



API Manual **Mark-to-Market**

The Thai Bond Market Association

February 27, 2025

Revision History

Revision No.	Revision Date	Revised By	Details of Revision
V1.0	30/02/2020	Phantira Suksomnirundon	Initial Document
V1.2	06/10/2023	Phantira Suksomnirundon	Add Issue Rating by each rating agency, Add Embedded option
V1.3	31/07/2023	Phantira Suksomnirundon	Configure the system to filter data for the past 30 days
V1.4	19/11/2024	Phantira Suksomnirundon	Add Bond type for Plain Vanilla Mark-to-Market
V1.5	27/2/2025	Phantira Suksomnirundon	Adjust parameter of par

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Plain Vanilla Mark-to-Market

POST /api/v1/mtm/plain-vanilla

Description: End-of-Day Plain Vanilla Mark-to-Market price provides fair value for general securities used as reference prices by mutual funds and provident funds by calculating net asset value at the end of the day (NAV).

Frequency: Daily.

Release schedule:

1. Real time Mark-to-Market: when published Plain-Vanilla Mark-to-Market data on iBond website.
2. Mark-to-Market 2 Hours lagged published at 7.00 p.m. (BKK-GMT+07:00).
3. Mark-to-Market falls on a holiday; data will be published on the next business day.
4. Mark-to-Market End-of-Month falls on a holiday; data will be published on the previous business day.

Remark:

1. Traded yield is based on 30/360 basis (on coupon payment) which might be different from yield calculated on actual payment.

2. For Inflation-linked bonds, the coupon (%) is a real coupon (%) and all the yields (%) shown are real YTM (%). The clean price (%) and accrued interest (%) are all in unadjusted terms. The corresponding adjusted terms can be obtained by multiplying the unadjusted price or accrued interest by the index ratio shown in the last column. Modified duration and convexity are calculated based on real YTM.

3. For traded-by-price bonds shown gross price (%) only. ThaiBMA does not provide market yield (%), clean Price (%), and AI (%).

4. The cut-off time for daily quotation of all bonds is 16:00.

5. Clean price, accrued interest, modified duration, and convexity shown in Plain vanilla MTM pages (not Trade-by-price) calculated with market yield and settlement date on T+1 (Calendar day).

6. Model yield of LB24DA, LB24DB, LB256A, LB267A, LB276A, LB27DA, LB283A, LB286A, LB28DA, LB296A, LB29DA, LB366A, LB383A, LB396A, LB406A, LB716A are synthetic yield derived from ThaiBMA pricing model. But if there are trading transaction, model yield will be traded yield.

7. BEY (%) is Bond equivalent yield (calculated with semi-annually compounded yield).

8. Since 1-Apr-2020, the market yield of Long-term corporate bonds that have one-time cash flow (zero-coupon bond and coupon at maturity) is a semi-annual compounding yield (BEY).

9. Since 27-Nov-2023, ThaiBMA improving CB & TB Model Yield for more information please see: [Mark-To-Market Yield of CB & TB](#)

Request body (Method: POST)

Parameter name	Data type	Description	Format
start_period	String	Start date	"yyyy-mm-dd"
end_period	String	End date	"yyyy-mm-dd"

Example value:

```
{
  "start_period": "2024-11-14T07:28:19.985Z",
  "end_period": "2024-11-14T07:28:19.985Z"
}
```

Responses:

Code	Description
200	Success
400	Bad request
401	Unauthorized
500	Internal server error

Details:

Parameter name	Data type	Length	Description	Example
asof	datetime	19	Data as of yyyy-mm-dd	2024-08-26T00:00:00
bond_type	string	100	Bond type by issuer (Government Bonds, Treasury Bills, State Agency Bonds, State Owned Enterprise Bonds (Guaranteed), State Owned Enterprise Bonds (Non-Guaranteed), Government Related Entity Bonds, Corporate Bonds, Commercial Papers, Foreign Bonds or Foreign Currency-Denominated Bonds)	Corporate Bonds
symbol	string	15	ThaiBMA bond symbol	ABPSPV324A
isin_en	string	15	ISIN code (International)	
isin_th	string	15	ISIN code (Thailand)	TH795403C409
coupon	number	(6,6)	Coupon interest (%) / Year	4.79
maturity_date	datetime	19	Maturity date (yyyy-mm-dd)	2032-04-21T00:00:00
ttm	number	(6,6)	Time to maturity: Settlement (T+1) time until expiration (years)	7.654794520548
type	string	50	Type of bond by characteristics	Straight
coupon_type	string	20	Type of coupon	Fixed
tris	string	20	Issue rating rated by TRIS Rating	A-
fitch	string	20	Issue rating rated by FITCH (Thailand)	
moody	string	20	International Issue rating by Moody	
snp	string	20	International Issue rating by S&P	
fitch_inter	string	20	International Issue rating by FITCH	

