

---

## CONTENTS

INTRODUCTION	1
WHAT IS KLIBOR?	2
WHAT IS MGS?	2
THE FINANCIAL DERIVATIVES PRODUCTS	3
WHY USE FINANCIAL DERIVATIVES?	6
EXAMPLES OF TRADING STRATEGIES	7
CONTRACT SPECIFICATIONS	11

---

## INTRODUCTION

Bursa Malaysia Derivatives Berhad, formerly known as Malaysia Derivatives Exchange Berhad (MDEX), is a wholly owned subsidiary of the Bursa Malaysia Group. It operates under the supervision of the Securities Commission and is governed by the Futures Industry Act (FIA) 1993. Bursa Malaysia Derivatives Berhad also falls under the jurisdiction of the Ministry of Finance of Malaysia, thus offering investors the security of trading on a regulated Exchange with infrastructure and regulations comparable to that of established markets worldwide.



The following derivatives products are currently offered for trading via an electronic screen-based system on Bursa Malaysia Derivatives Berhad:

1. Crude Palm Oil Futures (FCPO)
2. Crude Palm Kernel Oil Futures (FPKO)
3. Kuala Lumpur Composite Index Futures (FKLI)
4. Kuala Lumpur Composite Index Options (OKLI)
5. 3-Month Kuala Lumpur Interbank Offered Rate Futures (FKB3)
6. 3-Year Malaysian Government Securities Futures (FMG3)
7. 5-Year Malaysian Government Securities Futures (FMG5)
8. 10-Year Malaysian Government Securities Futures (FMGA)

This brochure presents an overview of non-equity financial derivatives, namely the FKB3, FMG3, FMG5 and FMGA.

---

## **WHAT IS KLIBOR?**

The underlying instrument of the country's first interest rate derivatives contract, the FKB3, is the 3-Month Kuala Lumpur Interbank Offered Rate (KLIBOR). FKB3 was launched in May 1996.



### ***Defining KLIBOR***

The local interbank money market is for short-term deposits and borrowings between banks and other financial institutions. KLIBOR is the short-term interest rate announced and published by the central bank, Bank Negara Malaysia (BNM), every market day at 11:00 am after obtaining quotes from locally-incorporated banks. Rates are contributed by 12 banks designated by BNM. The final fixing rate is derived by eliminating the highest and lowest rates and averaging the remaining 10 rates. The KLIBOR rates give market participants an indication of market rates for the trading day. It is a generally accepted benchmark for short term interest rates.

## **WHAT IS MGS?**

The underlying instrument of Bursa Malaysia Derivatives Berhad's bond derivatives contracts are the Malaysian Government Securities (MGS).

### ***Defining Government Securities***

Government Securities are defined as the obligation of a sovereign nation in respect of borrowed money. They are generally transferable securities with a defined coupon rate and maturity date.

### ***Malaysian Government Securities (MGS)***

MGS were first issued in 1959 to finance public sector development programmes. MGS are issued and managed by BNM on behalf of the Government of Malaysia. They are considered gilt-edged securities because they are borrowings of the Government and are issued for financing long-term Government development projects. MGS are issued by auction and subscription. It is considered a security with interest payable semi-annually. The tenure of an MGS is above 1 year and the coupon rate is determined by the weighted average of the successful bids in the MGS Auction.

---

## THE FINANCIAL DERIVATIVES PRODUCTS

### *What is FKB3?*

FKB3 is a derivatives contract that allows the seller to deliver and the buyer to receive the KLIBOR at a future date. However, upon expiry, no physical delivery takes place as the contract specification provides for settlement on a cash basis. The final settlement value is obtained from Reuters (an information service provider) at 11:00 a.m. on the final trading day.



Prices of FKB3 are quoted in index terms, that is 100 minus the implied interest rate. This means that there is an inverse relationship between the derivatives price and interest rate. Hence, if the implied interest rate is 1.50%, then the derivatives price is 98.50.

Market participants can use FKB3 for trading, hedging and arbitrating strategies and FKB3 prices are determined by market supply and demand.

