

## TREASURY BILLS & THE TREASURY BILL MARKET

### 3) Static and Dynamic Thresholds and Tick Sizes

Static and dynamic thresholds are used by the exchange to ensure an orderly market. Static thresholds are set to a percentage from the static reference price. An order with a price outside the static thresholds will be automatically rejected upon order entry. For TBills, the static threshold will be 3% of the previous day's closing price.

Dynamic thresholds define the maximum percentage deviation from the dynamic reference price. The dynamic thresholds are always within or at the static thresholds. They define the maximum percentage deviation of the price around the dynamic reference price. The dynamic thresholds for TBills will be 2% of the last executed trade price.

The tick size for TBills will be QAR 0.01.

### 4) Fees on TBill Trading

Fees for TBill trading are charged by the brokers for each trade, whether buy or sell. Please refer to your broker for more information on fees charged.

### 5) Trading Report

The daily trading report is produced at the end of each daily trading session, and will include a specific section for TBill trading activity and prices.

The TBill section in the trading report will have the following format:

TBill	Symbol	Previous Closing Price	Current Closing Price	Total Trading Value in QAR	Number of Trades	Total Trading Volume

The TBill information that will be displayed on Qatar Exchange's website is as follows:

TBill	Listing Date	Issue Date	Nominal Value	Par Value	Maturity Date
XXXXXXXXXX	XX/XX/XXXX	XX/XX/XXXX	XXX,XXX,XXX.00	10,000.00	XX/XX/XXXX

### 6) Trading Restrictions

There are no restrictions on investors wishing to trade in TBills.

There are no restrictions on foreign investors wishing to trade in TBills.

### 7) Disclaimer

Investors are urged to include the commissions payable to the broker when calculating the potential or actual returns on these instruments. It should be understood that an investor will receive only the par value at maturity, and as such, when the purchase price is known, the total net return can be calculated, inclusive of commission. Investors should not trade in these instruments unless they are fully aware of their attributes and potential returns.

As part of its continuous service expansion to support the investor community, Qatar Exchange will be introducing Qatar Central Bank issued short term securities, commonly referred to as Treasury Bills or TBills, for trading. These will be followed, in due course, with the listing of bonds.

### What are Treasury Bills?

Treasury Bills (TBills) are debt securities which are issued by the Central Bank as a monetary policy tool used principally to regulate the money supply and influence prevailing interest rates. They are classified as short-term debt securities as the maturity dates of each issue are almost exclusively one year or less. Issues are usually made on a regular basis (monthly) and with standard maturity periods of either three, six or nine months. TBills are widely regarded as the least risky investment available to investors.

Initial issues of T Bills are made to the primary market, which is made up exclusively of the local banks, and is completed via an auction. The TBills are issued by the Central Bank to the primary market members at a discount to their par value, meaning they have no coupon or interest rate, and do not pay interest prior to the maturity date. The primary market members then make the securities available for purchase by investors in the secondary market. The issuer or seller will receive the discounted amount from the purchaser, which is equivalent to the book or settlement value (Price \* Volume) of the securities issued or sold. On the maturity date, the holder of the bills will receive the par value of the TBills from the Qatar Central Bank. The difference between the issue or purchase price and the par value is the investment return.

When a TBill is traded or bought at issue, the following attributes should be considered by potential investors:

#### Discount Rate (Price)

The Discount Rate is a function of the price paid and represents the rate of return on the TBill on an annualized basis. The calculation for the discount rate is shown below. The higher the discount rate (the lower the price paid), the greater the return to the investor.

#### Maturity Date (Term)

This is the date when the issuer repays the face value to the holder of the TBills. The term to maturity, which is a function of the maturity date, is an additional factor that should be considered by investors. All TBills are short term, in that they will mature within one year from the date of issue.

#### Par Value (Principal Amount)

The Par Value is the amount of money the holder of the TBill will receive from the Qatar Central Bank at maturity. Each TBill traded at Qatar Exchange will all have a Par Value of QAR 10,000.

### Why Invest in TBills?

TBill volatility is always lower than that of both equity and bond investments and TBills are generally considered to be the least risky of all investment products. The difference between the purchase price and the par value repaid at maturity will always result in a capital gain for the investor (unless the bill is purchased at par). The purchase price can never be greater than the par value.

