



/ MBonos Futures
in **MexDer**

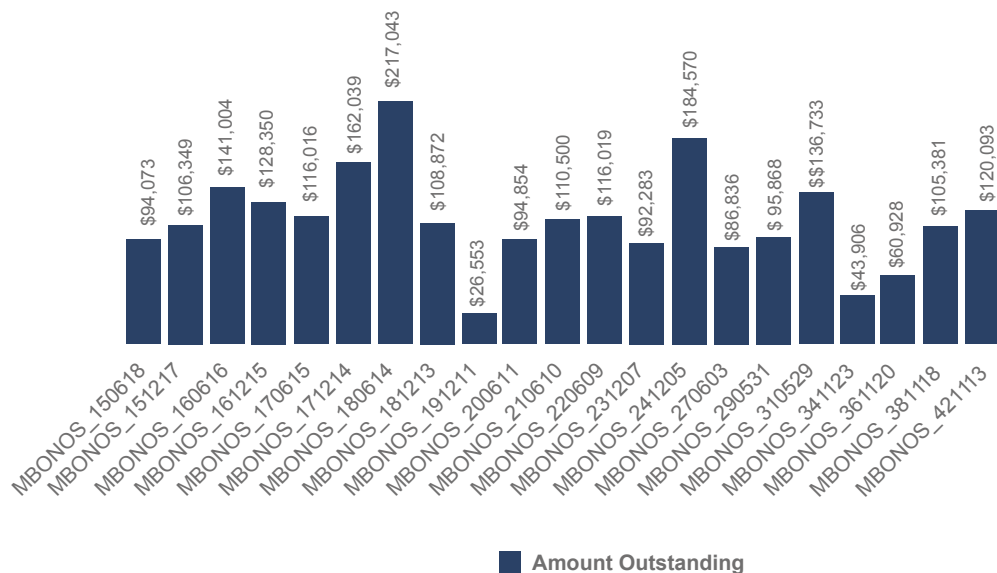


Overview



Nominal Fixed-Rate Bonds issued by the Federal Government of Mexico (MBonos) were first issued in January 2000. The 3, 5, 10, 20 and 30 year maturities are currently issued according to the government’s securities auction calendar published by the Ministry of Finance and Public Credit (SHCP). In the last 10 years (2004-2014), the total outstanding amount of MBonos increased five-fold from \$428 billion pesos to \$2,350 billion pesos. The maturities of bonds with the largest outstanding amounts are due in June-18 (M180614) with 8.23%, due Dec-24 (M241205) with 7.38% and due Dec-17 (M171214) with 6.78%.

