Australian Taxation Office

Draft Taxation Ruling

Income tax: Application of the "Rule of 78" or other methods in calculating deductions for interest paid on fixed term loans or hire purchase agreements.

other Rulings on this topic

IT 2065

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DTRs may not be relied on by taxation officers, taxpayers and practitioners. It is only final Taxation Rulings which represent authoritative statements by the Australian Taxation Office of its stance on the particular matters covered in the Ruling.

What this Ruling is about

1. This Ruling considers when a deduction for interest on a fixed term loan or hire purchase agreement can be claimed based on an estimate obtained by the use of the "Rule of 78" or other method of estimation.

Ruling

2. If the exact amount of interest paid on a fixed term loan or hire purchase agreement during the year is known, that figure must be used as the basis for calculating any applicable deduction. Under these circumstances, the "Rule of 78" or any other method which estimates the interest paid during the year should not be used.

3. If the exact amount of interest paid during the year is not known then reasonable steps should be taken to ascertain the exact amount from the financier.

4. If the financier has not advised the exact amount of interest paid during the year but the method which it used to calculate interest is known, then this method should be used for calculating the deduction.

5. If the exact amount is not known and, taking into account all relevant circumstances, cannot reasonably be ascertained from the financier, or be precisely calculated, then it will be acceptable to estimate the interest charge using either the "Rule of 78", the actuarial

method, the flat rate method, or some other method, whichever is appropriate in the circumstances.

6. Whichever method is adopted must be used consistently over the life of the loan or other agreement.

7. This office insists on claims being made based on the exact amount of interest paid in any case where an estimation method has been deliberately or recklessly used in an attempt to bring forward tax deductions for interest.

8. This Ruling does not apply to:

- hire purchase agreements where the interest charge is capitalised and included in the cost for depreciation purposes (as per the alternative method as discussed in Taxation Rulings IT 196 and IT 2236);
- leases (as per Taxation Ruling IT 28);
- interest-only loans;
- loans which do not have fixed terms.

Date of effect

9. This Ruling (that is, the final Taxation Ruling based on this Exposure Draft Taxation Ruling) applies (subject to any limitations imposed by statute) for years of income commencing both before and after the date on which it is issued.

Explanations

10. Fixed term loans and extended credit transactions such as hire purchase agreements or instalment sales, normally entail the payment of a predetermined number of instalments. Each instalment will generally include an element of capital or principal and another element which may be variously described as interest, hiring charge or terms charge. For the purposes of this Ruling the latter are all referred to as interest.

11. If funds borrowed under a fixed term loan are used in gaining or producing assessable income or in carrying on a business for that purpose then a tax deduction may be available for the interest component of each loan instalment under subsection 51(1) of the *Income Tax Assessment Act 1936*. Similarly, if plant or articles obtained under a hire purchase agreement or instalment sale are used or installed ready for use for the purpose of producing assessable

income, a deduction may be available for the interest component of each of the instalments paid. No deduction is available for the capital component of any instalment. It is therefore necessary to distinguish between the two components.

12. The question addressed by this Ruling is how to calculate the interest component of each instalment.

Methods for calculating interest

13. There are various methods which can be used in apportioning interest over the life of a loan. Each of the methods will provide the same total interest payable over the life of the agreement, however each method will provide a different apportionment of the total interest between the instalments.

14. Well known methods include:

The "Rule of 78"

The Actuarial Method

The Flat Rate Method

The "Rule of 78"

15. The "Rule of 78" apportions the total interest payable under a loan in accordance with an arithmetic progression. Under the rule the early instalments include larger interest components than the later ones.

16. To calculate the interest component of any particular instalment the total interest payable under the loan is multiplied by the fraction applicable to that instalment. The denominator of the applicable fraction is always the sum of the number of instalments, so that for a loan of 18 monthly instalments it is 1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9 + 10 + 11 + 12 + 13 + 14 + 15 + 16 + 17 + 18 = 171. The numerator is the total number of instalments minus the number of instalments already passed. With a loan of 18 months the interest component for the first instalment will be 18/171 x total interest payable, for the second (18 - 1)/171 x total interest payable and for the third (18 - 2)/171 x total interest payable and so on for the remaining instalments.

17. This method is known as the "Rule of 78" after the sum of the numbers from 1 to 12 which is the applicable denominator for a one year loan of 12 monthly instalments.

