Financial Stability Report – First Semester 2023

June 14, 2023

BANCO DE MÉXICO®

Introduction

The Financial Stability Report describes:

- ✓ The **current state of the Mexican financial system**.
- ✓ The **evolution of the most important risks and vulnerabilities**.
- ✓ The **results of credit, liquidity and climate-related physical risk stress tests.**

- The Mexican financial system, and particularly commercial banks, continue to be in a **solid and resilient position** despite the **complex global environment** observed during the first half of 2023, which has been characterized by:
  - ✓ Episodes of **volatility in global financial markets,** associated with the **difficulties** experienced by **some banking institutions** in advanced countries.
  - ✓ More persistent **global inflationary** pressures than expected and the response implemented by the main central banks.
  - ✓ The prolonged tightening of **financial conditions.**
- It is foreseeable that a complex and uncertain environment prevails.

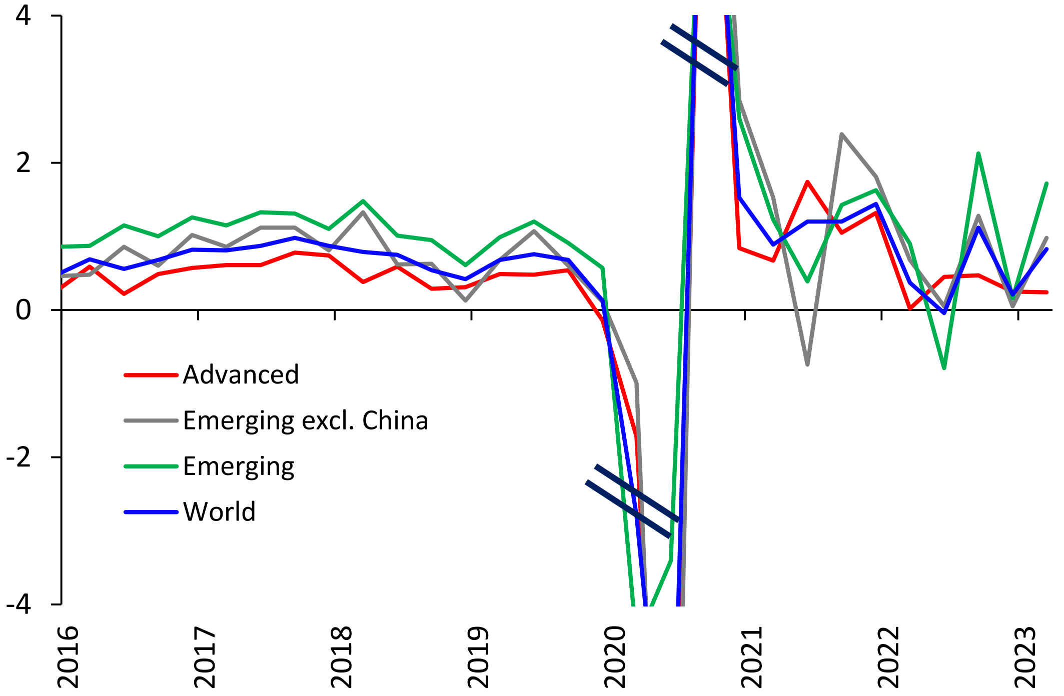
Contents

❶ Global economic growth

During the first half of 2023, world economic activity recovered slightly as a result of lower pressures on energy prices, fewer distortions in supply chains, and easing mobility restrictions in China. However, the growth forecasts were revised marginally downward for 2023 and 2024.

GDP Growth 1/

Quarterly % change, s. a.



Data as of first quarter of 2023.
Source: Banco de México with data from Haver Analytics and J.P. Morgan.
s. a./ Seasonally adjusted figures.
1/ The sample of countries used for the calculation represents 85.2% of world GDP measured by the purchasing power parity. Forecasts are used for some countries in the sample for the first quarter. The scope of the graph has been narrowed to make it easier to read.