### *What are FMG3, FMG5 and FMGA?*

FMG3, FMG5 and FMGA are bond derivatives that are based on the underlying of 3-Year, 5-Year and 10-Year MGS respectively. FMG5 was introduced in March 2002 and was followed by FMG3 and FMGA in September 2003.

Bond derivatives allow the seller to deliver and the buyer to receive MGS at a future date. Eligible MGS must meet the specifications of the respective bond derivatives contracts. Upon maturity, all bond derivatives are settled in cash terms using a final settlement value.

The final settlement value will be based on the price quotations provided by the appointed Principal Dealers of BNM on eligible MGS that fall between the term to maturity for the respective derivatives contracts, with a minimum issuance size of RM500 million.

Market players can use bond derivatives contracts for trading, hedging and arbitrating strategies. The bond derivatives prices are determined by market forces, with Bursa Malaysia Derivatives Berhad providing the marketplace for buyers and sellers to come together and trade.

---

## ***Advantages of Financial Derivatives***

Financial derivatives contracts offer participants many benefits, some of which are listed below:

- Provides a mechanism for hedging as well as re-allocating risk to those more tolerant of it
- Serves as a pricing benchmark as well as a price discovery tool
- Provides information about expected interest rate movements
- Allows for portfolio management for Money Market, Interest Rate Swap (IRS) Market and Debt Market participants:
  - to hedge and cross hedge against price risk
  - to arbitrage when markets are inefficient
  - to speculate for profits
  - to allocate assets without having to sell the underlying
- Encourages further development of the Malaysian Money Market, Ringgit Bond Market and Interest Rate Swap (IRS) Market, and improves liquidity in the secondary market.



## ***Reasons to Trade Financial Derivatives***

- Traded on the highly cost-effective and efficient electronic trading platform, in a transparent and liquid derivatives market
- Credible benchmark for the Malaysian Ringgit Bond and Money markets
- Excellent hedging instrument for institutional and corporate users of Malaysian Bond and Money markets for their short term, medium term and long term interest rate exposures
- Enhanced trading capability to exploit opportunities in various segments of the Malaysian yield curve
- Profit from combining various strategies using different financial derivatives contracts, for example, FKB3 and FMG5.

---

## ***Users of Financial Derivatives***

### **Institutional Users**

Institutional users such as fund managers, insurance companies and other financial institutions are among the most active users of the underlying market. Thus, financial derivatives would greatly assist them in asset/liability management and diversification of their portfolios.



### **Yield and Proprietary Traders**

They concentrate on trading the market either on an outright basis or by focusing on the yield curve relationship.

### **Over-The-Counter (OTC) Product Providers**

Traders of OTC interest rate products are very active users of both the underlying and the derivatives market.

### **Hedgers**

Market participants who employ certain strategies in the derivatives market to minimise their risk exposure in the underlying market.

### **Arbitrageurs/Basis Traders**

The arbitrageurs' primary purpose is to trade both the underlying and derivatives market in tandem to capture any temporary price distortions between the 2 markets. They would also use both the cash and derivatives markets to secure virtually risk-free profits in an inefficient marketplace.

### **Local Members and Retailers**

These are individual investors or traders who assume risk in return for trading profits. They are an important group of liquidity providers.

### **Market Makers**

One of the most important group of participants. Their commitment is to market-make, i.e., quote 2-way prices, providing much liquidity to the market.

---

## WHY USE FINANCIAL DERIVATIVES?

The following is a summary of the principal uses of financial derivatives:

- **To hedge a portfolio of bonds, loans and deposits**

An insurance company with a portfolio of bonds or money market instruments can sell bond derivatives contracts or FKB3 against its portfolio to protect itself against a decline in their value caused by rising interest rates



- **A temporary substitute for holding physical bonds**

A dealer who is unable to obtain physical bonds at tender could buy bond derivatives as a temporary substitute until the actual bonds become available. The derivatives position would then be liquidated once the physical bonds are acquired

- **To hedge portfolios of similar instruments**

An institution holding semi-Government or corporate bonds can use bond derivatives to manage their interest rate risk provided the difference in coupon rates, yields and maturities are taken into account and volatilities are correctly matched. For example, FKB3 can be used as a hedge for holdings of Banker's Acceptance and various money market instruments

- **Directional trade**

Traders benefit from low transaction costs, ease of opening and closing positions, narrow bid/ask spreads, transparent pricing and the ability to short sell in a bearish market. High liquidity, volatility and a tendency to trend provide opportunities for generating trading profits

- **Arbitrage transactions**

During periods when financial derivatives are trading above or below their theoretical "fair value", it is possible to undertake arbitrage strategies by buying or selling derivatives and simultaneously selling or purchasing the underlying physical instrument(s). The arbitrage can then be held to expiry or reversed prior to maturity, once the pricing anomaly is corrected.