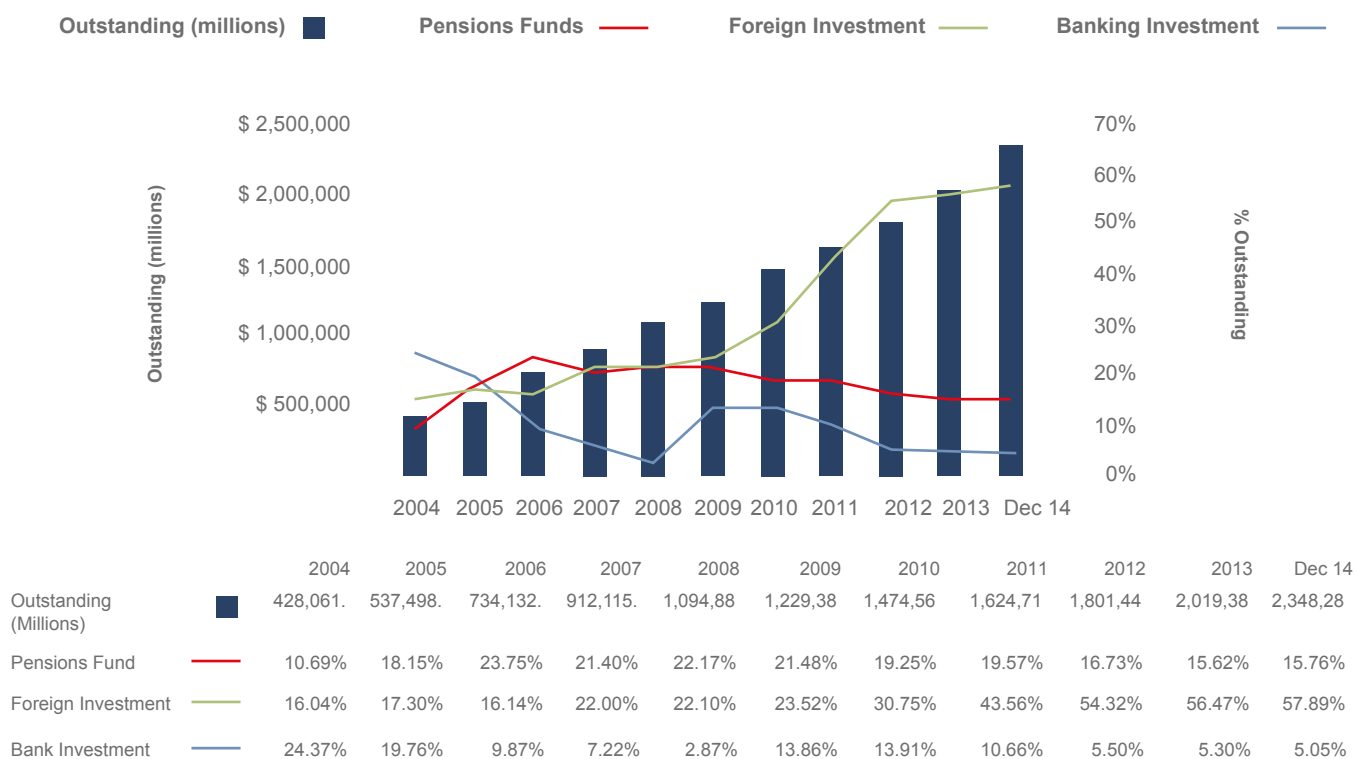
Outstanding (Million Pesos)



Data source Banco de México as of December 31st 2014

In 2004, foreign account holding in MBonos corresponded to 16%, ending 2014 with a holding of 58%.

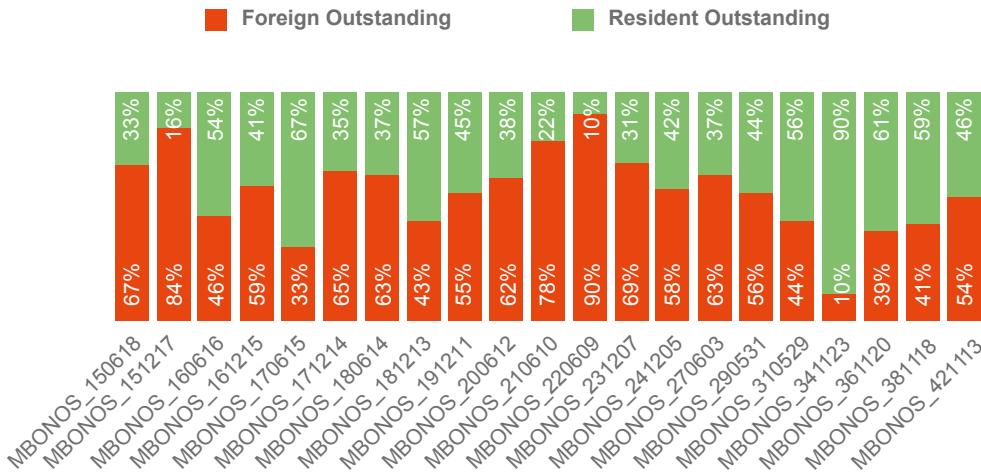
Overview Mexican Bonds



Data source Banco de México as of December 31st 2014

In addition, foreign holding is concentrated in 5, 10 and 30 year maturities. As of December 31, 2014, the participation in the MBono with maturity in Dec-24 (M241205) corresponded to 57% and 44% for the bond maturing May-31 (M310529).

