STATE OF TEXAS

OFFICE OF CONSUMER CREDIT COMMISSIONER

SAM KELLEY, Commissioner

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September 29, 1982 82-23

Mr. David C. DuBose
8323 Southwest Freeway
at Gessner, Suite 600
Houston, Texas 77074

Dear Mr. DuBose:

This is to acknowledge receipt of your letter dated August 31, 1982 concerning the method of computation of interest rates on loans on which there is prepaid interest for the purpose of determining if the interest rate on the contract is within the allowable interest rate ceiling(s).

Your question as set out in your letter is as follows:

> "Query: In determining if the prepaid interest or finance charges causes the yield to the lender to exceed the maximum lawful rate, is the prepaid interest to be both deducted from the loan amount and included in the total amount of interest charged on the reduced loan amount or, is the prepaid interest to be just deducted from the loan amount and not included in the total interest charged on the reduced loan amount?"

The prepaid interest is deducted from the loan amount only for the purpose of calculating an interest rate on the reduced amount which will produce the same total dollars in interest received by the lender as would be received by the lender when using the amount of the loan (before deducting the prepaid interest) as the beginning principal and amortizing the loan, applying an amount received as payment first to accrued interest as of the date received and any remaining amount to the reduction of principal utilizing the U.S. Rule method. This method conforms to the example given in Regulation Z, Appendix H-14 and described in the official Staff Commentary on Regulation Z, Appendix H-15.

Perhaps this somewhat involved procedure can best be explained by way of an example of the method employed by our office in determining the true interest yield to the lender when prepaid interest (points) are paid to the lender.

For the purpose of this illustration it is assumed there is a $20,000 loan repayable in consecutively monthly payments over a 10 year period and there is prepaid interest of $1,000. If the quoted interest rate on the loan is 18% per annum, there would be 120 monthly payments of $360.37 each. The total dollars in interest charges by amortization of the 18% rate on the $20,000 over the 10 year term of the loan would be $23,244.40. However, the $1,000 in prepaid interest is paid to the lender at the time the loan is made and at which time no interest has accrued because the lender has not had any money outstanding at that time.

Our approach in computing the rate is based upon a theory which we call the "time value of money." The "time value of money" in this context is a comparison of the amount(s) of money advanced by a lender at a specific point in time to the amount(s) of money received by the lender from time to time. In the example used here, the $1,000 in prepaid interest received at the time the loan is made must be considered payment on the debt at that time. Because of the fact that at the time of receipt of the $1,000 in prepaid interest no interest had accrued on the debt, the $1,000, for interest rate computation purposes, should be deducted from the amount of the loan ($20,000), which of course results in a figure of $19,000.

Since it is already known that the total number of dollars in interest to be received by the lender on the contract of $20,000 at 18% per annum over a ten year period would be $23,244.40, a determination must then be made of what interest rate applied to $19,000 would produce that same number of dollars when the loan is repayable in 120 monthly installments of $360.37 each. (It should be remembered that the payment of the $1,000 in prepaid interest does not reduce the number or the amount of the monthly payments - the lender just gets $1,000 in interest before any has accrued).

In this example we have determined that the rate of interest to be applied to $19,000 which would result in 120 monthly payments at $360.37 each would be slightly in excess of 19.45%. Therefore, for the purpose of determining whether this contract is within the allowable rate ceiling the figure of 19.45% and not 18% is controlling. For the purposes of Regulation Z the amount financed would be disclosed as $19,000, the finance charge would be $24,244.40 ($23,244.40 + $1,000), the annual percentage rate as 19.45% and the total of payments as $43,244.40 (120 x $360.37).

Sincerely,

Sam Kelley
Consumer Credit Commissioner

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