



Assessing the stage of financial market development in CEMLA countries

TBC, Monetary and Capital Markets Department IMF

September, 2019



BANCO DE MÉXICO

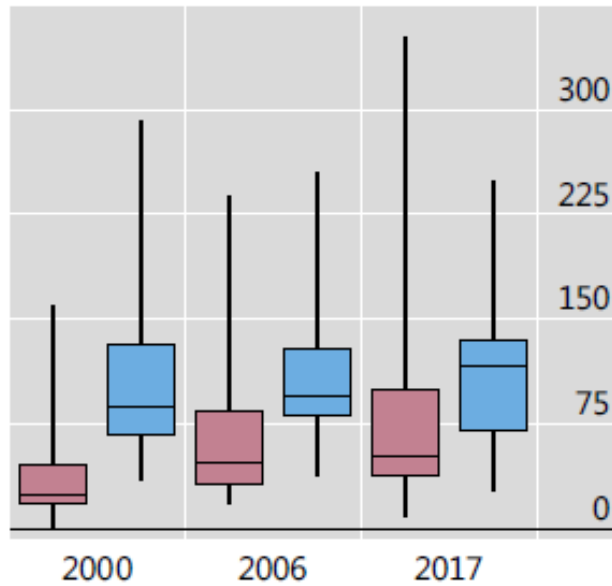
Developing capital markets – key aspects

- Developed and deep capital markets play a key role in:
 - ✓ *Financing economic growth*
 - ✓ *Influencing financial stability*
 - ✓ *Transmission of monetary policy*

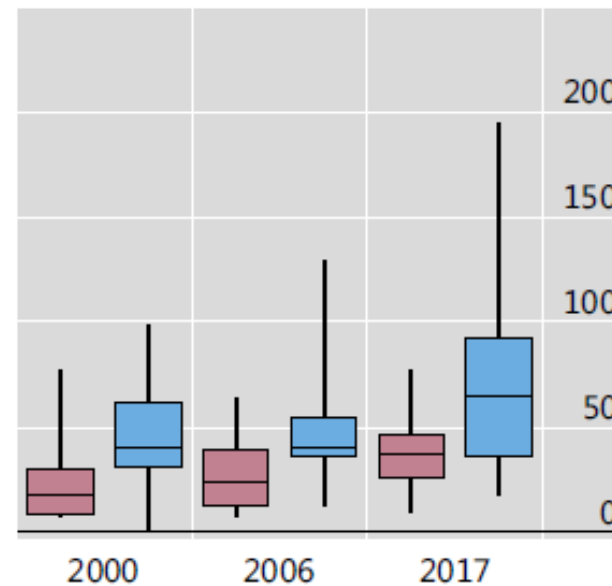
- Enabling environment:
 - ✓ *Macroeconomic stability*
 - ✓ *Market autonomy*
 - ✓ *Strong legal frameworks*
 - ✓ *Effective regulatory regime*
 - ✓ *Other drivers may include*
 - (Better disclosure standards; investor diversity; internationalization; hedging markets; efficient and robust market infrastructures)

Size of securities markets As a percentage of GDP

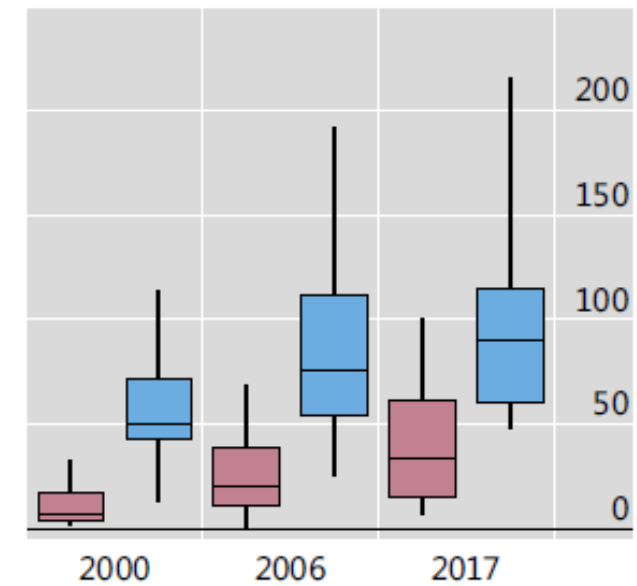
Equity market capitalisation²



Government debt securities outstanding³



Corporate debt securities outstanding^{3, 4}



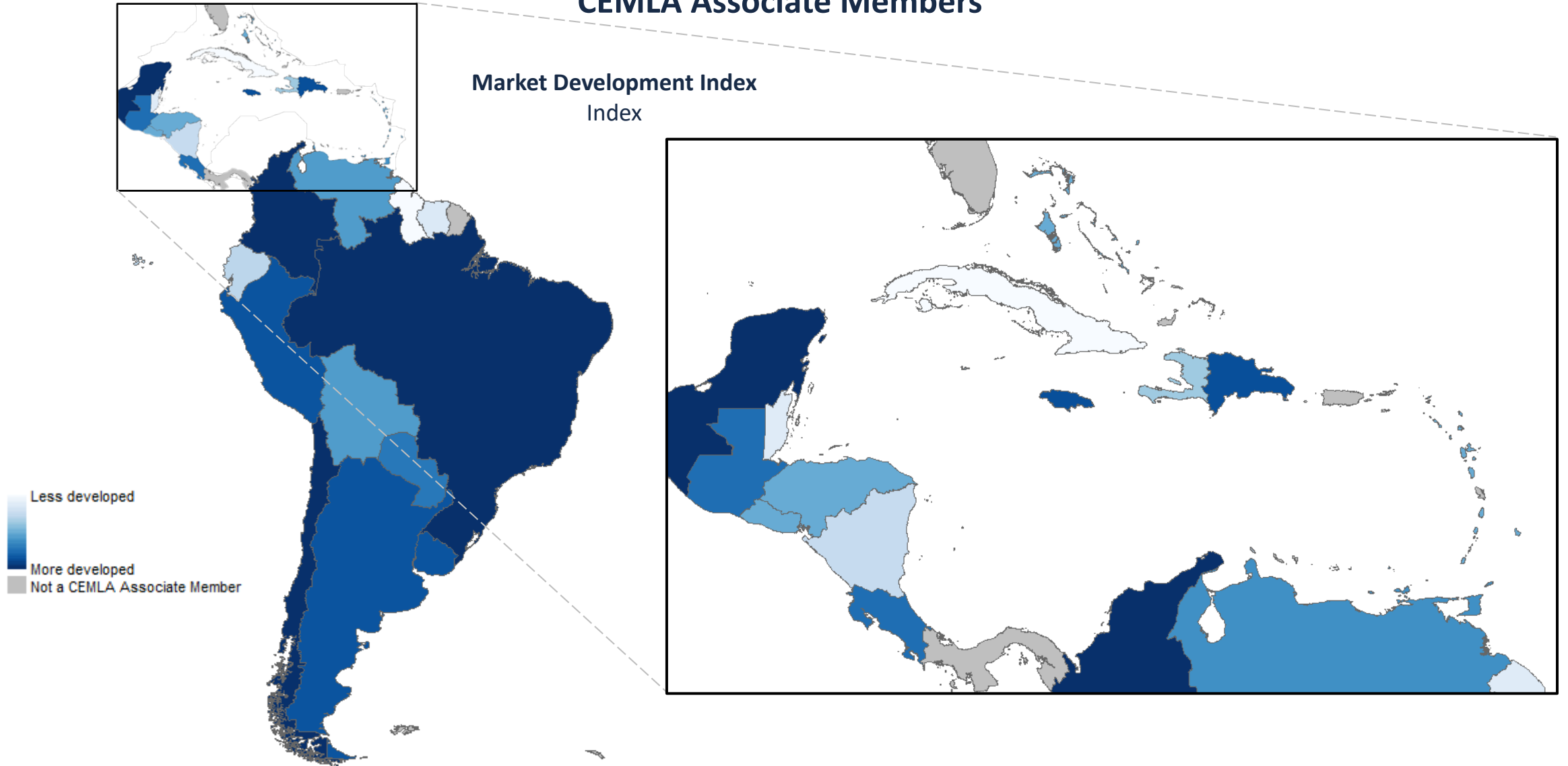
EME AE

¹ Box and whisker plots show median, interquartile range and range. Depending on data availability, the jurisdiction sample in these charts and throughout the report comprises AR, AU, BE, BR, CA, CH, CL, CN, CO, CZ, DE, DK, ES, FR, GB, HK, HU, ID, IL, IN, IT, JP, KR, MX, MY, NL, NO, NZ, PE, PH, PL, RO, RU, SA, SE, SG, TH, TR, US and ZA. See Annex 2 for additional details. ² Excluding HK, where in 2017 equity market capitalisation was 1,274% of GDP. ³ Total debt securities, by residence. If total debt securities are not available, then the sum of domestic and international debt securities. ⁴ Financial and non-financial corporate sector, by residence.

Source: BIS CGFS document "Establishing viable capital markets"

CEMLA Associate Members

Market Development Index Index

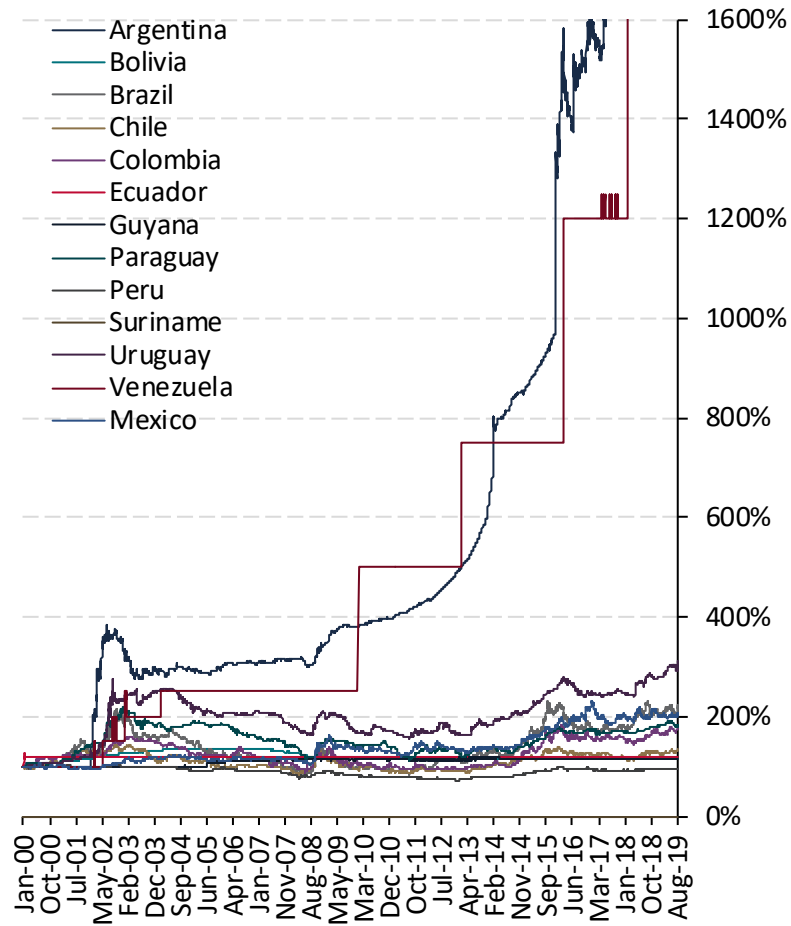


Note: Market Development Index evaluates the financial market development; assigning one if the country has 10 year local currency bond , 10 year foreign currency bond, Corporate Debt Market, Fixed Income Derivatives, Equity Market, Not Dollarized Currency, Free Floating Currency or FX Derivatives; and zero in other case . A dollarized currency is defined as economy with American dollars as currency and a currency with a peg.

Source: International Monetary Fund, Central Banks, Stock Exchanges, and Bloomberg.

South America Markets: Foreign Exchange

Foreign Exchange Index
Percentage



Foreign Exchange Information

Flag	Country	Free floating	Free convertibility	Capital control	CLS member	24/7 trading activity	Market derivative
	Argentina	✓	✓	✗	✗	✗	✓
	Bolivia	✗	✓	✓	✗	✗	✗
	Brazil	✓	✓	✓	✗	✗	✓
	Chile	✓	✓	✗	✗	✗	✓
	Colombia	✓	✗	✗	✗	✗	✓
	Ecuador	✗	✗	✗	✗	✓	✗
	Guyana	✗	✗	✓	✗	✗	✗
	Paraguay	✓	✓	✗	✗	✓	✗
	Peru	✓	✓	✓	✗	✗	✓
	Suriname	✗	✗	✓	✗	✗	✗
	Uruguay	✓	✓	✗	✗	✗	✓
	Venezuela	✗	✗	✓	✗	✓	✗
	Mexico	✓	✓	✗	✓	✓	✓

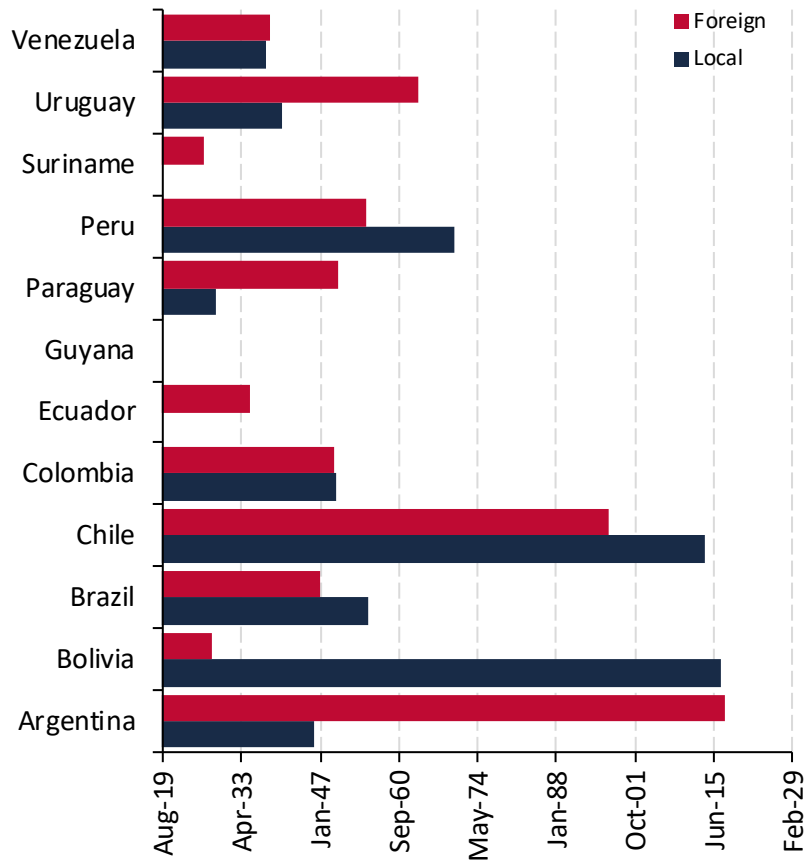
Note: Argentina's last index is 5,700%, while Venezuela's is 7,027,022,450%.

Source: Bloomberg.

South America Markets: Fixed Income

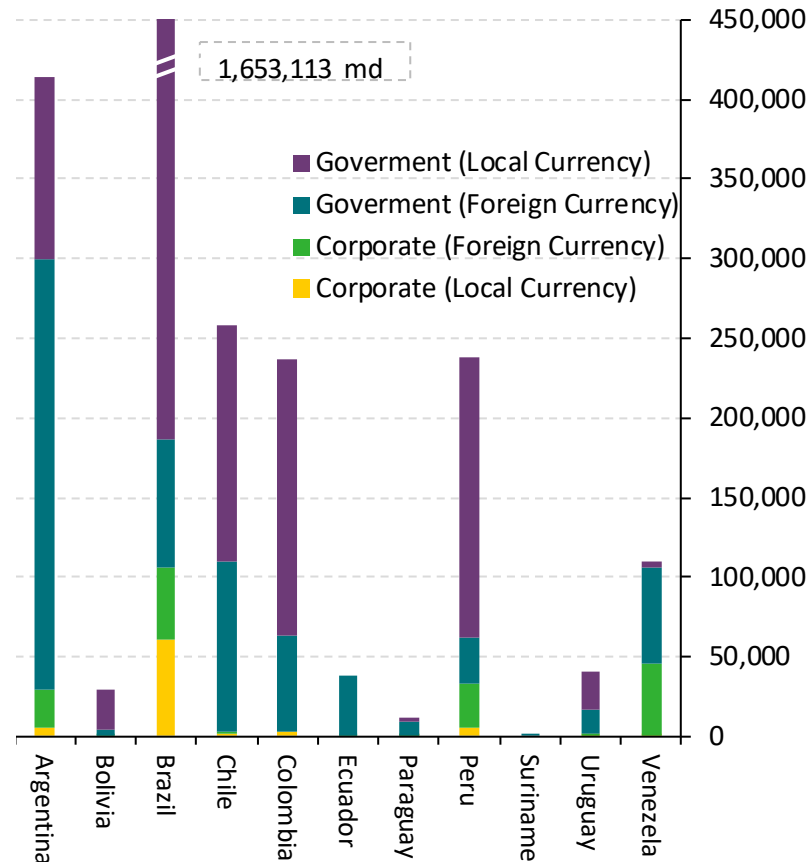
- In South America, Bolivia and Argentina are countries with longest maturities in local and foreign currency bonds, respectively. While Brazilian outstanding debt is the highest in the region.

Longest maturity date in local and foreign currency bonds
Years



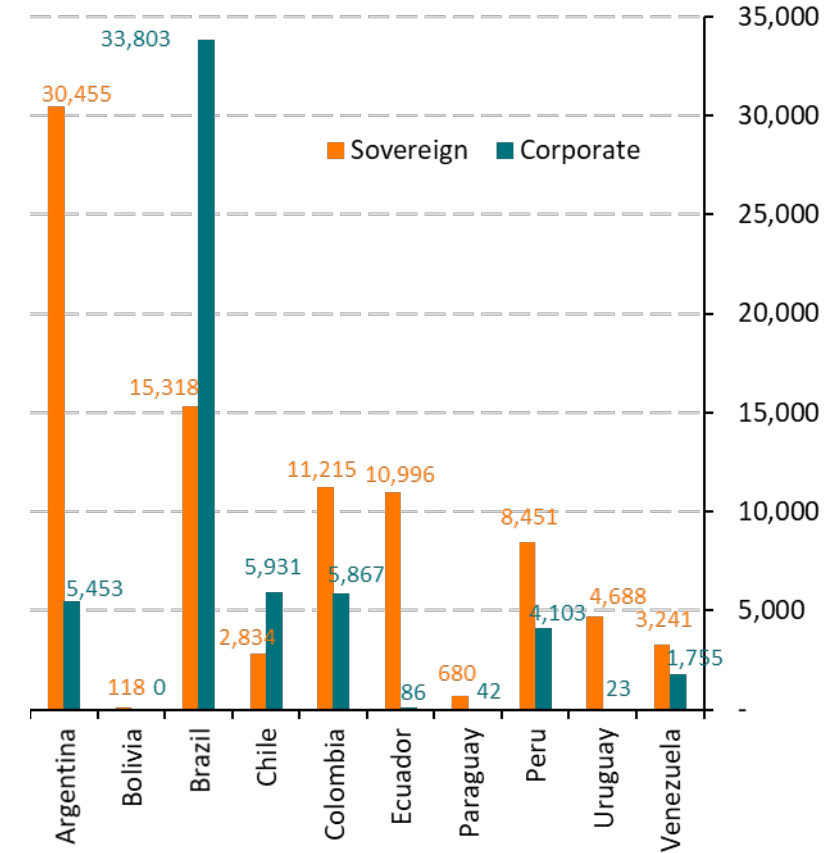
Source: Bloomberg.