Global GDP growth forecasts

%

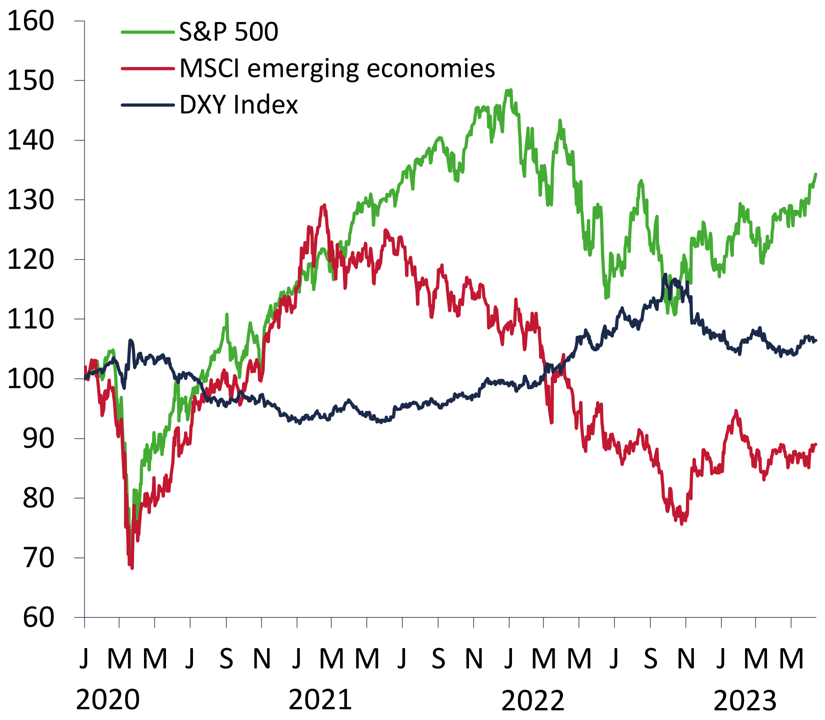
	World Economic Outlook April 2023		Change from January 2023	
	2023	2024	2023	2024
World	**2.8**	**3.0**	**-0.1**	**-0.1**
Advanced	**1.3**	**1.4**	**0.1**	**0.0**
United States	1.6	1.1	0.2	0.1
Euro area	0.8	1.4	0.1	-0.2
Japan	1.3	1.0	-0.5	0.1
United Kingdom	-0.3	1.0	0.3	0.1
Emerging	**3.9**	**4.2**	**-0.1**	**0.0**
Excl. China	3.3	4.1	-0.1	0.0
Mexico	**1.8**	**1.6**	**0.1**	**0.0**
China	5.2	4.5	0.0	0.0
India	5.9	6.3	-0.2	-0.5
Brazil	0.9	1.5	-0.3	0.0

Data as of April 2023.
Source: IMF, World Economic Outlook, January and April 2023.

2 International financial markets

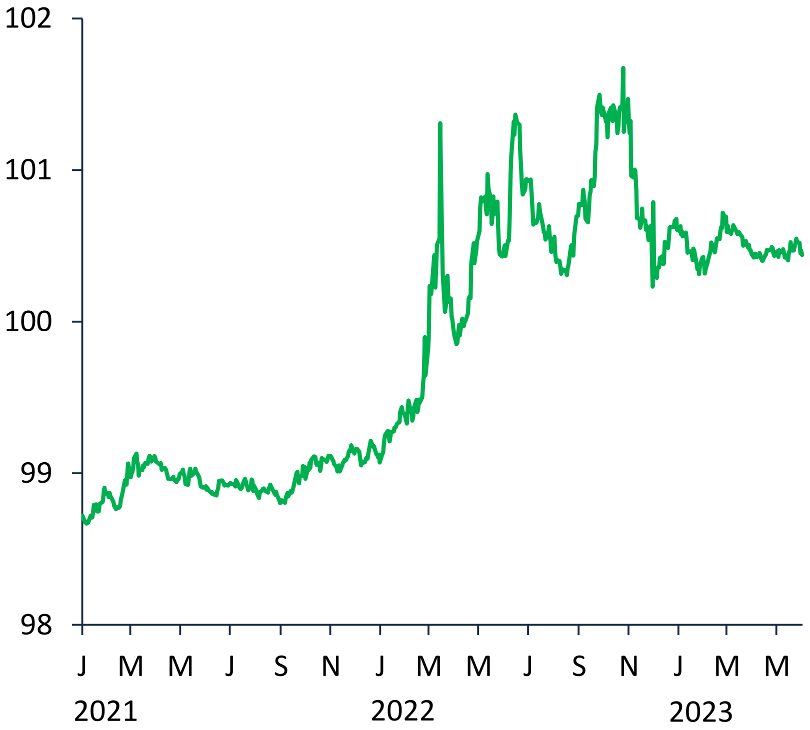
In the first half of 2023, the dynamics of international financial markets were affected by the persistence of global inflationary pressures and the continuation of monetary policy tightening in most countries, by the period of financial stress caused by the problems in the U.S. and European banks, as well as by the debate regarding the government debt ceiling in the United States.

