

A Comparison of the Accounting and Taxation Approaches to Interest Rate Options Held with Trading Intention

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Abstract: This study analyses the differences of the accounting and taxation treatment of gains and losses on interest rate options held with trading intention in South Africa. The accounting treatment of interest rate options held with a trading intention, is regulated by AC133. Very clear but complex rules are stipulated. The taxation consequences of interest rate options are, however, more problematic. It was found that the total loss or profit accounted for on an option contract would be the same for taxation and accounting purposes, however, the timing thereof could fall within different financial periods. It was also found that the intention of the legislature is not very clear on whether interest rate options could be regarded as trading stock or not.

Key words: Accounting, rating, interest rate

Introduction

The modern history of financial derivatives dates from the 1972 trading of currency futures on the International Monetary Market, a specially established division of the Chicago Mercantile Exchange (Watsham 1992). Trading in equity options on the Chicago Board Options Exchange started in 1973 (Watsham 1992). This growth in financial derivatives was spurred by the breakdown of the Bretton Woods accord, which had maintained the stability of world interest rates and currency exchange rates since the end of World War II, coupled with the Nixon administration's freeing of the US dollar from the gold standard (KPMG 1994). After these early developments in the United States of America, the futures and options markets spread to Europe and the East. Trading in equity options was initiated in Amsterdam and London during 1978 (Watsham 1992). In 1982 a financial futures market was established in London, the London International Financial Futures and Options Exchange (Watsham 1992). Trading also started in Japan, Singapore and Australia during the early eighties (Watsham 1992).

Today the Chicago Mercantile Exchange (CME), the Chicago Board of Trade (CBOT) and the more recent New York Mercantile Exchange are still major players in the futures and options market, although their share of the market has declined with the arrival of the London International Financial Futures and Options Exchange (LIFFE), the Matif in Paris and the Deutsche Terminbörse in Frankfurt (Reynolds 1995). There are also large derivative exchanges in Tokyo and Sydney. Trading in financial futures commenced on the South African Futures Exchange (SAFEX), Johannesburg in 1990 (A Brief History of SAFEX 1999).

Different institutions, with different objectives, determine the accounting and taxation treatment of financial derivative transactions in South Africa. International Accounting Standards are set by the IASC. Shortly after an international standard has been issued, the body that sets accounting standards in South Africa, the South African Standards Board, usually issues the South African equivalent. It usually agrees with the IASC standard and only in rare instances diverges from the international statement. However, tax legislation on financial derivatives is prepared by the South African Revenue Service after consultation with interested bodies (including the Tax Advisory Committee). After draft

legislation is accepted by the Parliamentary Portfolio Committee on Finance and the National Council of Provinces, it is promulgated by Parliament. As a result, different sets of rules guide the accounting and taxation treatment of financial derivatives. Differences in the accounting and taxation treatment often cause deferred taxation calculations which complicate matters unnecessarily for the accountant, the auditor, the tax collector and other users of financial statements. It also increases the cost of preparation of financial statements and the development and maintenance of accounting information systems.

The main objective of this study is to analyse the differences, in South Africa, of the accounting and taxation treatment of gains and losses on interest rate options held with trading intention. A secondary objective is to identify issues which may cause uncertainty and possible weaknesses in current tax legislation and accounting standards.

This study will, however, only investigate the accounting and taxation treatment of options held with a trading intention and therefore other derivative instruments as well as options held as a capital asset and options held to hedge, will not be analysed.

Option contracts are traded both over-the-counter as well as through regulated and organised exchanges. Van den Berg (1998) defines over-the-counter as any transaction which is made outside a regulated and organised exchange. This means, *inter alia*, that performance of the obligations created by the transaction is not guaranteed beyond the means of the parties to the transaction, and that the transaction may be difficult to renegotiate in a secondary market.

An exchange-traded transaction will therefore be any transaction that is made with a regulated and organised exchange, for example SAFEX. This study will only evaluate over-the-counter transactions and will therefore not investigate exchange-traded transactions.

Materials and Methods

To achieve the objectives a literature survey with practical examples will be done.

To achieve the objectives of this study it is firstly important to understand what an option is. Secondly, the suggested accounting and taxation treatment for options will be analysed and finally the suggested accounting and

Stighlindh and Plessis: A comparison of the accounting and taxation approaches to interest rate

taxation treatment for options will both be applied in two practical examples in order to determine whether there are any differences between the accounting and taxation treatments.

Defining the different option contracts: Investors in interest rate products and lenders paying interest have in recent years been exposed to larger losses and more uncertainty than usual due to relatively large fluctuations in interest rates (Van den Berg 1998:89). This has led to the creation of specialised derivative products to hedge the risk of large financial losses due to movements in interest rates (Van den Berg 1998:89).

One such derivative is an option contract which KPMG (1994:6) defines as a contract that provides the option holder the right, but not the obligation, to buy or sell the underlying instrument. The contract defines a price, referred to as the strike price, and establishes the term of the option, referred to as the exercise period.

The option writer has to fulfil the obligations in terms of the option contract if it is exercised (Van den Berg 1998:130). In return for bearing the risk of fulfilling the obligations, in terms of the option contract, the option writer receives a once-off non-refundable payment known as a premium (Van den Berg 1998:130, KPMG 1994:6). The option writer is the originator of the option and should be distinguished from a party re-selling an existing option to another party. In the case of a call option, the option writer will sell the underlying asset at the strike price if the option is exercised by the option holder (Van den Berg 1998:131). In the case of a put option, the option writer will buy the underlying asset from the option holder at the strike price if the option holder exercises his right.