---

## EXAMPLES OF TRADING STRATEGIES

### FKB3

#### *Scenario 1*

A company has RM20 million in 3-month deposits which will be reinvested upon maturity. To protect against a fall in interest rates (and a subsequent rise in derivatives prices), the company assumes a “long hedge” and buys FKB3.



#### *Scenario 2*

A financial institution can use FKB3 to cover any gaps or mismatches in their money market portfolio due to different loan and deposit maturities. If the institution has lent RM20 million for 180 days at a rate of 4.00% and borrowed RM20 million for 90 days at a rate of 3.75%, it has an exposure or mismatch in its books. To hedge this exposure, it can sell FKB3.

#### *Scenario 3*

Spread trading in interest rate derivatives is done to take advantage of movements in the yield curve. In simple terms:

1. If the investor expects the yield spread between 2 contracts to narrow, he then buys the higher yield contract and sells the lower yield contract.
2. If the investor expects the yield spread between 2 contracts to widen, he then sells the higher yield contract and buys the lower yield contract.

#### *Scenario 4*

A fund manager wishing to “lock in” a fixed rate of return for his large cash portfolio for a 1 year period can execute a KLIBOR STRIP. Essentially, a KLIBOR STRIP is a trade of 4 or more consecutive derivatives contract months and it replicates an Interest Rate Swap (IRS). Simply put, an IRS happens when a fixed rate is swapped with a floating rate.

#### *Scenario 5*

FKB3 could also provide trading opportunities for those who simply wish to take a view on the direction of short-term interest rates. The leverage offered by the derivatives market means that large percentage returns can be realised through accurate forecasting of interest rates trends.

---

## **FMG3, FMG5 and FMGA**

### ***Scenario 1***

A holder of MGS, planning derivatives sales from his portfolio, could “lock in” his selling price today if he anticipates a rise in interest rate (and fall in price of the cash bonds). By selling bond derivatives or undertaking a “short hedge” he can protect himself from the anticipated rise in rate pending the sale.



### ***Scenario 2***

A principal dealer, obliged to bid in an expected bond tender in 2 months’ time, could buy bond derivatives to protect himself against a drop in interest rates (and rise in price) in the meantime. This strategy is called a “long hedge”. Alternatively, a financial institution which is not a principal dealer but wishes to purchase bonds following the auction and expects rates to drop, could take a long position in bond derivatives. The contracts would then be reversed after the bonds are purchased.

### ***Scenario 3***

An insurance company, which expects rates to fall but finds the physical market illiquid, could take a long position in bond derivatives. The position would be liquidated when the cash bonds are acquired.

### ***Scenario 4***

A principal dealer who had bid aggressively for 5-year MGS in anticipation of a drop in rates but then had difficulty finding a buyer when the rate actually moved up, could undertake a “short hedge” and sell FMG5 as an alternative to selling bonds. When a buyer for the bond is found, the derivatives contract is liquidated with the profit on the transaction locked in.

### ***Scenario 5***

A money market dealer could use the bond derivatives to facilitate bond switching or trading the yield curve. If he expects a rise in long term rates relative to shorter term rates, he would therefore wish to sell 7-year bonds and buy 2-year bonds to take advantage of this outlook. However, if he does not have the bonds in his portfolio, he could instead sell FMG5 and buy 2-year physical bonds. When the rate differential between the 2 and 7-year bonds widens, the dealer buys back the FMG5 and sells his 2-year bonds for a net profit. This is called “spread” trading which involves the simultaneous purchase of 1 derivatives contract and the sale of another derivatives contract or cash instrument with the expectation that their price relationship will change.

