The Graduated Payment Loan: Implications for Mortgage Lenders

by James E. McNulty

In the past few years there has been a virtual flood of new information and innovation in the field of alternative mortgage instruments (AMIs). One of the most interesting ideas is the graduated payment mortgage (GPM) which allows home buyers to make much lower monthly payments in the early years of the loan. This article draws on the extensive body of recent research and experience to bring out the practical questions lenders might wish to be aware of if they were to attempt to implement and market their own GPM program.

Three developments are particularly noteworthy in this regard. The first is the publication of the Federal Home Loan Bank Board's Alternative Mortgage Instruments Research Study (AMIRS).[1] This comprehensive three-volume report contains 22 research papers dealing with many aspects of alternative mortgages. The second development, also described in the AMIRS report, is the incorporation of a graduated payment plan into the FHA mortgage program. This program has exhibited rapid growth after only two years of operation. The latest development is a set of regulations allowing federally chartered savings and loan associations to write GPMs.

The term GPM can apply to any mortgage in which the initial monthly payments are set at a level below that necessary to pay off the loan (i.e. below the payments on a standard level-payment loan). Payments then increase over time at a predetermined rate, eventually rising above what they would be on the level-payment loan. In most cases the payments eventually stabilize at a level modestly above the payment on the standard mortgage. *Figure 1* illustrates this by presenting typical monthly payments on two GPM plans actually authorized and currently being offered under the FHA's GPM pro-

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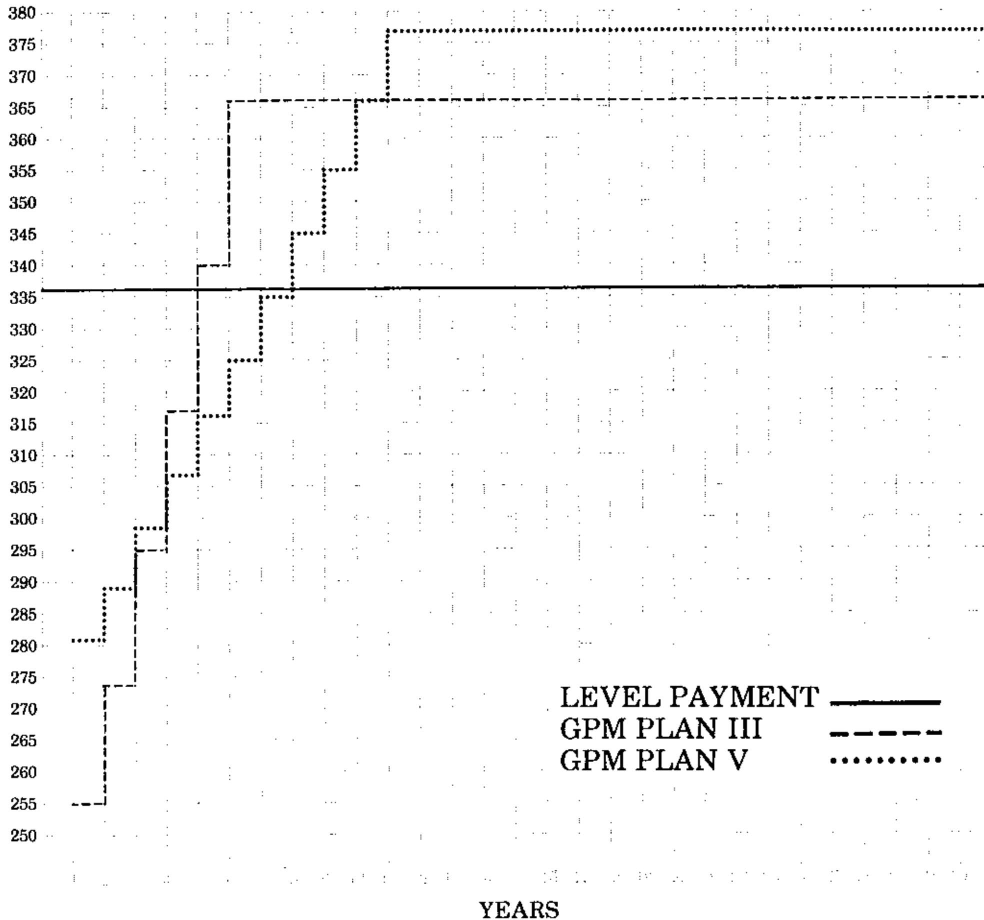
FIGURE 1

MONTHLY PAYMENTS ON A 9½%, $40,000 MORTGAGE WITH A 30 YEAR TERM STANDARD LEVEL PAYMENT MORTGAGE AND SELECTED FHA GRADUATED PAYMENT PLANS



Source: Adapted from AMIRS, Chapter V.

gram, known within HUD as their Section 245 program. This plan began operating in 1976 on an experimental basis, but it is now a regular FHA loan program.