Some financial derivatives, such as those on interest rates, are settled in cash, since it is inconvenient or impossible to deliver the underlying asset (Hull 1997:29). Instead of physical delivery of the underlying asset, differences between the contract price and the spot price are paid to the buyer if prices have risen, or to the seller if prices have dropped. For options, the difference between the current settlement price on the underlying asset and the option's strike price is paid to the option holder when the option is exercised (Van den Berg 1998:123).

Options are also classed as either American or European. The holder of an American option may exercise it at any time during the exercise period, whereas a European option holder may only exercise the option at maturity (KPMG 1994:6).

Caps, floors and collars are different types of options and according to Coopers & Lybrand (1991:458) an interest rate cap (or interest rate guarantee) is an agreement stating that if the prevailing interest rate, as determined by a pre-specified interest rate index (e.g. the 91-day BA rate), is above a strike rate, specified in advance on a prescribed future date or dates, the seller (option writer) will pay the buyer an amount equal to the additional interest cost until the next reference date, based on an agreed notional principal. The writer of a cap receives a fee (or premium) which is paid up front by the purchaser. An interest rate cap contract should specify the interest rate, the period and the notional principal applicable. Effectively, an interest rate cap is a series of European put options on the relevant futures contract (usually short term interest rates) which are written by the bank and purchased by the customer (Coopers & Lybrand

1991:459). When interest rates are higher than the strike rate, a cap is similar to an interest rate swap where interest is swapped from floating to fixed interest. If interest rates remain below the strike rate for a substantial period over the life of the cap, the floating rate borrower would have obtained funds cheaper than by entering into an interest rate swap (Coopers & Lybrand 1991:460).

According to Coopers & Lybrand (1991:459-461) an interest rate floor is the reverse of a cap. When interest rates fall below a pre-specified index, the writer pays the difference in return for a fee received. A floor is effectively a series of European call options which protect the buyer from interest rate declines.

An interest rate collar is a combination of a cap and a floor. If interest rates rise above the level stipulated in the contract, the seller of the collar will pay the purchaser an amount equal to the additional cost to the next reference date. If, however, interest rates fall below the stipulated level, the purchaser will pay the seller an amount equal to the additional cost to the next reference date (Coopers & Lybrand 1991:462). The purchase of a collar is an attractive alternative to a cap if the purchaser believes that the interest rates are going to rise, because the fee received for the floor will offset the price paid for the cap (Coopers & Lybrand 1991:462).

Caps, floors and collars are over-the-counter products. The maturities of these derivative instruments range from 3 months to 12 years. Caps, floors and collars have been designed to hedge the income stream on an investment, and not necessarily the capital amount, although it could be used to hedge the capital amount on a fixed rate investment (Van den Berg 1998:120).

Accounting for Interest Rate Options:

Introduction: The development of new financial instruments forced Accounting Standards Boards to formulate new standards. The Financial Accounting Standard Board (FASB), which sets accounting standards in the United States of America, started its research in 1986 (SFAS 133:§207). This initially resulted in a statement on disclosure (SFAS 119, issued October 1994), and the final statement, Accounting for Derivative Instruments and Hedging Activities (SFAS 133, issued June 1998). The International Accounting Standards Committee (IASC) which represents accounting bodies from countries such as Australia, Canada, Germany, France, Japan, the United Kingdom and the United States of America, initiated a project in 1989 on setting universal accounting principles regarding financial instruments. This work culminated in two statements, Financial Instruments: Disclosure and Presentation (IAS 32, issued in March 1995) and Financial Instruments: Recognition and Measurement (IAS 39, issued in December 1998). In 1995 the IASC also reached an agreement with the International Organisation of Securities Commissions (IOSCO) to complete a core set of International Accounting Standards that could be endorsed by IOSCO for cross-border capital raising and for listing purposes in global markets (IAS 39:4). The current IAS 32 and IAS 39 documents do not meet the requirements of IOSCO and work on a comprehensive set of standards for financial instruments is still in process.

The first formal accounting statement in South Africa guiding the recognition and measurement of financial derivative instruments was AC 208, Accounting for Financial Futures Contracts, issued March 1991. Yet AC

Stighlingh and Piëssis: A comparison of the accounting and taxation approaches to interest rate

208 is only an accounting guideline (denoted by the prefix 2). According to Vorster, Joubert, Koen & Koornhof (1998:10-11) guidelines are not subject to the same extensive process of consultation and prior disclosure of an accounting statement (denoted by the prefix 1) and consequently do not have the same level of authority as an accounting statement. The suggestions in the guidelines are tentative, attempting to give direction, and are therefore not generally applied by the business community.

Van den Berg (1998:99) suggested that AC 108 may be applicable to financial instruments, but AC 108 explicitly excluded financial instruments from its scope (AC 108: §2).

Accounting statement AC 133 (Financial Instruments: Recognition and Measurement), issued December 1999, provides the most recent authoritative South African guidelines for the accounting of financial derivative contracts, which includes caps, floors and collars. AC 133 is based on IAS 39, the international accounting statement issued by the International Accounting Standards Committee (IASC).

Interest rate options are classified as financial derivatives since they comply with the definition of a derivative (AC 133:§11).