South America Markets Outstanding Debt
Millions of Dollars



Source: Bloomberg.

Debt Trading Volume Survey
Millions of dollar



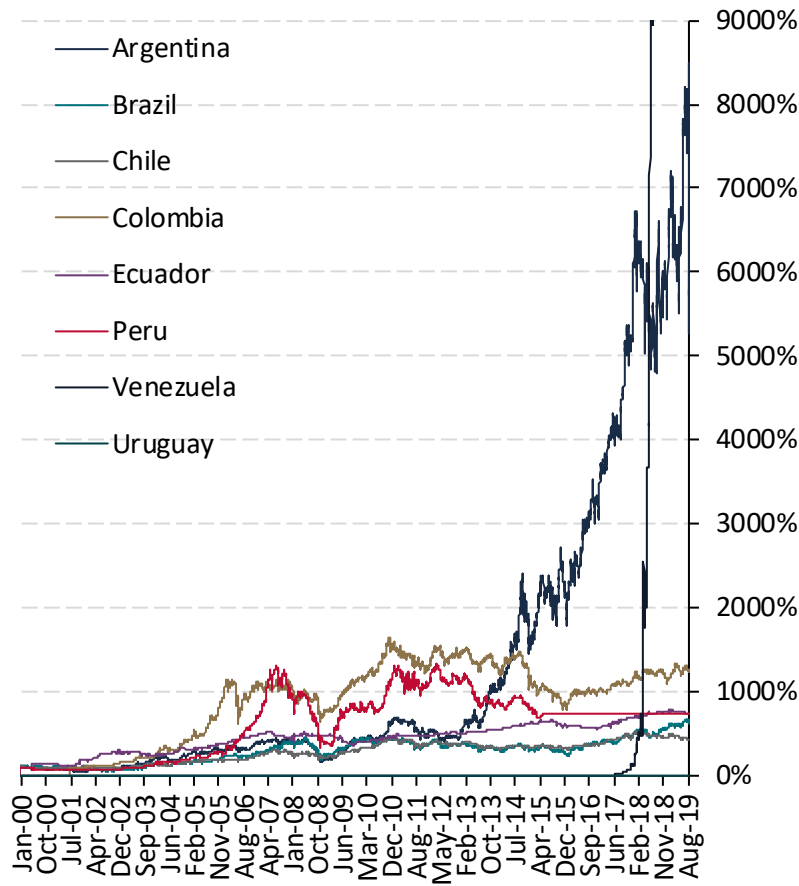
Note: Data from first quarter 2019. Guyana and Suriname did not give information in the survey.

Source: Trade Association for the Emerging Markets (EMTA)

South America Markets: Equity

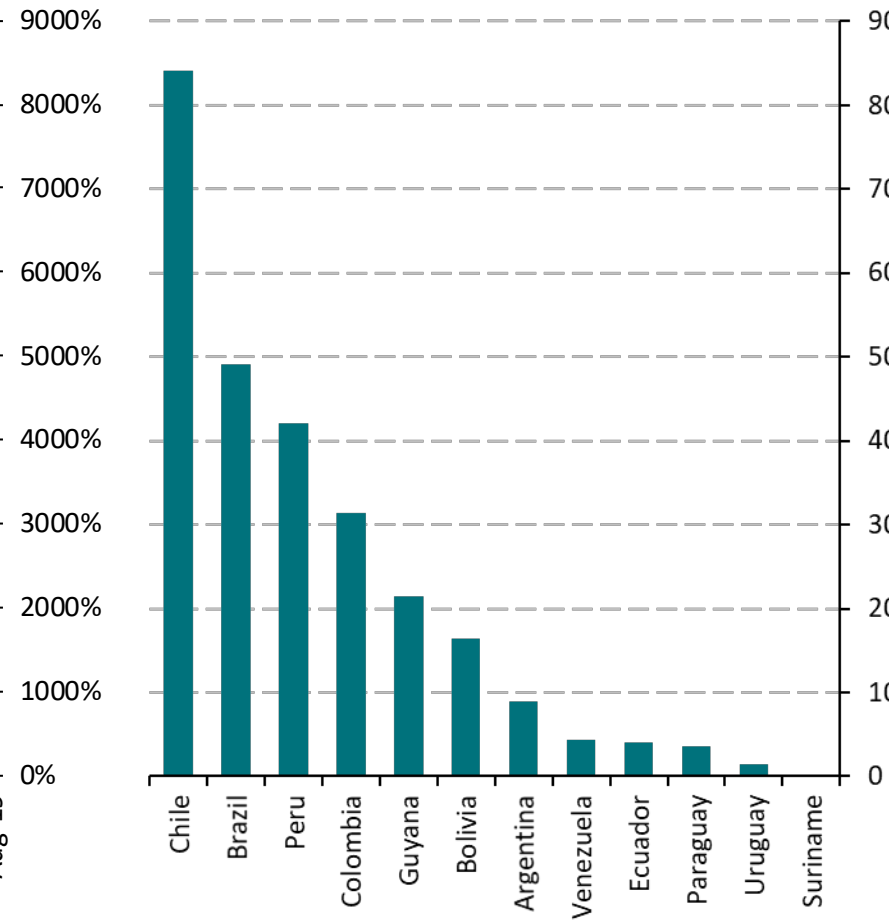
- Considering the market capitalizations as a measure of size for a stock exchange, Chilean and Brazilian stock exchange are the biggest in the region.

Stock Exchange Index Percentage



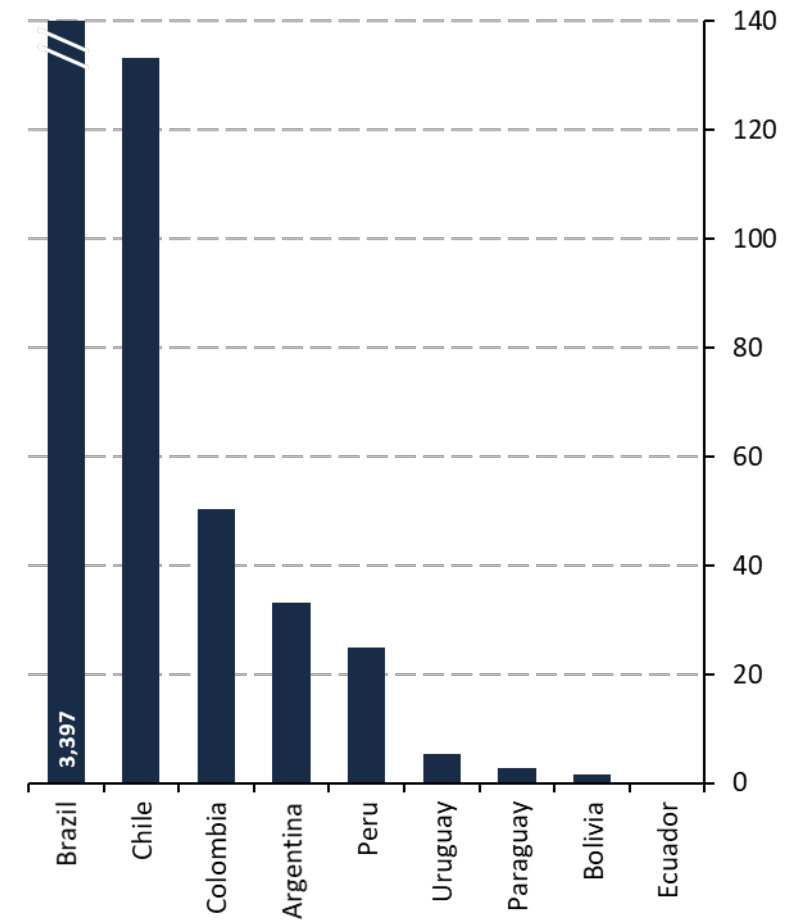
Note: Venezuela's last index is 4396584%.
Source: Bloomberg.

Exchange Market Capitalization as Percentage of GDP Percentage



Source: World Bank.

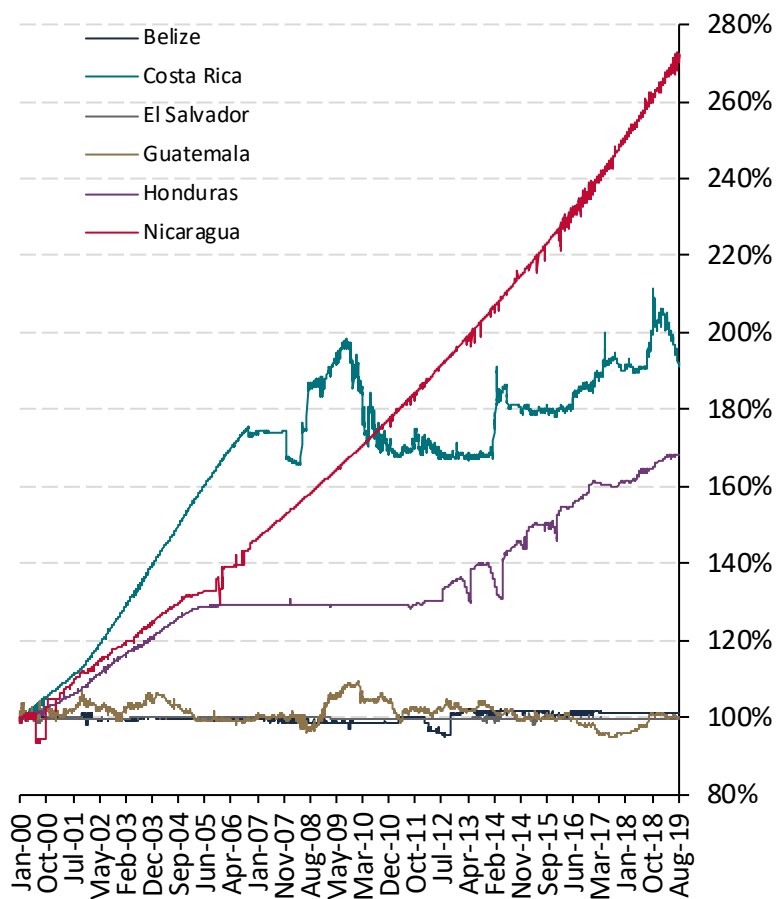
Daily Average of Volume Traded in Stock Exchanges Millions of dollars









Note: 2018 daily average.
Source: Stock Exchanges and Bloomberg.

Central America Markets: Foreign Exchange

Foreign Exchange Index
Percentage



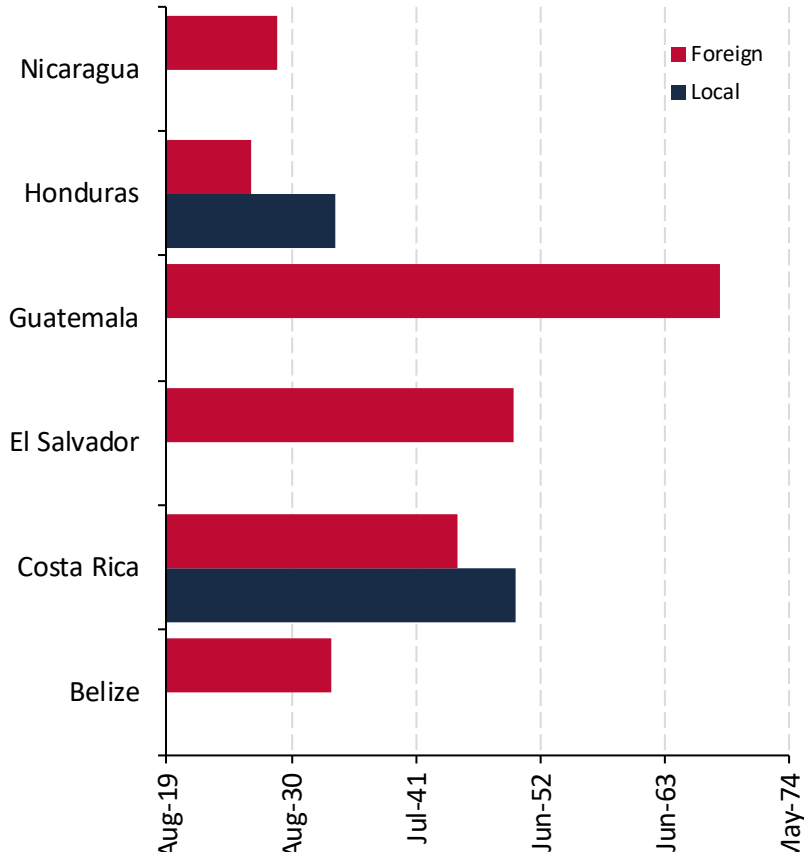
Source: Bloomberg.

Flag	Country	Free floating	Free convertibility	Capital control	CLS member	24/7 trading activity	Market derivative
	Belize	✗	✓	✓	✗	✓	✗
	Costa Rica	✗	✓	✗	✗	✓	✓
	El Salvador	✗	✗	✗	✗	✓	✓
	Guatemala	✗	✗	✗	✗	✓	✓
	Honduras	✗	✗	✓	✗	✓	✗
	Nicaragua	✗	✓	✗	✗	✓	✗

Central America Markets: Fixed Income

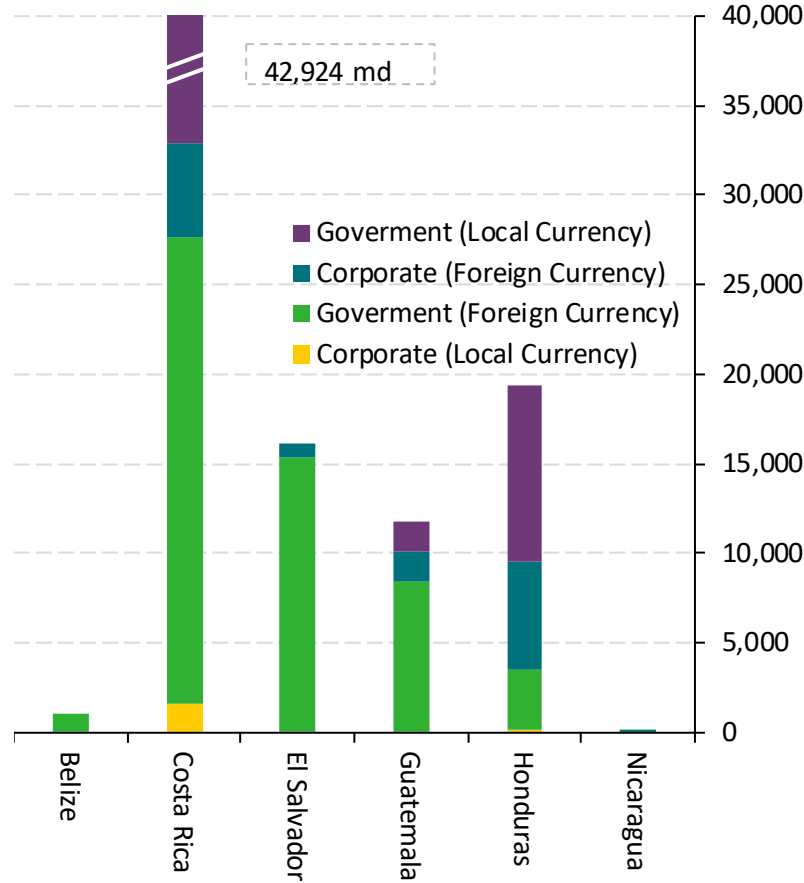
- In Central America, Costa Rica and Guatemala are countries with longest maturities in local and foreign currency bonds, respectively. While Costa Rica outstanding debt is the highest in the region.

Longest maturity date in local and foreign currency bonds
Years



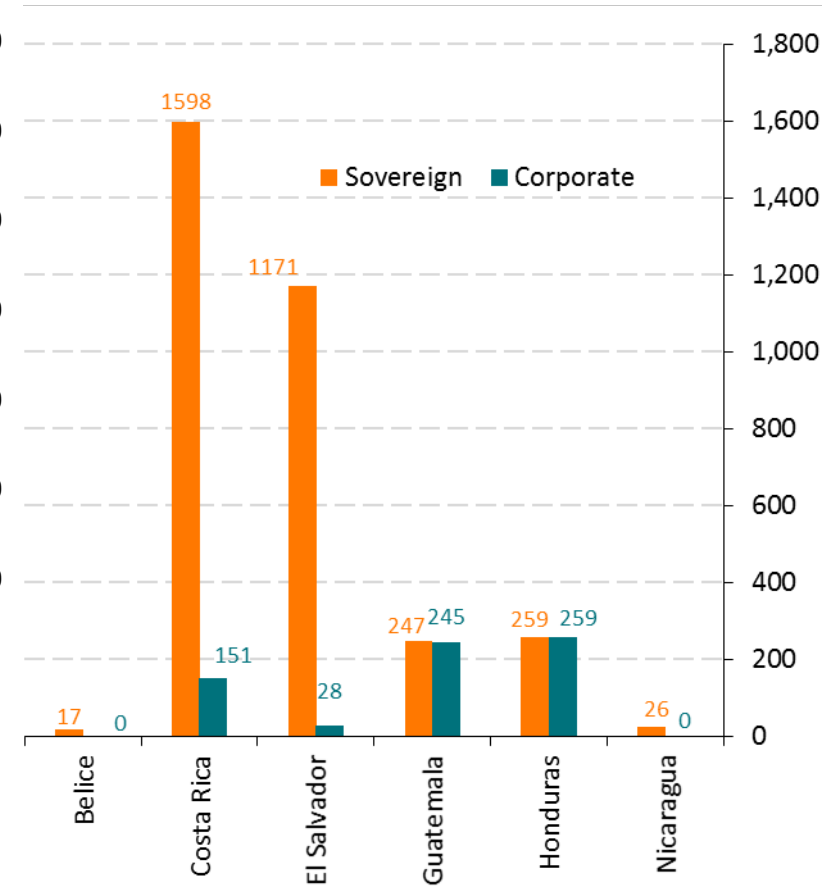
Source: Bloomberg.

Central America Markets Outstanding Debt
Millions of Dollars



Source: Bloomberg.

Debt Trading Volume Survey
Millions of dollar



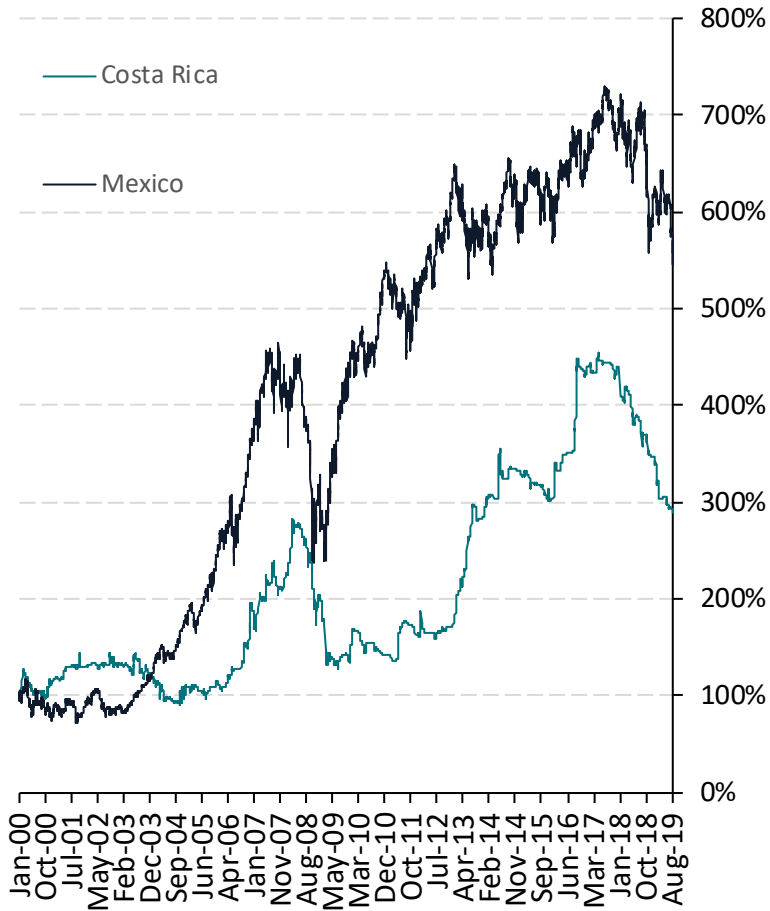
Note: Data from first quarter 2019.

