
Project	Financial Instruments: Hedge Accounting
Topic	Accounting for time value of options—‘zero-cost’ collars

Introduction

Background

1. In the the exposure draft *Hedge Accounting* (ED) the Board proposed accounting for the time value of options that reflects the view of a premium for protection against risk (‘insurance premium’ view). The Board noted that the time value paid at inception is a cost of obtaining protection against unfavourable changes of prices or rates. This aligns with the risk management perspective where risk management typically views the time value paid at inception as being similar to an insurance premium for protection against risk, ie a cost of hedging.
2. A zero-cost collar (a combination of a purchased and a written, one being a put and one being a call option with a net nil time value at inception¹) similarly also has time value during its life. The staff note however that the Board’s proposed treatment for time value of options as a cost of hedging would not apply to zero-cost collars because these collars have no (net) time value at inception.²
3. Respondents from comment letters argued that any final requirements for accounting for the time value of options should also extend to the time value of zero-cost collars to avoid entities structuring transactions to achieve a particular

¹ This paper refers to zero-cost collars as those collars with net nil time value at inception.

² The staff note that a collar (ie a combination of a purchased and written option) including a zero-cost collar can be designated as a hedging instrument unless it results in a net written option (paragraph 77 of IAS 39 *Financial Instruments* and paragraph 11 of ED).

This paper has been prepared by the technical staff of the IFRS Foundation for discussion at a public meeting of the IASB.

The views expressed in this paper are those of the staff preparing the paper. They do not purport to represent the views of any individual members of the IASB.

Comments made in relation to the application of an IFRS do not purport to be acceptable or unacceptable application of that IFRS—only the IFRS Interpretations Committee or the IASB can make such a determination.

The tentative decisions made by the IASB at its public meetings are reported in IASB *Update*. Official pronouncements of the IASB, including Discussion Papers, Exposure Drafts, IFRSs and Interpretations are published only after it has completed its full due process, including appropriate public consultation and formal voting procedures.

IASB Staff paper

accounting outcome and to better align with a principle-based approach to accounting (that avoids an artificial difference in the accounting outcome). We learnt during our outreach activities that entities that use options also commonly use 'zero-cost' collars. All of these entities think that the accounting for time value of options and zero-cost collars should be aligned.

Purpose

4. The purpose of this paper is to ask the Board whether the final requirements for the accounting for time value of options should also apply to zero-cost collars..
5. The staff note the Board has not yet redeliberated on its proposal on the time value of options. However, this paper does *not* have to (and does not) anticipate that decision:
 - (a) The differentiation whether the time value relates to a *transaction related* or a *time period related* hedged item referred to the treatment of the initial time value. Hence it is not relevant for a zero-cost collar (because the amount that would be capitalised or expensed on a rational basis, respectively, would be zero and hence does not make a difference).
 - (b) The issue addressed in this paper is *whether* the Board wants to *align* the treatment of changes in the time value for such zero-cost collars and other options (to the extent applicable)—not what that treatment should be. (Obviously, based on the feedback received, the analysis in this paper considers the proposals in the ED as they have been cited as the rationale for the views.)
6. The benefit of discussing this paper is that the Board and staff will have greater clarity about the scope of the instruments that the later discussions about the treatment of the time value of options will apply to. Hence, this paper asks the Board whether any decision that the Board makes subsequently on its proposal on the accounting for time value of options should also extend to collars so that

IASB Staff paper

the accounting treatments for changes in time value of options and zero-cost collars are aligned.

7. The structure of the paper is as follows:
 - (a) summary of the feedback from comment letters and outreach activities on zero-cost collars;
 - (b) staff analysis;
 - (c) staff recommendation; and
 - (d) question to the Board.

Feedback from comment letters and outreach activities

8. Many respondents in their comment letters and participants in outreach activities are of the view that the proposed accounting for purchased options should also apply to all zero-cost collars.
9. Some other respondents have requested *clarification* on the Board's intention regarding the accounting for the time value of options in the case of zero-cost collars. These respondents also commented that they would expect consistent accounting for the time value for all zero-cost collars and options.
10. Respondents and participants noted that without aligning the accounting treatment for the time value of zero-cost collars and options generally it may encourage entities to undertake particular types of transactions and replace zero-cost collars with collars with nominal cost only to achieve a desired accounting outcome. Hence they strongly support aligning the accounting for the time value of options and zero-cost collars to avoid arbitrary accounting outcomes and artificial structuring incentives.
11. Some respondents further commented that commodity sales and purchases are frequently hedged with zero-cost collars. Zero-cost collars consist of a combination of put and call options on the sale (or purchase) of the commodity and have a combined zero net cost at inception. Because both the put and the