According to AC 133 (§11) financial derivative assets and financial derivative liabilities are always deemed held for trading purposes unless they are designated as effective hedge instruments:

4.2 Accounting principles in terms of AC 133:

4.2.1 Timing of recognition

4.2.1.1 An enterprise should recognise a financial derivative asset on its balance sheet when it becomes a party to the contractual provisions of the instrument (AC 133:§28). When purchasing financial derivative assets the purchase should be recognised using trading date accounting or settlement date accounting. The method chosen should be applied consistently for all financial derivative assets held with trading intention (AC133:§31). The trade date is the date on which an enterprise commits (or contracts) itself to purchase the asset, however, no delivery takes place at this interim stage. Trade date accounting refers to the recognition of the asset to be received and the liability to pay for it on the trade date (AC 133:§33). The settlement date is the date on which the asset is delivered to the enterprise. Settlement date accounting refers to the recognition of the asset only on the day that it is transferred to the enterprise (AC 133:§34).

This choice does not affect the value or timing of gains realised or losses incurred on financial derivative assets, since only the amounts reported in the balance sheet are affected (AC133:§35).

4.2.1.2 An enterprise should recognise a financial derivative liability on its balance sheet at the time it becomes a party to the contractual provisions of the instrument (AC 133:§28).

4.2.2 Timing of derecognition

4.2.2.1 An enterprise should derecognise a financial derivative asset when the enterprise loses control of the contractual rights that comprise the financial derivative asset (AC 133:§36). The sale of financial derivative assets should be recognised using settlement date accounting (AC 133:§31).

4.2.2.2 An enterprise should derecognise a financial derivative liability (or part of a financial derivative liability) on its balance sheet when, and only when, it is extinguished - that is, when the obligation specified in the contract expires, or is discharged or cancelled (AC 133:§58).

4.2.3 Initial measurement on recognition

When a financial derivative asset or financial derivative liability is recognised initially, an enterprise should measure it at its cost, which is the fair value of the consideration given (in the case of an asset) or received (in the case of a liability) for it. Transaction costs are included in the initial measurement of every financial derivative asset or liability (AC 133:§67).

Fair value is the amount for which an asset could be exchanged, or a liability settled, between informed, willing parties in an arms length transaction (AC 133:§9).

Transaction costs are defined as incremental costs that are directly attributable to the acquisition or disposal of a financial asset or liability (AC 133:§11). Transaction costs include fees and commissions paid to agents, advisers, brokers and dealers; levies by regulatory agencies and securities exchanges; and transfer taxes and duties. Transaction costs do not include debt premium or discount, financing costs, or allocations of internal administrative or holding costs (AC 133:§18).

4.2.4 Subsequent measurement

After initial accounting recognition has occurred, financial derivatives are measured (i.e. remeasured) at fair value. A held-for-trading derivative financial asset should subsequently be measured at fair value, without deduction of transaction costs that may be incurred on sale or other disposal (AC 133:§70). Derivatives that are liabilities should also be measured at fair value (AC 133:§94).

4.2.5 Treatment of gains and losses after subsequent remeasurement

The gains and losses on remeasurement in terms of fair value for held-for-trading derivatives should be included in net profit or loss for the period in which they arise (AC 133:§104(a)).

Although AC 133 is a very long and confusing statement, the thorough analysis of this statement results in very specific rules for the accounting treatment of option contracts. No uncertainty was therefore found for the accounting of option contracts.

The Taxation Treatment of Interest Rate Options

Introduction: The accounting standards for South Africa, although set by a South African institution, are guided by international developments in accounting, as the Accounting Practices Board of South Africa has an explicit policy of harmonising its precepts with international standards. The position regarding taxation treatment of financial derivatives is different. Although the Tax Advisory Committee may review international trends on the taxation of financial derivatives, South African tax legislation has its own unique character.

The Global Derivatives Study Group (1993:23) stated that in most countries the approach to taxing derivative transactions is derived from general tax principles that have been laid down long before derivative transactions came into general use. Several countries updated their out-dated tax laws regarding developments in financial

markets by introducing major reforms in their tax legislation in the eighties and nineties.

The Tax Reform Act of 1986 was passed in the United States (Schenk 1994:487). The United Kingdom introduced the "1994 financial instruments legislation" (Butterworths 1985:4925). Australia started the process of addressing taxation of financial arrangements in 1993, but actual legislation has thus far not been introduced. The Consultative Document prepared by the Australian Tax Office for the purpose of changing taxation of financial arrangements has been used by the South African Revenue Service in preparing legislation on the incurral and accrual of interest (section 24J of the Income Tax Act, no 58 of 1962 (hereafter "the Act")) and interest rate agreements (section 24K of the Act) introduced in 1995 and 1997.

Gains and losses on financial derivatives were initially taxed in South Africa by applying general principles of tax law. Piecemeal legislation was, however, also introduced to close unintended loopholes.

The possible sections of the Act which might be applicable, will now be analysed by firstly evaluating the general tax consequences of the different amounts and, secondly, to determine the timing of the tax implications as regulated by specific sections in the Act.

5.2 General tax consequences of interest rate derivative contracts

5.2.1 Taxability of receipts and accruals: In terms of interest rate option contracts the possible receipts or accruals that require further investigation are: the option premium received by the option writer (option originator), proceeds on the transfer (or selling) of an option contract, the unrealised profit on exercising a call option, and increases in the value of options, considered trading stock.

Receipts and accruals on derivative contracts are included in taxable income via the definition of gross income as per section 1 of the Act.

Hutton (1998a:164) identifies the capital or revenue nature of receipts and accruals under derivative contracts as a tax issue, as well as the timing of the receipts or accruals arising from derivative transactions, implied by the words "received by or accrued to or in favour of a person".