Stock market and FX indices' performance
Index (January 2020 = 100)



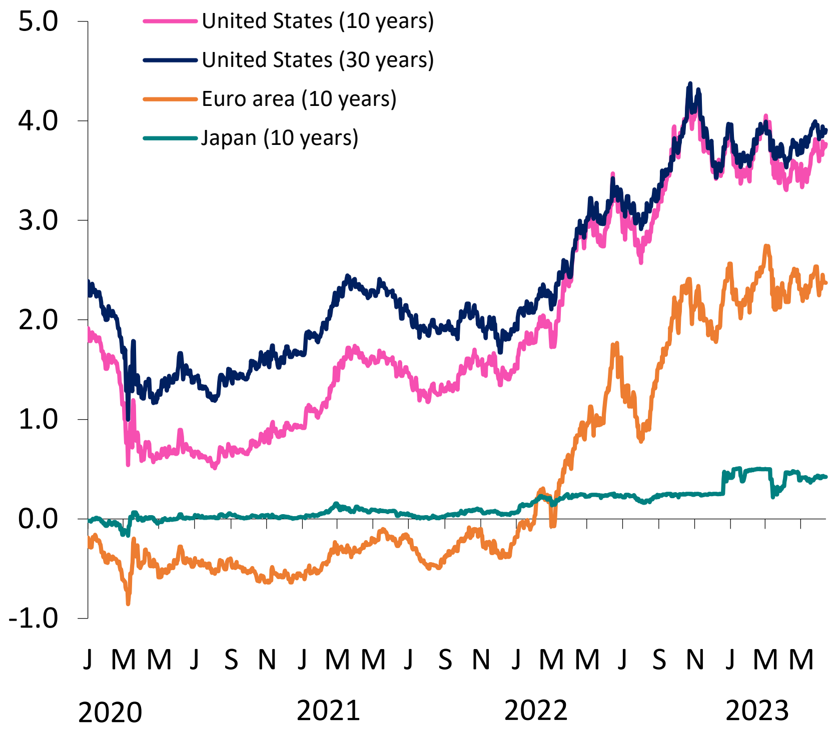
Data as of June 2023.
Source: Banco de México with data from Bloomberg.

Global financial conditions index
%



Data as of June 2023.
Source: Goldman Sachs.

Government bonds' interest rates
%



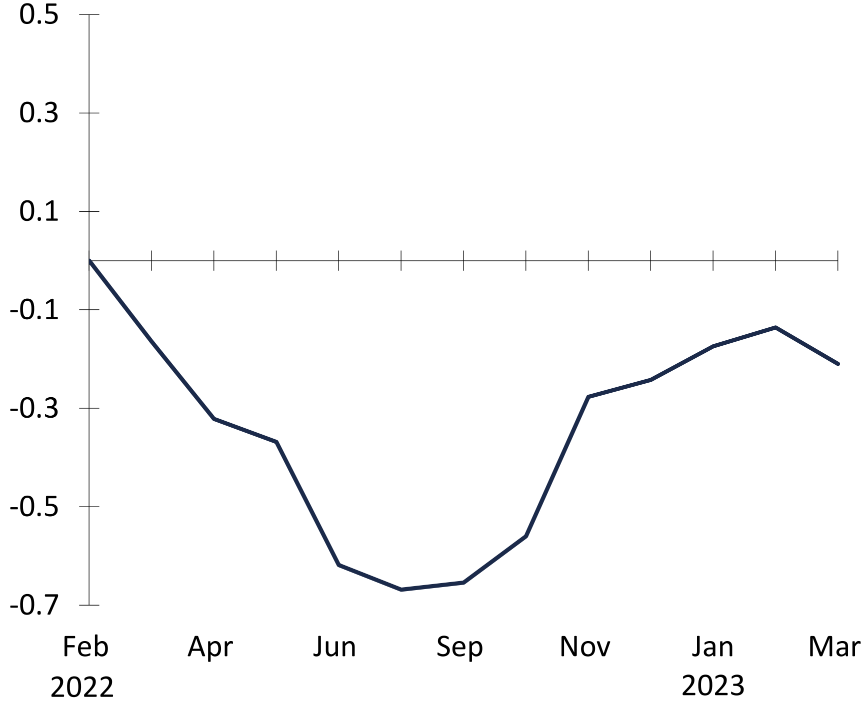
Data as of June 2023.
Source: Bloomberg.