The solid line in *Figure 1* shows the monthly payment on a standard level-payment FHA loan of $40,000 with a 30 year term and an interest rate of 9½%. This payment of $336 (excluding the additional ½ percentage point insurance premium) is, of course, fixed for the life of the loan. Under FHA's GPM Plan III, monthly payments begin at $255, which is a full 24% below the payments on the standard mortgage; payments then increase at a rate of 7½% per year and stabilize at $366 after five years. Payments are level during the year,

with the increase going into effect each year on the anniversary date of the mortgage. The dotted line on the chart shows an alternative GPM plan known as Plan V in the FHA program, in which payments increase at 3% per year for 10 years. According to Chester Foster, who helped develop the HUD GPM program, the 7½% annual increase represents "the best estimate of a tolerable payment burden consistent with anticipated increases in income that the majority of families in the target population could reasonably expect to afford" (AMIRS, chapter V, p. 5). Plans with 2½%, 3% and 5% rates of graduation were then added to broaden consumer choice. Incidentally, while the higher payments in the latter years of the mortgage might appear to be a deterrent to potential borrowers, Foster points out that these payments are about the same as what they would be on a 25-year mortgage.

"NEGATIVE AMORTIZATION"

At 9½% interest it would take about $317 per month ([.095 x $40,000] ÷ 12) just to pay interest on the loan. Since both GPM plans shown here have initial payments below $317, both involve what is known as "negative amortization," a process whereby this unpaid interest is added to the loan amount, resulting in an increase in the loan balance in the early years of the mortgage. In both the GPM plans shown in *Figure 1,* the loan amount eventually increases from $40,000 to about $42,000 before beginning to decline. This feature makes the GPM somewhat riskier for the lender than the standard mortgage. HUD first dealt with this problem by requiring considerably higher down payments, but these requirements have been liberalized; negative amortization is now permitted up to 97% of the original appraised value. Down payments under the GPM are still somewhat greater than under the standard FHA mortgage, but experience has indicated that there are many borrowers quite willing to come up with the extra down payment in order to take advantage of the lower required payments in the earlier years of the loan.

The Federal Home Loan Bank Board (FHLB) issued regulations in December, 1978 which authorized a number of AMIs, including the GPM. According to the regulations, S&Ls would be permitted to utilize a variety of payment plans including the 7.5% five-year and the 3% ten-year plans shown, as well as a number of intermediate schedules. FHLB also specified that any borrower, offered an alternative instrument, must also be offered a standard mortgage and be shown a written side-by-side comparison of rates, terms and payment schedules under the AMI and the standard mortgage. Borrowers must be clearly informed of their right to choose a standard mortgage, as well as the right to convert their loan into a standard mortgage at a later date should they be eligible for such a loan under the organization's normal underwriting standards.

A few S&Ls and commercial banks are currently offering GPMs under the FHA program and, according to a 1977 survey, at least three state-chartered associations have developed or are experimenting with their own conventional GPM plans (AMIRS, chapter II, p.3). The FHA plan, primarily offered through mortgage bankers, got off to a slow start for a number of legal and technical reasons. Only about 800 firm commitments were issued in all of 1977. However, volume increased rapidly in 1978 with about 38,000 firm commitments issued during the first eight months of the year, which appears to signify quite an impressive level of demand at this stage in the history of the program. Based on a small sample of 1977 applications, Foster reports that over 60% of the GPM borrowers were choosing Plan III—the plan with the 7½% rate of graduation. (A later report showed over 70% of the borrowers choosing Plan III.) This is not surprising since the approximate 24% difference between the initial payments under Plan III and payments under the standard mortgage could mean as much as $100 or more per month in the first year of the mortgage. The next most popular plan (chosen by about 20% of the sample households) was Plan II, with a 5% rate of graduation for five years. Interestingly, the plans which increase payment for 10 years have had very little use, despite the built-in low increments.

WHO BORROWS UNDER GPMs?

Other characteristics of GPM borrowers are also noteworthy. Based on this same sample, it was determined that three out of four users of the plan were first-time homebuyers, that GPM-users were slightly younger than borrowers under the standard FHA mortgage, that their average incomes were about 15% lower ($15,556 vs. $18,312). Despite their lower incomes, GPM borrowers came up with a larger down payment (9.5% vs. 7%) and took out a larger mortgage ($31,445 vs. $28,170) than borrowers under the standard plan. A later tabulation of the complete results for 1977 confirms these sample-based results.[2]