% Outstanding Resident vs Foreign

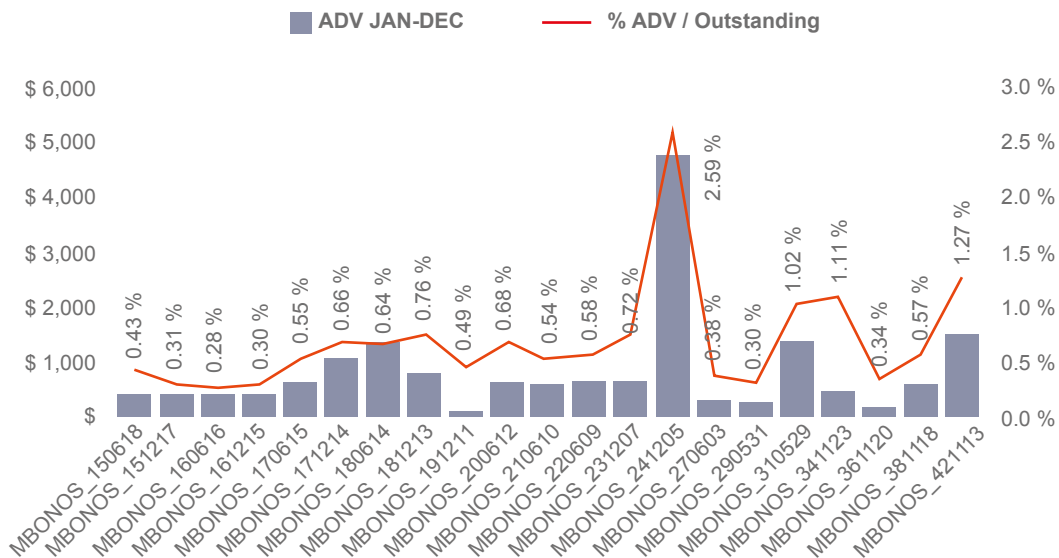


Data source Banco de México as of December 31st 2014

MBonos are highly liquid in the Mexican debt market. In 2014, the secondary market showed that liquidity is concentrated mainly in the bond with maturity in Dec-24 (a.k.a. “M24” or “DC24”) with an average daily volume of \$4,784 million pesos, followed by the Nov-42 (M421113) maturity at an average daily volume of \$1,530 million pesos and the May-31 (a.k.a. “M31” or “MY31”) maturity at \$1,402 million pesos.

If we analyze the trading volume against the outstanding amount of the MBonos, we can observe that the securities with the highest percentage of trading volume are the Mbono due in Dec-24, as well as Nov-42.

ADV Bonos M (Millions)



Data source Banco de México as of December 31st 2014

MBonos Futures in MexDer

Undoubtedly, MBonos have trading desks' participation, who actively provide liquidity to Mexican institutional investors (pension funds, mutual funds and insurance companies) as well as to foreign investors (who hold 58% of the total MBoño outstanding).

The MBoño curve is the main benchmark for fixing the spread that investors demand for corporate and bank debt that are denominated in pesos (mainly the 10y and 20y tenors). Thus, the need arises to provide hedging mechanisms to all participants for adequate risk management as well as to take short positions, among other strategies.

In developed markets, derivative instruments such as U.S. Treasury Futures Contracts listed on CME Group and German Bund Futures traded on Eurex provide market participants liquid, efficient and transparent hedge mechanisms.

