

This payment reduces the net loan to \$86.67 and the actual rate of interest on the \$8.33 principal paid back at the end of a month is 5¼% a month or 63.16% a year. On the principal repaid in the second instalment the effective rate is 31.58% a year. On the third payment the *real rate* is over 21% and so on. It is only on the twelfth payment that the *real rate* of interest is 5¼% a year and this applies only to that portion of the principal unpaid at that time, viz. \$3.33.

The real rate of interest on each instalment is shown in table 1. Under the terms of this bill, the borrower signs a note for \$100. The bank deducts \$5 and the borrower has \$95 for one month. He pays back \$8.33 and has \$86.67 for a month. The last column in table I shows the real rate of interest on the monthly repayments of principal. These real rates range from 63 per cent on the first payment to 5¼ per cent on the last payment. The actual interest cost to the borrower is very different from the rather innocent looking 5 per cent mentioned in the bill.

The real rate of interest is hidden by combining the particular method of repayment recommended in section 91, subsection 2, and by applying the rate of 5 per cent, not to the unpaid balances at the end of each month, but to the original sum borrowed, including the interest charge itself.

This is shown clearly in table I which was developed for the single purpose of demonstrating the real effect of this method of exacting interest.

The computation of the average real rate of interest which a borrower would have to pay under section 91, subsection 2, may be computed by simple arithmetic by finding the equivalent amount which a borrower would have to pay at the end of a year on a loan for one year. The question may be put in this way. What percentage of a principal sum, borrowed for a year, would the borrower have to pay to equal the interest charges proposed in this Bill? The answer is \$10.17 on each \$100, a rate of 10.17 per cent.

TABLE I. THE REAL RATE OF INTEREST

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

The borrower signs a note for say \$100. He receives \$95. The interest charge is \$5 on the loan of \$95, or 5.25 per cent. But part of the loan is paid back in a month, part in two months, etc. The real rate of interest on each payment is shown below.

Month	Principal payments at the end of each month	Real rate of interest on principal repaid each month Per cent
1	\$8 33	63.16
2	8 34	31.58
3	8 33	21.05
4	8 33	15.79
5	8 34	12.63
6	8 33	10.58
7	8 33	9.02
8	8 34	7.89
9	8 33	7.02
10	8 33	6.32
11	8 34	5.74
12	3 33	5.25

The development of this equivalent rate of 10.17 per cent is shown clearly in table 2. Assume that the amount involved is \$100. Under Bill 91, the bank is authorized to deduct \$5 and advance to the borrower \$95. At the end of the first month the borrower pays back \$8.33 and therefore has a net loan of \$86.67 for another month. But he pays back \$8.34 at the end of the second month and thus has \$78.33 for a month. The items in table 2, column 2 show