

#### **DETERMINATION** > FINANCIAL ARRANGEMENTS > GENERAL

# **Exchange Traded Option Contracts**

Issued: 4 December 1989



This Determination may be cited as "Determination G19: Exchange Traded Option Contracts".



# 1 Explanation (which does not form part of the determination)

- 1. This determination is available for persons unable to use section 64C(4).
- 2. An option gives its owner the right, but not the obligation to buy or sell an underlying financial instrument, at a predetermined price at any time during a predetermined future period. For this right the owner of the option has to pay a premium, which is quoted on the exchange in points, to the seller/writer of the option. The owner of the option has the right to exercise the option at any date during the term of the option. The person who has the rights to exercise the option is the grantee of the option while the writer of the option is the grantor.
- 3. Markets, sources of information, and prices for an option contract are determined by reference to Determination G7B: New Zealand Futures and Options Markets, and Determination G18: International Futures and Option Markets.
- 4. The income derived or expenditure incurrred in relation to an option contract in an income year is the change in option value, taking account of transaction costs, as determined by the change in price of the option contract obtained in accordance with Clause 6(3) of Determination G7B: New Zealand Futures and Options Markets, and Determination G18: International and Futures and Option Markets.
- 5. This determination only applies to options traded on markets approved in Determination G7B: New Zealand Futures and Options Markets, or Determination G18: International Futures and Option Markets. Options outside the accruals regime, for example options on shares, are outside the scope of this determination.

## **2** Reference

This determination is made prusuant to section 64E(1)(b) of the Income Tax Act 1976.

# **3 Scope of Determination**

This determination shall apply where it is necessary to calculate the income deemed to be derived or expenditure deemed to be incurred by a person in respect of a call option contract or a put option contract, traded on approved markets, to which the person becomes a party after the day on which this determination is signed.

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# 4 Principle

- 1. An option that is exercised gives rise to a net gain or loss if the value at the exercise date of the underlying asset to which the option relates is different from the exercise price plus the premium. Similarly a net gain or loss will be made where a person closes out at a different price than that paid to acquire the option. A gain or loss will also be made where the option is allowed to lapse.
- 2. The net gain or loss on an option at balance date is the difference between:
  - (a) The—
    - (i) Purchase price of the option plus transaction costs incurred in acquiring the option, in the case of the person acquiring the option, if the option has been purchased since last balance date; or
    - (ii) Sale price of the option less transaction costs incurred in writing the option, in the case of the writer of the option, if the option has been written since last balance date; or
    - (iii) Net realisable value of the option as on the immediately preceding balance date, where the option contract had not been entered into in that income year; and
  - (b) The net realisable value of the option as at balance date.

# 5 Interpretation

1. In this determination, unless the context otherwise requires,—

Expressions used have the same meanings as in the Act and where a word or expression is given a particular meaning for the purposes of sections 64B to 64M of the Act it shall have the same meaning as in the said sections 64B to 64M:

"The Act" means the Income Tax Act 1976:

"Approved markets" are those markets approved in Determination G7B: New Zealand Futures and Options Markets, and Determination G18: International Futures and Option Markets:

"Call options" are an option to buy the underlying financial instrument, which in the case of option contracts approved in Determination G7B: New Zealand Futures and Options Markets, and Determination G18: International Futures and Option Markets, will be a futures contract:

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"Exchange traded option contract" means an option contract traded on an approved market:

"Exercise price" means the price at which the option may be exercised on the underlying futures contract:

"Net realisable value" means the market value of the option, as ascertained in accordance with Determination G7B: New Zealand Futures and Options Markets, and Determination G18: International Futures and Option Markets, less the direct costs associated with closing out, exercising, or lapsing the option. In the case of the writer of the option the net realisable value may be a negative value:

"Put options" are an option to sell the underlying financial instrument, which in the case of option contracts approved in Determination G7B: New Zealand Futures and Options Markets, and Determination G18: International Futures and Option Markets, will be a futures contract:

"Transaction costs" are those direct costs incurred in the purchase or sale of the option including, but not limited to, brokers fees and clearing house fees.

2. Any reference in this determination to another determination made by the Commissioner shall be construed as referring to any fresh determination made by the Commissioner to vary, rescind or extend that determination.

### 6 Method

1. The income derived or expenditure incurred in respect of an exchange traded option contract in any income year (other than an income year to which section 64F of the Act applies) is calculated using the following formula:

a – b

where—

a is—

- (i) In the case of the grantee of the option, the purchase price of the option, plus transaction costs incurred in entering into the option contract, if the option has been acquired in that income year; or
- (ii) In the case of the grantor of the option, the sale price of the option, less transaction costs incurred in entering into the option contract, if the option was written in that income year, which amount shall be deemed to be a negative value; or

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(iii) The net realisable value of the option as on the immediately preceding balance date, if the option contract had not been entered into in that income year; and

b is the net realisable value of the option as balance date.

- 2. Where the amount calculated using the above formula is a positive amount it shall be deemed to be expenditure incurred in that income year.
- 3. Where the amount calculated using the above formula is a negative amount it shall be deemed to be income derived in that income year.

# 7 Examples

#### **Example A**

On 10 July 1989 a taxpayer believes that there will be a rise in interest rates. The taxpayer is not completely certain that this will happen so the taxpayer decides to purchase put options, so as to limit the risk.