A comprehensive survey of consumer attitudes and preferences concerning AMIs was done by researchers at the MIT-Harvard Joint Center for Urban Studies as part of the AMIRS project (AMIRS, chapter III). Three separate but interrelated surveys were conducted—a telephone survey to provide an overview of consumer attitudes, a more comprehensive mail survey based on a sample of responses to the telephone survey, and a set of intensive panel discussions with selected groups of individuals. Several specific findings may be of interest to managers of member associations as they consider developing and marketing GPMs. When first faced with the GPM concept in the telephone survey, 63% indicated their skepticism or lack of interest by stating a specific preference for the standard mortgage; 25% expressed a favorable response (i.e. a choice of the GPM over the

standard mortgage) and 12% were indifferent. The results of the mail survey were slightly better with 43% of the respondents rating the GPM as their first choice and 57% choosing the standard mortgage. In the mail survey, the respondents were also asked if they would be "very" concerned, "somewhat" concerned or "not at all" concerned about certain potential problems with the GPM, such as the possibility that their income would not keep pace with the required payments, the fact that the total payment will be larger over the life of the loan, and the negative amortization feature. Generally, about half of the respondents answered "very concerned" to each of these questions, and only about one respondent in eight answered "not at all concerned." These results confirm what one might have expected: while there is definite interest in the concept, GPMs are clearly not for everyone. The standard mortgage will still have an important role to play in the homebuying process.

Interest in the GPM was expressed most frequently by younger households, who also expressed the least concern about its negative features. The figures below show the percentages in various age classes who expressed a preference for the GPM over the standard mortgage:[3]

All Households	25%
Under 35	30%
35-54	19%
Over 55	16%

The percentage choosing the GPM was as high as 45% for young (under 35) renters who could not afford to buy at the time of the survey. On the crucial question as to whether they would be concerned about their income keeping pace with the payments, only 30% to 35% of young households answered "very concerned," as compared to 51% for all households and even higher percentages among certain groups.

INTEREST EXPRESSED BY LOW-INCOME HOUSEHOLDS

Low and moderate income households appear to be a group toward which an association could direct its GPM marketing efforts: there was clearly interest in the concept among some of the low and moderate income individuals who responded to the survey. Nonetheless, in answering the income growth question, 73% to 83% of these respondents indicated that they would be "very concerned" about this aspect of the GPM. Respondents were also asked about their attitudes toward homeownership. Of all groups surveyed, lower income households attached the greatest value to the fact that homeownership stabilizes housing costs over time. Considering these results together, it would appear that many of these households may be more comfort-

able with the standard mortgage. However, a small but significant number of low and moderate income households in the survey did like the GPM concept, so it is possible that a properly designed GPM could still be of some significant benefit to this segment of the population.

There was some interest in GPMs among middle-aged, upper middle income households, but this was again limited somewhat by economic considerations. In the mail survey about two-thirds of this category chose the standard mortgage (compared with 57% for the entire sample). Furthermore, about 41% answered "very concerned" in regard to the income growth question, which was well above that shown by the younger households (although still below the sample average). The Harvard-MIT researchers suggest that, on balance, middle-aged, upper middle income households appear to prefer a declining ratio of mortgage payments to income over time in order to provide for other claims on their budgets. It appears that GPMs could be successfully marketed to this segment of the population, although they would not constitute the primary market for such loans.

Concluding the demographic analysis, the researchers found a very strong preference for the standard mortgage among older households, and less interest in the GPM here than in almost any group in the population.

CONCLUSION

In general, the results indicate that lenders who offer the GPM will almost certainly find their primary market among younger households with good income expectations, with some additional demand coming from middle-aged, upper middle income households and low and moderate income households. Since the GPM concept is somewhat new to many people, it is encouraging to note that the Harvard-MIT researchers found that interest in the concept increased with exposure. Clearly, lenders who want to offer GPMs, and are willing to do the educational and counselling work necessary to market them, could experience significant demand for this type of loan. In other words, while a potential demand exists for these loans, lenders will have to uncover it through various promotional and educational efforts. Based on the FHA experience, the GPM plan with the lowest initial payments and resultant high rates of graduation is in greatest demand. This is also the most risky of the GPM plans, since it produces the greatest negative amortization and would normally require greater increases in future income for the borrower; as lenders attempt to determine what type of GPM to offer, they will probably want to keep this point in mind. Each lending institution will need to do its own analysis of potential risks and returns as it determines whether to stick with the standard mortgage, to utilize the FHA plan, or to develop its own conventional GPM program.

REFERENCES

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2. *Alternative Mortgage Instruments: Consumer Bane or Boon.* Proceedings of a Conference held at Cornell University, Ithaca, N.Y., May 8-10, 1978, sponsored by the Department of Consumer Economics and Housing.
3. These figures (from the telephone survey) come from an expanded version of the report, published separately as *"The National Borrower Study"* by Kent W. Colton *et al,* Joint Center for Urban Studies, Cambridge, Mass., January, 1978.