Mexico’s Bond Market: An Introduction

INTRODUCTION

Mexico has one of the most-developed and second-largest local bond markets, after Brazil, in Latin America. Historically, the country’s market has been one of the most important among emerging countries. In addition, Mexico has long been included in the community of world government bond indices, owing to its investment-grade credit quality and full market access for international investors.

Adding to the potential attractiveness of Mexico’s bond market is a series of reforms undertaken by President Nieto since his inauguration in December 2012. Mexico has announced and completed the legislative process underpinning its comprehensive reforms agenda, which covers energy, telecommunications, anti-trust, labor markets, education, and the financial sectors. In its latest report from November 2014, the IMF noted that these reforms could potentially boost the annual growth in output over the medium term to 3.5%-4%, compared to the previous estimate of 3%-3.25% growth. In expectation of improving growth prospects and fiscal flexibility in the medium term, rating agencies raised Mexico’s sovereign rating from ‘BBB’ to ‘BBB+’ (Standard & Poor’s Ratings Services) in December 2013, and from ‘Baa1’ to ‘B3’ (Moody’s) in February 2014.

These attributes make a potentially compelling case for consideration of Mexico’s bond market by emerging market fixed income investors who are searching for income, as well as potential capital and currency appreciation. In this paper, we provide an overview of Mexico’s bond market with respect to market development, structure, and key risk/return considerations for investors.

MARKET DEVELOPMENTS

Mexico’s local bond market has undergone rapid development since the mid-1990s, most notably in government bonds. After the Mexican peso crisis in 1994, the country’s government adopted the debt management strategy of shifting financing from external debt to domestic debt, extending debt maturities, and developing a liquid domestic yield curve. By adopting an inflation-targeting regime in 2001, with a 3% target and a variability band of +/- 1%, Banco de Mexico’s (Banxico; Mexico’s central bank) inflation has gone from being more than 10% down to 3% as of February 2015. In fact, inflation has averaged 3.85% for the past five years. Another policy initiative that has contributed to the growth of the country’s government bond market is pension system reform. In 1997, Mexico’s pension system was transformed from a defined benefit system to a compulsory defined contribution plan, which is fully funded by individual accounts that are managed by private administrators. As of February 2015, Mexico’s pension funds held MXN 1.6 trillion (USD 104 billion) in domestic market debt securities (17.3% of all outstanding) and are a major domestic investor in local bonds.

1 www.banxico.org.mx
Government and government-related bonds constituted the majority of Mexico’s bond market (85.9%) as of January 2015.

Exhibit 1 shows the growing market size of Mexico’s Federal public sector bonds over the past decade, with domestic debt representing more than 70% of federal funding. Exhibit 2 displays the composition of the domestic bond market by issuer type. As shown in the chart, government and government-related bonds constituted the majority of the domestic bond market (85.9%) as of January 2015. Given the significant portion of Mexico’s bond market that government and agency bonds occupy, our focus is on those sectors in this paper.
MARKET STRUCTURE

Local Bond Instruments

- **Federal treasury certificates (CETES):** These are zero-coupon bonds issued by the federal government in auctions on a weekly basis since 1978, and trade at a discount. CETES have been issued for a minimum and a maximum of 7- and 728-day terms, respectively. Currently, CETES are issued for 28- and 91-day terms, and at maturities close to six months and one year. For secondary market trading, the current market convention is to quote them by calculating their rate of return.

- **Federal government development bonds (Bondes D):** Since 2006, the federal government has issued Bondes D with floating-rate coupons that pay every 28 days and are compounded at the overnight interbank funding rate. Bondes D are frequently issued with five-year tenor, as well.

- **Federal government development bonds with a fixed interest rate (MBONOS):** Fixed-rate MBONOS are currently the largest issue among local government securities (43% of total outstanding debt, with an average life of 8.6 years). These securities are issued for terms longer than one year, paying coupons every six months. In the secondary market, the market convention is to quote them by yield to maturity. Currently, the government issues 3-, 5-, 10-, 20-, and 30-year bonds.