Parameter name	Data type	Length	Description	Example
randi	string	20	International Issue rating by R&I	
last_trade_date	datetime	19	Latest trade date (yyyy-mm-dd)	2020-02-21T00:00:00
last_exec_yield	number	(6,6)	Latest executed market yield (%)	2.707
quoted_date	datetime	19	Quoted date (yyyy-mm-dd)	
quoted_avg_yield	number	(6,6)	Quoted average yield (%)	
quoted_min	number	(6,6)	Minimum quoted yield	
quoted_max	number	(6,6)	Maximum quoted yield	
model_yield	number	(6,6)	Model yield (%)	4.645659
static_spread	number	(6,6)	The difference between the yields on securities and zero-coupon yield curve (basis point)	223.405959
market_yield	number	(6,6)	Market yield	4.645659
bey	number	(6,6)	Bond equivalent yield (calculated with semi-annually compounded yield)	4.645659
dm	number	(2,6)	Discount margin	
clean_price	number	(6,6)	The price of a bond without accrued interest (%)	100.908151
gross_price	number	(6,6)	The price of a bond with accrued interest (%)	102.587932
ai	number	(6,6)	Accrued interest (%)	1.679781
modified_duration	number	(6,6)	The approximate percentage change in price for a given change in yield	6.25145
convexity	number	(6,6)	A measure of the sensitivity of a bond's price to changing interest rates	46.999098
par	number	(30,6)	Current par (Baht)	1000
currency	string	3	Currency (THB, CNY, USD, JPY, or EUR)	THB
registration_status	string	50	Registration status (Registered, or Mark-to-Market)	Registered
index_ratio	number	(6,6)	Index ratio	
current_outs_size	number	(18,10)	Current outstanding size (mln)	900
issuer_rating	string	50	Issuer rating	
distribution_type	string	10	Distribution type (HNW, II, PG, PO, PP10, PP13, PP13e, P/P, PP17, PPEXX, PPCC or RO)	PP13e
event_sign	string	20	Event sign status (RS, DP, DNP, REH, BANKRUPT, IC, RI, FP, or FPG)	
embedded_option	string	50	Embedded Option (Call - Put, Call Option, Put Option, Conv & Call Option or Convertible Issue)	

Structured Note Mark-to-Market

POST /api/v1/mtm/structured-note

Description: Structured Note Mark-to-Market Prices are obtained from the latest trading price on that day, If no trading data, prices are calculated from the bid price from the issuer or underwriter sent to ThaiBMA every 15 days.

Frequency: Daily.

Release schedule:

1. When publishing Structured Note Mark-to-Market data on the iBond website.
2. Mark-to-Market falls on a holiday; data will be published on the next business day.
3. Mark-to-Market End-of-Month falls on a holiday; data will be published on the previous business day.

Request body (Method: POST)

Parameter name	Data type	Description	Format
start_period	String	Start date	"yyyy-mm-dd"
end_period	String	End date	"yyyy-mm-dd"

Example value

```
{
  "start_period": "2024-11-14T07:39:47.145Z",
  "end_period": "2024-11-14T07:39:47.145Z"
}
```

Responses

Code	Description
200	Success
400	Bad request
401	Unauthorized
500	Internal server error

Details:

Parameter name	Data type	Length	Description	Example
asof	datetime	19	Data as of yyyy-mm-dd	2024-08-26T00:00:00
symbol	string	15	ThaiBMA bond symbol	KT252A
isin_en	string	15	ISIN code (International)	
isin_th	string	15	ISIN code (Thailand)	TH0150035200
maturity_date	datetime	19	Maturity date (yyyy-mm-dd)	2025-02-24T00:00:00

Parameter name	Data type	Length	Description	Example
ttm	number	(6,6)	Time to maturity: Settlement (T+1) time until expiration (years)	0.495890410959
type	string	50	Type of bond by characteristics (Straight or Amortization)	Straight
tris	string	20	Issue rating rated by TRIS Rating	
fitch	string	20	Issue rating rated by FITCH (Thailand)	
moody	string	20	International Issue rating by Moody	
snp	string	20	International Issue rating by S&P	
fitch_inter	string	20	International Issue rating by FITCH	
randi	string	20	International Issue rating by R&I	
last_trade_date	datetime	19	Latest trade date (yyyy-mm-dd)	
last_exec_gross	number	(6,6)	Latest execute gross price (%)	
quoted_date	datetime	19	Quoted date (yyyy-mm-dd)	
quoted_avg_gross	number	(6,6)	Quoted gross price (%)	
model_gross	number	(6,6)	Model gross price (%)	
mtm_gross	number	(6,6)	Market gross price (%)	
par	number	(30,6)	Current par (Baht)	1000
currency	string	3	Currency code (THB, CNY, USD, JPY, or EUR)	THB
current_outs_size	number	(18,10)	Current outstanding size (mln)	20
registration_status	string	50	Registration status (Registered, or Mark-to-Market)	Registered
issuer_rating	string	50	Issuer rating	AAA(tha)
distribution_type	string	10	Distribution type (HNW, II, PG, PO, PP10, PP13, PP13e, P/P, PP17, PPEXX, PPCC or RO)	PP13e
embedded_option	string	50	Embedded Option (Call - Put, Call Option, Put Option, Conv & Call Option or Convertible Issue)	