---

### **Scenario 6**

Fund managers could use bond derivatives to adjust the duration of a fixed income portfolio to take advantage of anticipated changes in interest rates. They could lengthen (by buying derivatives) or shorten (by selling derivatives) the duration of the portfolio. A portfolio with a longer duration will be more sensitive to a given change in rates than a similar portfolio with a shorter duration. In an environment of declining rates, the longer-term portfolio will realise greater capital gains.



### **Scenario 7**

By developing precise hedge ratios and carefully monitoring the market, bond derivatives can be used as a cross-hedge for non-Government issues. A corporation which intends to issue 3-year Private Debt Securities in a few months' time, for instance, could sell bond derivatives to offset any increases in interest cost in the meantime.

### **Scenario 8**

The FMG3, FMG5 and FMGA contracts could also provide trading opportunities for those who simply wish to take a view on the direction of interest rates. The leverage offered by the derivatives market means that large percentage returns can be realised through accurate forecasting of interest rates trends.

## Trading Strategies at a Glance

<b>User</b>	<b>Strategy</b>	<b>Application</b>
Institutional investors	<ul style="list-style-type: none"> <li>● Hedging</li> <li>● Investing future cash</li> <li>● Change asset allocation</li> <li>● Duration adjustment</li> </ul>	<ul style="list-style-type: none"> <li>● Long bonds/sell derivatives</li> <li>● Long deposits/sell derivatives</li> <li>● Long borrowings/buy derivatives</li> <li>● Buy derivatives (sell when bonds bought)</li> <li>● E.g., Sell bond derivatives and buy stock index derivatives</li> <li>● Buy/sell derivatives to alter duration</li> </ul>
Issuers of debt	<ul style="list-style-type: none"> <li>● Hedging future borrowing</li> </ul>	<ul style="list-style-type: none"> <li>● Sell bond derivatives and close when debt is issued</li> </ul>
Traders	<ul style="list-style-type: none"> <li>● Directional trade</li> <li>● Yield curve trades</li> <li>● Bond spreading</li> </ul>	<ul style="list-style-type: none"> <li>● Buy/sell derivatives</li> <li>● Buy/sell derivatives and sell/buy derivatives</li> <li>● Buy/sell bond derivatives and sell/buy other bond derivatives</li> </ul>
Market makers	<ul style="list-style-type: none"> <li>● Hedging cash book</li> </ul>	<ul style="list-style-type: none"> <li>● Long bonds/sell derivatives</li> <li>● Short bonds/buy derivatives</li> <li>● Long deposits/sell derivatives</li> <li>● Long borrowings/buy derivatives</li> </ul>

Source: Mastering Government Securities, 1996 (Mahony S.)

Note: The Bursa Malaysia Derivatives Berhad Bond Price Calculator and other updates are available on our website at [www.bursamalaysia.com](http://www.bursamalaysia.com)

---

## CONTRACT SPECIFICATIONS

### 3-Month KLIBOR Futures

Contract Code	:	FKB3
Underlying Instrument	:	Ringgit interbank time deposit in the Kuala Lumpur Wholesale Money Market with a 3 month maturity on a 360-day year.
Contract Size	:	RM1,000,000 quoted in index terms (100.00 minus yield).
Minimum Price Fluctuation	:	0.01% or 1 tick.
Contract Months	:	Quarterly cycle months of March, June, September and December up to 5 years ahead, and 2 serial months.
Trading Hours	:	First trading session: Malaysian time: 9:00 a.m. to 12:30 p.m. Second trading session: Malaysian time: 2:30 p.m. to 5:00 p.m.
Final Trading Day and Maturity Date	:	Trading ceases at 11:00 a.m. (Malaysian time) on the 3rd Wednesday of the delivery month or the 1st Business Day immediately following the 3rd Wednesday of the delivery month, if the 3rd Wednesday of the delivery month is not a Business Day.
Final Settlement	:	Cash Settlement based on the Cash Settlement Rate.
Cash Settlement Rate	:	The Cash Settlement Rate is determined by the Clearing House obtaining KLIBOR 3-Month rate from the Reuters reference page "KLIBOR" at 11:00 a.m. (Malaysian time) on the last day of trading.
Reportable Position	:	Open position of 100 or more lots in any 1 delivery month, at the close of trading of each Business Day.