Currently MexDer has MBonos basket-eligible futures under the "Cheapest to Deliver" (CTD) mechanism for 3, 10, 20 and 30 year notes. However, the constituent bonds sometimes do not bear the same liquidity as in the cash market. With the intention to leverage the concentration of liquidity in DC24 and MY31 bonds, MexDer decided to list Specific Bond Future Contracts on these securities.

The Specific Bond Future Contracts have the following characteristics: contract size 1,000 bonds or MXN\$100,000 face value, quarterly period contracts up to one year, the quote convention is in "dirty price" (i.e. price plus accrued interest), the tick size is MXN\$0.10 and has physical delivery of the singular MBoño (M241205 for DC24 ticker and M310529 for MY31 ticker), the last trading day is the third business day preceding the maturity date of the delivery month.

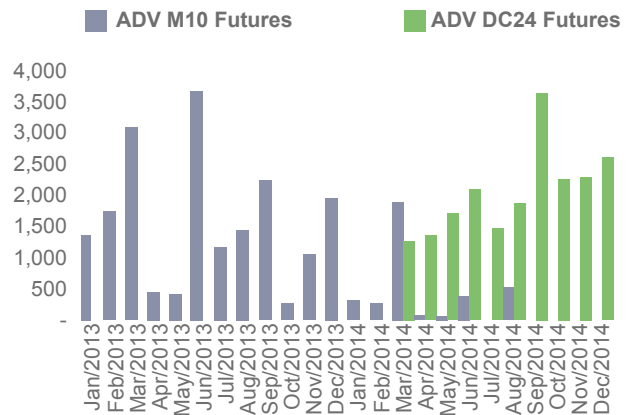
Specific Bond Future Contracts offer the best alternative for taking long and short positions in the MBonos securities and also is an effective product for arbitrage and hedging strategies.



Why trade specific bond future contracts instead of basket-eligible future contracts?

While MBonos Futures with “cheapest to deliver” have real advantages, it is also true that there is a risk of change of the cheapest to deliver bond (because of the skew levels in the cash market or the inclusion of a new security in the basket). In this context and based on the high liquidity of individual bonds, MexDer listed DC24 and MY31 Mbonos Specific Bond Futures, in March and August 2014 respectively, to meet the diverse needs of the market. In these futures, it is known with exactitude the MBono that will be delivered and has a hedge ratio 1-1.

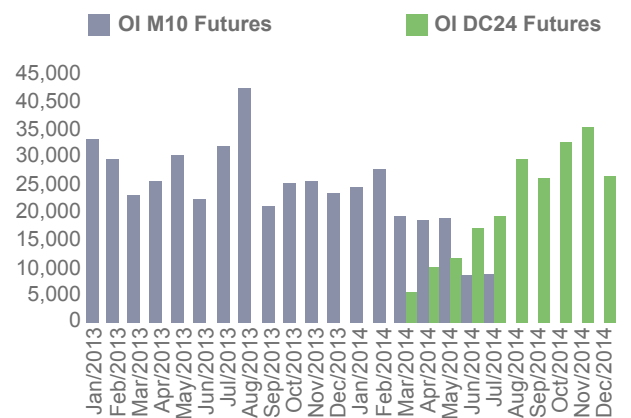
ADV M10 Futures vs. DC24 Futures



Which is the advantage of the specific bond futures contracts?

The main advantage is that both buyer and seller of the specific bond futures contract know the MBono he/she will be receiving or delivering in advance. This takes away the uncertainty regarding which bond could be delivered given the huge difference in the liquidity of the futures constituent bonds, thus the risk of a CTD change is reduced. Consequently, since the listing of the DC24 MBono Specific Bond Futures Contract, open interest gradually migrated from the M10 Future (basket-eligible 10y tenor MBono contracts) to the new specific bond future.

OI M10 Futures vs. DC24 Futures



Data source Banco de México as of December 31st 2014

The DC24 MBono specific bond future contract, triggered an increase in the average daily volume relative to 2013.