If a receipt or accrual is considered to be of a capital nature it will not be included in gross income and will not be taxable (unless specifically included by the Act). Various sources list the tests used to determine whether a receipt is of a capital or revenue nature. The most established test is whether or not the transaction formed part of a scheme of profit-making (Hutton 1998a:164). In determining this issue the courts attach great weight to intention. The intention of a dealer or speculator in derivative transactions is clear, namely to make a profit from changes in price fluctuations. Amounts accrued to and received by a trader or speculator in derivatives are deemed to form part of a scheme of profit-making and are therefore revenue in nature and thus taxable.

The timing of a receipt in terms of gross income relies on the words "received by or accrued to" in the definition of gross income. A taxpayer is assessed on income in the year of assessment on either the accrual or the receipt of the income, whichever occurs first. The words "accrued to or in favour of any person" has been defined in CIR v

People's Stores (Welvis Bay) (Pty) Ltd 1990 (2) SA 353 (A), 52 SATC 9 as meaning "to which he has become entitled to". It upheld the decision in *Lategan v CIR* 1926 CPD, 2 SATC 16. The meaning of "accrued to" was also interpreted, *inter alia*, by *Mooi v CIR* 1972 (1) SA 675 (A), 34 SATC 1 where it was held that accrual of income only occurs when the taxpayer's entitlement to the income is unconditional. In an *orbiter dictum* in *Ochberg v CIR* 1933 CPD 256 6 SATC1, the court indicated that an entitlement to income which is dependent only on the taxpayer's performance of "a reciprocal obligation is conditional for income tax purposes until such time as that reciprocal obligation is performed. This precludes unrealised profits due to value increases in trading stock from being included in gross income. Unrealised profits on derivative transactions are therefore not taxable in terms of section 1 of the Act.

5.2.2 Deductibility of the expenses or losses

Expenditure and losses on interest rate option contracts may include

expenditure on the option premium, expenditure due to buying the underlying asset when exercising the option, any losses made on the transfer or sale of an option contract, and associated transaction costs.

Expenditure and losses relating to derivative contracts are allowed in terms of section 11(a) or (b) of the Act (Hutton 1998a:165 and Byala 1993:141).

The central issue regarding the deductibility of expenditure and losses on derivative contracts is the capital/revenue nature of the expenditure or loss (Hutton 1998a:164). In establishing whether an expense or loss incurred is of a capital or revenue nature, the basic test is to determine whether the expenditure or loss should properly be regarded as part of the cost of performing the taxpayer's income-earning operations (Hutton 1998a:170). If it is, the expense (or loss) is of a revenue nature and thus deductible. If an expenditure or loss is regarded as part of the cost of acquiring, enhancing or adding to the taxpayer's income earning structure, it is of a capital nature and thus not deductible (refer *New State Areas Ltd v CIR* 1946 AD 610 14 SATC 155 and *CIR v George Forest Timber Co Ltd* 1924 AD 516 14 SATC 155). Intention will once again play an important role. It follows therefore that because an option contract held for trading purposes is entered into pursuant to a scheme of profit-making, only expenses and losses relating to that transaction are regarded as revenue in nature.

The deductibility of transaction expenses like broker's fees, commissions and exchange fees will also depend on whether the actual derivative transaction will be considered to have a capital nature or revenue nature (*CIR v Nemojin (Pty) Ltd* 1983 (4) SA 935 (A) 45 SATC 241). As the option contracts are held on trading account, all related transaction costs will therefore also be on revenue account.

The Courts have interpreted "actually incurred" to mean an unconditional liability to pay the expenditure incurred in the year of assessment, irrespective of whether it was actually paid in the year of assessment (*Port Elizabeth Tramway Co Ltd v CIR* 1936 CPD 241 8 SATC 13, *Edgars Stores Ltd v CIR* 1988 (3) SA 876 (A) 50 SATC 81). Contingent expenses and losses are excluded by the words "actually incurred" (*Nasionale Pers v KBI* 1986 (3) SA 549 (A) 48 SATC 55).

Stighlingh and Plessis: A comparison of the accounting and taxation approaches to interest rate

In *CIR v Felix Schuh (SA) (Pty) Ltd* (1994 (2) SA 801 (A), 56 SATC 57) it was held that unrealised exchange rate losses were not losses "actually incurred". (Since this court case, section 24I has been inserted into the Act, amending the taxation treatment of gains and losses on foreign exchange differences. The above principle, however, is very important and illustrates that unrealised losses are not deductible in terms of the general deduction formula.)

5.2.3 Section 22 of the Act - Trading stock

An expense could, however, have further tax implications if it could be classified as trading stock. Trading stock is defined in section 1 as "anything produced, purchased or in any other manner acquired by a taxpayer for purposes of manufacture, sale or exchange by him or on his behalf, or the proceeds from the disposal of which forms or will form part of his gross income".

According to Du Plessis (1991:96) to qualify as trading stock the taxpayer-

- should acquire something;
- with the purpose to sell, exchange or dispose of it;
- if the purpose is disposal, the proceeds of disposal should form part of gross income;
- it should be owned; and
- should not be disposed of as yet.

The party purchasing a cap obtains a right to receive interest under certain circumstances. This right may be seen as "something obtained". The last two qualifiers are also complied with: the option is owned by the purchaser, usually encapsulated in a standard option contract, and the option is not disposed of as at 31 December 19x0.