- **Federal government development bonds denominated in investment units (UDIBONOS):** Developed in 1996, these are instruments that protect the holder from unexpected changes in the inflation rate. UDIBONOS are sold at long terms and pay interest every six months based on a real, fixed interest rate, which is determined on the issue date of each security. UDIBONOS have been issued at terms of 3, 5, 10, 20 and 30 years. For the purpose of the placement, interest payments, and amortization, the conversion to domestic currency is made at the value of the Unidades de Inversion (UDI) on the day that the corresponding payments are made. In 1995, Mexico introduced UDI, a price level adjusting unit of account which represents real constant value. The value of the UDI changes every day and is calculated based on information from the previous 25 days, which is calculated and published by Banxico in the Official Gazette and can be found on Banxico’s website.

- **Savings Protection Bonds with biannual interest payments and protection against inflation (BPA182):** These bonds are agency bonds and issued by the Institute for the Protection of Bank Savings (IPAB) with a seven-year term. The interest rate has two components: a market reference rate of the rate on CETES issued in a primary auction for terms of 182 days, and an option that protects the holder against inflation.

- **Savings Protection Bonds with a monthly coupon and an additional benchmark interest rate (BPAG28):** These bonds are also issued by the IPAB. The annual interest rate will be the greater of either the one-month CETES yield or the Government Weighted Benchmark Rate (TPFG). The TPFG rate is calculated and released by Banco de Mexico on the day of the primary auction of government securities that will be placed at the start date of each interest-rate period.

- **Savings Protection Bonds with a quarterly coupon and an additional benchmark interest rate (BPAG91):** These are five-year, floating-rate agency bonds. The annual interest rate will be the greater of either the three-month CETES yield or the TPFG.²

Auction

The Ministry of Finance, through its financial agent, Banco de Mexico, announces the issuance calendar for government securities on a quarterly basis, with size and issuance dates. Authorized bidders include banks, brokerage houses, pension funds, and mutual funds. Auctions for MBONOS and UDIBONOS are Dutch style.

Trading in the Secondary Market

Mexico has the most-developed fixed-rate bond market in Latin America. The bid-offer spread for MBONOS in the secondary market has decreased drastically to 3-5 basis points (bps) in recent years from above 25 bps in 2001. Exhibit 3 displays the average daily trading volume per issue for MBONOS in the 5-10 year maturity range.

Exhibit 3: Average Daily Trading Volume per MBONOS Bond in the 5-10 Year Maturity Range

Investor Profile

Mexico’s bond market, being one of the most liquid among emerging market countries, has seen increasing investment inflows from international investors. Foreign investors are the single largest holder of domestic debt market securities (owning 25% of the outstanding amount as of January 2015, according to Banxico), and foreign investors have been an important marginal price setter. Domestic institutional investors, led by pension funds, also provide strong support for local bonds. Pension funds currently own around 50% of long-end government bonds.
RISK/RETURN CHARACTERISTICS OF MEXICO LOCAL BONDS

Mexico’s local bond market offers investors exposure to local fixed income, and thus, inherent investment risks include interest rate risk, credit risk (for corporate bonds), and liquidity risk. In addition, local bonds bear foreign exchange risk for foreign investors. By investing in Mexican peso-denominated bonds, foreign investors are exposed to the volatility and valuation risk of the Mexican peso. The Mexican peso could fluctuate with changes in global macroeconomic factors or capital flows, and it could also correlate with movements in other emerging market currencies.

Investors should also be aware of the potentially negative impact of movement of large foreign holdings in local bonds. Following the 2008 global financial crisis, partly due to global monetary easing, peso-denominated Mexico government bonds have witnessed strong inflows from foreign investors. Foreign holdings of federal government bonds have increased to 40% in January 2015 from around 10% before 2010 (see Exhibit 5). Large holdings from foreign investors could be a source of volatility for the local bond market, if foreign inflows reverse their direction.
Mexico's local bond market may offer a diversification benefit for U.S. investors.

Exhibit 5: Percentage of Foreign Resident Holdings in Federal Government Domestic Securities

Source: Banxico. Data as of January 2015. Charts and tables are provided for illustrative purposes. Past performance is no guarantee of future results.

Exhibits 6 and 7 display the returns of Mexico government bonds in Mexican pesos, and their risk/return characteristics. During the past 11 years, Mexico government bonds demonstrated impressive cumulative returns, in local currency terms, of 128% (for the 1-5 year MBONOS) and 165% (for the 5-10 year MBONOS). In particular, the 1-5 year MBONOS delivered the highest returns per unit of risk for the past five years. Exhibit 7 also shows correlation between Mexico local bonds and U.S. Treasury bonds. With a five-year correlation around 0.50-0.58, Mexico’s local bond market may offer a diversification benefit for U.S. investors.