3 Financial markets: emerging market economies

In the first half of 2023, financial markets in emerging economies have registered limited impacts in the current juncture. Since December 2022, the currencies of some countries have performed favorably, while the recovery of capital flows to emerging economies has consolidated since October 2022.

Cumulative portfolio flows from non-residents to EMEs 1/

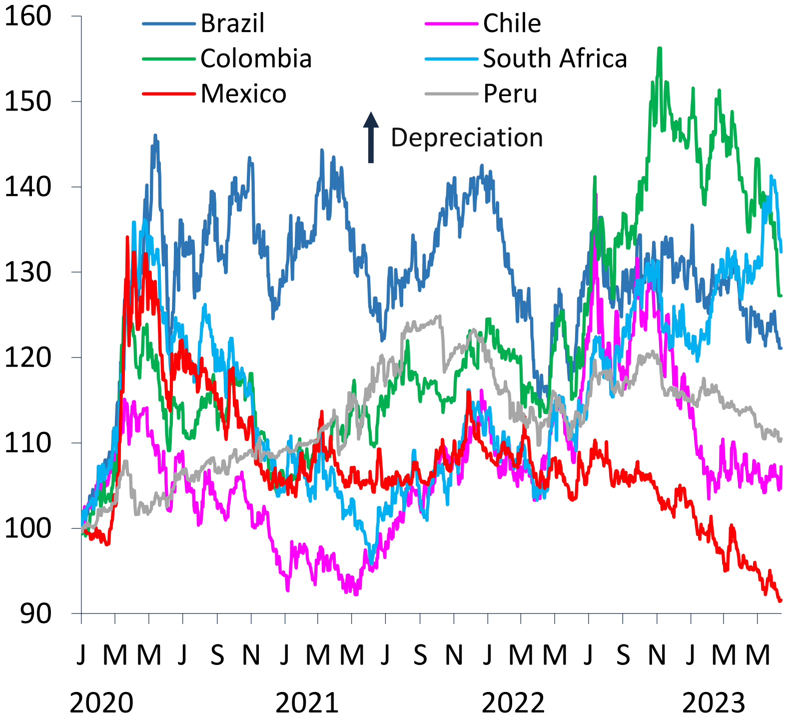
% of GDP in 2020



Data as of March 2023.
Source: Institute of International Finance (IIF).
1/ The measurement of portfolio flows of emerging economies includes those countries considered in the section "Monetary policy and international financial markets" of the Quarterly Report January-March 2021, for which information was available in the IIF. This measure was obtained by adding the flows of these economies and dividing it by the sum of their GDP in 2020. The flows were accumulated since March 2022. The latest data for the remaining EMEs is March 2023, given that this is the latest updated information that allows to obtain a sufficiently large number of these countries.