The characteristic that is in doubt though is whether the option is bought with the purpose of selling, exchanging or disposing thereof. Interest rate derivative products, are mostly sold over-the-counter. Over-the-counter products are non-standardised products and a secondary market for these products does not exist. If an enterprise's purpose is to trade in or speculate with these products, the product itself will not be resold, because there is usually a clause in the contract limiting transfer without the written consent of the other contracting party (Hudson 1996:248, 269, 273, 276). The products on hand will be offset by a transaction of opposite nature. This raises the issue whether over-the-counter caps held for trading purposes will fall within the definition of trading stock per section 1 of the Act, specifically "anything ... purchased or in any other manner acquired for purposes of ... sale or exchange by him or on his behalf or anything the proceeds from the disposal of which forms or will form part of his gross income" (emphasis added). Over-the-counter derivative contracts are neither resold nor readily disposed of and therefore the applicability of section 22 of the Act is in doubt.

From *Rand Mines (Mining Services) Ltd v CIR* (1997 1 All SA 279 (A) 59 SATC 85) we may infer that for derivative agreements, to be considered trading stock, they must be bought with the intention of disposing of them.

The importance of intention was confirmed in *De Beers Holdings (Pty) Ltd v CIR* 1986 (1) SA 8 (A) 47 SATC 229. It was held that the words "or anything the proceeds from the disposal of which forms or will form part of his gross income" covers only things which are intended to be disposed of and not things which, if they were disposed of, would generate gross income (De Koker 1997). This underlines the importance of actual intention; a hypothetical possibility is not enough to make the

definition of trading stock applicable.

The crux of the matter is still whether offsetting is regarded as a disposition of over-the-counter financial derivative products. This meaning has not yet been explored in a court case on financial derivatives.

However, in *ITC 972* (1962) 24 SATC 796 (F), a Rhodesian and Nyassaland special court case, the word, "dispose", was analysed with regard to its cognate, "disposition". The definition of "disposition" used in this case was "any transfer or abandonment of rights to property and includes a sale, lease, mortgage, pledge, delivery, payment, release, compromise or donation". This definition seems to exclude offsetting as an alternative.

According to the Concise Oxford Dictionary of Current English (Sykes 1982:707&277) the word, "offset" includes the interpretations "compensation" and "consideration or amount diminishing or neutralising effect of contrary one". The phrase "dispose of", includes the meaning "settle". Offsetting may therefore provide compensation in the settlement of a disposition agreement. However, when over-the-counter interest rate options are offset, this usually only has a set off affect for oneself, because the party one is setting off with, may not be the original party with whom one traded initially.

It follows, therefore, that section 22 of the Act is not applicable to interest rate options sold over-the-counter.

5.3 Specific sections relating to interest rate derivatives

Apart from the general rules as analysed above, sections 24J, 24K and 24L of the Act could also be applicable. According to the Explanatory Memorandum to the Income Tax Bill (1997:16), the provisions of section 24K will not interfere with general principles such as the source principle or the capital or revenue nature of amounts accrued or incurred in respect of such agreements. This is also true for sections 24J and 24L. These sections therefore only regulate the timing of the specific amounts which are taxable or tax deductible.

5.3.1 Section 24J of the Act

Section 24J of the Act focuses on the timing of the incurral and accrual of interest on instruments (interest bearing arrangements) such as stocks, bonds, debentures, bills, promissory notes, certificates, deposits with financial institutions, loans, advances and debts, whether secured or unsecured, any repurchase or resale agreement. A catch-all phrase is then added to the definition: "any acquisition or disposal of any right to receive interest or the obligation to pay any interest, in terms of any other interest-bearing arrangement" (section 24J(1)). At first glance this may appear to include caps, floors and collars, but this is not the case. Since there is no exchange of the notional amount in such agreements, it is not a consideration for the use of money and does not qualify as interest payments in law (Hutton 1998b:223; Charmoy 1994:58 and *CIR v Genn* 1955 (3) SA 293 (A)). An alternative method of determining the incurral and accrual of interest is only available to companies whose business comprises dealing in instruments or interest rate agreements (section 24J(9)(a) of the Act). This method entails valuing financial instruments and interest rate agreements at market value. If a company has elected to use a market valuation method in terms of section 24J(9) of the Act, opening and closing trading stock should be valued at this market value at the beginning and end of

Stighlingh and Plessis: A comparison of the accounting and taxation approaches to interest rate

the year of assessment (section 22(1)(b) of the Act). By including the trading stock at valuation, the unrealised profits and losses due to revaluation, will be included in or deducted from taxable income. Application of section 24J(9) of the Act is, however, only limited to interest rate agreements which are considered as trading stock and could therefore not be applied to over-the-counter interest rate options held for trading.

5.3.2 Section 24K of the Act

Section 24K of the Act addresses the timing of the incurral and accrual of amounts in respect of interest rate agreements.

An interest rate agreement is defined per section 24K(2) of the Act as any agreement in terms of which any person acquires the right to receive or is liable to pay-

- (a) an amount calculated by applying any rate of interest to a notional principal amount specified or referred to in such agreement; or
- (b) an amount calculated with reference to the difference between any combination of rates of interest applied to a notional principal amount specified or referred to in such agreement; or
- (c) a fixed amount specified or referred to in such

agreement as consideration in terms of such agreement whereunder the right to receive (or the obligation is imposed to pay) any other amount as contemplated in paragraph (a) in terms of such an agreement or an amount equal to the difference between such fixed amount and such other amount.

The scope of the definition of an interest rate agreement is so wide it includes a range of transactions apart from interest rate swaps (Hutton 1998b:224-225). An interest rate option is therefore also an interest rate agreement because it gives the option holder the right to receive, and the option grantor the liability to pay, an amount contemplated in paragraph (b) above.

Amounts are deemed accrued or incurred on a daily basis during the period in respect of which it is calculated. The calculation of the accrual and incurral should conform to GAAP and be consistently applied for all financial reporting purposes (section 24K(2) of the Act).