Source: Trade Association for the Emerging Markets (EMTA)

Central America Markets: Equity

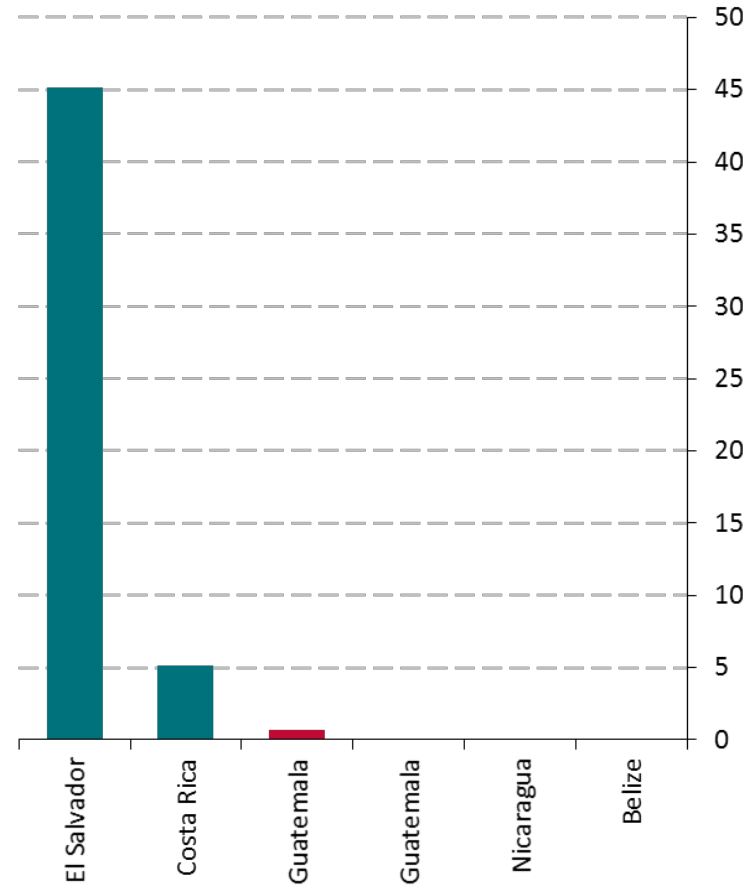
- Considering the market capitalizations as a measure of size for a stock exchange, El Salvador and Honduras stock exchange are the biggest in the region.

Stock Exchange Index Percentage



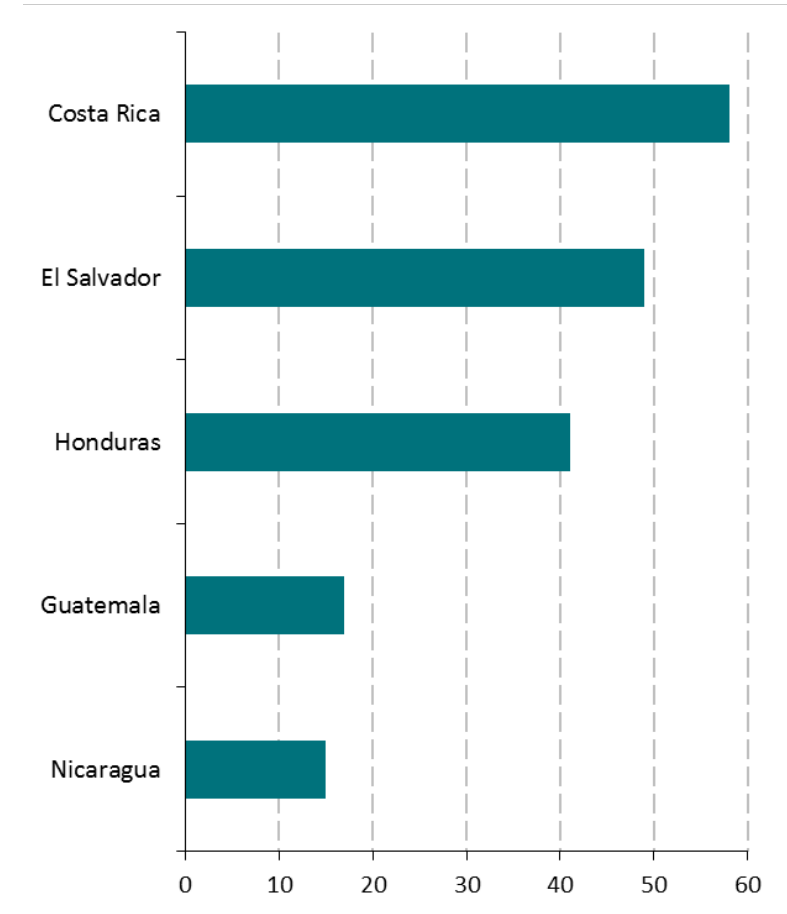
Source: Bloomberg.

Exchange Market Capitalization as Percentage of GDP Percentage



Source: World Bank.

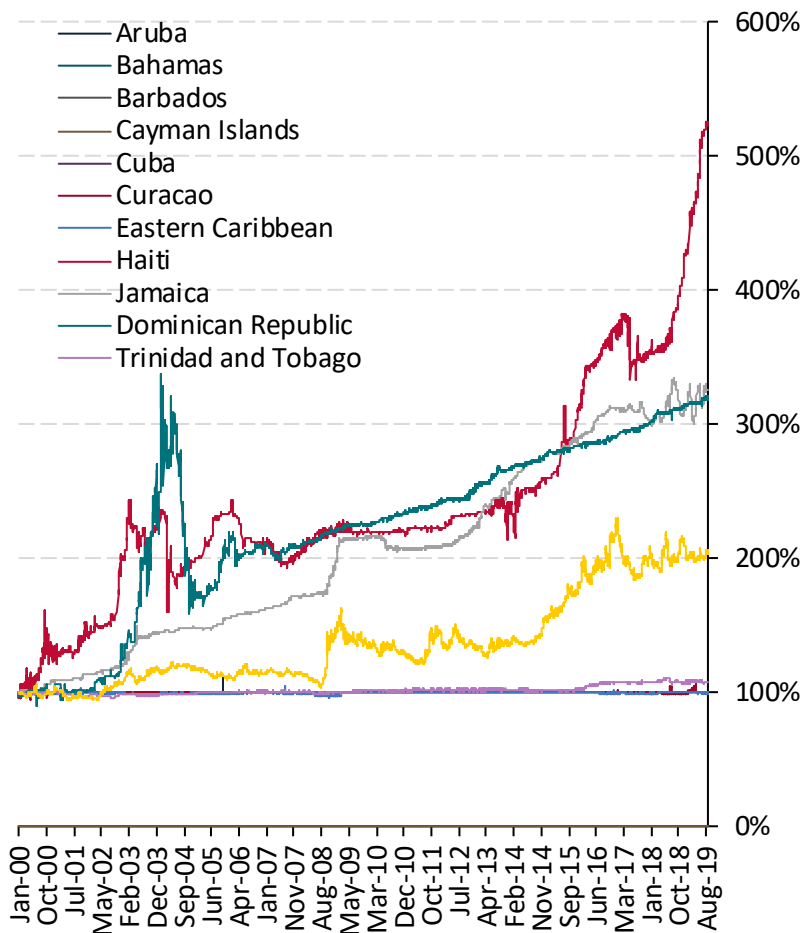
Number of listed companies by country Companies



Source: Stock Exchanges and Bloomberg.


Caribbean Markets: Foreign Exchange

Foreign Exchange Index
Percentage



Source: Bloomberg.

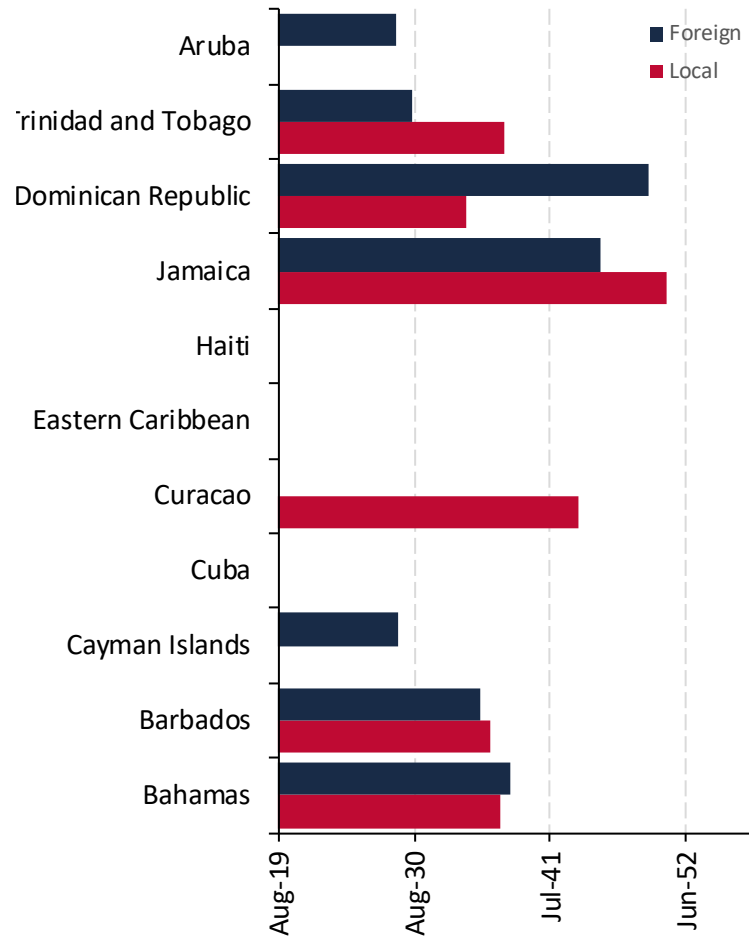
Foreign Exchange Information

Flag	Country	Free floating	Free convertibility	Capital control	CLS member	24/7 trading activity	Market derivative
	Aruba	✗	✓	✗	✗	✓	✗
	Bahamas	✗	✗	✓	✗	✓	✗
	Barbados	✗	✗	✗	✗	✓	✗
	Cayman Islands	✗	✓	✗	✗	✓	✗
	Cuba	✗	✗	✓	✗	✓	✗
	Curacao	✗	✗	✗	✗	✓	✗
	Eastern Caribbean	✗	✗	✗	✗	✓	✗
	Haiti	✓	✗	✗	✗	✓	✗
	Jamaica	✓	✗	✗	✗	✓	✓
	Dominican Republic	✓	✗	✗	✗	✓	✓
	Trinidad and Tobago	✗	✗	✗	✗	✓	✗

Caribbean Markets: Fixed Income

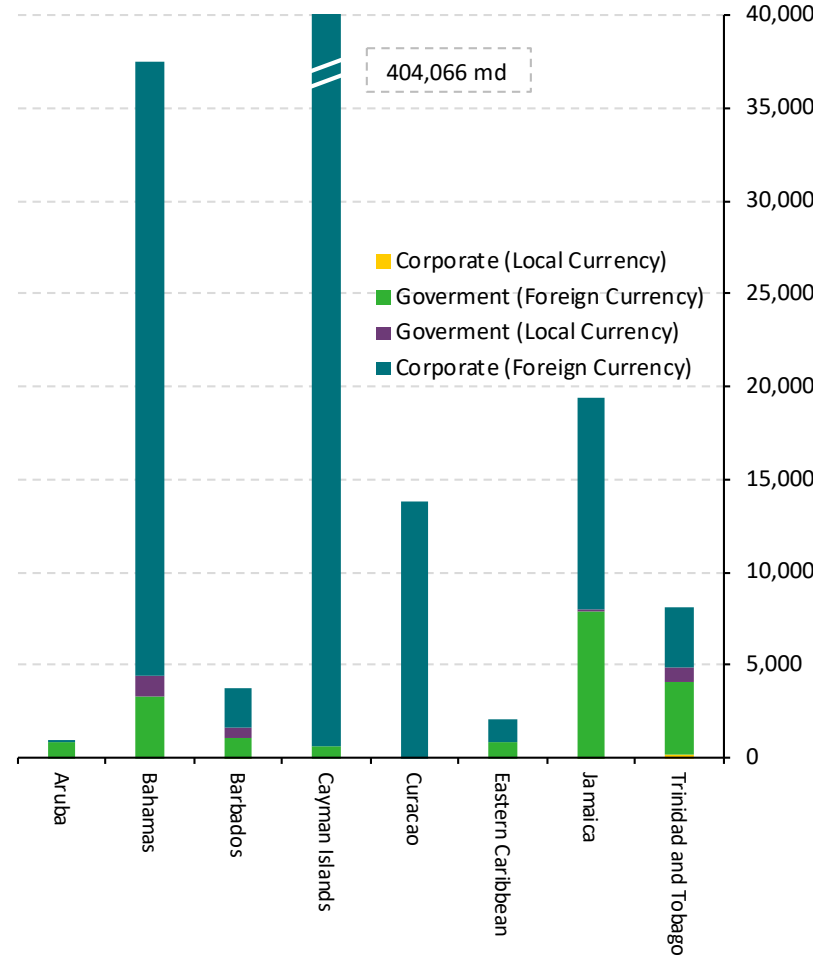
- In Caribe, Jamaica and Dominican Republic are countries with longest maturities in local and foreign currency bonds, respectively. While Cayman Islands outstanding debt is the highest in the region.

Longest maturity date in local and foreign currency bonds
Years



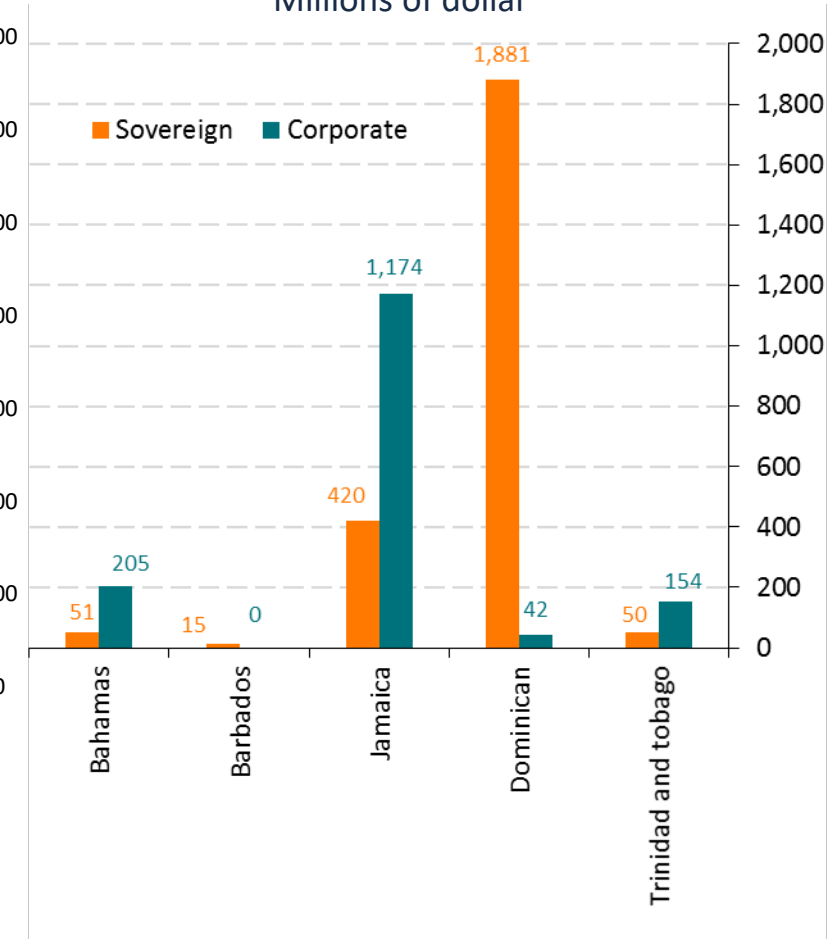
Source: Bloomberg.

Caribbean Markets Outstanding Debt
Millions of Dollars



Source: Bloomberg.

Debt Trading Volume Survey
Millions of dollar

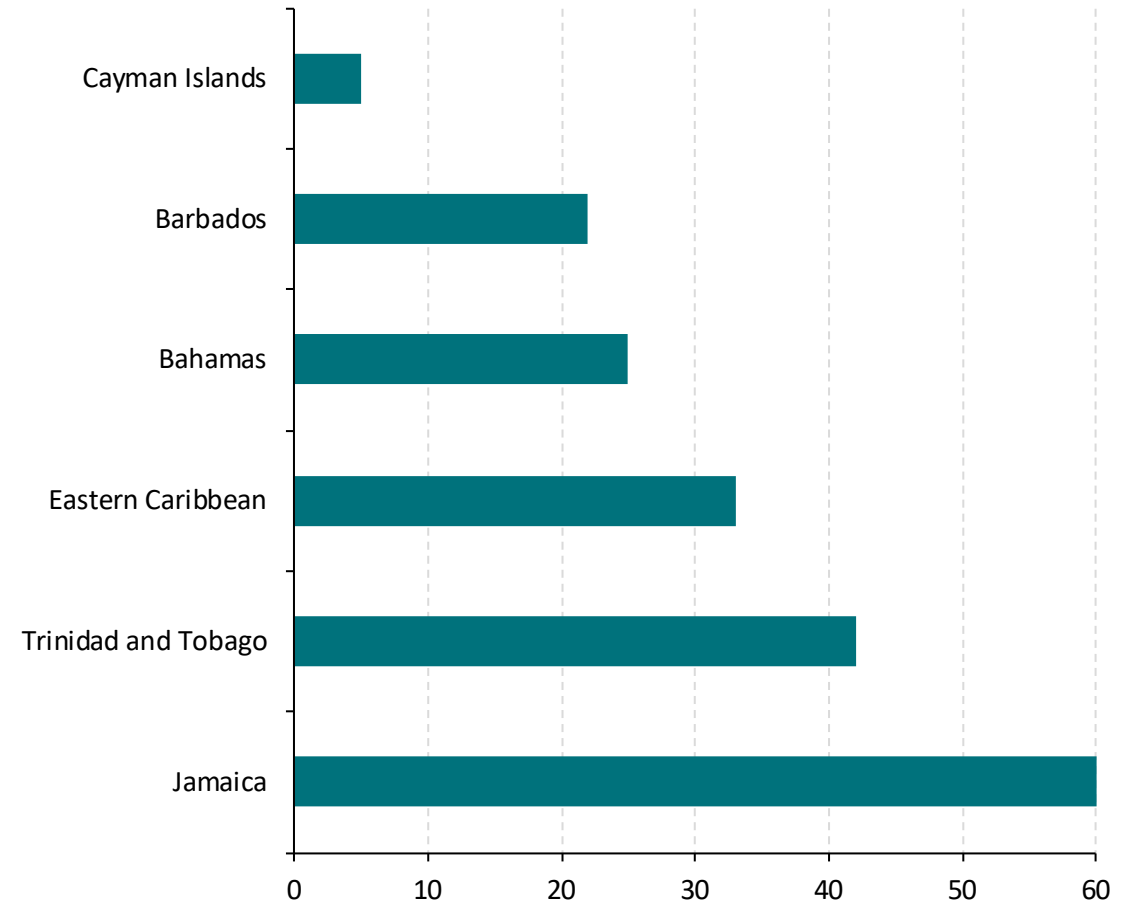


Note: Data from 2019 first quarter. Aruba, Cayman Islands, Curacao, Eastern Caribbean, Haiti and Cuba did not give information in the survey.
Source: Trade Association for the Emerging Markets (EMTA)

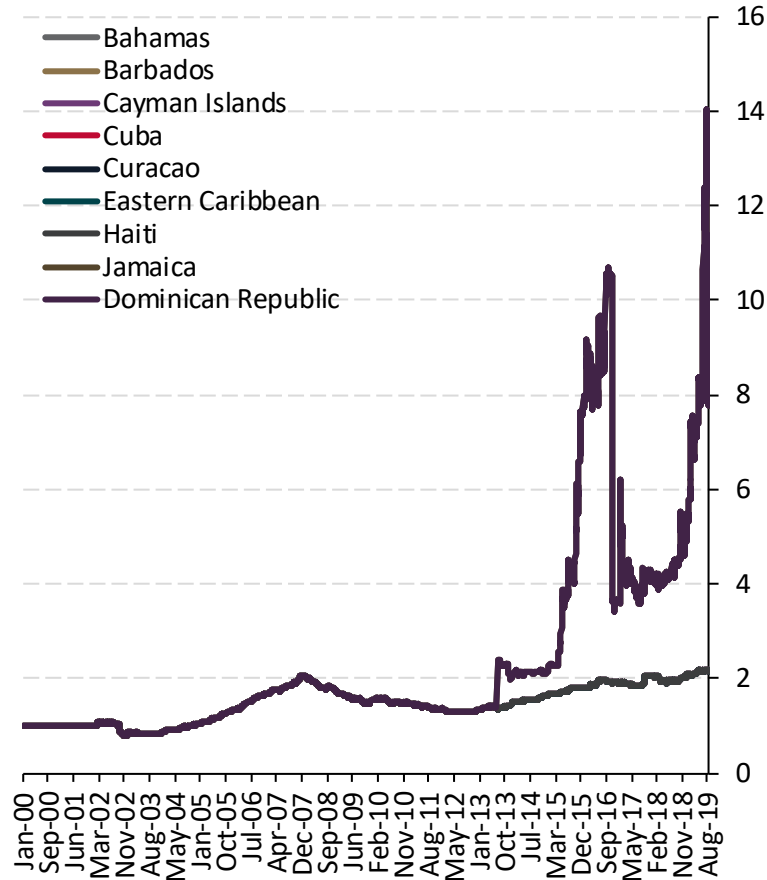
Caribbean Markets: Equity

- Jamaican and Trinidad and Tobago stock markets are those with highest listed companies in Caribbean region.