---

Speculative Position  
Limit : 2,000 contracts, net gross Open Position  
for all delivery months.

Transaction Limit : Maximum number of contracts associated  
with a bid or offer by a Member is 500  
contracts.

---

## CONTRACT SPECIFICATIONS

### 3-Year MGS Futures

Contract Code	: FMG3
Underlying Instrument	: 3-Year Malaysian Government Securities
Coupon Rate	: 6%
Contract Size	: RM100,000
Minimum Price Fluctuation	: 0.01 or RM10.00
Contract Months	: 4 nearest quarterly cycle months (March, June, September and December).
Trading Hours	: First trading session: Malaysian time: 9:00 a.m. to 12:30 p.m. Second trading session: Malaysian time: 2:30 p.m. to 5:00 p.m.
Final Trading Day	: Trading ceases at 11:00 a.m. (Malaysian time) on the 3rd Wednesday of the delivery month or the 1st Business Day immediately following the 3rd Wednesday of the delivery month, if the 3rd Wednesday of the delivery month is not a Business Day.
Final Settlement	: Cash Settlement Method.
Cash Settlement Method	: <u>Weightage</u>

The final settlement value will be weighted equally on the eligible MGS. In the event of new eligible MGS being introduced:

1. If there are 4 or more MGS in the basket of eligible MGS (including the new/reissued MGS), the new MGS/reissued MGS will be assigned a 30% weighting while the rest will receive equal weights.

- 
2. If there are 3 MGS in the basket of eligible MGS (including the new MGS/reissued MGS), the new MGS/reissued MGS will be assigned a 40% weighting while the rest of the MGS in the basket will receive equal weights, and
  3. If there are 2 MGS in the basket of eligible MGS (including the new MGS/reissued MGS), the new MGS/reissued MGS will be assigned a 60% weighting while the other MGS will receive 40% weight.

#### Yield

At 11:00 a.m. on the Final Trading Day, from the quotation contributed by selected institutions on Reuters, the arithmetic mean of the eligible MGS mid price shall be calculated, after discarding the 2 highest and the 2 lowest prices. It will be converted to yield in percentage, rounded to the nearest 4 decimal places.

The final yield for all the eligible MGS in the basket is derived from the yield for each MGS as per the weightage announced by the Exchange.

The final settlement value shall be calculated from the final yield in accordance with the following formula rounded to 2 decimal places:

$$\text{Price} = \{(C/Y)[1-(1+Y/2)^{-2N}]+(1+Y/2)^{-2N}\} \times \text{RM100}$$

Where C = Coupon, Y = Yield.

In the event that the above calculation (1) cannot be made, the final settlement value shall be calculated as published by another financial news vendor approved by the Exchange at 11:00 a.m. (Malaysian time)

---

on the Final Trading Day.

In the event that the above calculation (1) and (2) cannot be made, the final settlement value shall be calculated as obtained from Bank Negara Malaysia at 11:00 a.m. (Malaysian time) on the Final Trading Day.

In the event that none of the above 3 calculations can be made, the final settlement value shall be determined by the Exchange.

Eligible MGS

- : a. Subject to sub-clause (c) hereinbelow, for an existing MGS in the market, or in the case of new MGS/reissued MGS that fulfil the requirement of a minimum issuance size of RM500 million 2½ to 3½ years term to maturity on the 1st calendar day of the contract month will be included; and
- b. The eligible MGS and its weightage for the following quarterly month contract will be announced on the 10th day of the expiry month for the current quarterly month (March, June, September, December) or the next Business Day immediately following the 10th day of the current quarterly month, if the 10th day is not a Business Day.
- c. No new MGS will be included after the announcement of Eligible MGS for the spot quarterly month contract.

Reportable Position

: 1,000 contracts.

Position Limit

: Net long or net short positions for all months combined shall be 10,000 contracts.