The Actuarial Method

18. Under the actuarial method the effective interest rate is used to calculate the interest and principal component of each instalment. At the time of each instalment the outstanding balance is multiplied by the interest rate applicable to the instalment period.

19. The interest component of each instalment decreases as the capital repayments increase and the outstanding principal reduces. This method reflects the fact that the interest being charged on the loan is at a constant rate. The interest figures determined under this method may be similar to those obtained under the "Rule of 78". The degree of variation between the two methods tends to increase with the length of the agreement.

The Flat Rate Method

20. Under the flat rate method the total interest payable under the agreement is allocated equally between each instalment. For example, where an asset is being acquired under an instalment sale agreement and the interest component is expressed as being $100 per annum then the flat rate method is being used. As the interest component of each of the instalments remains constant despite the reduction in the outstanding principal, with the flat rate method the effective rate of interest increases with each instalment.

Basis for calculating deduction

21. Banks, finance companies, vendors etc (in this Ruling collectively referred to as financiers) use different methods for calculating the interest paid under the agreements that they make. They may or may not inform their customers of the method which they use for calculating interest or the amount of interest actually paid during the year. The basis which taxpayers should use for calculating their claims will therefore depend upon the information which they have obtained from the financier.

If the actual amount of interest is known

22. In some cases the exact amount of interest included in each instalment paid during the year will be known. Some financiers will provide regular accounts or statements showing a detailed break-up of the instalments paid during the year apportioned into the capital and interest components. Where such statements are issued the figures that they contain must ordinarily be used as the basis for determining any claim for an interest deduction. It is not acceptable to use any of the estimation methods in these circumstances.

23. An exception to the above may apply if an estimation method was used in calculating an interest deduction in relation to that agreement in prior years. Once a particular method has been used to calculate interest deductions in relation to some instalments, the same method should continue to be used for the balance of the agreement. However, this office insists on the use of the actual figures and will amend the prior year returns in a any case where it is considered that estimates were used in an attempt to increase the tax deduction otherwise allowable in those years.

If the actual amount of interest is not known

24. If the exact amount of interest is not known, either because the financier does not regularly provide the information or because it has been misplaced or otherwise lost or destroyed, then the taxpayer should take reasonable steps to ascertain the exact amount from the financier. Reasonable steps may include the payment of a charge made by the financier for the provision of this information.

25. Factors to be taken into account in determining if it is reasonable to acquire the precise information from the financier include:

- the basis on which the interest on the loan was calculated in prior years;
- the costs involved (in comparison with the amount to be claimed);
- knowledge of the actual method employed by the financier in relation to the particular agreement. For example, if it is known that the financier itself calculates the interest using a particular method then it will be acceptable for the taxpayer to make a calculation using this method;
- knowledge of the usual method used by the financier in relation to that type of agreement;
- industry practice in relation to that type of agreement.

If the method used by the financier is known

26. In some instances the financier may not advise the exact amount of interest paid during the year but the method which it used to calculate interest may be known. In these circumstances the applicable method should be used for calculating the deduction.

27. In Taxation Ruling IT 2065 it was determined that the "Rule of 78" and the actuarial method were both appropriate methods for ascertaining the amount of interest accrued on a "flat rate" loan for the

purposes of the then home loan interest rebate schemes. Although this position was adopted by the Commissioner in relation to the home loan rebate schemes, it is considered that these methods are not necessarily appropriate for the purpose of calculating a deduction for interest paid on a "flat rate" loan under subsection 51(1). If the interest payable on a loan during the year was actually charged in accordance with the flat rate method, then this method must be used as the basis for calculating any deduction. Under these circumstances, where the method used to calculate interest charged during the year is known, it is not possible to use any other estimate.

28. However, knowledge of the flat rate of interest applicable to an agreement does not necessarily mean that the method of calculation used by the financier to calculate interest charged during the year is known. With every fixed term loan it is possible to calculate the total interest payable over the life of the loan and to express that interest in terms of a flat rate. Therefore, the fact that a person may know what the flat rate of interest on an agreement is, does not necessarily mean that the flat rate method was used by the financier in actually charging interest during the year. The financier may have calculated the interest charged during the year by using the "Rule of 78", the actuarial method, or some other method.

Using an estimate

29. If the exact amount of interest is not known and, taking into account all relevant circumstances, cannot be reasonably ascertained from the financier then it will be acceptable to calculate the interest charge using either the "Rule of 78", the actuarial method, the flat rate method or some other appropriate method. Whichever method is adopted must be used consistently over the life of the loan or other agreement.