Investments in TBills, as with bonds, provide a method of diversifying a portfolio, balancing the risks across the various asset classes that an investor may hold. These instruments will provide, once the purchase price is paid, a known investment return if held to maturity.

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The value of a TBill is primarily driven by the prevailing level of and expectations for interest rates. The term to maturity is also a factor, as the price will move towards par value as the maturity date approaches. As with all investments, if the TBill is sold on the secondary market – prior to the maturity – it is possible that the investor may receive less in return than the value of the original investment.

The table below provides a comparison between investments in equities and in TBills:

Equities	TBills
A shareholder becomes a part owner of the company in which shares are held	The holder of the TBill is a lender
High volatility	Low volatility
Dividend income is dependent on the performance of the company	Return is fixed if held to maturity
Shares in the profits/losses of the company	Receives the par value

## TBill Prices and Yields

### TBill Prices

TBills are priced on a value basis with a minimum investment and lot size of QAR 10,000, and will always be traded at a price that is less than or equal to QAR 10,000 (which is termed trading or issued at a discount).

Factors impacting TBill prices can be divided into these elements:

#### 1) Interest Rate

TBill prices are somewhat sensitive to changes in prevailing market interest rates, as when interest rates rise, TBill prices will tend to fall and vice versa.

#### 2) Maturity Date

The maturity date does not impact the price of the TBill directly, but the longer the term of the bill, the greater the price sensitivity to other factors described here.

#### 3) Liquidity

The price volatility of illiquid (rarely traded) TBills can potentially be greater than that of liquid (actively traded) TBills.

### TBill Yields

The discount yield provides a measure of the annualized return that an investor will benefit from if the purchased TBill is held until the maturity date. The yield is a function of the price and of the remaining term to maturity. The formula for calculating the discount yield is as follows:

$$\text{Discount Yield} = \frac{\text{Face Value} - \text{Purchase Price}}{\text{Face Value}} \times \frac{365}{\text{Days from Settlement to Maturity}} = 100$$

**NOTE:** The number of days from settlement to maturity is the actual number of days

#### Example:

If you buy 1 lot of a 6 month TBills at a price of 9,905.00 (Par Value of QAR 10,000) and with 179 actual days remaining to maturity, the discount yield will be:

$$\text{Discount Yield} = \frac{10,000 - 9,905}{10,000} \times \frac{365}{179} = 1.937\%$$

## Listing of TBills at Qatar Exchange

There will be a number of TBills listed when trading is launched on Qatar Exchange. As with equities, TBills will be listed in both the normal and special market segments.

### 1) TBill Pricing Mechanism

All TBills on Qatar Exchange will be listed with a par value and lot size of QAR 10,000 and will be priced on a per lot basis. Each purchase or sale will therefore be in multiples of QAR10,000. As an example, the purchase or sale of 5 (five) TBills will result in a position of QAR50,000. The book value is the effective market value of a position, in relation to the price paid or received and, unlike bonds, is also the settlement value or consideration which is the amount of money paid by the buyer to the seller. To calculate the book value of a TBill trade:

#### Example:

Price	=	9,975.00
Number of TBills traded	=	100
Nominal Value	=	QAR 1,000,000

Therefore, the book AND settlement value of the trade will be:

$$9,905 \times 100 = \text{QAR } 997,500$$

At maturity the investor will receive the nominal value of QAR 1,000,000.00, resulting in a gain of QAR 2,500.00

If the number of days from the trade settlement date to the maturity date are 56, and the TBill is held until maturity, then the Discount Yield for this trade will be:

$$\text{Discount Yield} = \frac{10,000 - 9,905}{10,000} \times \frac{365}{56} \times 100 = 1.629\%$$

### 2) Bond Trading Cycle

On the normal market, bonds will follow continuous trading pattern, in which trading will pass through the following phases:

Phase	Timing
Pre-open Period	9:00 – 9:30
No-cancel Period	9:25 – 9:30
Opening Auction followed by Continuous Trading	9:30 – 13:00
Pre-closing Period	13:00 – 13:10
No-cancel Period	13:05 – 13:10
Closing Auction and Trading At Last (closing price)	13:10 – 13:15

This is the same trading cycle which is currently in place for equities.

On the special market segment, TBills will follow the trading pattern below:

Phase	Timing
Continuous Trading Period	9:30 – 13:00
Market Close	13:15