

CMFAS Module 6A – Securities & Futures Product Knowledge

Summary of Updates (Sept 2019 – Version 2.11)

The updates made to the CMFAS Module 6A (July 2019 – Version 2.10) are summarized as follows:

**Additions / updates / corrections are indicated in blue italics.*

Deletions are indicated in strikethrough.

Section and page references relate to the updated study guide

Chapter / Section	Page No	Update / Amendment
Chapter 4 – Options		
4.8.6 / Theta	77	<p>4.8.6 Theta</p> <p>Theta is the sensitivity of an option's premium to change in time. The loss of value of an option over time is referred to as time decay. The quantitative measure of the rate at which the time value of an option is eroded is known as theta. Theta is negative for both call and put options (<i>assuming no short positions</i>) and is usually displayed as a 1-day or 7-day measure. For example, a 1-day theta of -0.0250 indicates the option's theoretical value changes by -0.0250 or minus 2.5 cents a day. Results may not be exact due to rounding.</p>
4.14.3 / Interest Rate Options	98 to 99	<p>4.14.3 Interest Rate Options</p> <p>Interest rates options are related to bond options. However these types of options typically focus solely on interest rates. Interest rate options are options where the underlying asset is an interest rate. The exercise price of an interest rate option is also an interest rate. An interest rate option gives the option buyer the right but not the obligation to make (call) or receive (put) a known interest rate payment.</p> <p>Interest rate options are cash settled. Upon exercise, the underlying securities do not have to be delivered, but the differences between the interest rates are settled using a scale of 100. Interest rate options are exercised in the European style, i.e. the option can only be excised on a specified date and not before that.</p> <p>Buying interest rate options to take a view on interest rates is attractive because the trader's risk is limited to the option premium but the upside potential is unlimited. Therefore, a high level of gearing can be achieved. For these options, only the interest rates differences are cash settled so there is no risk of losing the principal.</p> <p>The premium received from selling a call option against an existing investment or selling a put option against a debt issuance can be used to improve the investment yield or lower the borrowing cost, respectively. However, this needs to be weighed against the possibility of unlimited losses if the market turns against the option writer.</p>

Chapter / Section	Page No	Update / Amendment
4.14.3 / Interest Rate Options	98 to 99	<p>Example – Interest Rate Options</p> <p>An investor buys an interest rate put option on SIBOR with an exercise price of 2.0%. At expiration, if the prevailing SIBOR rate is lower than 2.0%, the investor will exercise his option and will receive 2.0% in lieu of the prevailing SIBOR rate. If SIBOR is above 2.0%, the investor will let the option expire.</p> <p>Market participants can hedge or take advantage of the expected direction of interest rate movements by buying options on interest rate futures. Unlike futures which represents an immediate contractual obligation, the option holder can decide if he wants to exercise the option. When exercised the option takes on a long or short position on the futures contract – making it an obligation.</p> <p>Such options allow a borrower to fix interest rate at a particular call strike price to avoid paying higher interest expense when they worry about rising interest rates. It also allows a lender or investor to fix interest rate at a particular put strike level to protect earnings at a particular level when interest rates are falling.</p> <p>Interest rate options are offered over-the-counter as well as traded on futures and option exchanges. Interest rate options provide liquidity and flexibility to manage risk efficiently across the entire yield curve which is particularly useful with expectations of interest rate movements.</p> <p>Globally, one of the largest volume of interest rate option trading occurs for US Treasuries and Eurodollar on the CME. Euribor futures and options are traded actively on ICE. In Singapore, options on the futures for 10-year Mini Japanese Government Bond and Euroyen (TIBOR) are traded on the SGX.</p> <p>As with other types of options, factors like time to expiry, volatility, strike price relative the current price of the underlying being the particular treasury interest rate, or particular interbank offer rate (e.g. USD LIBOR).</p>

Chapter / Section	Page No	Update / Amendment
4.12.4 Option Spreads / Condor Spread	97	<p><u>11. Condor Spread</u></p> <p>This is a variation of the butterfly spread. It is similar in that it has 4 options, but all 4 have different strike prices (instead of only 3 in a butterfly spread). The range of strike prices is wider than the butterfly.</p>
Appendix E / Review Questions Chapter 4 Options	331	<p>9. Which of the following statements are TRUE about theta and vega?</p> <ul style="list-style-type: none"> I. Theta measures the change in asset price with respect to time while vega measures the volatility of the option's portfolio II. Theta is always negative for calls and puts (assuming no short positions) since it reflects the time decay III. Vega is positive for long calls and short puts IV. Vega is positive for long volatility investment position with call or put options <ul style="list-style-type: none"> a. I & II b. I, II & III c. I, II & IV d. II, III & IV <p>Answer : C⁹</p>