Number of listed companies by country
Companies



Historical Stock Exchange Index
Percentage



Source: Bloomberg.

Source: Stock Markets.

Mexico: Fixed Income Market

- The Mexican fixed income market has showed a significant improvement and development over the last two decades. During this time, the market evolved from being closed and with few types of securities, to one of the most liquid and deep markets in the emerging and developed economies with several instruments available for trade.

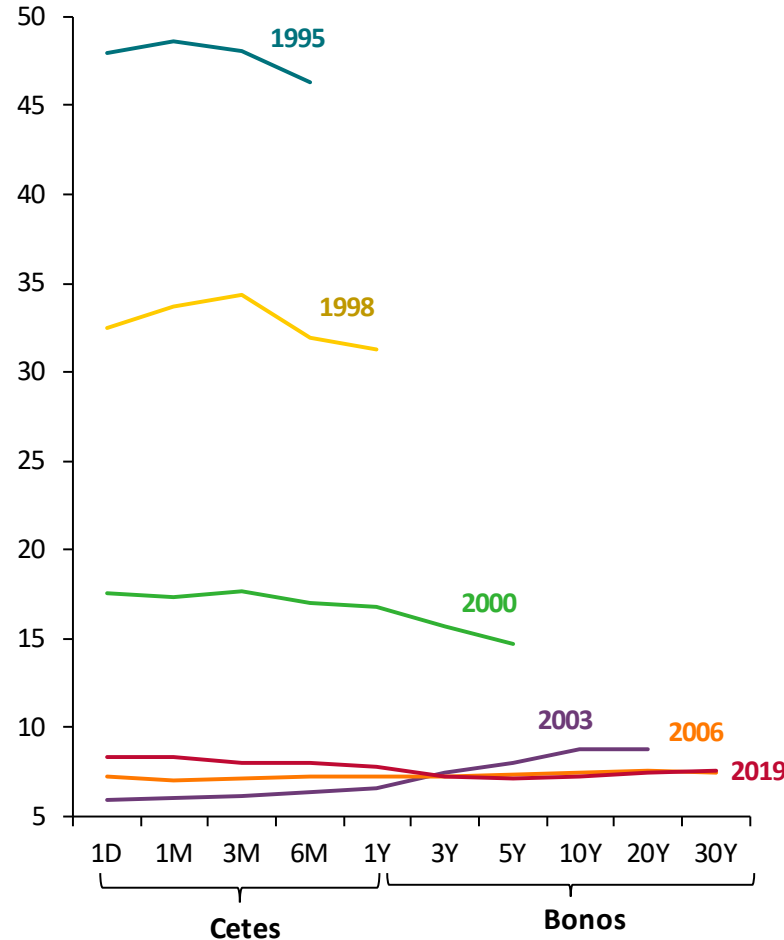
Sovereign Debt Securities Characteristics

Security	Face Value	Maturities	Interest payments	Interest rate	First issue
CETES Federal Treasury Certificates	10 pesos	28 and 91 days, six months and one year	Zero-coupon bonds	Discount rate	January 19, 1978
BONDES D Federal Government Development Bonds	100 pesos	1, 3 and 5 years	28 days	Overnight effective rate, compounded daily during the interest rate period	August 17, 2006
BONOS Federal Government Development Bonds with fixed interest rate		3, 5, 10, 20 and 30 years	182 days	Coupon rate is set by the Federal Government before the issuance	January 27, 2000
UDIBONOS Federal Government Development Bonds denominated in inflation-indexed investment units (UDIS)	100 UDIS	3, 10 and 30 years			May 30, 1996
IPAB SECURITIES Savings Protection Bonds with monthly/quarterly/semiannual interest payment and additional interest rate reference or protected against inflation	100 pesos	3, 5 and 7 years	28, 91 and 182 days	The highest between Government overnight effective rate (or change in the UDI) during the interest rate period and 28/91/182-day CETES	April 29, 2004

Source: Central Bank of Mexico.

Evolution of Mexican yield curve

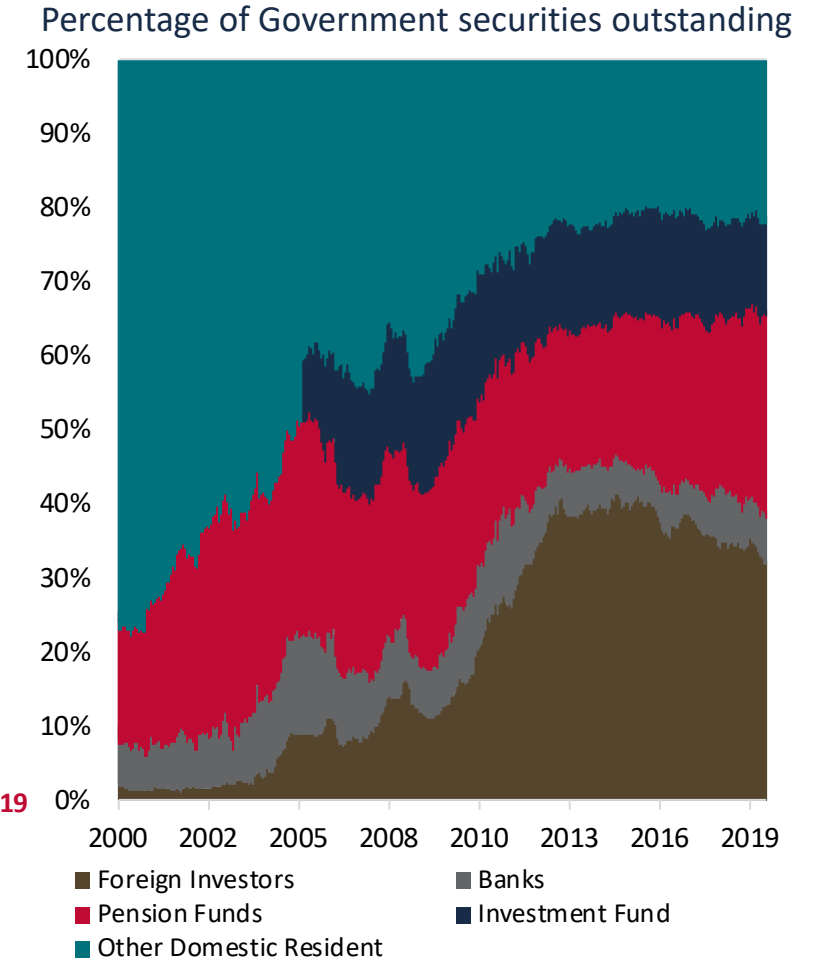
Percentage



Source: Central Bank of Mexico.

Investors Position in Government Securities denominated in Mexican Pesos

Percentage of Government securities outstanding

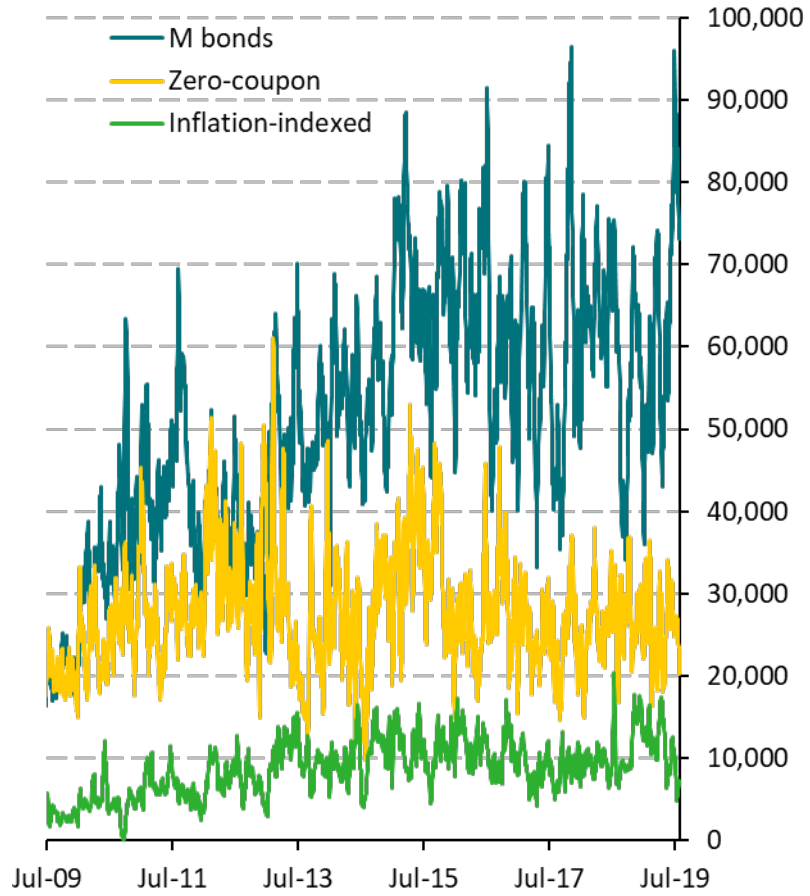


Source: Central Bank of Mexico.

Mexico: Fixed Income Market

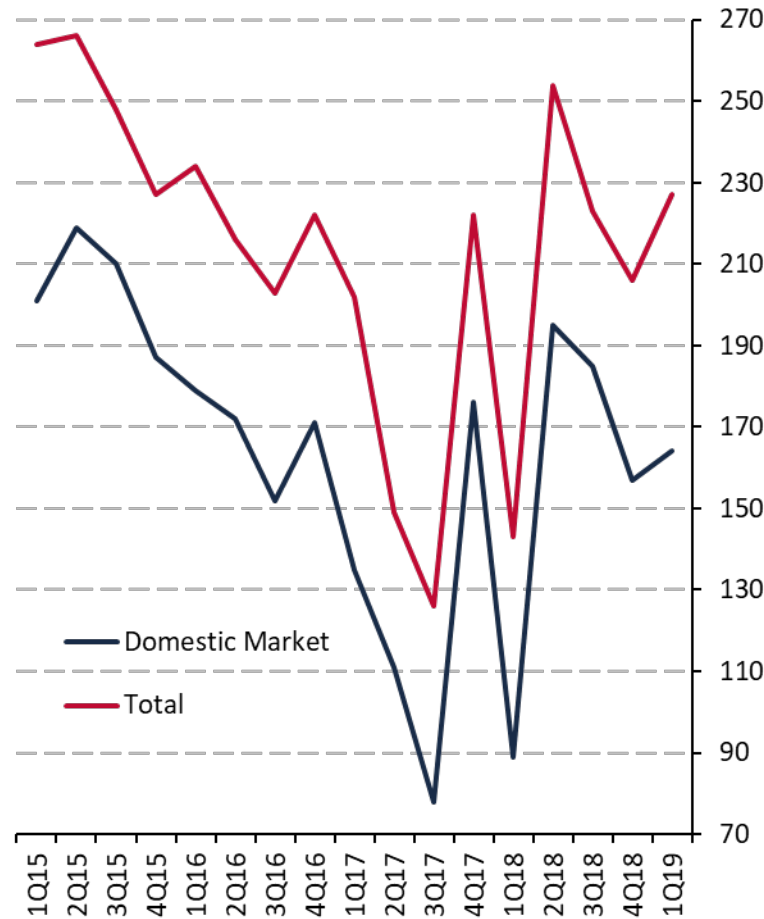
- The consequences of the aforementioned market development the trading conditions in the market has improved.

Daily Trading Volume in Sovereign Debt
Millions of pesos (10-day moving average)



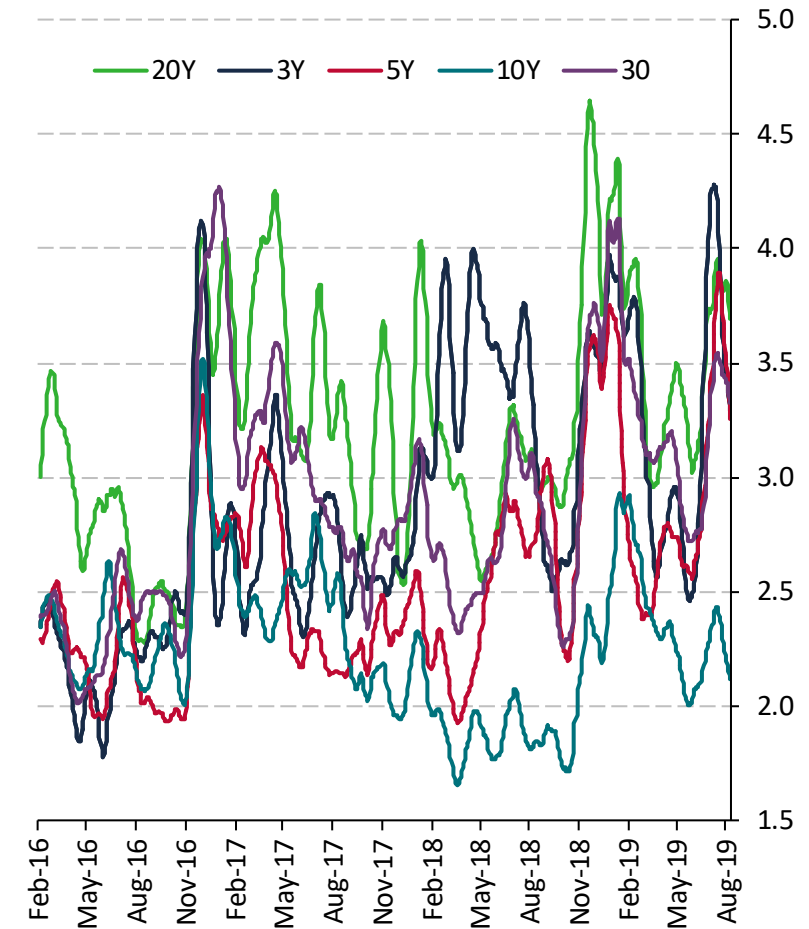
Source: Central Bank of Mexico.

Trading Volume in Mexican Debt
Billions of dollars



Source: Trade Association for the Emerging Markets (EMTA).

MBonos bid-ask spread for selected maturities
Basis points (40 days moving average)



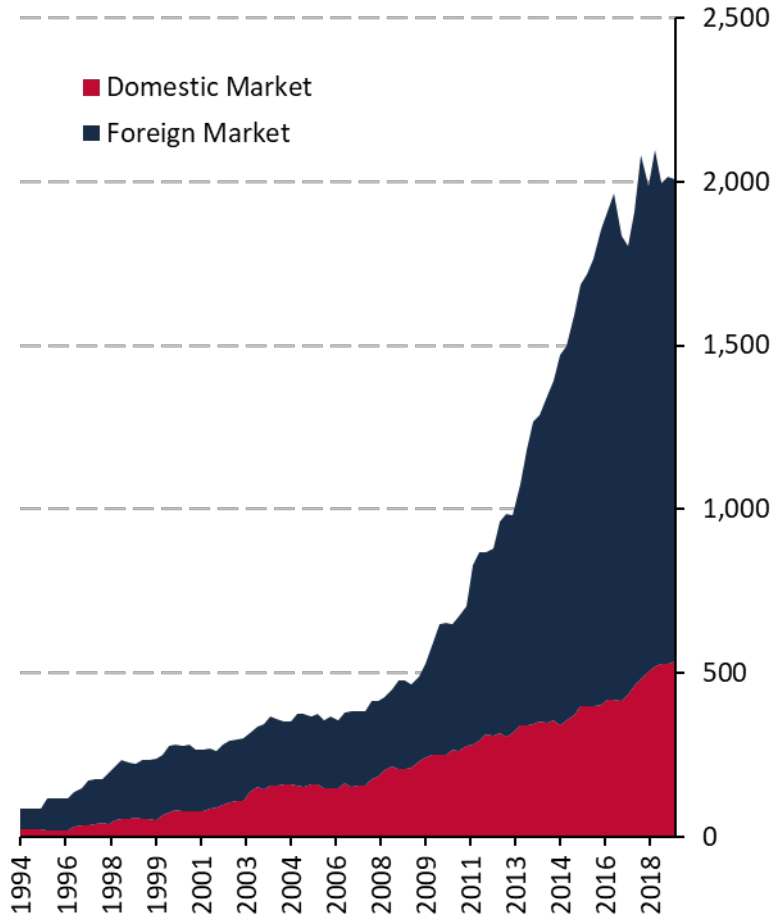
Source: Interbank brokerage house.

Mexico: Fixed Income Market

- The development of the government securities market has positive consequences for other fixed income markets, such as the corporate bond market.

Mexican Non-Financial Corporations Outstanding Debt by Market of Issuance

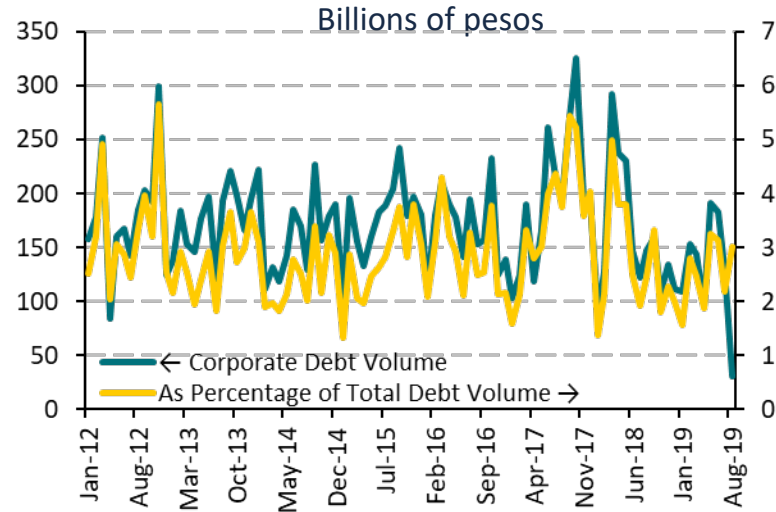
Billions of pesos



Source: Central Bank of Mexico.

