It shall be used in all cases were the length of the Periods Between Payments are unequal or the amount of principal varies.

- (b) The amount of income deemed to be derived or expenditure deemed to be incurred in respect of a Period is equal to—
 - (i) The amount calculated according to the formula-

$$\frac{a \times b \times c}{d}$$

where-

- a is the Total Finance Charges payable by the issuer or receivable by the holder as the case may be;
- b is the length of the Period;
- c is the amount of principal outstanding during the Period Between Payments;
- d is the sum of all items e calculated in respect of every Period Between Payments; and
- e in respect of any Period is $(b \times c)$,

plus

- (ii) In the case of a Variable Rate Financial Arrangement the amount of interest payable or receivable in respect of that Period.
- (c) Income deemed to be derived or expenditure deemed to be incurred using this determination shall be allocated to income years in accordance with Determination G1A: Apportionment of Income and Expenditure on a Daily Basis.

7. Examples

Method A

(1) Example A (a fixed rate fixed principal borrowing)

This is an example of a fixed rate borrowing under which the principal is fixed.

On 12 February 1992 a company borrows NZ\$10,000 for 5 years at a fixed interest rate of 16 per cent p.a. payable half yearly in arrears.

The money is raised by issuing notes at a discount of 5 per cent. The borrower is a New Zealand taxpayer who is eligible to use the straight line method.

Contingent fees of 2.5 per cent of \$10,000 are payable by the borrower to the lender; there are no non-contingent fees.

The Total Finance Charges payable by the borrower are—

The length of each Period is measured in time units of half a year, and the principal outstanding is \$10,000 throughout the term of the loan. There are 10 half yearly time periods over the 5 year term of the loan because interest is payable half-yearly.

Therefore Method A may be used, and the expenditure incurred in each Period is the Total Finance Charges of \$8750 divided by the number of Periods:

$$\$8,750/10 = \$875$$

This expenditure would be spread between income years on a daily basis using Determination G1A: Apportionment of Income and Expenditure on a Daily Basis.

The taxpayer has a 31 March balance date. In the first Period (12 February 1992 to 12 August 1992) the expenditure calculated using the straight line method is \$875. There are 182 days in the Period. Expenditure on a daily basis is

therefore \$875/182 = \$4.81. In the 1992 income year expenditure incurred is:

12/2/92-31/3/92 48 days $48 \times \$4.81 = \230.88

In the 1993 income year expenditure incurred is:

$$31/3/92-12/8/92$$
 134 days 134 × \$4.81 = \$644.54
 $12/8/92-12/2/93$ 184 days 47 × \$4.83* = \$227.01
 $12/2/93-31/3/93$ 47 days 47 × \$4.83* = \$1.746.55

(* There are 181 days in the period 12 February 1993 to 12 August 1993 therefore the daily rate is \$4.83)

Expenditure for subsequent income years is calculated in the same way. Expenditure for each income year, except the year the loan matures, is shown below:

\$ 230.88
\$1,746.55
\$1,749.23
\$1,749.23
\$1,753.10
\$7,228.99

When the arrangement matures the base price adjustment (section 64F) is used to calculate expenditure in the final income year (1997). The base price adjustment is calculated according to the formula:

$$a - (b + c)$$

a = all amounts paid

= \$10,000 (principal) + \$250 (fees) + \$8,000 (interest)

$$= $18,250$$

b = acquisition price

= all amounts received

= \$9.500 (principal)

c = expenditure incurred in previous years

= \$7,228.99 (as calculated above)

Therefore a - (b + c) = \$1.521.01.

This amount is deemed to be expenditure incurred.

If the holder was a New Zealand taxpayer able to use the straight line method, it would be deemed to derive income of \$875 in each Period.

(2) Example B (a variable rate loan)

This is the same as Example A except that interest is determined according to a market indicator. e.g. the bank bill or commercial bill rate.

Since the notes with a face value \$10,000 were issued at a 5 per cent discount, and contingent fees of 2.5 per cent were payable by the borrower (to the lender), who is the issuer in relation to this financial arrangement, the Total Finance Charges to the borrower are

Note that since the arrangement is a Variable Rate Financial Arrangement interest amounts are excluded from the calculation of the Total Finance Charges.

The length of each Period is measured in time units of half a year, and the principal outstanding is \$10,000 throughout. In the first period an interest rate of 10 per cent p.a. applied, and, interest of \$500 was payable.

Method A may be used to calculate the expenditure incurred in respect of each Period, that is—