Market Makers and Pension Funds in MexDer

When MexDer listed the Specific Bond Future Contracts, the number of participants increased. We had an average of six counterparts with the MBono basket-eligible future contracts, and the number increased to 17 participants actively trading with the new specific bond futures contracts. It is important to mention that Mexican authorities allow local banks to either become market makers or remain under current designation when trading in MexDer. This incentive, along with a sizeable number of participants, makes it possible to have a 1 to 2 basis point bid-ask spread for the first three closest contract maturities, as well as an increasing open interest.

Exc.	Contract	BidQty	Bid	Last	Ask	AskQty	LTime	TVol	OpenInterest	Settle
EMD	DC24 MR15	200	133.3	133.4	133.4	100	09:52:31	1,002	21743	133.4
		100	133.0		133.5	200				
		100	132.8		133.6	300				
					133.7	100				
					133.9	100				
EMD	DC24 JN15	200	129.2	129.1	129.4	100	10:03:59	3,100	28907	129.6
		100	129.1		129.5	200				
		100	129.0		129.8	105				
		100	128.8		130.0	500				

Exc.	Contract	BidQty	Bid	Last	Ask	AskQty	LTime	TVol	OpenInterest	Settle
EMD	MY31 MR15	100	116.1	116.4	116.3	300	13:26:49	400	1200	116.8
					116.9	600				
					117.0	100				
EMD	MY31 JN15	200	113.2	113.8	113.4	500	06:18:58		22069	113.8
					113.7	300				
					113.9	1,000				
					114.1	100				

As MexDer is an organized market, all the prices can be viewed in real time through the major vendors¹.

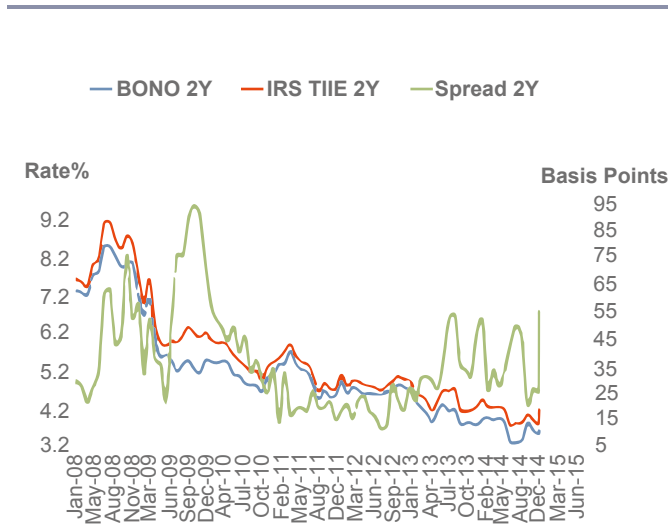
There is a great growth opportunity not only to increase the number of domestic and foreign participants, but also to increase the number of Mexican institutional investors. Currently half of the Afores (pension funds) have authorization from the National Commission of Savings Systems for Retirement (CONSAR) to trade Mbono futures and the rest are awaiting the appropriate certification, this makes the use of these products more attractive. Afores' Mbono holding represent 16% of the total outstanding, so the potential for growth for this sector is significant.