Exhibit 6: Return of Mexico Government Bond Indices for MBONOS (in MXN) and UDIBONOS (in MXV) Versus U.S. Treasury Bond Indices

Source: S&P Dow Jones Indices LLC. Returns for Mexico government bonds are denominated in Mexican pesos. Returns for UDIBONOS are denominated in Inflation Index Investment Units (Unidades de Inversion or UDI). Returns for U.S. Treasury bonds are denominated in U.S. dollars. Index level set to 100 in January 2004. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance of the S&P/BGCantor U.S. Treasury Bond Index, the S&P/Valmer Mexico Government 1-5 Year MBONOS Index, the S&P/Valmer Mexico Government 5-10 Year MBONOS Index, and the S&P/Valmer Mexico Government Inflation-Linked 1+ Year UDIBONOS Index.
Mexico's local bond market has undergone rapid growth during the past decade, demonstrating decreasing yield levels and improving liquidity. Recently adopted structural reforms could further improve economic growth prospects and fiscal flexibility, and therefore enhance attractiveness of Mexico's local bond market. For foreign investors, Mexico local bonds may also offer attractive yields and diversification benefits.
PERFORMANCE DISCLOSURES

The S&P/BGCantor U.S. Treasury Bond Index was launched on March 24, 2010. The S&P/Valmer Mexico Government 1-5 Year MBONOS Index, the S&P/Valmer Mexico Government 5-10 Year MBONOS Index, the S&P/Valmer Mexico Government 5-10 Year MBONOS Index, and the S&P/Valmer Mexico Government Inflation-Linked 1+ Year UDIBONOS Index were launched on Nov. 1, 2013.

All information presented prior to these launch dates is back-tested. Back-tested performance is not actual performance, but is hypothetical. The back-test calculations are based on the same methodology that was in effect on the launch date. Complete index methodology details are available at www.spdji.com.

S&P Dow Jones Indices defines various dates to assist our clients in providing transparency on their products. The First Value Date is the first day for which there is a calculated value (either live or back-tested) for a given index. The Base Date is the date at which the Index is set at a fixed value for calculation purposes. The Launch Date designates the date upon which the values of an index are first considered live; index values provided for any date or time period prior to the index’s Launch Date are considered back-tested. S&P Dow Jones Indices defines the Launch Date as the date by which the values of an index are known to have been released to the public, for example via the company’s public Web site or its datafeed to external parties. For Dow Jones-branded indices introduced prior to May 31, 2013, the Launch Date (which prior to May 31, 2013, was termed “Date of Introduction”) is set at a date upon which no further changes were permitted to be made to the index methodology, but that may have been prior to the Index’s public release date.

Past performance of the Index is not an indication of future results. Prospective application of the methodology used to construct the Index may not result in performance commensurate with the back-test returns shown. The back-test period does not necessarily correspond to the entire available history of the Index. Please refer to the methodology paper for the Index, available at www.spdji.com for more details about the index, including the manner in which it is rebalanced, the timing of such rebalancing, criteria for additions and deletions, as well as all index calculations.

Another limitation of using back-tested information is that the back-tested calculation is prepared with the benefit of hindsight. Back-tested information reflects the application of the index methodology and selection of index constituents in hindsight. No hypothetical record can completely account for the impact of financial risk in actual trading. For example, there are numerous factors related to the equities (or fixed income, or commodities) markets in general which cannot be, and have not been accounted for in the preparation of the index information set forth, all of which can affect actual performance.

Additionally, it is not possible to invest directly in an Index. The Index returns shown do not represent the results of actual trading of investable assets/securities. S&P Dow Jones Indices maintains the Index and calculates the Index levels and performance shown or discussed, but does not manage actual assets. Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the Index or investment funds that are intended to track the performance of the Index. The imposition of these fees and charges would cause actual and back-tested performance of the securities/fund to be lower than the Index performance shown. For example, if an index returned 10% on a US $100,000 investment for a 12-month period (or US$ 10,000) and an actual asset-based fee of 1.5% was imposed at the end of the period on the investment plus accrued interest (or US$ 1,650), the net return would be 8.35% (or US$ 8,350) for the year. Over a three-year period, an annual 1.5% fee taken at year end with an assumed 10% return per year would result in a cumulative gross return of 33.10%, a total fee of US$ 5,375, and a cumulative net return of 27.2% (or US$ 27,200).
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