APEX PERPETUAL FUTURES CONTRACTS

This course equips you with the fundamental knowledge on APEX Perpetual Futures Contracts. After each section, you can test your understanding on the special features of the Perpetual Futures Contracts through the short quiz.

CONTENTS

INTRODUCTION TO PERPETUAL FUTURES CONTRACTS

WHAT IS A PERPETUAL FUTURES CONTRACT?

Perpetual Futures Contract is a futures contract without an expiry date as opposed to traditional dated futures. It allows the position to be held for an indefinite period of time or until the position is closed. The position will be rolled over at the daily settlement price at the end of each trading day. Unlike traditional futures contracts, Perpetual Futures Contracts are often traded at a price that is closely aligned to spot markets. However, the prices of Perpetual Futures Contracts may deviate from spot market prices during extreme market conditions.

Quiz (What is a Perpetual Futures Contract)

1. Which of the following statement is/are correct?
   A) Perpetual Futures Contracts have no expiry date.
   B) Both traditional and Perpetual Futures Contracts do not have expiry dates.
   C) Perpetual Futures Contracts are always traded at a price different from spot markets.
   D) A and C

2. For Perpetual Futures Contracts, the trade will be executed only if/only when intended by _____.
   A) one of any participating parties (Buyer or Seller)
   B) the two participating parties (Buyer and Seller)
   C) Buyer
   D) Seller

3. For Perpetual Futures Contracts, is there a "Last Trading Day"?
   A) Yes
   B) No

4. Which of the following statement is/are incorrect?
   A) Perpetual Futures Contracts prices closely track the underlying prices in the spot market.
   B) There is no price gap between Perpetual Futures Contracts prices and the spot market prices as they are similar in nature.
   C) Position holders of Perpetual Futures Contracts can have their positions kept opened, as long as they do not close it or be forced liquidated by their respective brokers.
   D) Open positions of Perpetual Futures Contracts will be marked to market on a daily basis.

ROLLOVER FEE FOR APEX PERPETUAL FUTURES CONTRACT

Rollover Fee is the periodic fee you have to pay to maintain long or short open positions, based on the daily Rollover Rate. It will be imposed on any open position that remains open at the end of each trading day i.e. x pm.

The Rollover Fees compensate for the differences in settlement between Perpetual Futures Contracts and transactions traded in the spot market. As Perpetual Futures Contracts are not settled in the traditional sense, the Rollover Fee ensures that the Perpetual Futures Contracts prices are aligned with the spot market.

The Clearing House will compute the Rollover Fee for APEX Perpetual Futures Contracts on a daily basis or over a period of time.

The formula for Rollover Fee for a particular trading day is calculated as follows:

Formula for Rollover Fee for a particular trading day is calculated as follows:

$$\text{Rollover Fee} = \frac{\text{Rollover Rate} \times (\text{Daily Settlement Price} \times \text{Contract Size} \times \text{Open Position})}{365}$$

Where:

Total Number of Calendar Days in a Year = 365 (days)

Implications of Positive and Negative Rollover Fees (RF)		
Rollover Rate (RR)	**Long** Position Holders ("**Long**")	**Short** Position Holders ("**Short**")
Positive (>0)	Positive Long RR: Long have to **PAY** RF	Positive Short RR: Short have to **PAY** RF
Negative (<0)	Negative Long RR: Long will **RECEIVE** RF	Negative Short RR: Short will **RECEIVE** RF

Quiz (Rollover Fee)

1. Which is the right formula for Rollover Fee?
   Where:
   RR = Rollover Rate
   DSP = Daily Settlement Price
   OP = Open Position

   A) $\text{Rollover Fee} = \frac{\text{RR} \times (\text{DSP} \times \text{Contract Size} \times \text{OP})}{\text{Total Number of Calendar Days in a Year}}$

   B) $\text{Rollover Fee} = \frac{\text{RR} \times (\text{DSP} \times \text{Contract Size})}{\text{Total Number of Business Days in a Year}}$

   C) $\text{Rollover Fee} = \frac{\text{RR} \times (\text{DSP} + \text{Contract Size})}{\text{Total Number of Calendar Days in a Year}}$

   D) $\text{Rollover Fee} = \frac{\text{RR} + (\text{DSP} \times \text{Contract Size} \times \text{OP})}{\text{Total Number of Business Days in a Year}}$

2. The _____ shall compute the Rollover Fee for APEX Perpetual Futures Contracts on a _____ basis.
   A) Clearing House … weekly
   B) Clearing House … daily
   C) market … weekly
   D) traders … daily

3. You have entered into a long position of 10 lots on 31st May 21 and subsequently closed your position on 1st June 21 morning. Please use this information and the table below to answer the following two-part questions.

   Use the following hypothetical values for your calculation.

