

# Additional Reading Materials on Gold Futures Contract

Relevant for

- 1. Module 14 (Derivatives [Formerly known as Futures and Options])
- 2. Module 18 (Securities and Derivatives Trading [Products and Analysis])

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(This document consists of 9 pages including the cover page)

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# 1. Introduction to Gold Futures (FGLD) Contract

Gold futures (FGLD) contract is an agreement to buy or sell gold on a future date at an agreed-upon price. FGLD is a small-sized Ringgit Malaysia ("RM") denominated gold futures contract traded on Bursa Malaysia Derivatives, providing market participants exposure to international gold price movements at a lower entry cost.

The pricing of the FGLD contract in local currency removes the need for Malaysian participants to purchase foreign currency when entering or exiting the market. Each FGLD contract is equivalent to 100 grams of gold bullion. The small size has been designed to provide accessibility to all and also flexibility for those wanting greater exposure. For the retail player wanting a smaller exposure, the small size provides affordability. For the industrial user requiring a larger exposure, the contract can be traded in multiple lots at a time (e.g. 5 lots, 10 lots etc.).

As a cash-settled contract, no delivery of physical gold is required. Instead, the FGLD contract will be settled on expiry using the cash equivalent of the amount of gold purchased (e.g. 100 grams), calculated using the London AM Fix price (in USD) on the final trading day converted into Ringgit Malaysia. The London AM Fix price is the global benchmark for spot gold prices and the settlement of the FGLD contract in accordance with this price characterises the FGLD contract as an instrument that tracks the international gold market closely.

Similar with other commodity contracts, FGLD can be used for hedging, speculating and arbitrage. Besides FGLD, other commodity futures available on Bursa Malaysia Derivatives include crude palm oil futures, crude palm kernel futures and USD crude palm oil futures<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> Refer to Topic 4.04 of the Examination Study Guide for Module 14: Futures and Options for more information on commodity futures

# 2. Contract Specifications for (FGLD)

Contract specifications may vary from time to time. The table below is an example and will be used as the basis in the following exercises. You can refer to the Bursa Malaysia website at <u>www.bursamalaysia.com</u> for the latest contract specifications.

Contract Code	FGLD
Underlying Instrument	Gold assayed to a minimum of 995 fineness or such other technical specification of gold underlying LBMA Gold Price AM from time to time
Settlement Method	Cash Settlement based on the final settlement value
Contract Unit	100 grams
Minimum Price Fluctuation	RM0.05 per gram (or RM5 per tick)
Price Limit	There must be no trading at a price more than 10% above or below the settlement prices of the preceding Business Day ("the 10% Limit") except as provided below:
	(a) If spot month Contract trades at the 10% Limit, the Exchange will announce a 10-minute cooling off period ("the Cooling Off Period") for Contracts of all contract months (including the spot month) during which trading may only take place within the 10% Limit for Contracts of all contract months (including the spot month).
	(b) After the Cooling Off Period, Contracts of all contract months (including the spot month) will be specified as reserved for a period of 5 minutes, after which the price limit will be expanded to 20%. The prices traded for Contracts of all contract months (including the spot month) must then not vary more than 20% above or below the settlement prices of the preceding Business Day ("the 20% Limit").
	(c) If spot month Contract trades at the 10% Limit less than 30 minutes before the end of the first trading session, the 10% Limit will apply to Contracts of all contract months (including the spot month) for the rest of the first trading session, and the 20% Limit will apply to Contracts of all contract months (including the spot month) during the second trading session.
	(d) If spot month Contract trades at the 10% Limit less than 30 minutes before the end of the second trading session, the 10% Limit will apply to Contracts of all contract months (including the spot month) for the rest of the Business Day.