---

## CONTRACT SPECIFICATIONS

### 5-Year MGS Futures

Contract Code	:	FMG5
Underlying Instrument	:	5-Year Malaysian Government Securities
Coupon Rate	:	6%
Contract Size	:	RM100,000
Minimum Price Fluctuation	:	0.01 or RM10.00
Contract Months	:	4 nearest quarterly cycle months (March, June, September and December).
Trading Hours	:	First trading session: Malaysian time: 9:00 a.m. to 12:30 p.m. Second trading session: Malaysian time: 2:30 p.m. to 5:00 p.m.
Final Trading Day	:	Trading ceases at 11:00 a.m. (Malaysian time) on the 3rd Wednesday of the delivery month, or the 1st Business Day immediately following the 3rd Wednesday of the delivery month, if the 3rd Wednesday of the delivery month is not a Business Day.
Final Settlement	:	Cash Settlement Method.
Cash Settlement Method	:	<u>Weightage</u>

The final settlement value will be weighted equally on the eligible MGS. In the event of new eligible MGS being introduced:

1. If there are 4 or more MGS in the basket of eligible MGS (including the new/reissued MGS), the new MGS/reissued MGS will be assigned a 30% weighting while the rest will receive equal weights.

- 
2. If there are 3 MGS in the basket of eligible MGS (including the new MGS/reissued MGS), the new MGS/reissued MGS will be assigned a 40% weighting while the rest of the MGS in the basket will receive equal weights, and
  3. If there are 2 MGS in the basket of eligible MGS (including the new MGS/reissued MGS), the new MGS/reissued MGS will be assigned a 60% weighting while the other MGS will receive 40% weight.

#### Yield

At 11:00 a.m. on the Final Trading Day, from the quotation contributed by selected institutions on Reuters, the arithmetic mean of the eligible MGS bid and ask shall be calculated, after discarding the 3 highest ask and the 3 lowest bid. It will be converted to yield in percentage, rounded to the nearest 4 decimal places.

The final yield for all the eligible MGS in the basket is derived from the yield for each MGS as per the weightage announced by the Exchange.

The final settlement value shall be calculated from the final yield in accordance with the following formula rounded to 2 decimal places:

$$\text{Price} = \{(C/Y)[1-(1+Y/2)^{-2N}]+(1+Y/2)^{-2N}\} \times \text{RM100}$$

Where C = Coupon, Y = Yield.

In the event that the above calculation (1) cannot be made, the final settlement value shall be calculated as published by another financial news vendor approved by the Exchange at 11:00 a.m. (Malaysian time) on the Final Trading Day.

In the event that the above calculation (1)

---

and (2) cannot be made, the final settlement value shall be calculated as obtained from Bank Negara Malaysia at 11:00 a.m. (Malaysian time) on the Final Trading Day.

In the event that none of the above 3 calculations can be made, the final settlement value shall be determined by the Exchange.

- Eligible MGS : a. Subject to sub-clause (c) herein below, for an existing MGS in the market, or in the case of new MGS/reissued MGS that fulfil the requirement of a minimum issuance size of RM500 million 4½ to 5½ years term to maturity on the 1st calendar day of the contract month will be included; and
- b. The eligible MGS and its weightage for the following quarterly month contract will be announced on the 10th day of the expiry month for the current quarterly month (March, June, September, December) or the next Business Day immediately following the 10th day of the current quarterly month if the 10th day is not a Business Day.
- c. No new MGS will be included after the announcement of Eligible MGS for the spot quarterly month contract.
- Reportable Position : 1,000 contracts.
- Position Limit : Net long or net short positions for all months combined shall be 10,000 contracts.

---

## CONTRACT SPECIFICATIONS

### 10-Year MGS Futures

Contract Code	:	FMGA
Underlying Instrument	:	10-Year Malaysian Government Securities
Coupon Rate	:	6%
Contract Size	:	RM100,000
Minimum Price Fluctuation	:	0.01 or RM10.00
Contract Months	:	4 nearest quarterly cycle months (March, June, September and December).
Trading Hours	:	First trading session: Malaysian time: 9:00 a.m. to 12:30 p.m. Second trading session: Malaysian time: 2:30 p.m. to 5:00 p.m.
Final Trading Day	:	Trading ceases at 11:00 a.m. (Malaysian time) on the 3rd Wednesday of the delivery month or the 1st Business Day immediately following the 3rd Wednesday of the delivery month, if the 3rd Wednesday of the delivery month is not a Business Day.
Final Settlement	:	Cash Settlement Method.
Cash Settlement Method	:	<u>Weightage</u>

The final settlement value will be weighted equally on the eligible MGS. In the event of new eligible MGS being introduced:

1. If there are 4 or more MGS in the basket of eligible MGS (including the new/reissued MGS), the new MGS/reissued MGS will be assigned a 30% weighting while the rest will receive equal weights.