Section 24K(3) of the Act provides that in the case where an amount is to be calculated per section 24K of the Act, prior to the date of actual payment thereof, and there is reference to a variable rate, this amount shall be calculated with reference to the variable rate applicable on the date this amount is to be calculated, in order to determine all amounts payable or receivable after this date. This means that where an amount is calculated with reference to a variable interest rate and the end date of the last period in respect of which an amount is calculated, is not on the same date as the financial year end, the actual variable rate as at year end has to be used to determine the accrual amount (Explanatory Memorandum of the Income Tax Bill 1997:1). However, there is one additional provision that should be added, namely fixing (i.e. the reference date for the calculation of interest), which should also occur after the financial year end.

5.3.3 Section 24L of the Act - Incurral and accrual of amounts in respect of option contracts

Section 24L of the Act addresses the timing of the accrual or incurral of an option premium. In the Explanatory

Memorandum on the Revenue Laws Amendment Bill (1999:19-20) the motivation for the insertion of section 24L of the Act is stated as:

"In terms of normal tax principles a purchaser of an option contract who meets the requirements of the general deduction formula in section 11(a) of the Act may claim the amount of the premium or consideration incurred in respect of the acquisition thereof in full during the year of assessment the option contract is acquired. This may result in unacceptable tax deferral opportunities for taxpayers who may, shortly before the end of their year of assessment, buy options in order to claim the full premium or acquisition price as a deduction for tax purposes. The same applies to option contracts written for periods covering a number of years. In order to address this anomaly it is proposed to introduce an accrual basis in respect of the premium or purchase price of the option contract for the purchaser thereof; and in respect of the premium receivable by the writer thereof." Section 24L applies to both cash settled options and options settled by delivery (section 24L(1)). If a person or enterprise acquires an option, the option premium is assumed to be incurred on a day-to-day basis over the period of the option contract (section 24L(2)). In the case of an American option the period will end on the last date the option may be exercised. For a European option the period will end on the exercise date. If the option is sold, terminated or exercised before the end of the period indicated by the option contract, the balance of the option premium will be deemed to be incurred. Section 24L(3) has the same specifications for option premiums received by option writers, i.e. accrual on a day-to-day basis and the balance being deemed to be accrued in total on sale, termination or exercising (Explanatory Memorandum on the Revenue Laws Amendment Bill 1999:20). Section 24L(2) does not apply to an option contract held as trading stock by the taxpayer. Therefore section 22, if applicable, could take preference over section 24L.

5.4 Conclusion

The option premium received/(paid) by the option writer is taxable/(tax deductible) in terms of section 1/(11(a) or (b)) of the Act and the inclusion/(deduction) is calculated on a day-to-day basis in terms of section 24L.

The proceeds on the transfer (or sale) of an option contract will be included in taxable income when the taxpayer receives these amounts, or when he becomes unconditionally entitled to these amounts, whichever occurs first.

Any losses made on an option contract on transfer (or sale) or associated transaction costs are tax deductible when there is an unconditional obligation to pay.

An unrealised profit on the exercising of an in-the-money call option (i.e. buying the underlying asset below market value, but not yet reselling at the market value), and an increase/(decrease) in the value of the over-the-counter options held for trading, will not be taxable/(tax deductible) yet as no unconditional entitlement/(incurral) has taken place.

These options will be classified as interest rate agreements in terms of section 24K, and because these options can not be classified as trading stock under section 22, section 24J(9) is not applicable and any interest will be deemed to incur/accrue on a day-to-day basis (section 24K(2) of the Act).

6. Applying the accounting and taxation principles

Stighlingh and Plessis: A comparison of the accounting and taxation approaches to interest rate

to an example of a cap acquired with trading intention

Although a cap is employed in the following illustrative examples, the accounting and taxation principles are equally applicable to floors and collars.

6.1 Example: interest rate cap sold with trading intention (the option holder): A bank buys an interest rate cap at a premium of R2 000 on 1 December 19x0. This cap (a put option) allows the buyer to receive interest on a notional amount of R1 million at the rate at which the prime rate exceeds the strike rate of 14% on 31 January 19x1, for the period 31 January 19x1 until 30 April 19x1. Fixing and settlement occurs on 31 January 19x1.

The estimated fair value of the cap is R3 000 on 31 December 19x0. On 31 January 19x1 the prime rate is 15%.

The financial year end of the bank is 31 December 19x0. The bank compiles management financial statements on a monthly basis. The bank recognises derivative assets using settlement date accounting. (On initial recognition of derivative transactions, the transaction dates are assumed to be settlement dates.)

6.1.1 Accounting treatment

Date	Balance Sheet		Income Statement
	Cash	Caps held to	Profit (-)/loss (+)
1 Dec.19x0	-2000	+2000	
31 Dec.19x0		+1000	-1000
31 Jan.19x1	+2410 ¹⁾	-3000	+590

31 December 19x0 year end

1 December 19x0 - Purchase of option

The purchase of the interest rate cap is recognised as an asset per AC 000 §49 [also refer to 4.2.1.1 and 4.2.3], because it:

is under the control of (owned by) the enterprise, will result in future economic benefits flowing to the entity when interest rates decline, and originated as a result of a past event when the enterprise concluded the floor contract.

31 December 19x0 - Gain in option contract

A gain of R1 000 is realised against the income statement on 31 December 19x0 because the fair value increased from R2 000 to R3 000. Revaluation profits or losses on financial derivatives held for trading purposes should be taken to net profit and loss in terms of AC133 §104 [also refer 4.2.4].