# Table 1: FGLD Contract Specifications

Speculative	<ul> <li>(e) On any Business Day other than the Final Trading Day, the price limits in the above paragraphs apply to trades in Contracts of all contract months including the spot month. On the Final Trading Day, the price limits in the above paragraphs do not apply to trades in spot month Contracts.</li> <li>The maximum number of net long or net short positions for all months</li> </ul>
Position Limit	combined which a client or a participant may hold or control is 25,000 contracts.
Trading Hours	First trading session: 0900 hours to 1230 hours (Malaysia time); and Second trading session: 1430 hours to 1900 hours (Malaysia time)
Contract Months	Spot month, the next 3 calendar months and any February, April, June, August, October and December falling within a 12 month period beginning with the spot month.
Final Trading Day	<ol> <li>The last Business Day of the contract month unless such a day is a holiday in London, in which case the Final Trading Day will be the first preceding Business Day that is not a holiday in London.</li> <li>Trading in the expiring month Contract ceases at 1900 hours (Malaysia time) on the Final Trading Day.</li> </ol>
Final Settlement Value	<ol> <li>The LBMA Gold Price AM (quoted in USD/troy oz) on the Final Trading Day will be the reference price for the purpose of calculating the final settlement value.</li> <li>For the calculation of the final settlement value, the following will apply</li> <li>Conversion from USD to RM         <ul> <li>(a) The LBMA Gold Price AM will be converted to Ringgit Malaysia and rounded to the nearest RM0.05 using the mid exchange rate of USD/MYR as at 1700 hours (Malaysia time) on the Final Trading Day taken from Bank Negara Malaysia. In the event the final settlement value is equidistant between 2 minimum price fluctuations, the value will be rounded upwards.</li> <li>Conversion from Troy Ounce to Grams</li> <li>(b) 1 troy oz = 31.1034768 grams</li> </ul> </li> <li>On the Final Trading Day for a Contract, all Open Positions for the Contract will be marked to the final settlement value determined by the Exchange.</li> </ol>
Attribution / Disclaimer	The LBMA Gold Price AM is a trade mark of Precious Metals Prices Limited and is sourced by and licensed to ICE Benchmark Administration Limited as the administrator, operator and publication agent of the LBMA Gold Price AM, and is used by Bursa Malaysia Derivatives Bhd with permission under licence by ICE Benchmark Administration Limited.
	ICE Benchmark Administration Limited and Bursa Malaysia Derivatives Bhd make no warranty, express or implied, either as to the results to be obtained from the use of the LBMA Gold Price AM and/or the figure

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particular day. ICE Benchmark Administration Limited and Bursa
Malaysia Derivatives Bhd make no express or implied warranties of
merchantability or fitness for a particular purpose for use with respect
to the Gold Futures Contract.

# 3. Trading FGLD

Gold futures are traded by those who wish to assume the price risk that hedgers try to avoid in return for a chance to profit from favourable gold price movements. They will buy gold futures when they believe that gold prices will increase and will sell when they think gold prices will fall.

The following are some working examples for hedging and speculating with gold futures.

## i. Protection of asset value (Selling Hedge)

Mr Eddie, a gold coins collector has amassed 2,000 grams of gold coins over the years. He believes that gold prices is going on a downtrend and he wishes to use FGLD contracts to protect the value of his asset. Assuming that the FGLD is currently trading at RM140.00 and there is no transaction cost.

For a full hedge, Mr Eddie would need to sell 20 FGLD contracts (2,000g/100g) at RM140.00 to protect his current physical gold coins portfolio. The contract value from the sale would be RM280,000 (RM140.00 x 100g x 20 contracts).

Assuming that gold prices fall to RM130, the value of Mr Eddie's portfolio will fall to RM260,000 (RM130.00  $\times$  2,000g). This represents an unrealised loss of RM20,000 (RM280,000 - RM260,000). However, Mr Eddie would have made an equal profit of RM20,000 when he closes out his futures position (i.e. buy 20 FGLD contracts at RM130).

Sell 20 FGLD contracts at RM140 (RM140 x 100g x 20 contracts)	RM280,000
Buy 20 FGLD contacts at RM130 (RM130 x 100g x 20 contracts)	(RM260,000)
Profit from FGLD	RM20,000

Using FGLD, Mr Eddie can protect the value of his gold coins in the event of a fall in the gold prices.