¹ Bloomberg MMDD <GO>
Reuters MX/FUTEX1

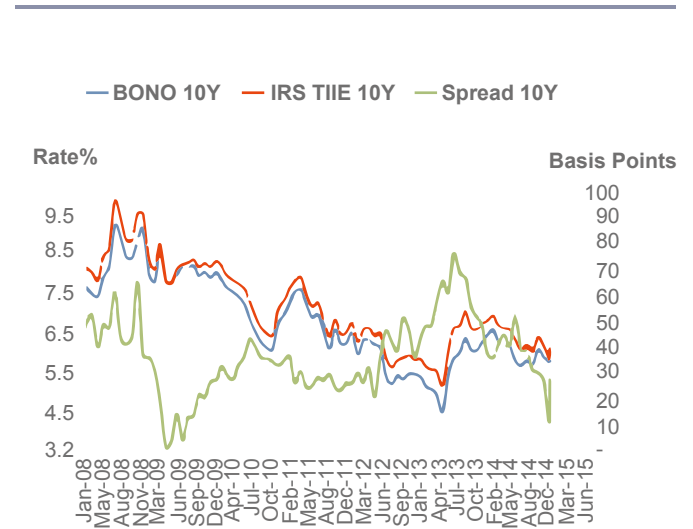
Hedging

Currently market participants hedge their exposures to DC24 and MY31 MBonos with TIIE IRS swaps due to the close sensitivity measures. Between these products, MBonos and TIIE swaps, there is a basis risk which shows high volatility, making it necessary to rebalance the hedge continuously which is dysfunctional and leads to a higher operational risk. In the following figures, we can see the yield spread between MBono and the equivalent TIIE IRS swap, as well as the basis risk volatility.

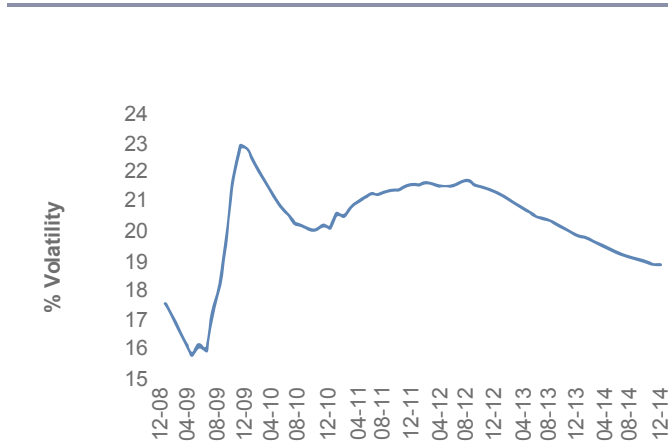
M's vs IRS TIIE 2Y



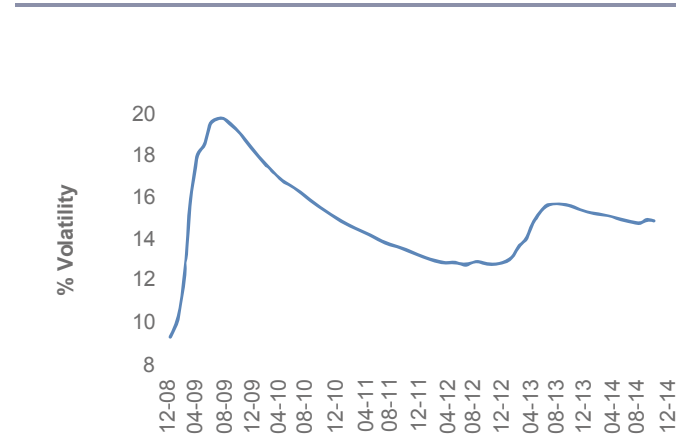
M's vs IRS TIIE 10Y



2Y Spread Volatility



10Y Spread Volatility



Data source Banco de México as of December 31st 2014



The average spread between the Mbono and the 2y and 10y TIIE swap was 47 and 38 basis points with a volatility of 19.92% and 15.60% respectively, at the end of 2013. On December 31, 2014, an average spread of 56 and 28 basis points with a standard deviation of 18.93% and 14.95%, respectively, was observed.

MexDer offers an alternative to this problem: the Specific Bond Future Contracts can achieve a coverage ratio of 1:1 between the Mbono cash and its future. Additionally, the sensitivity between these products is very similar so we can get a perfect hedge. Because of this, one can avoid the basis risk that the TIIE swap hedge entails. As it is used in developed markets (CME Group, Eurex), the best alternative to hedge the exposure to MBonos is with Futures with the same underlying security.