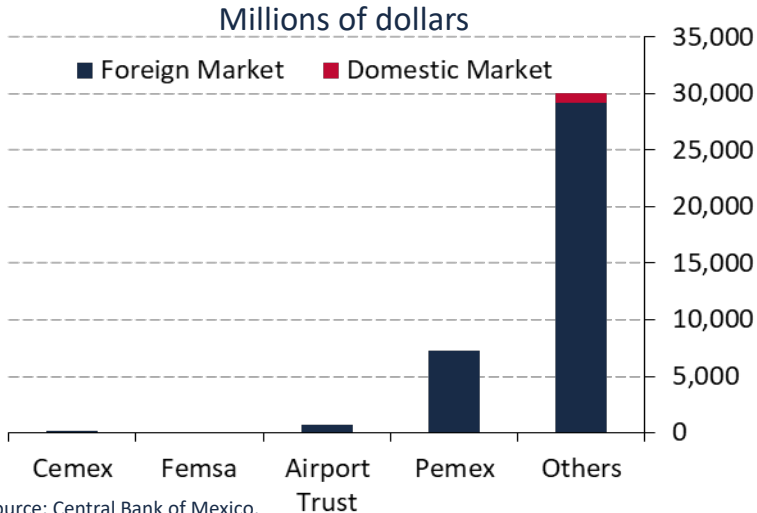
Monthly Trading Volume in Corporate Debt with Local Banks

Billions of pesos



Trading Volume in Mexican Corporations Debt at 1Q19 by Market of Issuance

Millions of dollars

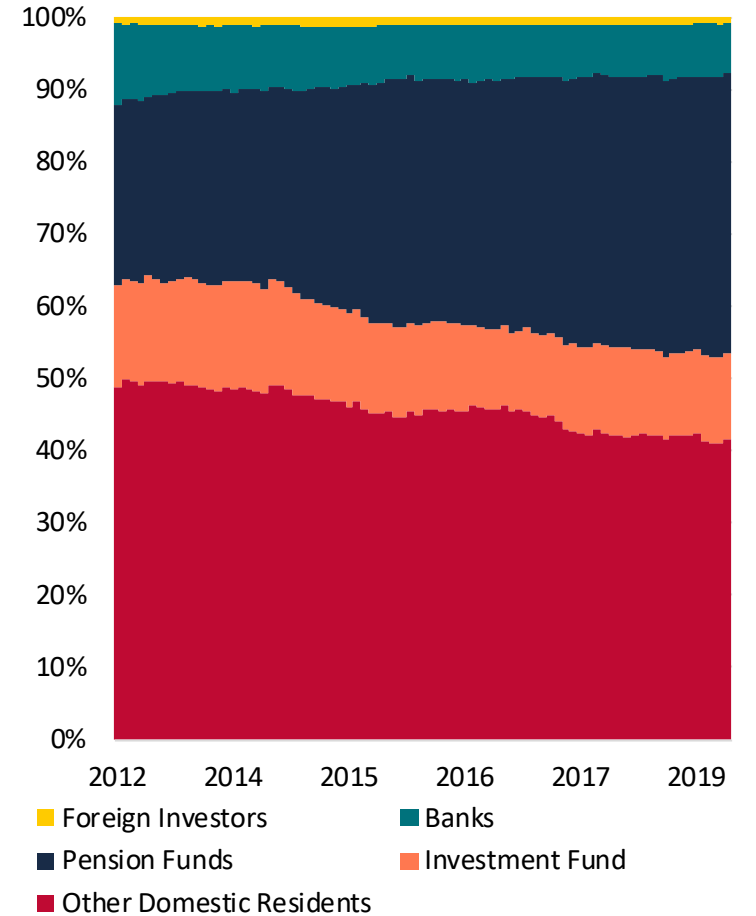


Source: Central Bank of Mexico.

Source: Trade Association for the Emerging Markets (EMTA).

Investors Position in Private Securities denominated in Mexican Pesos

Percentage of Government securities outstanding



Source: Central Bank of Mexico.

Mexico: Fixed Income Market

- As a further step to develop Mexico's debt markets and promote the liquidity of the secondary market, the Mexican Ministry of Finance established in 2000 a market-making program for government bonds. The combination of all the factors previously mentioned had important consequences regarding the relevance of Mexican securities in global fixed income markets. These measures improved substantially the depth and liquidity of the market, allowing the inclusion of local government securities in several Global Fixed Income Indexes.

Primary Dealers System in Mexico: Characteristics

Selection Criteria

Declare their interest in participating in the program

Active participation in primary and secondary markets

Market share \geq 7%

Obligations

Primary Market Participation

Commitment to participate in primary auctions.

Secondary Market Participation

Provide two-way quotes for each of the securities they are market makers of, in all their maturities.

Comply with the Code of Conduct

Comply with the Code of Conduct for the money and fixed income market.

Privileges

"Greenshoe" option

The right to buy up to an additional 20% of the Fixed-rate securities offered in the primary auction.

Securities lending facility

Borrowing privileges with the Central Bank.

Syndicated auctions

Exclusive access to syndicated auctions where they act as distributors.

Source: Central Bank of Mexico.

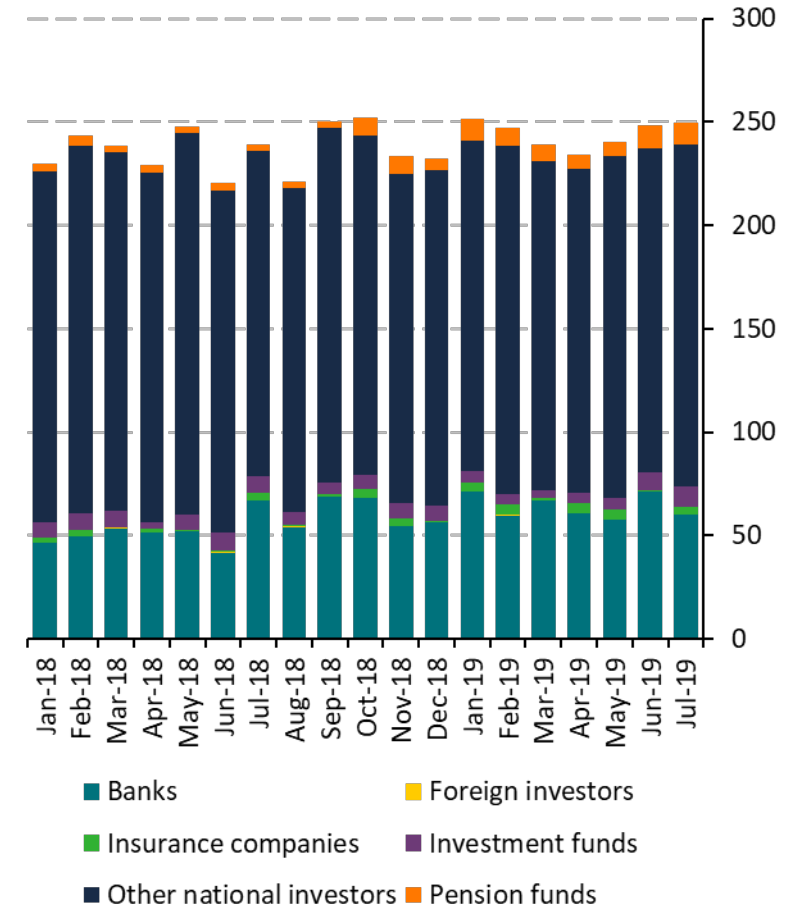
Mexican Sovereign Debt Inclusion in Global Indices

Year of inclusion	Index name
2003	Universal Government Inflation-Linked Bond Index (Barclays)
	Government Bond Index Broad (JP Morgan-GBIBroad)
2005	Government Bond Index Emerging Markets (JP Morgan-GBIEM)
	Global Aggregate Index (Lehman/Barclays)
2006	Global Government Bond Index (Merrill Lynch-GGBI)
2007	Global Government Inflation-Linked Index (Merrill Lynch -GGILI)
	Emerging Markets Government Inflation-Linked Bond Index (Barclays)
2008	Global Emerging Markets (Markit Group-GEMX)
2010	World Government Bond Index (Citi-WGBI)

Note: Mexico was the first Latin American country included in the WGBI.
Source: Mexican Ministry of Finance.

Repos Position with Local Banks by Investor in Private Securities denominated in Mexican Pesos

Billions of pesos



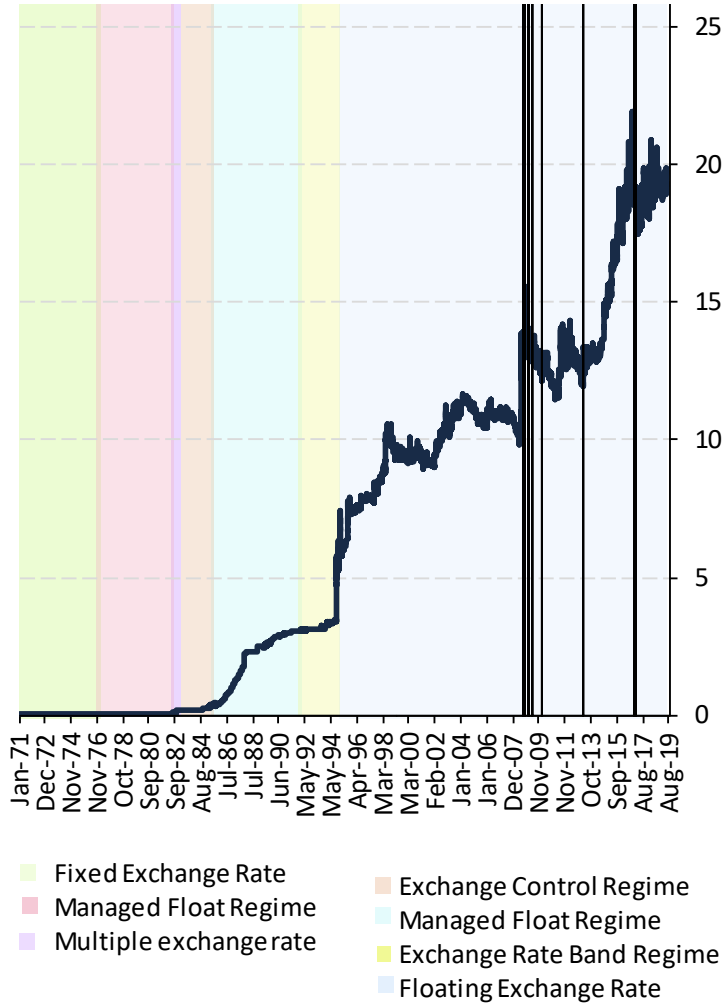
Source: Central Bank of Mexico.

Mexico: Foreign Exchange Market

- The MXN/USD market is one of the most liquid FX markets among emerging markets.

Mexican Peso Historical Events

Pesos per dollar

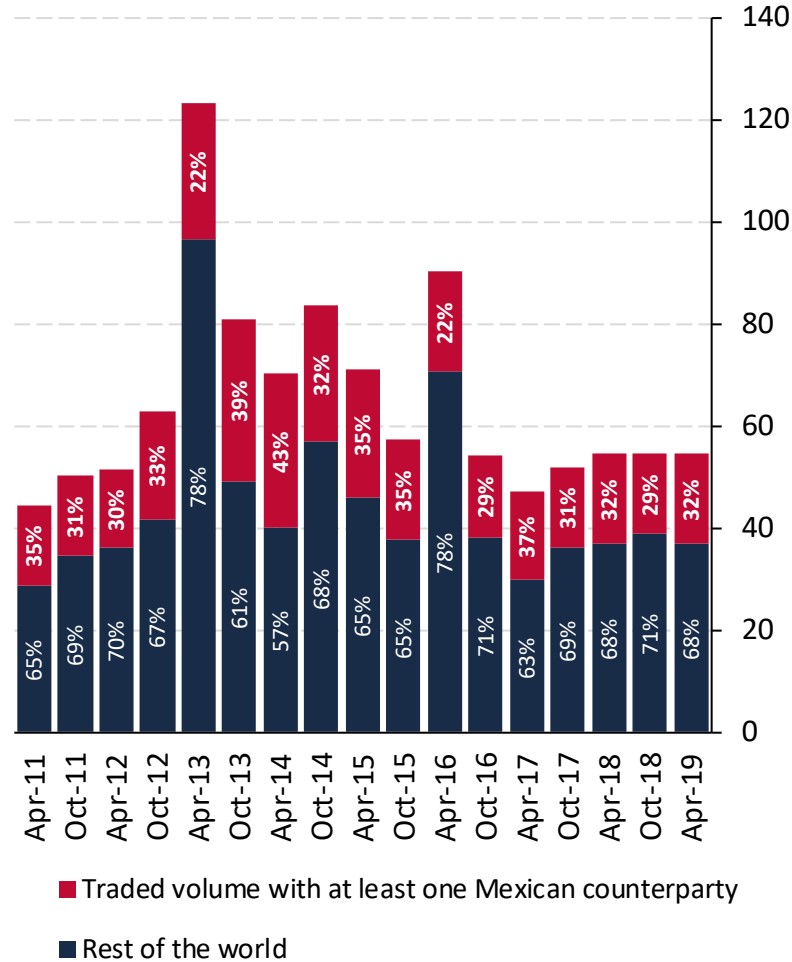


Note: Vertical lines indicate when Central Bank of Mexico sold dollars in the Fx-Market.

Source: Central Bank of Mexico.

Total spot volume traded in USD/MXN

Daily averages, million of US dollars

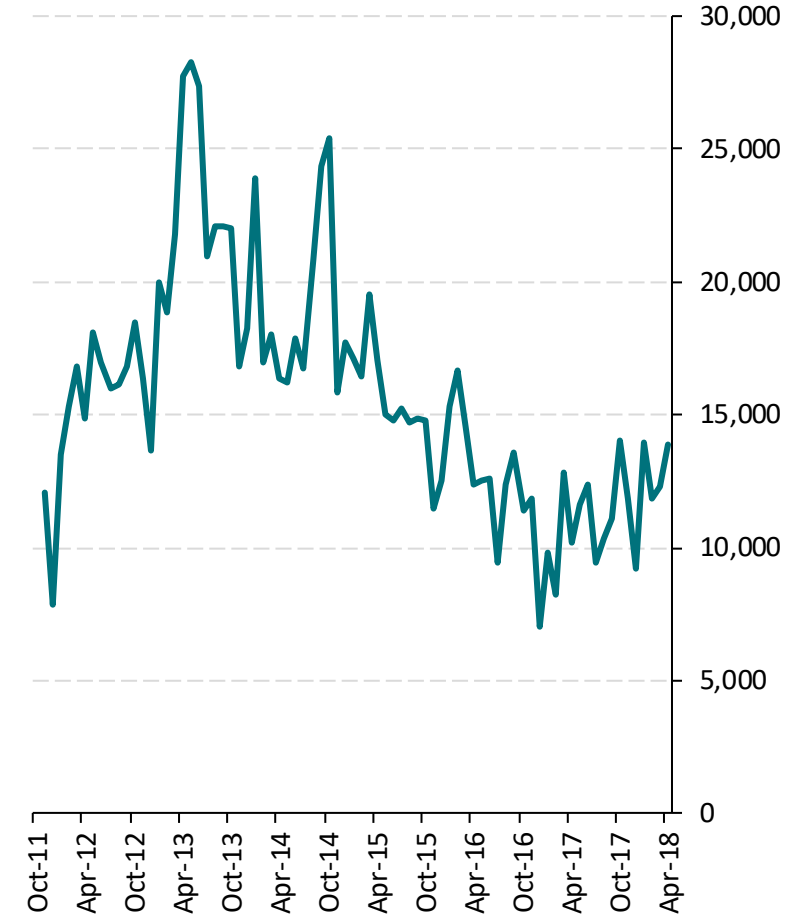


Note: For April 2013 and April 2016 data is sourced from the BIS "Triennial Central Bank Survey of foreign exchange and OTC derivatives markets in 2016". Other data is estimated by Bank of Mexico using information from the semiannual Federal Reserve FX Volume Survey and the London Foreign Exchange Joint Standing Committee (FXJSC) FX Turnover Survey without the intersection of these markets to avoid double counting.

Source: BIS "Triennial Central Bank Survey of foreign exchange and OTC derivatives markets in 2016", Federal Reserve FX Volume Survey, London Foreign Exchange Joint Standing Committee (FXJSC) FX Turnover Survey and Bank of Mexico.