- 
2. If there are 3 MGS in the basket of eligible MGS (including the new MGS/reissued MGS), the new MGS/reissued MGS will be assigned a 40% weighting while the rest of the MGS in the basket will receive equal weights, and
  3. If there are 2 MGS in the basket of eligible MGS (including the new MGS/reissued MGS), the new MGS/reissued MGS will be assigned a 60% weighting while the other MGS will receive 40% weight.

#### Yield

At 11:00 a.m. on the Final Trading Day, from the quotation contributed by selected institutions on Reuters, the arithmetic mean of the eligible MGS mid price shall be calculated, after discarding the 2 highest and the 2 lowest prices. It will be converted to yield in percentage, rounded to the nearest 4 decimal places.

The final yield for all the eligible MGS in the basket is derived from the yield for each MGS as per the weightage announced by the Exchange.

The final settlement value shall be calculated from the final yield in accordance with the following formula rounded to 2 decimal places:

$$\text{Price} = \left\{ \frac{C}{Y} [1 - (1 + Y/2)^{-2N}] + (1 + Y/2)^{-2N} \right\} \times \text{RM100}$$

Where C = Coupon, Y = Yield.

In the event that the above calculation (1) cannot be made, the final settlement value shall be calculated as published by another financial news vendor approved by the Exchange at 11:00 a.m. (Malaysian time) on the Final Trading Day.

---

In the event that the above calculation (1) and (2) cannot be made, the final settlement value shall be calculated as obtained from Bank Negara Malaysia at 11:00 a.m. (Malaysian time) on the Final Trading Day.

In the event that none of the above 3 calculations can be made, the final settlement value shall be determined by the Exchange.

- Eligible MGS : a. Subject to sub-clause (c) herein below, for an existing MGS in the market, or in the case of new MGS/reissued MGS that fulfil the requirement of a minimum issuance size of RM500 million 9 to 11 years term to maturity on the 1st calendar day of the contract month will be included; and
- b. The eligible MGS and its weightage for the following quarterly month contract will be announced on the 10th day of the expiry month for the current quarterly month (March, June, September, December) or the next Business Day immediately following the 10th day of the current quarterly month if the 10th day is not a Business Day.
- c. No new MGS will be included after the announcement of Eligible MGS for the spot quarterly month contract.
- Reportable Position : 1,000 contracts.
- Position Limit : Net long or net short positions for all months combined shall be 10,000 contracts.

---

## Contact Bursa Malaysia Berhad for more information at:

Phone : +(603) 2034 7070

E-mail : [derivatives@bursamalaysia.com](mailto:derivatives@bursamalaysia.com)

### DISCLAIMER

This brochure has been provided by Bursa Malaysia Derivatives Berhad for general reference purposes only. Although care has been taken to ensure the accuracy of the information/data within this brochure, there is no warranty or representation expressed or implied by Bursa Malaysia Derivatives Berhad as to the accuracy or completeness of the materials herein, therefore applicable laws, regulations and current Exchange and Clearing House rules should be consulted.

#### **FUTURES AND OPTIONS TRADING INVOLVES RISK. THEREFORE, KNOW THE RISKS BEFORE YOU TRADE.**

The Business Rules of Bursa Malaysia Derivatives Berhad supersedes all matters pertaining to derivatives contracts. The current Business Rules of Bursa Malaysia Derivatives Berhad should be referred to concerning trading related issues. Please note that contract specifications of each product is subject to change from time to time.

Please contact your broker or Bursa Malaysia Derivatives Berhad concerning current contract specifications.

The text of this publication, or any part thereof, may not be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, storage in an information retrieval system, or otherwise, without the prior written consent of Bursa Malaysia Derivatives Berhad.

All rights reserved.