31 December 19x1 year end

31 January 19x1 - Derecognition of cap

On 31 January 19x1 the option is derecognised [refer 4.2.2.1]. The loss on derecognition is transferred to net profit AC133 §104 [refer 4.2.5].

Net profit/loss recognised in various financial years

An accounting gain of R1 000 is recognised in 19x0 and an accounting loss of R590 in 19x1. A total gain of R410 (R1000 gain - R590 loss) is accounted for.

6.1.2 Taxation treatment

31 December 19x0 year end

1 December 19x0 - Purchase of option

The option premium paid will be deductible in terms of

section 11(a) as it represents an expense which forms part of the income earning operations of the company [refer 5.2.2].

The alternative market valuation method of section 24J(9) could perhaps also be applicable to this example, because the bank is classified as a company whose business comprises the dealing in instruments or interest rate agreements. However, the alternative market valuation method is precluded from this situation because it is assumed the cap is not trading stock. Section 22(1)(b) is therefore not applicable.

Since section 22 is not applicable to over-the-counter interest rate options [refer 5.2.3] section 24L should therefore be employed. Section 24L regulates the timing of the section 11(a) deduction and provides for the daily incurral and accrual of the option premium over the term of the option contract. On careful scrutiny of section 24L it is submitted that by "term of the option contract" the following is meant: the period starting on the day the option contract is concluded until and including the last day the option may be exercised (1 December 19x0 and 31 January 19x1 in this example). An amount of R1 000 (31/62 x R2000) can be deducted in 19x0 and the rest (R1 000) should be deducted in 19x1.

31 December 19x0 - Gain in option contract

The gain in the option contract is an unrealized gain, and is therefore not yet taxable in terms of the general gross income definition as being an unrealized profit [refer 5.2.1]. The applicability of the day-to-day incurral and accrual methods prescribed by section 24K should, however, also be tested. The day-to-day incurral method is only applied over "the period in respect of which it is calculated" (section 24K(2)). No interest accrual period is applicable on 31 December 19x0 in this example and therefore section 24K has no effect as yet.

31 December 19x1 year end

31 January 19x1 - Derecognition of cap.

On 31 January 19x1 the option is exercised and the bank receives an amount of R2 410 from the option writer. This amount is taxable in 19x1 in terms of section 1 of the Act since the transaction it relates to forms part of a scheme of profit-making [refer 5.2.1]. Section 24K regulates the timing of this inclusion on a day-to-day basis from 31 Jan 19x1 until 30 April 19x1. Therefore, the full profit is taxable in the 19x1 financial year.

Net profit/loss recognised in various financial years

A loss of R1 000 will be deductible in 19x0 and a gain of R1 410 (R1 000 loss (the rest of the option premium deducted) - R2 410 gain) is taxable in 19x1. A total gain of R410 (R1 000 loss - R1 410 gain) is therefore taxable.

6.2 Example: interest rate cap sold with trading intention (the option writer)

A bank sells an interest rate cap at a premium of R2 000 on 1 December 19x0. This cap (a put option) allows the buyer to receive interest on a notional amount of R1 million at the rate at which the prime rate exceeds the strike rate of 14% on 30 April 19x1, for the period 31 January 19x1 until 30 April 19x1. Fixing and settlement occurs on 30 April 19x1.

The estimated fair value of the cap is R3 000 on 31 December 19x0. On 31 January 19x1, 31 March 19x1 and 30 April 19x1 the prime rate is 15%. Only on 28 February 19x1 is the rate 16%.

The financial year end of the bank is 28 February 19x1.

Stighlingh and Plessis: A comparison of the accounting and taxation approaches to interest rate

The bank compiles management financial statements on a monthly basis. The bank recognises derivative liabilities using settlement date accounting. (On initial recognition of derivative transactions, the transaction dates are assumed to be settlement dates.)

28 February 19x1 year end

1 December 19x0 - Receiving the option premium.

The option is recognised as an obligation in the balance sheet because it complies with the conditions for the recognition of an obligation in terms of AC.000 §49 [also refer 4.2.1.2 and 4.2.3]. An obligation is recognised because:

it is a present obligation due to the legal contract that has been concluded;

it is the result of a past event, i.e. the conclusion of the agreement;

the settlement of the obligation will probably result in the outflow of economic benefits (cash); and

the liability is also measurable; the option premium is a measurement of the liability.

31 December 19x0, 31 January 19x1, 28 February 19x1 - Revaluation of option

A net loss of R2 870 (R1 000 - 590 + 2 460), is realised in the income statement for the period 1 December 19x0 to 28 February 19x1. Revaluation profits or losses on financial derivatives held for trading purposes, should be taken to net profit and loss in terms of AC133 §104 [refer 4.2.5].

28 February 19x2 year end

31 March 19x1 - Revaluation of option

A profit of R2 401 is realised in the income statement for the period 1 March 19x1 to 31 March 19x1. Revaluation profits or losses on financial derivatives held for trading purposes, should be put to net profit and loss in terms of AC133 §104 [refer 4.2.5].

30 April 19x1 - Derecognition of option

On 30 April 19x1 the option is derecognised [refer 5.1]. The loss of R31 on derecognition is transferred to net profit AC133 §104 [refer 4.2.5].

Net profit/loss recognised in various financial years

An accounting loss of R2 870 is recognised in 19x0 and an accounting gain of R2 370 (R2 401 gain - R31 loss) in 19x1. A total loss of R500 (R2 870 loss - R2 370 gain) is therefore accounted for.