Nominal exchange rates against the USD

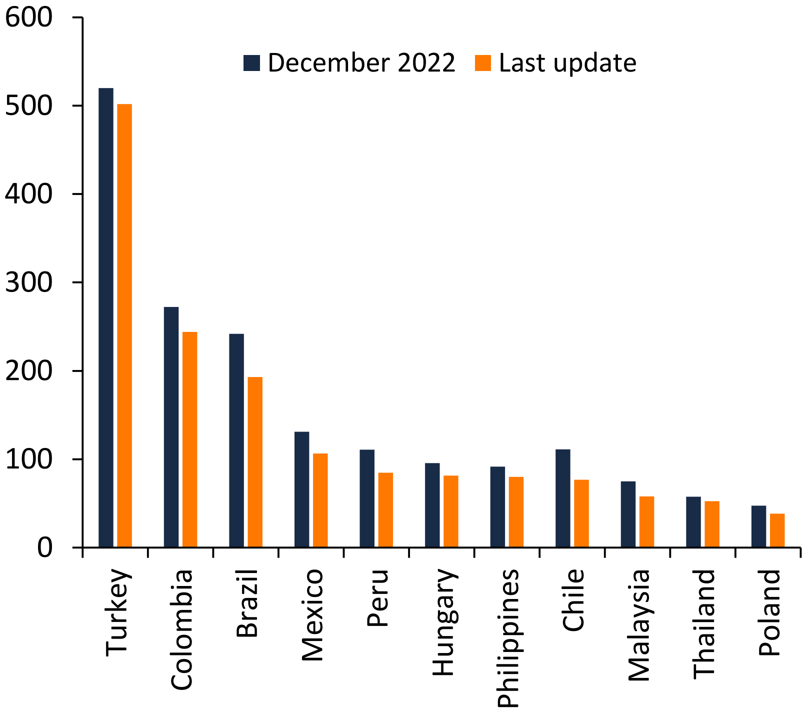
Index 01-Jan-2020 = 100



Data as of June 2023.
Source: Bloomberg.

Credit Default Swap for selected EMEs

Basis points



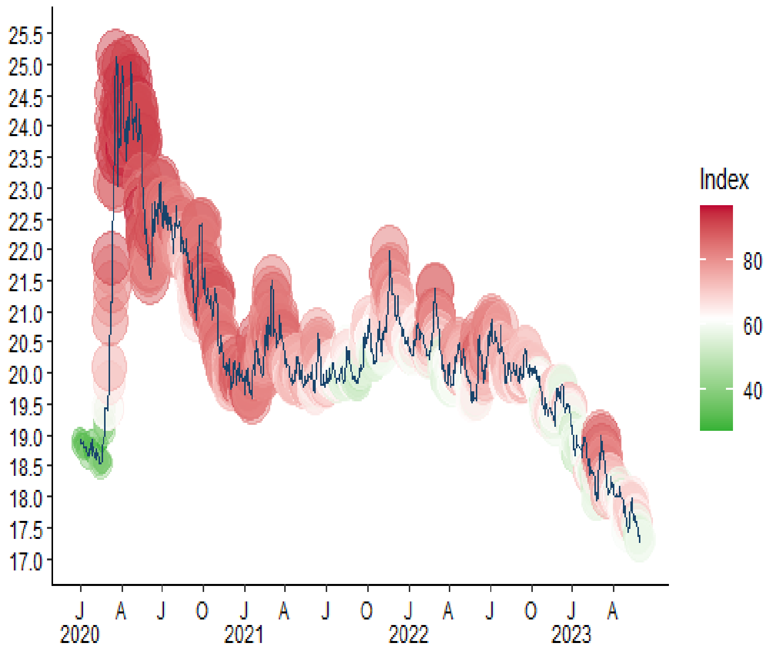
Data as of June 2023.
Source: Banco de México with data from Bloomberg.

4 Mexican financial markets

During the first half of 2023, although domestic financial markets were affected by the global environment, the impact was limited. The Mexican peso appreciated significantly during the period and the foreign exchange market has operated with resilience. The yield curve of government bonds showed differentiated movements by maturity, with increases in the short-term node and decreases in the medium- and long-term nodes, while the Mexican stock market recovered in recent months.