On that day the futures price for a September 1989 90 Day Bank Bill Contract is 8700.

The taxpayer purchases five put options on 90 Day Bank Bill Option Contracts with a strike price of 8700. The option premuims for the five contracts total \$2,024.75 (11.57 [\$ value per point]  $\times$  35 [premium value in points] = 404.95 [premium value per contract]  $\times$  5 [no. of contracts]).

Commission and Clearing House fees for the five contracts total \$200.

The taxpayer has a 31 July balance date. On that date the price of a 90 Day Bank Accepted Bill Futures Contract has fallen, reflecting a rise in interest rates, to 8625.

The value of the five September 8700 put options has risen to \$4,628.00, reflecting a 45 point gain in the value of the put options. Transaction costs of closing out the contracts at the present value are \$230.

Income or expenditure is calculated as follows:

Using 
$$a - b$$

$$a = $2,224.75 (2,024.75 + 200)$$

$$b = $4,398.00 (4,628.00 - 230)$$

Therefore:

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$$2,224.75 - 4,398.00$$

= -\$2,173.25 which is deemed to be income derived in the 1989 year.

#### **Example B**

On 24 January 1990 a taxpayer believes there will be a drop in interest rates. The taxpayer decides to write put options over 12 Five Year Government Stock Futures Contracts, which were trading at 8750, at an exercise price of 8775.

The option premiums for the 12 contracts total \$12,531.60 (34.81 [\$ value per point]  $\times$  30 [premium value in points] = \$1,044.30 [premium value per contract]  $\times$  12 [no. of contracts]).

Commission and Clearing House fees for the 12 contracts total \$430.

The taxpayer has a 28 February balance date. At the close of trading on that day Five Year Government Stock Futures Contracts are trading at 8700, reflecting a rise in interest rates.

The value of the twelve March 1990 8775 put options has risen to \$30,911.28 reflecting a 44 point loss in the value of the written put options. Transaction costs, if the contracts were closed out, are \$420.

Income or expenditure is calculated as follows:

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Using a - b
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a = \$12,101.60 (12,531.60 – 430 = 12,101.60 deemed a negative)

b = \$31,331.28 (- 30,911.28 [this is a negative because it is a liability to the writer in this case] - 420)

#### Therefore:

-12,101.60 - -31,331.28

= 19,229.68 which is deemed to be expenditure incurred in the 1990 income year.

#### **Example C**

On 22 May 1989 a taxpayer believes that the Barclays Share Index will increase value over the next few months. The taxpayer decides to purchase 6 call options on September 1989 Barclays Share Index Futures Contracts, which were trading at 1930, at an exercise price of 1950.

The option premiums for the 6 contracts total \$12,600.00 (20 [\$ value per point]  $\times$  105 [premium value in points] = \$2,100.00 [premium value per contract]  $\times$  6 [no. of contracts]).

Commission and Clearing House fees for the 6 contracts total \$210.

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The taxpayer has a 30 June balance date. At the close of trading on that day Barclays Share Index Option Contracts are trading at 1850, reflecting a drop in share values.

The value of the six September 1989 1950 call options has fallen to \$6,240.00 reflecting a drop in the premium value to \$52.00 points. Transaction costs, if the contracts were closed out, are \$210.

Income or expenditure is calculated as follows:

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Using a - b
a = $12,810.00 (12,600.00 + 210)
b = $6,030.00 (6,240.00 - 210)
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Therefore:

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12,810.00 - 6,030.00
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= \$6,780.00 which is deemed to be expenditure incurred in the 1989 income year.

#### **Example D**

On 20 December 1989 a taxpayer believes that the New Zealand Dollar is going to fall in value. The taxpayer writes 10 call options over March 1990 New Zealand Dollar Futures Contracts, which are trading at 5600, at an exercise price of 5650.

The option premiums for the 10 contracts total \$14,300.00 (10 [\$ value per point]  $\times$  143 [premium value in points] = \$1,430.00 [premium value per contract]  $\times$  10 [no. of contracts]).

Commission and Clearing House fees for the 10 contracts total \$400.

The taxpayer has a 31 December balance date. At the close of trading on the 29th December (last day of trading before balance date) New Zealand Dollar Futures Contracts are trading at 5550, reflecting a drop in the New Zealand Dollar.

The value of the ten March 1990 5650 call options has fallen to \$11,000.00 reflecting a drop in the point value to \$110.00. This is a gain in the value of the written call options. Transaction costs, if the contracts were to be closed out, are \$400.

Income or expenditure is calculated as follows:

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Using a-b  $a = -\$13,900.00 \quad (14,300.00 - 400 = 13,900.00 \text{ deemed a negative})$   $b = -\$11,400.00 \quad (-11,000.00 - 400 = -\$11,400.00)$ [The \\$11,000 is a negative because it is a liability to the writer in this case]

#### Therefore:

-13,900.00 - -11,400.00

=-2,500.00 which is deemed to be income in the 1990 income year.

Note: In the income year in which the option is closed out, lapsed or is exercised a base price adjustment, in terms of section 64F, is required instead of the above calculation.

## **About this document**

General determinations set out the Commissioner's view on how the financial arrangements rules apply to a specific type of financial arrangement. All general determinations are binding on the Commissioner and some are also binding on taxpayers.

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