# ii. Locking in current gold price (Buying Hedge)

A goldsmith who requires gold to produce jewellery can buy FGLD to lock in the price of gold today if he believes that the price will increase in the future.

Below is an example of a buying hedge; transaction costs are excluded:

Quantity of gold to be hedged	= 4,000 grams
FGLD price	= RM150

The goldsmith would need to buy 40 FGLD contracts for a full hedge (4,000g/100g). If the FGLD rises to RM160, the profit for the above trade is as follows:

Buy 40 FGLD contracts at RM150 (RM150 x 100g x 40 contracts)	RM600,000
Sell 40 FGLD contracts at RM160 (RM160 x 100g x 40 contracts)	(RM640,000)
Profit from FGLD	RM40,000

Assuming the gold price is RM160 per gram, the goldsmith would need to pay RM640,000 to obtain 4,000 grams of gold. Taking into consideration the profit from FGLD, his effective price is RM600,000 (RM640,000 - profit of RM40,000) or RM150 per gram (RM600,000/4,000g).

From this example, the goldsmith can use FGLD to lock in the current gold price in the event of upward price movement, where profits from FGLD contracts are added to his working capital to purchase the gold required.

# iii. Taking advantage of gold price volatility (Speculating)

An investor is interested to include 2,000 grams of gold as an asset class in his investment portfolio. He observes that gold prices have been volatile and believes that he can profit from the price fluctuations. Currently the gold price is at RM140 per gram.

If the investor expects that gold price will increase to RM150 per gram, he can profit from this situation by executing the following trades assuming there is no transaction cost.

Buy 20 FGLD contracts at RM140 (RM140 x 100g x 20 contracts)	RM280,000
Sell 20 FGLD contracts at RM150 (RM150 x 100g x 20 contracts)	<u>(RM300,000)</u>
Profit from FGLD	RM20,000

If the investor expects that the gold price will fall to RM120 per gram, he can profit from this situation by executing the following trades assuming there is no transaction cost.

Sell 20 FGLD contracts at RM140 (RM140 x 100g x 20 contracts)	RM280,000
Buy 20 FGLD contracts at RM120 (RM120 x 100g x 20 contracts)	(RM240,000)
Profit from FGLD	RM40,000

From this example, the investor can use FGLD to diversify his investment portfolio and profit from the fluctuation of gold price.

# 4. Summary

The gold futures contract provides market participants with more trading and investment opportunities by introducing a new asset class: precious metals. In addition, it also serves as a risk management mechanism for the primary user of gold such as jewellery makers.

Speculators could take advantage of the volatility in gold prices by entering into FGLD trading. The speculator can buy the FGLD contract if they expect the gold price to increase and sell the FGLD contract if the gold price is expected to fall.

Goldsmiths, a primary user of gold can use the FGLD contract to hedge against unfavourable price movements to minimise the production cost of making jewellery. If gold prices are expected to increase, the goldsmith can sell FGLD contracts to lock in the current gold price.

# **Practice Questions**

## Question 1

Which of the following statements with regard to the gold futures contract is TRUE?

- (A) Final settlement value must be rounded to the nearest RM1.00
- (B) Minimum price fluctuation is RM0.05 per gram or RM5 per tick
- (C) Delivery of physical gold is required upon settlement of the contract
- (D) Final trading day is the common business day of the spot month in Chicago and Kuala Lumpur

## Question 2

Eddie has 6,000 grams of gold in his investment portfolio. How many FGLD contracts are required to fully hedge his portfolio against downward movement of gold prices?

- (A) 12 contracts
- (B) 60 contracts
- (C) 120 contracts
- (D) 600 contracts

#### Question 3

A speculator observes that the price of gold has been volatile and believes that he can make a profit from this situation by trading a gold futures contract. Currently, the gold price is RM150 per gram. If the speculator expects that the gold price will increase to RM155 per gram, how much is the expected profit of the futures contract? (Assuming no transaction cost)

- (A) RM250
- (B) RM500
- (C) RM5,000
- (D) RM15,500

#### Answer

1. B 2. B 3. B

Reference: Bursa Malaysia: <u>www.bursamalaysia.com</u>