Mexican peso turnover on CLS (Continuous Linked Settlement)

Millions of US dollars

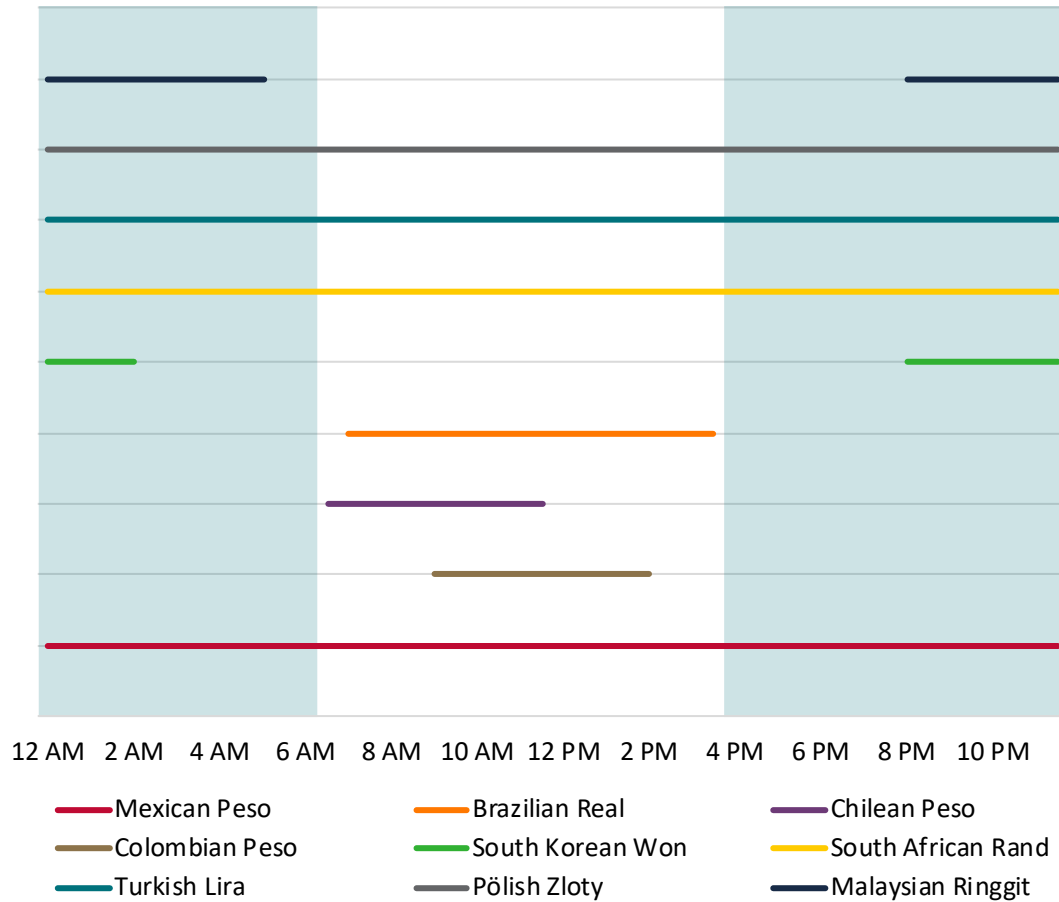


Source: CLS

Mexico: Foreign Exchange Market

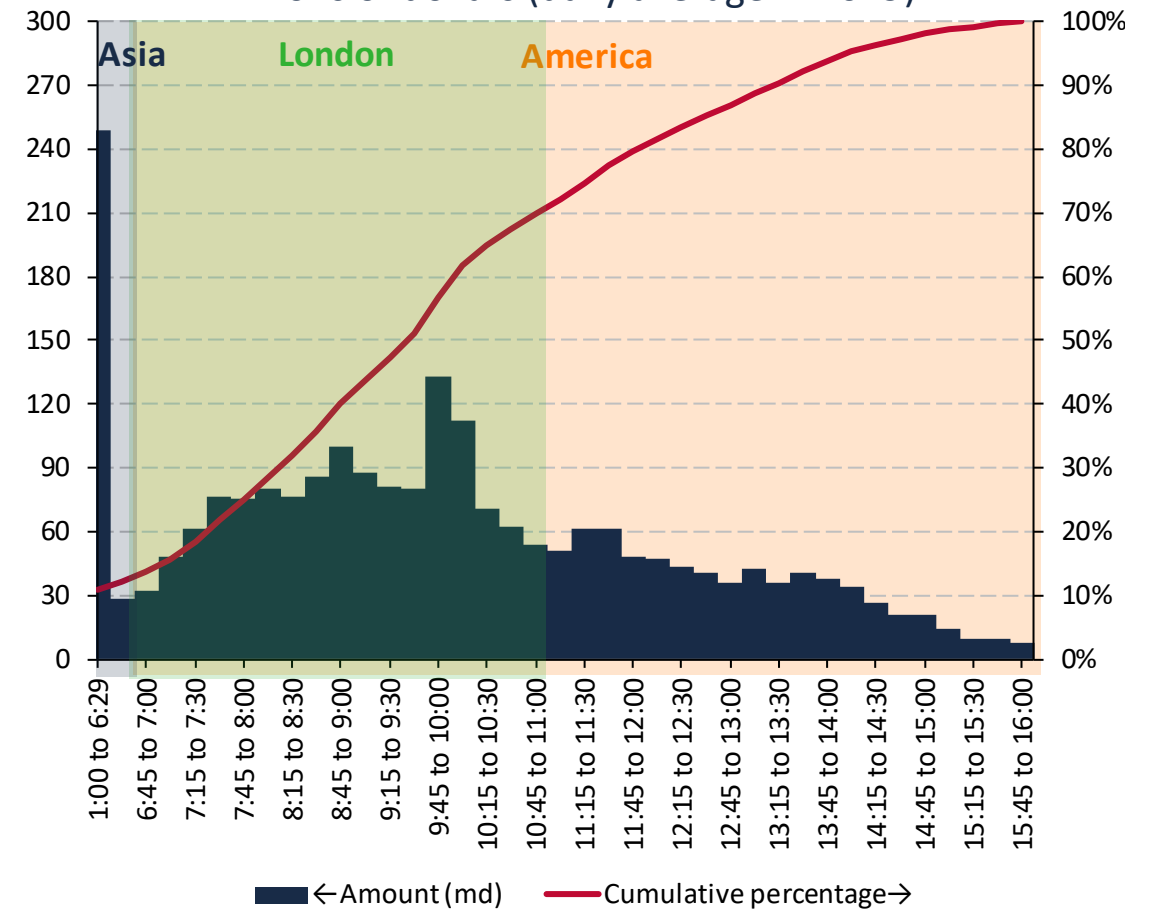
- The Mexican peso is the most traded Latin American currency and second most amongst emerging markets after the Chinese renminbi; and it is traded 24 hours.

Trading hours for emerging markets



Source: Reuters.

Distribution of MXN daily traded volume through Refinitiv Millions of dollars (daily average in 2019)



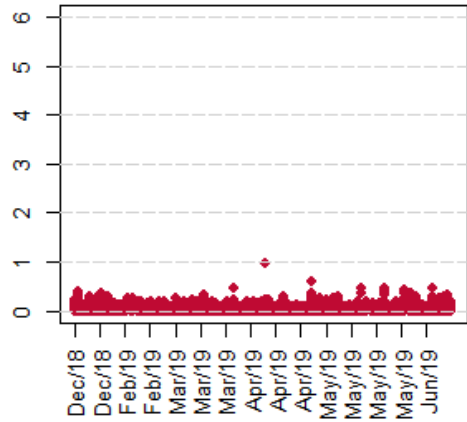
Note: The graph shows the average volume during 2019.

Source: Refinitiv and Central Bank of Mexico.

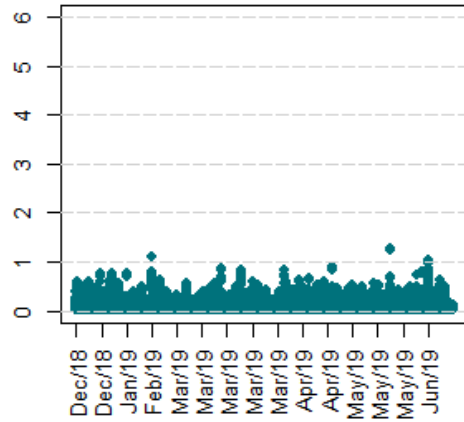
Mexico: Foreign Exchange Market

Bid-Ask spread

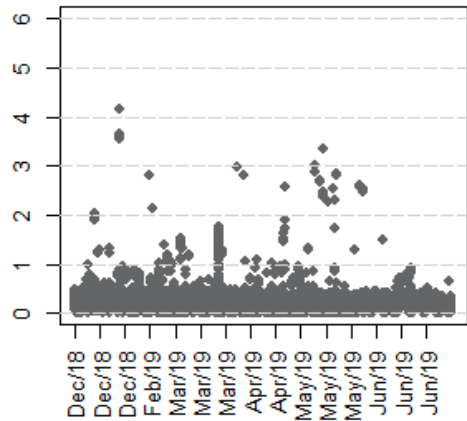
Mexican peso



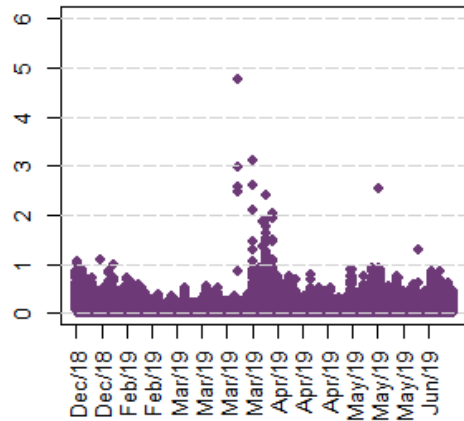
South African Rand



Polish Zloty

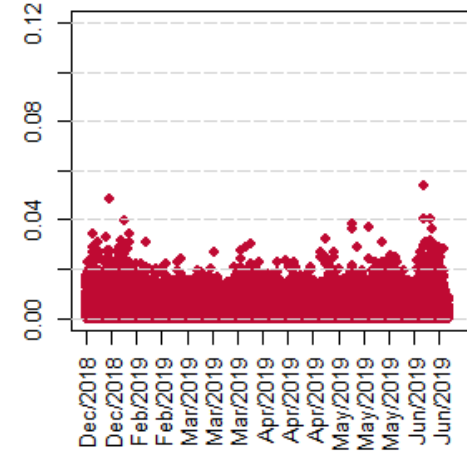


Turkish Lira

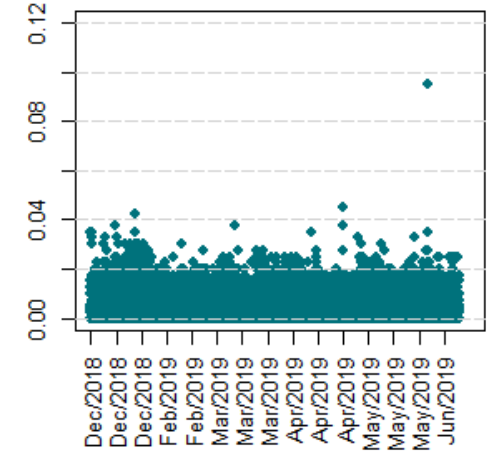


Market depth

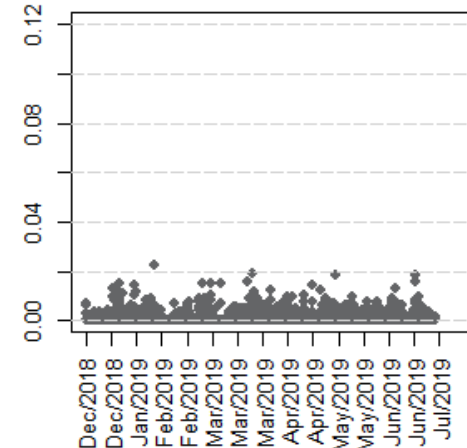
Mexican peso



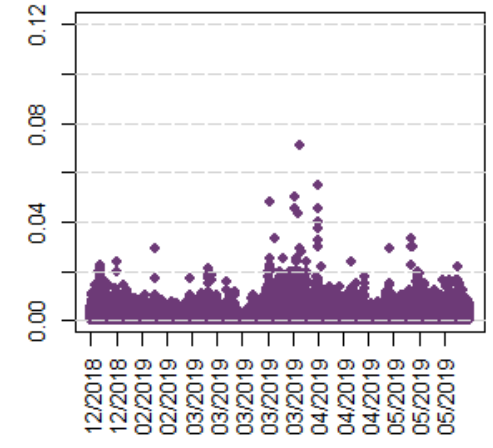
South African Rand



Polish Zloty



Turkish Lira



Source: CentralBank of Mexico calculations with information from Refinitiv.

Mexico: Foreign Exchange Market

Mexican FX-spot market: Achievements and Challenges



Source: Central Bank of Mexico.

Mexico: Equity Market

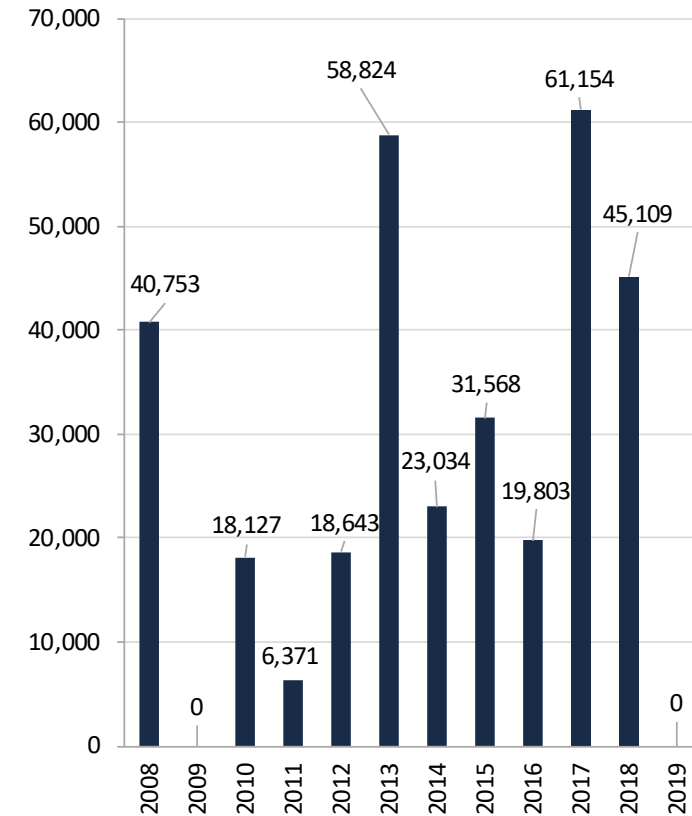
- The Mexican equity market is composed by two securities exchange market, “Bolsa Mexicana de Valores” (BMV) and “Bolsa Institucional de Valores” (BIVA); totalizing 144 companies listed. Other securities such as CKDs, SPACs, FIBRAs, and CERPIEs are trades in the Mexican equity market.

Equity Securities Characteristics

Instrument	Description	Purpose	First issue year
Development Equity Certificates (CKDs)	Fiduciary securities that provides sources of capital for Mexican companies or business project in general located in Mexico.	Support economic growth with mainly capital from Mexican mandatory pension funds (Siefores). Provide a new financing alternative, strengthen the Stock Market and allow dynamism to economic sectors.	2009
Special purpose acquisition company (SPAC)	Publicly traded buyout companies that raise funds through an IPO with the goal of later completing acquisitions (18 to 24 months).	Attract investment to the commercial real estate sector through an investment vehicle.	2017
Real Estate and Investment Trust (FIBRAs)	An investment trust dedicated to the acquisition and development of real estate in Mexico held for leasing.	Encourage participation through investment in energy and infrastructure.	2011
Fiduciary Investment Project Securitization Certificates (CERPIS)	Certificates issued to finance investment as well as to the investment in shares, social parts or to the financing of societies, either directly or through investment vehicles. Can only be acquired by qualified institutional investors.		2015

Initial Public Offering in Equity Market

Millions of pesos



Number of Issues											
2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
3	0	4	2	3	8	4	5	5	6	7	0

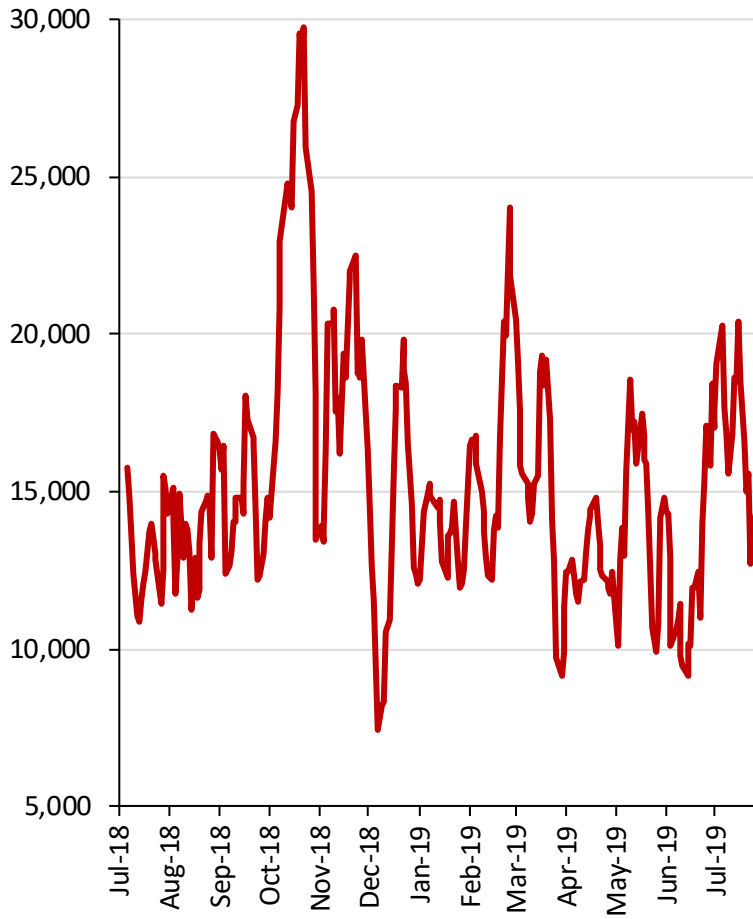
Source: Bloomberg

Source: Central Bank of Mexico, National Banking and Securities Commission, National Commission for the Retirement Savings System.

Mexico: Equity Market

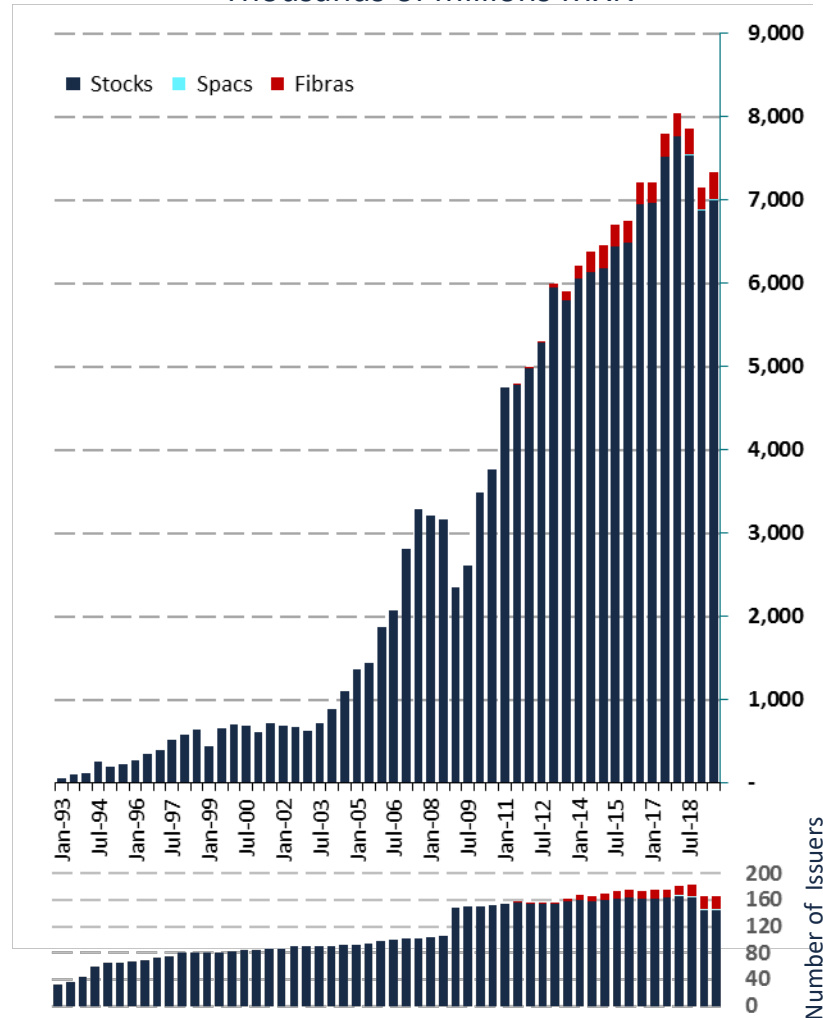
- Mexican outstanding equity is composed mainly by stocks and Fibras.

Traded Volume Mexican Stock Exchange
Thousands of millions MXN



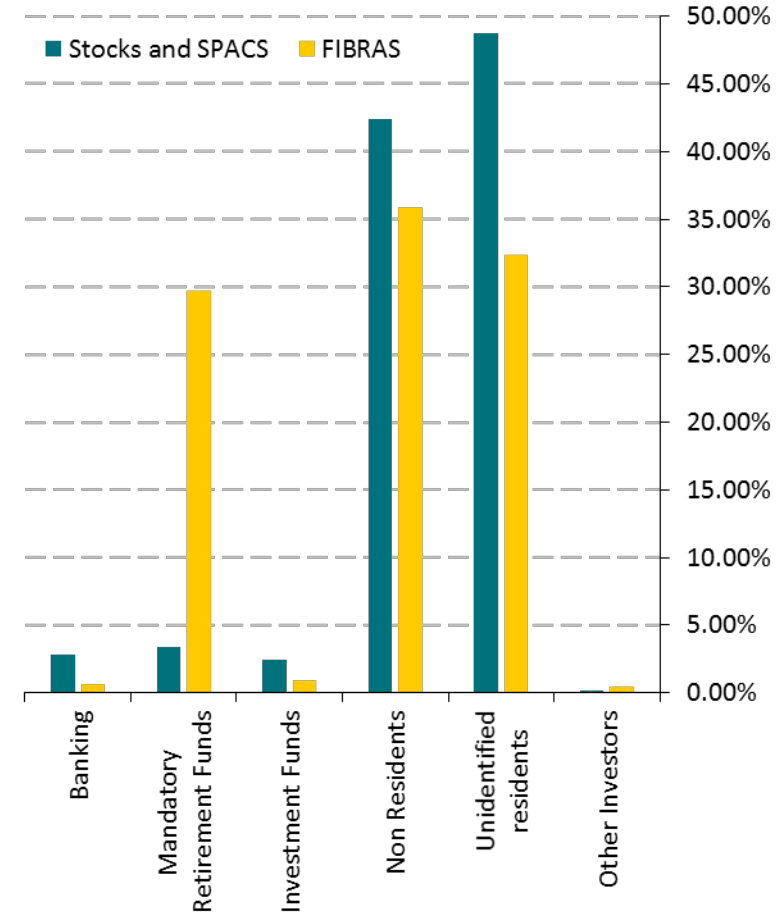
Source: Central Bank of Mexico.