Block Trades

As with any product in MexDer, the Specific Bond Future Contracts can be reported as a Block Trade. The current minimum contract threshold is of 500 for the DC24 and 300 for MY31.

Likewise, Block Trades eases the participation of institutional investors who can negotiate strategies such as spreads and rollovers with their counterparties and then report the transaction to the derivatives market.

Exchange for Physical (EFP) trades are frequently executed. Particularly, investors sell the bond in the cash market and take a long position in the Specific Bond Future Contracts, allowing them to gain liquidity while maintaining their exposure to the MBonos.

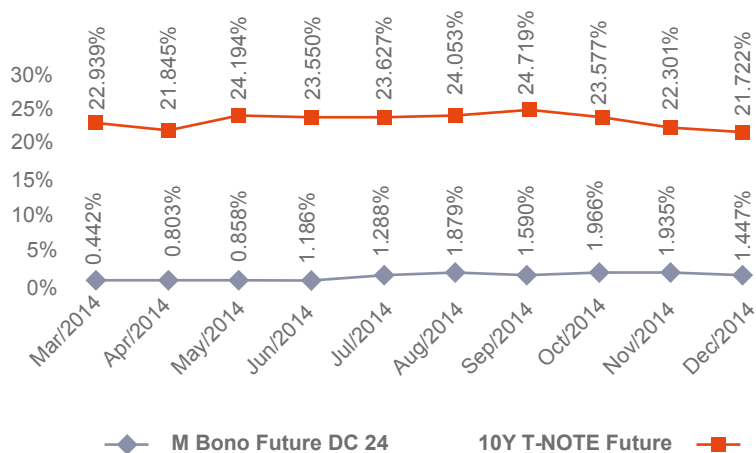
Potential Market

Since MexDer listed the Specific Bond Future Contract of the MBoNo due Dec-24 till the end of the year in March 2014, the open interest increased six times. Comparing it with the outstanding amount of the bond, we can observe that not only does this relationship hold, but it also increased 100 basis points.

Considering the outstanding size of the DC24 Mbono, the open interest in MexDer is still very small. Taking into consideration other markets where the open interest (OI) of the futures is around 20% of the underlying amount (e.g. the 10y Treasury note futures), we observe that this ratio indicates a growth opportunity for the MBonos futures. This fact, along with foreign investor's participation (which account for over 50% of the Mexican MBonos in the cash market), stand for a significant potential growth in MexDer given the perfect hedge and arbitrage opportunities that the Specific Bond Future Contracts provide.



%OI Futures / Outstanding



Data source Banco de México as of December 31st 2014

How can non-Mexican customers access the specific bond future contracts in MexDer?

Specific Bond Future Contracts in Mexder as well as the Basket-Eligible Bond Future Contracts, are Commodity Futures Trading Commission (CFTC) compliant for US Persons. This means that foreign investors and “US Persons” can access the market through the CME Globex® electronic trading platform. Since 2011, the order routing agreement between CME Group and MexDer allows the CME Globex® users to trade MexDer listed products.

Thereafter, traders (FCMs) who are members of CME Group and their clients can access the derivatives market in Mexico without establishing an office in Mexico, as long as they have a direct or indirect clearance relationship with a Mexican clearing member. The transactions are executed in MexDer and settled in Asigna.

Due to the important MBoNo holdings of foreign investors, we consider it important to have this futures contract as risk management and hedging tools.

There are three ways to access MexDer’s products through the north to south routing agreement with CME Group² :

- 1. As a remote member.**
- 2. As Omnibus Account.**
- 3. As an Omnibus Account client or as a Mexican Clearing Member client.**

² For more details, please refer to <http://www.cmegroup.com/international/partnership-resources/mexder-resources.html>

Asigna (MexDer Clearing House)

“Asigna, Compensación y Liquidación” is MexDer’s clearing house. In listed derivatives markets, the role of the clearing house is of significant importance because it becomes the counterparty and therefore the guarantor of all financial obligations arising from the derivatives contracts. All trades executed in MexDer are cleared in Asigna, who underwrites the fulfillment of the obligations inherent in the futures trading and clearing.