Date	**31st May 2021**	**1st Jun 2021**
Long Rollover Rate	0.6%	0.65%
Short Rollover Rate	0.3%	0.25%
DSP for Gold Perpetual Futures Contract	$65 per gram	$60 per gram

   Gold Contract Size: 100 grams per Lot

   (i). What is the Rollover Fee on 31st May?

   A) $\frac{0.3\% \times (\$65 \times 100) \times 10}{365}$

   B) $\frac{0.6\% \times (\$65 \times 100) \times 10}{365}$

   C) $\frac{0.6\% \times (\$65 \times 100) \times 5}{365} + \frac{0.65\% \times (\$60 \times 100) \times 5}{365}$

   D) $\frac{0.3\% \times (\$65 \times 100) \times 5}{365} + \frac{0.25\% \times (\$60 \times 100) \times 5}{365}$

   (ii). What does the value of the rollover rate/fee indicated in (i) mean to you?

   A) You have to pay the rollover fee.
   B) You will receive the rollover fee.
   C) You do not need to do anything.

4. You have entered into a long position of 10 lots on 31st May 21 and subsequently closed your position on 1st June 21 morning. Please use this information and the table below to answer the following two-part questions.

   Use the following hypothetical values for your calculation.

Date	**31st May 2021**	**1st Jun 2021**
Long Rollover Rate	0.6%	0.65%
Short Rollover Rate	0.3%	0.25%
DSP for Gold Perpetual Futures Contract	$65 per gram	$60 per gram

   Gold Contract Size: 100 grams per Lot

   (i). What is the Rollover Fee on 1st Jun?

   A) $\frac{0.3\% \times (\$65 \times 100) \times 10}{365}$

B) $\frac{0.6\% \times (\$65 \times 100) \times 10}{365}$

C) $\frac{0.3\% \times (\$65 \times 100) \times 5}{365} + \frac{0.25\% \times (\$60 \times 100) \times 5}{365}$

D) 0

(ii). What is the Rollover Fee on 1st Jun if you choose to only partially close 5 lots of position?

A) $\frac{0.65\% \times (\$60 \times 100) \times 10}{365}$

B) $\frac{0.65\% \times (\$60 \times 100) \times 5}{365}$

C) $\frac{0.65\% \times (\$65 \times 100) \times 5}{365} + \frac{0.25\% \times (\$60 \times 100) \times 5}{365}$

D) 0

5. You have entered into a short position of 10 lots on 31st May 21 and subsequently closed your position on 1st June 21 morning. Please use this information and the table below to answer the following two-part questions.

Use the following hypothetical values for your calculation.

Date	**31st May 2021**	**1st Jun 2021**
Long Rollover Rate	0.6%	0.65%
Short Rollover Rate	-0.3%	-0.25%
DSP for Gold Perpetual Futures Contract	$65 per gram	$60 per gram

Gold Contract Size: 100 grams per Lot

(i). What is the Rollover Fee on 31st May?

A) $\frac{-0.3\% \times (\$65 \times 100) \times 5}{365} + \frac{-0.25\% \times (\$60 \times 100) \times 5}{365}$

B) $\frac{-0.3\% \times (\$65 \times 100) \times 10}{365}$

C) $\frac{0.6\% \times (\$65 \times 100) \times 10}{365}$

D) $\frac{-0.25\% \times (\$60 \times 100) \times 10}{365}$

(ii). What does the value of the rollover rate/fee indicated in (i) mean to you?

A) You have to pay the rollover fee.
B) You will receive the rollover fee.
C) You do not need to do anything.

ROLLOVER RATE

Rollover Rate is akin to the daily interest rate chargeable on open positions of a Perpetual Futures Contract. It is derived from the forward rate of the underlying commodity or commodities of the Perpetual Futures Contract and includes an administrative charge. This rate can be determined on a daily basis or over a period of time.

APEX will publish the Rollover Rate on the APEX website for each trading day.

Test Your Understanding (Rollover Rate)

1. Which of the following statement is true?
   A) Rollover Fee is always payable from short open position holder(s) to long open position holder(s) only.
   B) Rollover Fee is always payable from long open position holder(s) to short open position holder(s) only.
   C) The payment/receipt of Rollover Fee depends on the signage of the Rollover Rate and the long/short open position(s).

2. Which of the following party(s) is/are involved in computation of Rollover Rate?
   A) Clearing Members
   B) Long open position holder
   C) Short open position holder
   D) Clearing House

3. The Rollover Rate is computed on _____.
   A) Calendar days
   B) Trading days
   C) Business days

MCQ Answers:

Test Your Understanding (Perpetual Futures Contract)

1. A
2. B
3. B
4. B

Test Your Understanding (Rollover Fee)

1. A
2. B
3(i). B
3(ii). A
4(i). D
4(ii). B
5(i). B
5(ii). B

Test Your Understanding (Rollover Rate)

1. C
2. D
3. B