Outstanding Equity by security
Thousands of millions MXN



Source: Central Bank of Mexico, Bloomberg, Price vendors

Stocks, SPACS and FIBRAS holdings by type of investor as a percentage of the total
Percentage

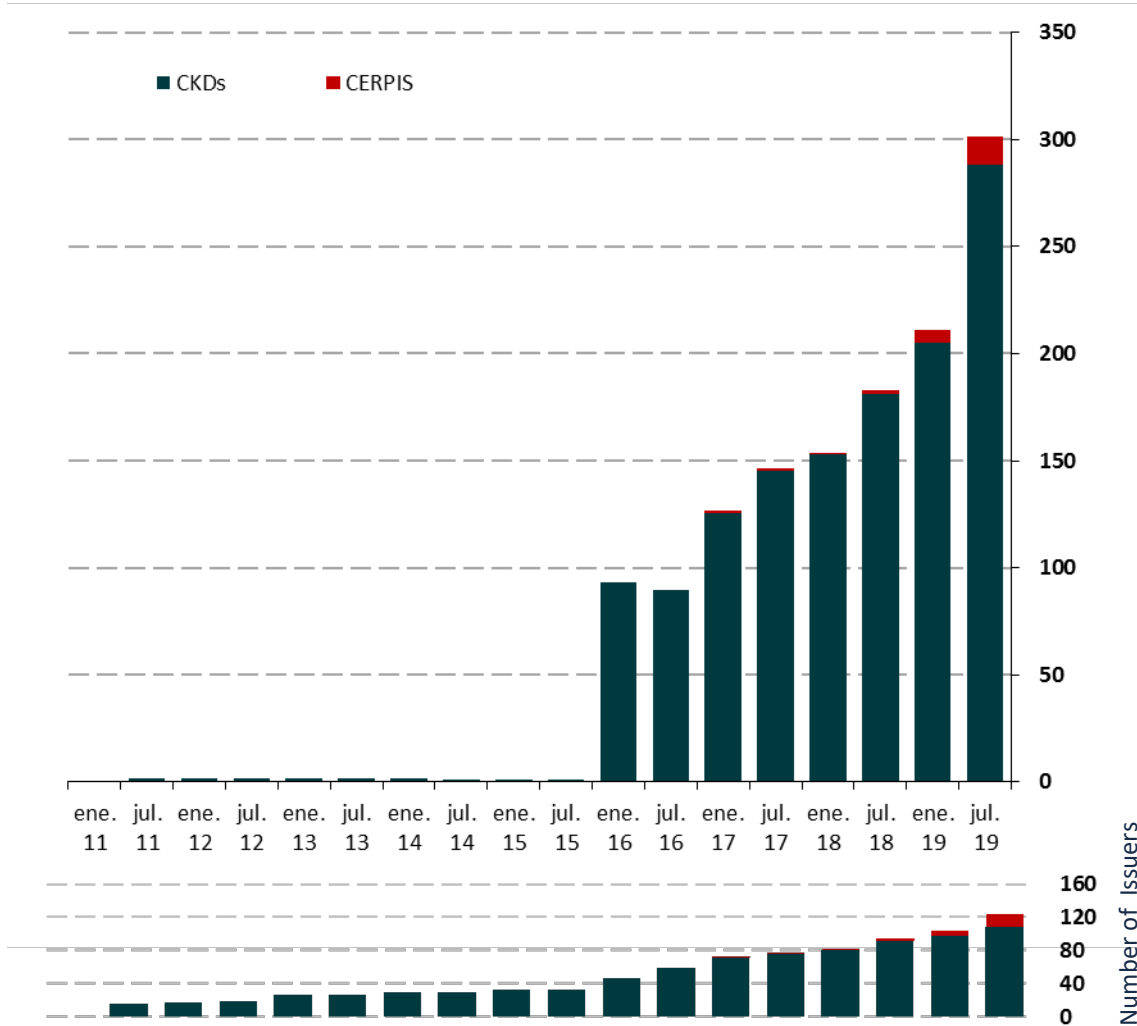


Source: Central Bank of Mexico.

Mexico: Equity Market

CKDs and CERPIs total outstanding by instrument

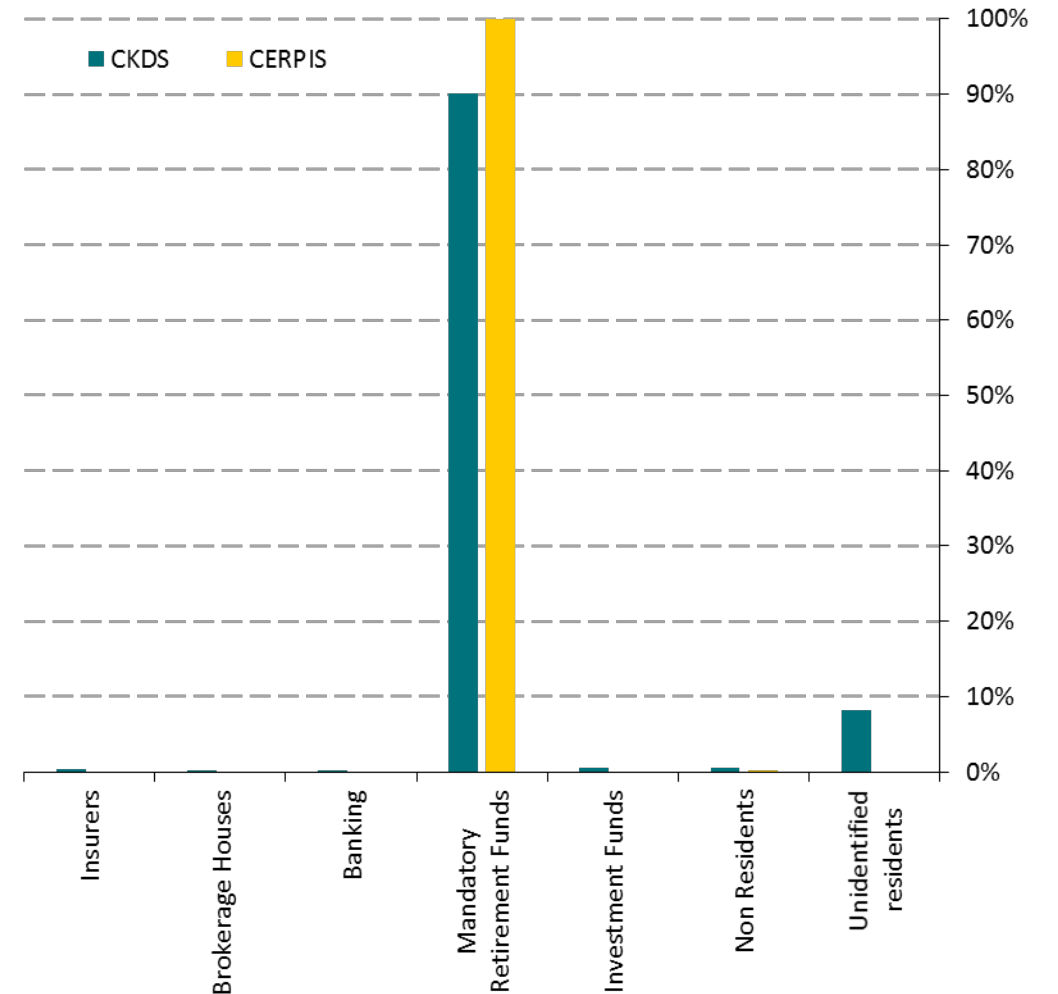
Thousands of millions MXN



Source: Central Bank of Mexico, Bloomberg, Price vendors

CKDS and CERPIs holdings by type of investor as a percentage of the total

Percentage



Source: Central Bank of Mexico.

Mexico: Equity Market

Stock market foliage through project funding with savers's money of the mandatory pension funds (2009).

A second stock exchange market start operations in México (2018).

Working in modifications to the rules of reports and lending of securities in order to add equity securities.

Proposal of 10% decrease in Income Tax on the gain on disposal, in order to increase Initial Public Offerings.

Develop of best execution methodologies incorporating positions of the operating stock exchanges.

Increase the liquidity in equity markets. Mainly in securities like CKDs, CERPIs, FIBRAs.

Promote trading in medium and small business shares

Promote and increase the stock trade in both exchange markets, removing entry barriers

Implement market makers programs on medium and small business shares through development banking.

Promote new Initial Public Offerings of medium and small business

Source: Central Bank of Mexico.

Mexico: Foreign Exchange Derivatives Market

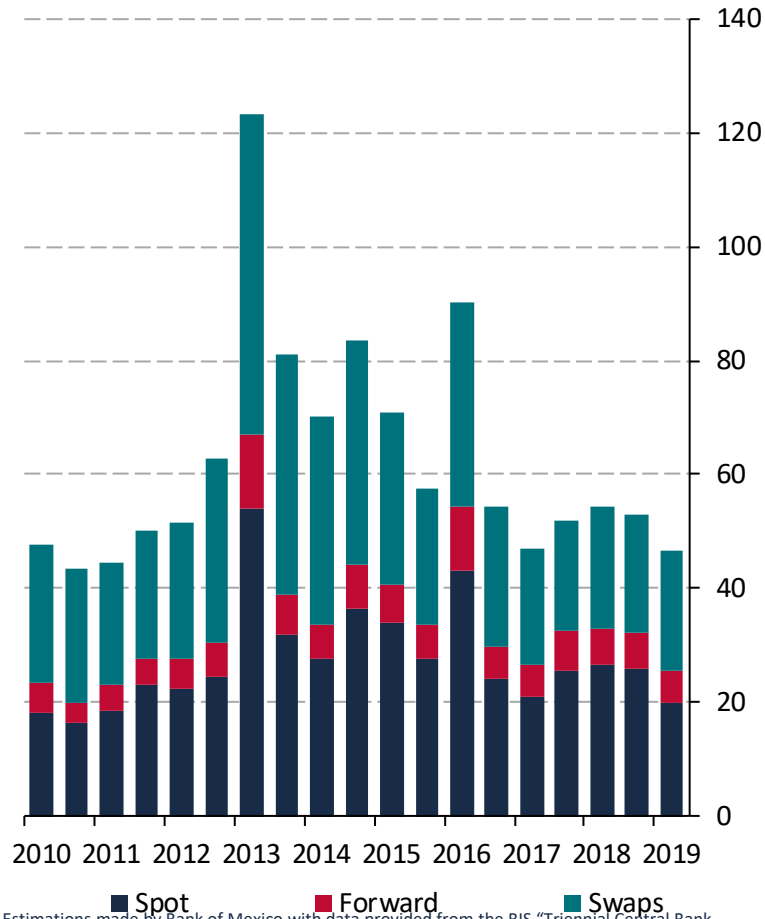
- Mexican peso derivative market is composed mainly by Forwards, Fx-Swaps, Cross Currency Swaps, and Options.

OTC Mexican peso derivatives turnover volume Daily averages, billions of US dollars

Fx derivative	Daily traded volume
Outright forwards	1,445
FX Swaps	11,642
Cross Currency Swaps	99
Options	650

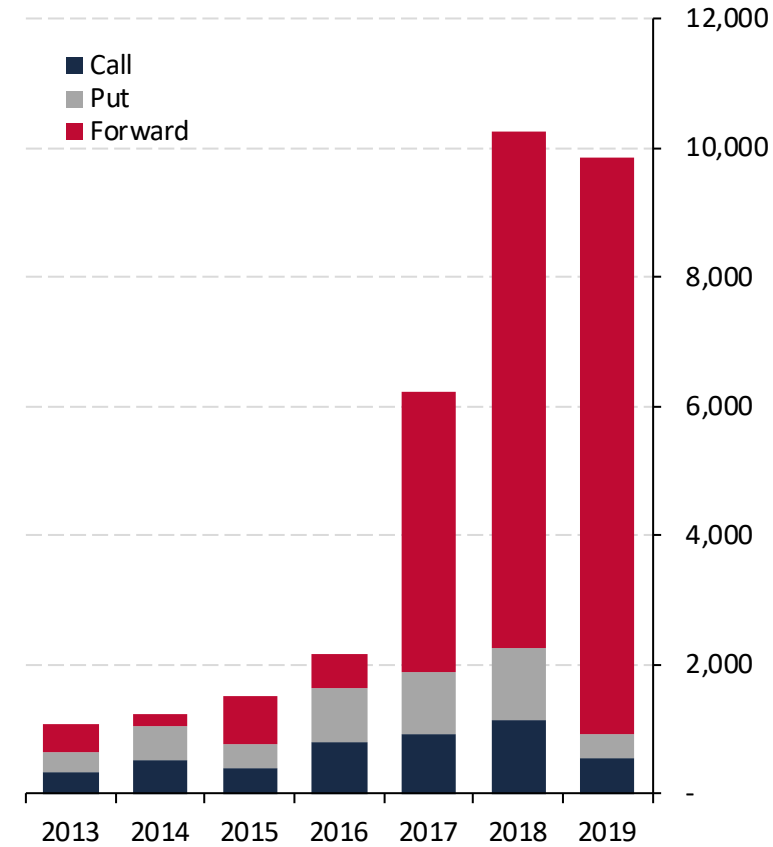
Source: Bank for International of Settlements..

Total volume traded in USD/MXN Daily averages, billions of US dollars



Source: Estimations made by Bank of Mexico with data provided from the BIS "Triennial Central Bank Survey of foreign exchange and OTC derivatives markets in 2016" and the semiannual Federal Reserve FXC FX Volume Survey and the London Foreign Exchange Joint Standing Committee (FXJSC) FX Turnover Survey.

Annual Traded Volume in Fx-derivatives as a underlying Mexican peso Billions of US dollars

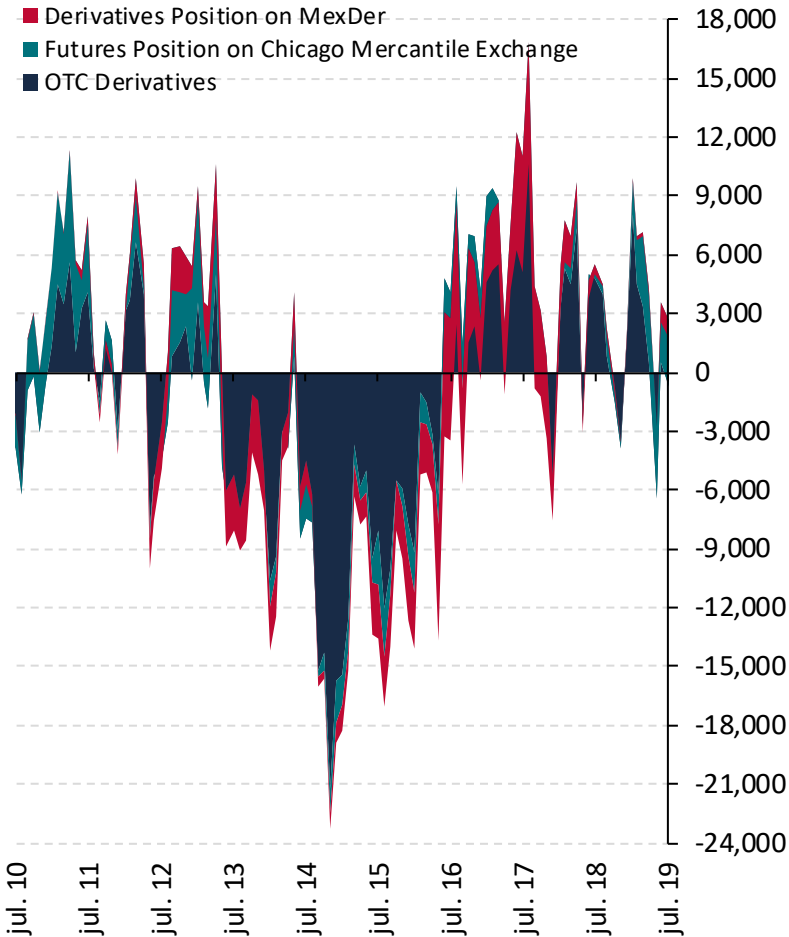


Source: Bloomberg

Mexico: Foreign Exchange Derivatives Market

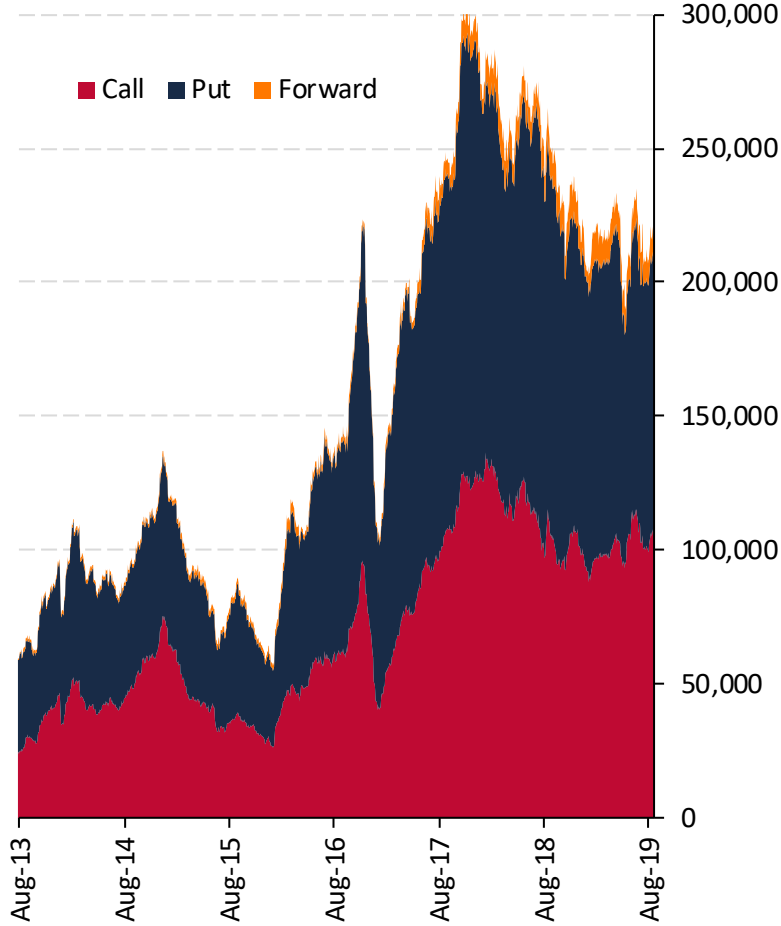
- Non-Residents investors have increased their position in Mexican peso during the last years.

Non-Residents FX Derivatives Position in Mexican Pesos
Billions of US dollars



Source: Bank of Mexico and CME.

Open Interest in Mexican Peso Derivatives
Millions of US dollars



Source: DTCC.