30. Although taxpayers are given a choice in determining which method to use, they should, where possible, ensure the method is appropriate as well as consistent. In general, with long term loans such as loans to acquire rental properties, the actuarial method will be the most appropriate method since that is the method most likely to be used by the financier.

31. The size of the instalments themselves may indicate what is and what is not an appropriate method. With some agreements the size of the instalments may vary. This factor would have to be taken into account in determining the appropriate method of estimation to be used. In some cases it may be appropriate to use a combination of two methods. For example, some agreements have a number of regular instalments with what is commonly known as a balloon payment at the

end of the agreement. The balloon payment is a large payment made at the end of the agreement to extinguish the debt. The regular instalments paid during the course of the year on such an agreement will probably include interest on both the capital to be paid off during the course of the regular instalments and the capital to be paid off with the balloon payment.

32. As with other agreements, where the exact amount of interest paid on this type of agreement during the year is known, that amount should be used as the basis for claiming any deduction. Where the exact amount of interest is not known, nor details of the precise method(s) used by the financier in calculating interest, an estimate may have to be used. In making this estimate it is appropriate that two separate calculations be made and that two different methods be used. As the amount of principal represented by the balloon payment has not been reduced during the course of the agreement it is appropriate that the annual interest on this amount be calculated using the flat rate method. As the balance of the principal has been reducing over the course of the agreement, it is more appropriate that either the "Rule of 78" or the actuarial method be used.

Examples

Example 1

33. Jane has a fixed term loan from a bank. The regular statements sent out by the bank disclose the interest and capital repaid each instalment. Jane must use these figures as the basis for any claim for deduction.

Example 2

34. A company is acquiring a piece of heavy equipment under an instalment sales contract. Total payments under the contract for the first year were $120,000. The company does not know the exact amount of interest paid during the year. The company is not sure which method is being used by the finance company. The finance company charges for the provision of this information. The company should obtain the information from the finance company.

Example 3

35. Tom is acquiring a piece of equipment under a hire purchase agreement from XYZ Co. The equipment is used in his construction business. Tom paid 11 instalments during the last income year. The

total paid was $2,450. XYZ Co. does not routinely provide details of the break-up of the instalments paid into its capital and interest components.

36. Tom contacts XYZ Co. who informs him that it will provide him with the relevant information for a $50 fee. Tom decides to consult his accountant. His accountant informs him that XYZ Co. usually calculates interest repayments on hire purchase agreements using the "Rule of 78".

37. Tom has a choice, he can pay the $50 fee and obtain the figures from XYZ Co. or he can arrange to have his accountant make his own calculation using the "Rule of 78". Should Tom elect to have his own calculation made, then full details of the calculation should be kept.

Example 4

38. Jill took out a fixed term loan in July 1988. For two years she was not informed of the amount of interest she had paid. In her returns for these years Jill claimed a deduction for interest based on the "Rule of 78". For the third year of the loan, statements were issued which showed the exact amount of interest paid. The interest shown was calculated in accordance with the actuarial method. Jill should continue to claim her deduction for interest based on the "Rule of 78", or request amendments to her prior year assessments to reflect the fact that the actuarial method should have been used in those years.

Example 5

39. Joe borrowed $8,000 on fixed terms. His bank does not disclose interest paid each instalment. Joe knows that the total interest payable over the course of the loan was calculated at a flat rate but does not know the method the bank uses to allocate the interest between instalments. He contacts the bank but can't obtain more information. He will be able to calculate his deduction for interest using either the "Rule of 78", the actuarial method or the flat rate method.

Example 6

40. John took out a ten year fixed term loan to fund the acquisition of a rental property. John was not advised of the amount of interest paid on the loan during the year or the method used by the financier in calculating interest. Despite taking reasonable steps to ascertain this information, he has been unable to do so. As John has a long term loan, the actuarial method is the most appropriate method for him to use to estimate the interest paid during the year.

Commissioner of Taxation

29 October 1992

ISSN 1039 - 0731

ATO references
NO
BO BXH 0014

Not previously released to the public in draft form

Price $0.80

FOI index detail
reference number

subject references
- actuarial method
- calculation of interest
- deductibility of interest
- estimates
- fixed term loans
- flat rate
- hire purchase
- interest
- "Rule of 78"

legislative references
- ITAA 51(1)

case references