IASB Staff paper

call are out of the money at inception zero-cost collars have zero time value at inception. These respondents argue that during the life of the hedge, the *time value* of the collars fluctuates with commodity price movements but would decay to zero at expiry (like the time value of options generally). Hence they believe that the time value of all zero-cost collars should be recognised in other comprehensive income (OCI) during the life of the hedging relationship. They consider it unjustified to limit this accounting to the time value for options that includes time value as an initial transaction cost given that one of the main concerns being addressed with the proposal was the volatility resulting from the changes in time value over time.

Staff analysis and recommendation

12. As some respondents have noted in paragraph 11, a zero-cost collar results from buying and selling options (in contemplation of each other). For example, when hedging a sale of a commodity an entity buys a put while at the same time writing a call option. The put option would provide the protection to the entity that the underlying (the particular commodity) can be sold at a minimum price (ie 'floor'), while the written call option sets a 'cap' on the commodity's selling price. Appendix A sets out an example of a zero-cost collar.
13. In a zero-cost collar, the premium received on the written option is equal to the premium paid for the purchased option. Entities frequently use zero-cost collar strategies to reduce the option premium paid, ie the cost of hedging. Entities can typically specify either the 'floor' (ie the strike price of the put) or the 'cap' price (ie the strike price of the call). The other price is calculated to ensure a zero-premium expense.
14. As some respondents have noted, while the time value is zero at inception during the life of the zero-cost collar the time values of the purchased and written options fluctuate as the price for the underlying fluctuates (as for all other options). Depending on the movement of the market price of the underlying, the collar may either have a positive or negative time value during

IASB Staff paper

its life, but as with any option, the time value is subject to ‘time decay’ and hence both the purchased option and the written option lose their time values over time as the collar approaches expiry. Appendix B illustrates the fluctuation of time value of a zero-cost collar and a purchased option over its life in a graph.

15. The proposals in the ED are based on the view that time value paid is the cost of obtaining protection against *unfavourable* changes of prices or rates, ie an ‘insurance premium’ view. Hence when an entity separates the time value of the option and designates as the hedging instrument only the intrinsic value element, the time value paid (ie the ‘cost’) is deferred in OCI with any subsequent changes in the fair value of the time value accumulated in OCI and reclassified or released to profit or loss depending on the type of the hedged item:
 - (a) for *transaction related* hedged items: reclassify from accumulated OCI (AOCI) accordance with the general requirements for transaction related hedged items; or
 - (b) for *time period related* hedged items: transfer from AOCI to profit or loss on a rational basis the part of the aligned time value that relates to the current period.
16. Under the ED, because no premium is paid at inception for a zero-cost collar, there is no time value to account for at inception (eg to defer to OCI). Hence, any subsequent changes in time value would *not* be recognised in OCI (as they would be for changes related to options that involve transaction cost) but in profit or loss like a trading gain or loss.
17. From a risk management perspective, the change in time value of the combination of the purchased and the written option are not viewed as a trading gain or loss. The risk management perspective is exactly the same as for all other options used for hedging purposes. Zero-cost collars are used to reduce the cost of hedging, and the changes in time value of zero-cost collars are viewed economically as temporary volatility, no different to that associated with the time value of options or collars that have an upfront premium/cost.

IASB Staff paper

18. As some respondents and participants have noted, to achieve the same accounting outcome, an entity could structure a collar so that it has a nominal cost and hence would qualify for the accounting outcome as proposed in the ED. The staff do not believe that maintaining such a distinction between options and zero cost collars would be meaningful. Nor do they believe it is appropriate given that the risk management objective for collars is the same as for all other options. Moreover, mixing the fair value changes of the time value of a zero cost collar with trading gains or losses reduces transparency and makes the understanding of the hedging strategy more difficult.
19. The staff agree with the feedback from comment letters and outreach activities (see paragraph 8 to 11) and for the reasons set out in paragraphs 17 and 18 above, the staff recommend aligning the treatment for time value of options and zero-cost collars. Hence, the final requirements for the accounting for time value of options should also apply to zero-cost collars.

Question 1— zero-cost collars

Does the Board agree with the staff recommendation as outlined in paragraph 19

If the Board does not agree, what does the Board prefer and why?

IASB Staff paper

Appendix A

A1. Appendix A sets out an example of a zero-cost collar.