Mexican FX-derivatives markets: Challenges

- More trading activity through electronic market
- Increase market liquidity in securities such as exotic options, cross currency swaps, structure notes, etc.
- More trading activity in local markets
- Expansion of investor base
- Use of value adjustments and different interest rates in pricing process

Source: Central Bank of Mexico.

Mexico: Fixed Income Derivatives Market

- The development of the government debt market in Mexico has also fueled the emergence of the derivatives market.

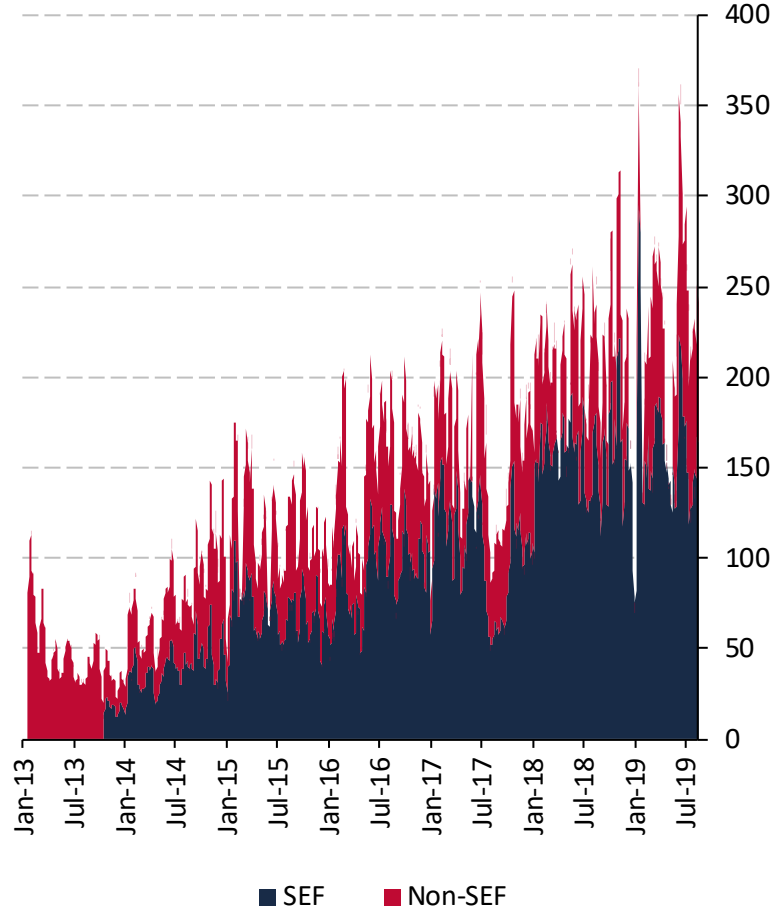
Mexder Fixed Income Derivatives Characteristics

	Futures			Swaps
Underlying asset	28 days TIIE	91 days Cetes	Bonos M (3Y to 30Y)	28 days TIIE
Size	100,000 Pesos	10,000 Cetes (Equivalent to 100,000 pesos)	1,000 Bonos (Equivalent to 100,000 pesos)	100,000 Pesos
Maturity	Monthly cycles for 10 years.	Monthly or quarterly cycles for up to 10 years.	Quarterly cycles for up to a year.	Number of coupons by 28 days.
Quotation	Future interest rate value.	Future annualized interest rate value.	Future bond transaction price in Mexican pesos.	Fixed nominal annualized interest rate.

Source: Mexder.

TIIE IRS' Daily Turnover

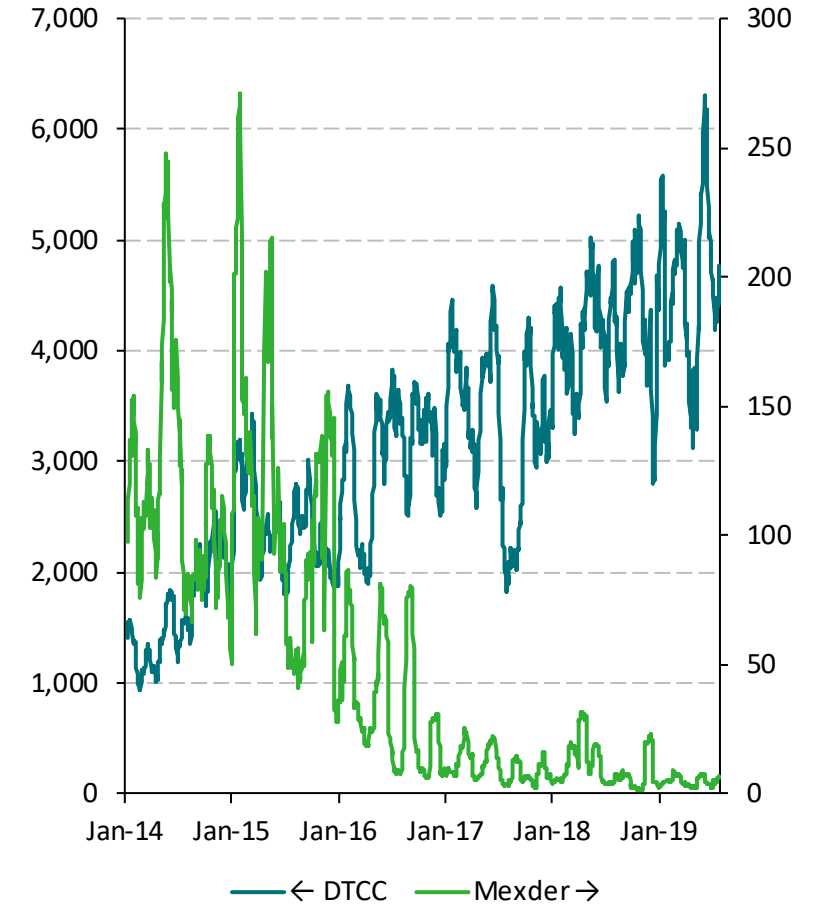
Billions of pesos (20-day moving average)



SEF: Swap execution facility.
Source: DTCC.

TIIE IRS' Daily Turnover

Billions of pesos (20-day moving average)/Millions of pesos (20-day moving average)

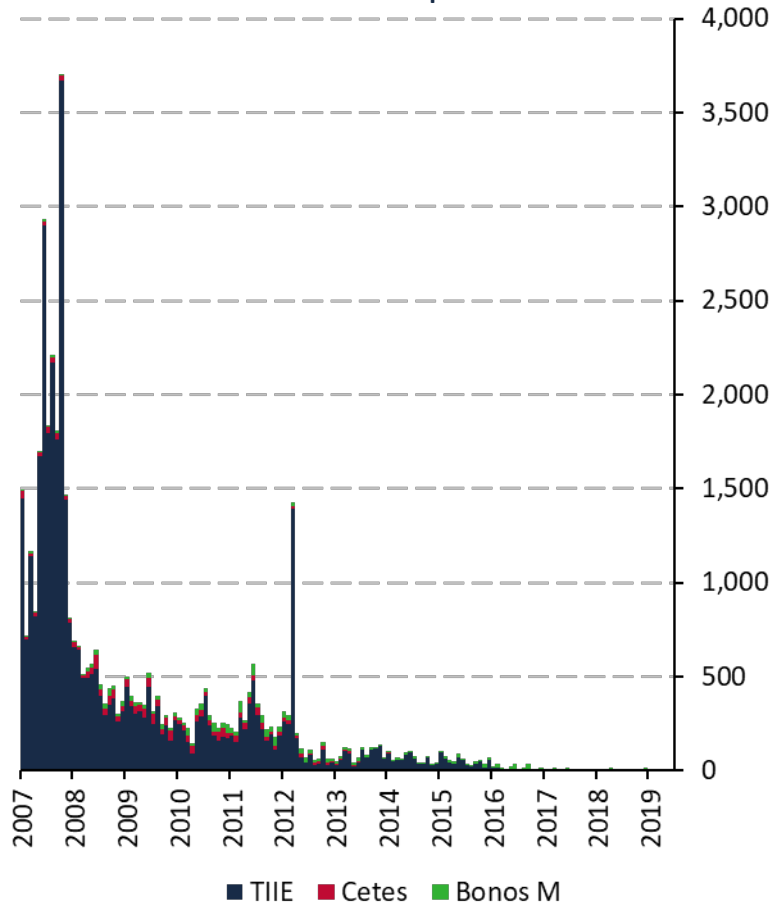


Source: DTCC and Central Bank of Mexico.

Mexico: Fixed Income Derivatives Market

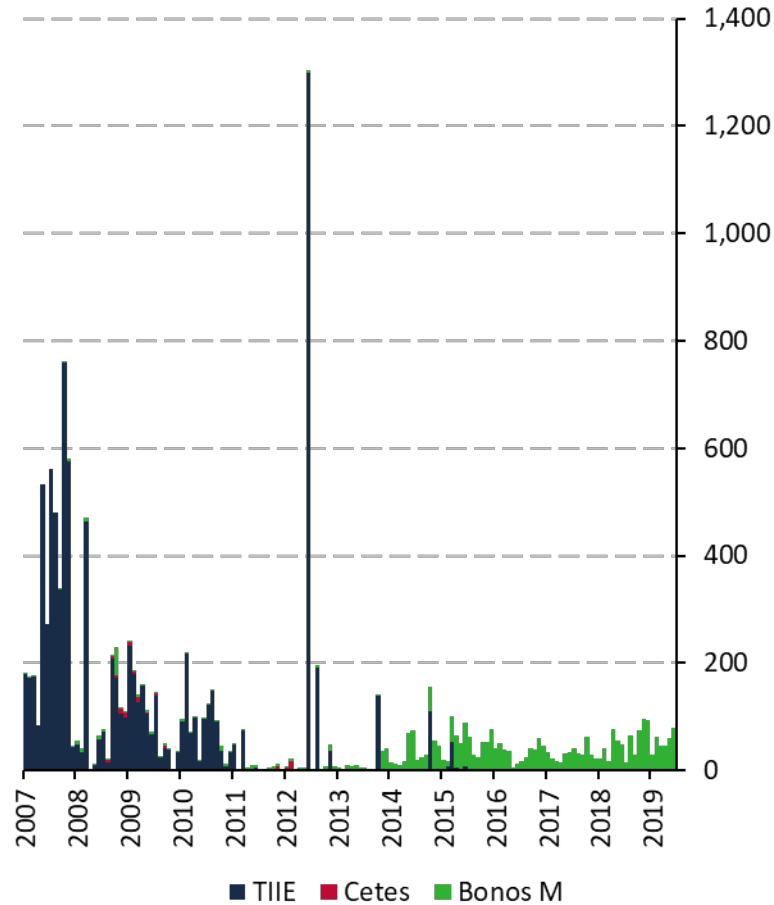
- The Mexican Interbank Interest Rate (TIEE) is the most used underlying in fixed income derivative in securities such as futures, forward, and swaps.

Monthly Trading Volume in Futures with Local Banks
Billions of pesos



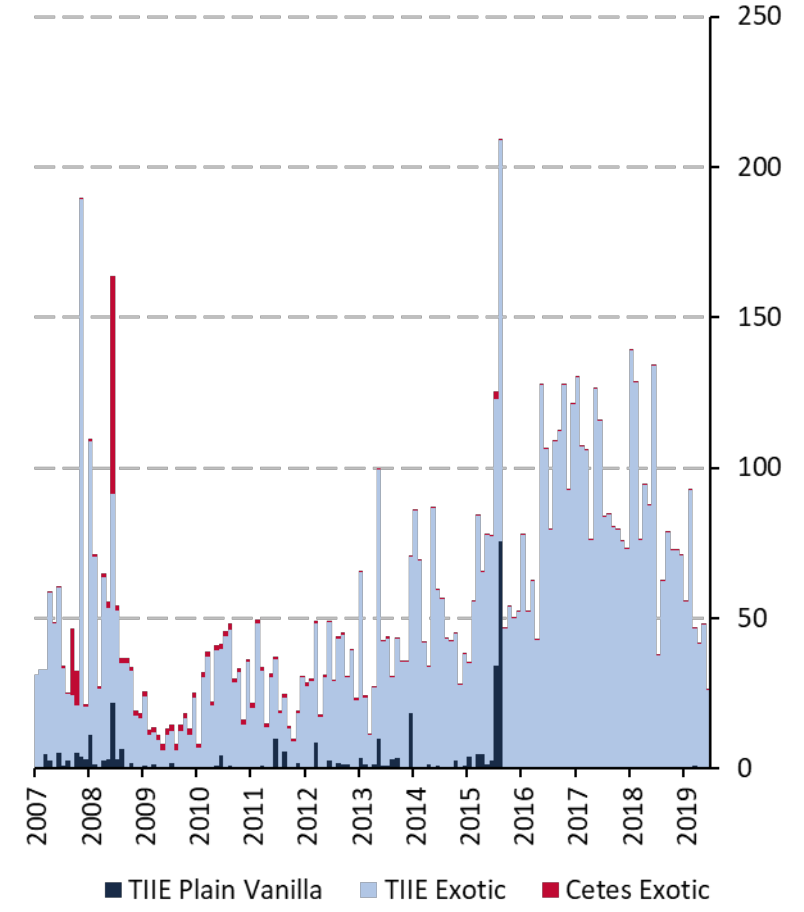
Source: Central Bank of Mexico.

Monthly Trading Volume in Forwards with Local Banks
Billions of pesos



Source: Central Bank of Mexico.

Monthly Trading Volume in Options with Local Banks
Billions of pesos



Source: Central Bank of Mexico.

Mexico: Equity Derivatives Market

- The equity derivative market in Mexico is traded mainly in MexDer.

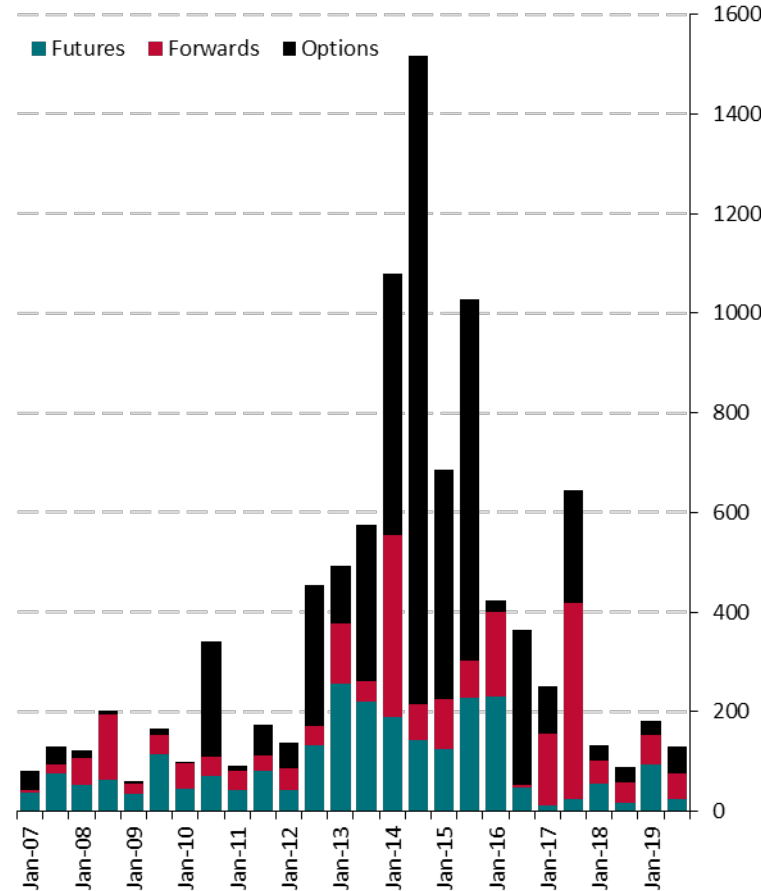
Daily Trading Volume in Futures, Forwards and options on equity securities Billions of pesos

Derivatives types	Underlying Asset on listed markets*	
	Stock Shares	Index
Futures	14/145	1/13
Options	14/145	1/13
Forwards	0/145	1/13
OTC Options	9/145	1/13

* Underlyings assets are showed number o assets availables on each Markets over the total assets available

Source: Central Bank of Mexico.

Biannual Trading Volume in Futures, Forwards and options on equity securities Billions of USD



Source: Central Bank of Mexico.

Mexican Equity-derivatives markets: Challenges

- Develop the listed derivative Markets , increasing de number of underlying Assets
- Increase the liquidity on equity market.
- Increase the number of contracts with underlying a national equity index
- Develop the OTC Market



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South America Markets

South America Region	Fixed Income				Equity	Foreign Exchange		
	Govt 10Y Bond in Local Currency	Govt 10Y Bond in Foreign Currency	Corporate Markets	Derivatives	Equity Markets	Dollarized	Free Floating	Derivatives
Argentina	✓	✓	✓	✓	✓	✗	✓	✓
Bolivia	✓	✓	✓	✗	✓	✗	✗	✗
Brazil	✓	✓	✓	✓	✓	✗	✓	✓
Chile	✓	✓	✓	✓	✓	✗	✓	✓
Colombia	✓	✓	✓	✓	✓	✗	✓	✓
Ecuador	✗	✓	✓	✗	✓	✓	✗	✗
Guyana	✗	✗	✗	✗	✓	✓	✗	✗
Paraguay	✓	✓	✓	✗	✓	✗	✓	✗
Peru	✓	✓	✓	✗	✓	✗	✓	✓
Suriname	✗	✓	✗	✗	✗	✗	✗	✗
Uruguay	✓	✓	✓	✗	✓	✗	✓	✓
Venezuela	✓	✓	✓	✗	✓	✗	✗	✗
Mexico	✓	✓	✓	✓	✓	✗	✓	✓

Note: Dollarized currencies are those with a peg or with USD as a currency. Here, Free Floating currencies are those considered Free Floating and Floating by the International Monetary Fund.

Source: International Monetary Fund, Central Banks, Stock Exchanges and Bloomberg.

Central America Markets

Caribbean región	Fixed Income				Equity	Foreign Exchange		
	Govt 10Y Bond in local Currency	Govt 10Y Bond in foreing currency	Corporate Markets	Derivatives	Equity Markets	Dollarized	Free exchange rate floating	Derivatives
Belice	✓	✗	✗	✗	✗	✓	✗	✗
Costa Rica	✓	✓	✓	✗	✓	✗	✗	✓
El Salvador	✗	✓	✓	✗	✓	✓	✗	✓
Guatemala	✓	✓	✓	✗	✓	✗	✗	✓
Honduras	✓	✓	✓	✗	✓	✓	✗	✗
Nicaragua	✗	✗	✓	✗	✓	✓	✗	✗

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Caribbean Markets

Caribbean region	Fixed Income				Equity	Foreign Exchange		
	Govt 10Y Bond in local Currency	Govt 10Y Bond in foreing currency	Corporate Markets	Derivatives	Equity Markets	Dollarized	Free exchange rate floating	Derivatives
Aruba	✗	✓	✓	✗	✗	✓	✗	✗
Bahamas	✓	✓	✓	✗	✓	✓	✗	✗
Barbados	✓	✓	✓	✗	✓	✓	✗	✗
Cayman Islands	✗	✗	✓	✗	✓	✓	✗	✗
Cuba	✗	✗	✗	✗	✗	✓	✗	✗
Curacao	✗	✗	✓	✗	✓	✓	✗	✗
Eastern Caribbean	✓	✓	✗	✗	✓	✗	✗	✗
Hait	✗	✗	✗	✗	✓	✗	✓	✗
Jamaica	✓	✓	✓	✗	✓	✗	✓	✓
Dominican	✓	✓	✓	✗	✓	✗	✓	✓
Trinidad and Tobago	✓	✓	✓	✗	✓	✗	✗	✗

Note: Dollarized currencies are those with a peg or with USD as a currency. Here, Free Floating currencies are those considered Free Floating and Floating by the International Monetary Fund.

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