be a final statement of the annual percentage rate must be on the amount of interest.

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B. Some More

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Examples

a). The FHA [Title II, 203(a), etc.]

b). The associations made amounts in ex.

545.6-1(a)(5)(i)

"Provisions"

"Burgers"

"Mourners"

"D. B. Brown"
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.22

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,23 and to “shop for credit.”24 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.”25

B. SomeMiscellaneous 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)].

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


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." 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. . ." 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." 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.

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

31 Ibid., p. 7.

32 Ibid., p. 8.