A2. An oil producer's risk management objective is to protect itself from falling oil prices in 12 months' time but it does not want to pay a cash premium for the protection. The producer enters into a one-year WTI zero-cost collar agreement for 40,000 barrels (bbl) in 12 months' time. The zero-cost collar consists of:

- a purchased put option with a strike price of WTI \$100/bbl (ie floor) ;
and
- a written call option with a strike price of WTI \$140/bbl (ie cap).

A3. If the WTI price is below \$100/bbl, the producer:

- a. receives the market price;
- b. exercises its put option and receives a payment equal to the amount by which the oil price is below \$100/bbl.

The net outcome would be that the producer receives \$100/bbl.

A4. If the WTI price is between \$100 /bbl and \$140/bbl, the producer will receive the market WTI price.

A5. If the WTI price is above \$140/bbl, the oil producer:

- a. receives the market price;
- b. the counterparty to the written call exercises the call; hence, the producer pays the amount by which the oil price is above \$140/bbl.

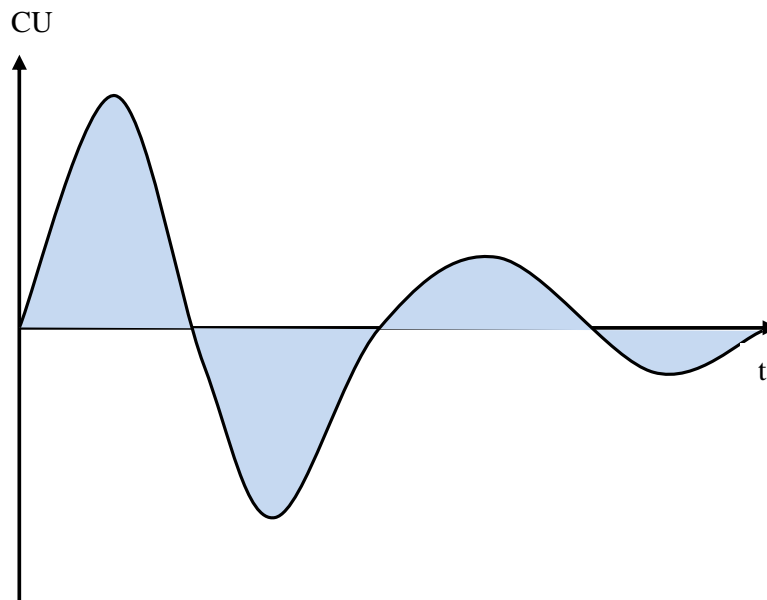
The net outcome would be that the producer receives \$140/bbl.

IASB Staff paper

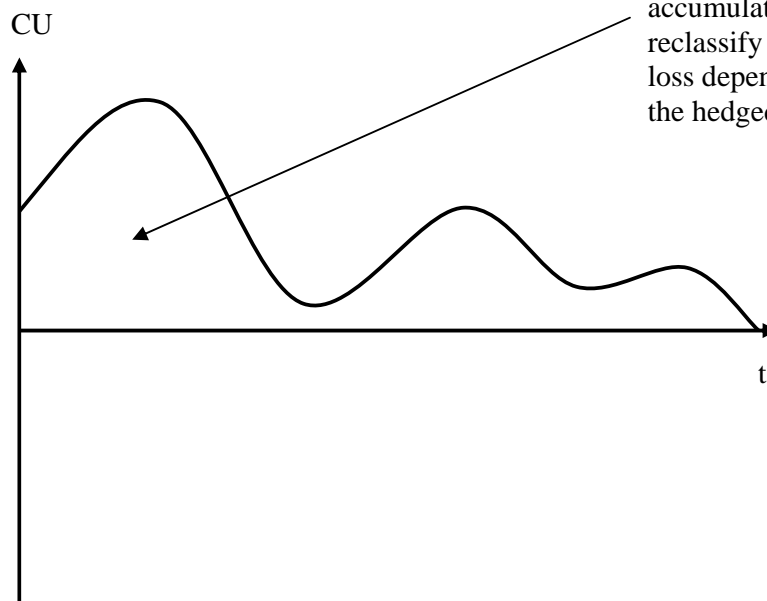
Appendix B

B1. Appendix B sets out examples of how the time value of a zero-cost collar and a purchased option can fluctuate over its life.

Zero-cost collar



Purchased option



ED proposes to defer and accumulate in OCI and reclassify or release to profit or loss depending on the type of the hedged item