Asigna has counterparty credit ratings granted by Standard & Poors, Moody’s and Fitch Ratings in the scale BBB+ global and AAA local.

Asigna conducts the initial margin administration as well as the daily margin variation payment/collection functions according with the international standards that apply today and that clearing houses follow globally; also Asigna complies with the IOSCO and PFMI’s recommendations and is in process of being recognized as a “Qualified Chamber” to the European Authority (ESMA). All this ensures that Asigna follows international standards, applied and recognized by the risk management industry, and is assigned the global ratings.

Asigna through its Clearing Members receives as Initial Margin different securities denominated in Mexican pesos and US dollars, as well as cash. These resources constitute segregated accounts in various contributions funds, which are managed and invested by Asigna ensuring the participants an adequate and transparent administration as established by the Mexican financial authorities. The eligible securities of the clearing house for mexican and foreign participants are:

- Cash: Mexican pesos and U.S. dollars
- Mexican Sovereign Securities
- Equities
- Naftracs
- Treasuries: T-Bills, T-Notes & T-Bonds

Asigna’s Benefits

One of the benefits of MexDer’s clearing house, Asigna, is that participants receive interest payments in their cash Initial Margin (AIMs). Additionally, at any time, the customer can exchange the securities posted as AIMs. The benefits generated by the posted instruments belong to the customer.

Summary

Products available in MexDer are very useful for Mexican and foreign investors. The latter have various means to access MexDer such as through the strategic alliance “north- to south” with CME Group that allows order-routing between the two exchanges. In particular, Specific Bond Future Contracts allow investors to have exposure to the underlying MBonos and to perform an efficient hedge of these instruments.

Finally it should be noted that in addition to the advantage of earning interests on the margins posted in Asigna, foreign participants enjoy the benefit of being free of withholding tax on capital gains.

For more information please take advice with your Bank, Brokerage, MexDer’s clearing member, or FCM in the US. Our website is www.mexder.com

Contract Specs

10-Year DC24 Bond Futures Contract: Specifications

Underlying:	Bono M241205
Contract Size:	1,000 Bonds=\$100,000 pesos.
Delivery Months:	Quarterly, up to one year
Trading Symbol:	DC24
Quotation:	Bond Futures Price using `Dirty Price`
Tick:	0.10 Pesos
Tick Value:	\$100 Pesos
Tick Ratio/Fee:	7.5 times
Initial Margin:	\$5,000 pesos
Opposite Margin:	\$1,000 pesos
Trading Hours:	7:30 a 14:00 hours.
Last Trading Day:	Third business day preceding the Maturity Date
Maturity date:	The last business day of the month
Settlement:	Physical Delivery of M241205 Bond
Bloomberg<MMDD>	DCYA<CMDTY>CT
Reuters MXN/FUTEX1	0#DC24:

20-Year MY31 Bond Futures Contract: Specifications

Underlying:	Bono M241205
Contract Size:	1,000 Bonds=\$100,000 pesos.
Delivery Months:	Quarterly, up to one year
Trading Symbol:	MY31
Quotation:	Bond Futures Price using `Dirty Price`
Tick:	0.10 Pesos
Tick Value:	\$100 Pesos
Tick Ratio/Fee:	4.26 times
Initial Margin:	\$7,500 pesos
Opposite Margin:	\$1,500 pesos
Trading Hours:	7:30 a 14:00 hours.
Last Trading Day:	Third business day preceding the Maturity Date
Maturity date:	The last business day of the month
Settlement:	Physical Delivery of M310529 Bond
Bloomberg<MMDD>	MYOA<CMDTY>CT
Reuters MXN/FUTEX1	0#MY31:

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