6.2.1 Accounting treatment

Date	Balance Sheet		Income Statement Profit(-)/loss(+)
	Cash (Asset)	Caps held to trade (Liability)	
1Dec 19x0	+2000	-2000	
31Dec 19x0		-1000	+1000
31Jan 19x1		590 ¹⁾	-590
28Feb 19x1		-2460 ²⁾	+2460
31Mar 19x1	-2500	+2401 ³⁾	-2401
30Apr 19x1		+2469 ⁴⁾	+31

1: $(0,15=0,14) \times R1000000 \times 3/12 = R2500$; $R2500 (1+(0,15 \times 3/12)) = R2410$; $3000 - 2410 = 590$

2: $(0,16=0,14) \times R1000000 \times 3/12 = R5000$; $(1+(0,16 \times 2/12)) = R4870$; $2410 - 4870 = -2460$

3: $(0,15=0,14) \times R1000000 \times 3/12 = R2500$; $R2500 (1+(0,15 \times 1/12)) = R2469$; $4870 - 2469 = 2401$

4: $(0,15=0,14) \times R1000000 \times 3/12 = R2500$; $2469 - 2500 = -31$

6.2.2 Taxation treatment

28 February 19x1 year end

1 December 19x0 - Receiving the option premium

Section 1 defines trading stock as "anything produced, purchased or in any other manner acquired by a taxpayer". It appears that the option premium may be considered as "anything ... in any other manner acquired by a taxpayer" and should therefore be included in the definition of trading stock, despite the fact that the receipt of the option premium created an obligation. However, if the option writer enters into an option agreement with the sole aim to earn the option premium and not for the purpose of reselling, it cannot be considered trading stock. This is a consideration, in addition to the issue of over-the-counter products not being considered as trading stock [refer 5.2.3].

As section 22 is not applicable, section 24L should be employed. Section 24L provides for the daily accrual and accrual of the option premium over the term of the option contract. By "term of the option contract" it is assumed that the period starts on the day the option contract is concluded and lasts up to and including the last day the option may be exercised (1 December 19x0 and 31 January 19x1 in this example). The total option premium of R2 000 should therefore be included in taxable income for the period ended 28 February 19x1.

31 December 19x0, 31 January 19x1, 28 February 19x1 - Revaluation of option

The gains and losses on the option contract on these dates are unrealised, and are therefore not taxable in terms of the general gross income or general deduction definitions [refer 5.2.1 and 5.2.2]. However, section 24K regulates the timing of the tax consequences and determines that the day-to-day accrual method should be applied to the option over "the period in respect of which it is calculated" (section 24K(2)). As at 28 February 19x1, one month's interest has already been incurred. Based on the explanatory memorandum, the interest incurred as at 28 February 19x1 should be calculated as: $28 / 365 \times (0,16 - 0,14) \times (R1 \text{ million}) = R1534$

28 February 19x2 year end

31 March 19x1, 30 April 19x1 - Revaluation and derecognition of option

The gain on the option contract on 31 March 19x1 is unrealised, and is therefore not taxable in terms of the gross income definition [refer 5.2.1].

On 30 April 19x1 the option is exercised and the bank pays an amount of R2 500 to the option holder. R1 534 of this amount has already been deducted in 19x1 in terms of section 24K of the Act. The remainder of the amount, R966, is now deductible.

Net profit/loss recognised in various financial years

An amount of R466 (R2 000 - R1 534) is taxable in the year ending 28 February 19x1. An amount of R966 is tax deductible in the year ending 28 February 19x2. A net tax deduction R500 (R466 gain - R966 expense) will therefore be granted.

7. Conclusion

The accounting treatment of interest rate options held with a trading intention is regulated by AC133 and very clear but complex rules are stipulated. The taxation consequences of interest rate options, however, are more problematic and the intention of the legislature is not very clear on whether this option could be regarded as trading stock or not. In comparing the accounting and tax

Stighlingh and Plessis: A comparison of the accounting and taxation approaches to interest rate

consequences, it was found that the total loss or profit accounted for on an option contract would be the same for taxation and accounting purposes. The timing thereof, however, could fall within different financial periods. This is due to the following reasons:

-The option premium is dealt with, for tax purposes, as an income or an expense which accrues/(is incurred) on a day-to-day basis. For accounting purposes, the option premium as such does not result in an entry in the income statement.

- The option contract will always be revalued to the fair value for accounting purposes, whereas this alternative is not available for taxation as the options cannot qualify as trading stock for the purposes of section 22 and 24J of the Act. As section 22 and 24J of the Act did not apply to the interest rate option, the application of sections 24K and 24L of the Act result in a difference in the timing of the accounting and taxation implications.

The accounting and taxation consequences of a transaction could be the same if the options were to qualify as trading stock. This would result in sections 24K and 24L not being applicable and only the market value method being used for taxation purposes. A premium paid could, however, still qualify as a tax deduction in terms of section 11(a) of the Act, but the market value would be added as trading stock in terms of section 22 thereof. The difference between the market value and the premium paid would therefore be the only net effect on the tax calculation for a specific period and this would agree with the accounting treatment. This, however, would only eliminate the differences for companies, as individuals and trusts, currently do not have the option, in terms of section 24J(9) of the Act to use the market value method. Individuals and trusts, however, are not bound to use GAAP and this should not be too problematic for them. The above would also only be applicable to holders of options as the writer will have negative trading stock as a result of its liability towards the holder.

It is therefore of paramount importance that the legislature either issues a practice note or amends the Act to clarify the situation regarding the treatment of such options as trading stock. If it were the intention of the legislature to harmonise the tax implications with the accounting treatment, this should also be addressed with an amendment in the Act.

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