

the net principal for each month. By adding these amounts we find that the borrower had the equivalent of \$590 for one month. This is equal to a loan of \$49.16 for one year. The interest charge was \$5. The real rate of interest per annum is, therefore, 100 times \$5/49.16, or 10.17 per cent.

It is important to note that even this rate is not the highest effective rate which the borrower may have to pay. In many cases, loans of this type may be refinanced before the payments have been completed and the procedure of discounting is repeated. Thus the rate mentioned may be applied more than once during a given year, with all the cumulative effects on the real rate of interest which the borrower pays.

TABLE 2. THE REAL RATE OF INTEREST

Under Bill 91, s. 91, ss. 2, Canada

Computation of the real rate of interest on a loan of \$100, discounted at 5 per cent and payable in 12 monthly instalments. (Assume that interest (\$5) is included in the final payment.)

Month	Net principal balance	Payment on principal at end of month	Interest payment
1	\$ 95 00	\$ 8 33	
2	86 67	8 34	
3	78 33	8 33	
4	70 00	8 33	
5	61 67	8 34	
6	53 33	8 33	
7	45 00	8 33	
8	36 67	8 34	
9	28 33	8 33	
10	20 00	8 33	
11	11 67	8 34	
12	3 33	3 33	\$5 00
	<u>\$590 00</u>	<u>\$95 00</u>	<u>\$5 00</u>

The principal involved is equal to \$590 for one month, which is equal to \$49.16 for one year, on which the interest charge is \$5. Therefore, the real rate of interest is $\$5/\$49.16=10.17$ per cent.

In computing the real rate of interest, it is quite possible to assume any one of many possible conditions. Interest is paid twice a year on the Bonds issued by the Government of Canada. It might be assumed that interest paid twice yearly is the proper basis of comparison. The computation of such a comparison involves a formula and a trial and error approach. To reduce the rate under Bill 91 to a real rate on the monthly unpaid balance is slightly more involved and gives a real rate on this assumption of less than 10 per cent. What is called a constant ratio method (the ratio of interest to principal in each monthly instalment is assumed to be constant), gives an equivalent real rate of 9.7 per cent for the rates proposed in subsection 2. It is not the question of whether the real rate is 9.7 per cent or 10.17 per cent with which we are concerned. It is the fact that the stated rate of 5 per cent proposed in section 91, subsection 2 results in a real rate in the neighbourhood of 10 per cent and that in fact the real rate may be much higher due to refinancing loans payable by instalments.

The practice of hiding the real rate of interest either by deducting a fixed amount or a rate from the face value of a note, or by adding such an amount or rate to the net proceeds of a loan, which is to be repaid in instalments, has been widely used both in the United States and in Canada by money lenders who operate outside the law. More recently, the practice has invaded the field of retail selling, so that the real charges may be hidden from the customer.