Trading conditions of the Mexican peso [1/]

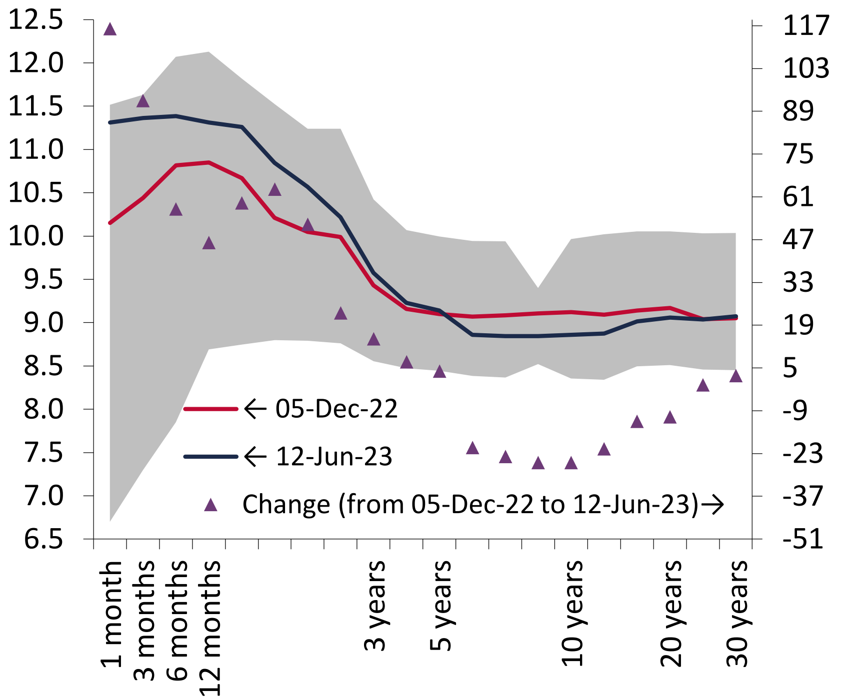
MXN/USD; Index



Data as of June 2023.
Source: Banco de México with data from Bloomberg and Refinitiv.
1/ The index is computed as the average of the percentiles of 1-month implicit volatility and skewness, volume and observed spreads. Percentiles are computed since 2018. Red (green) circles mean a greater (lesser) deterioration of the trading conditions in the FX market.

***Bonos* M nominal yield curve [1/]**

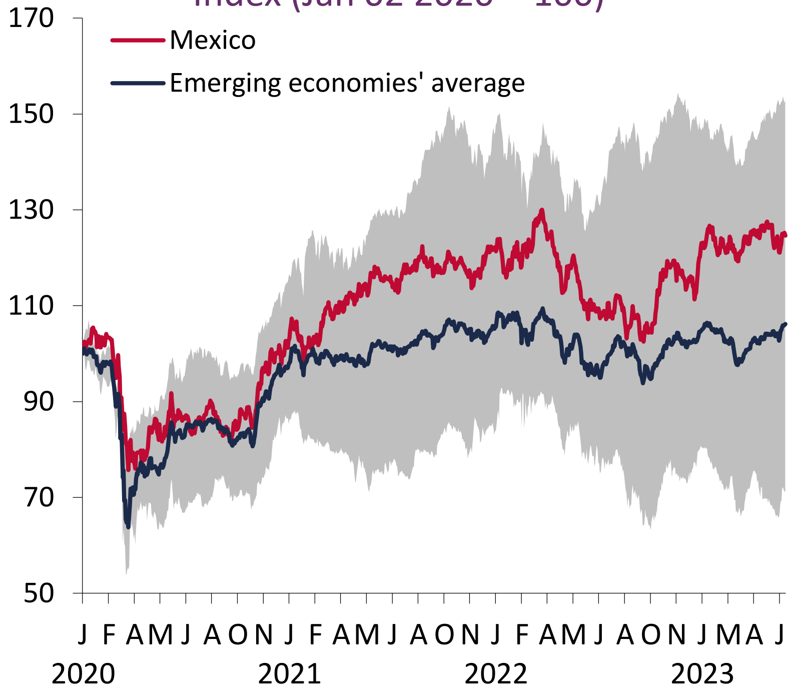
%



Data as of June 2023.
Source: Banco de México with PIP data.
1/ The grey area is the yield curve range since December 5th, 2022.

Cumulative performance of stock market indices in emerging economies [1/]

Index (Jan 02 2020 = 100)



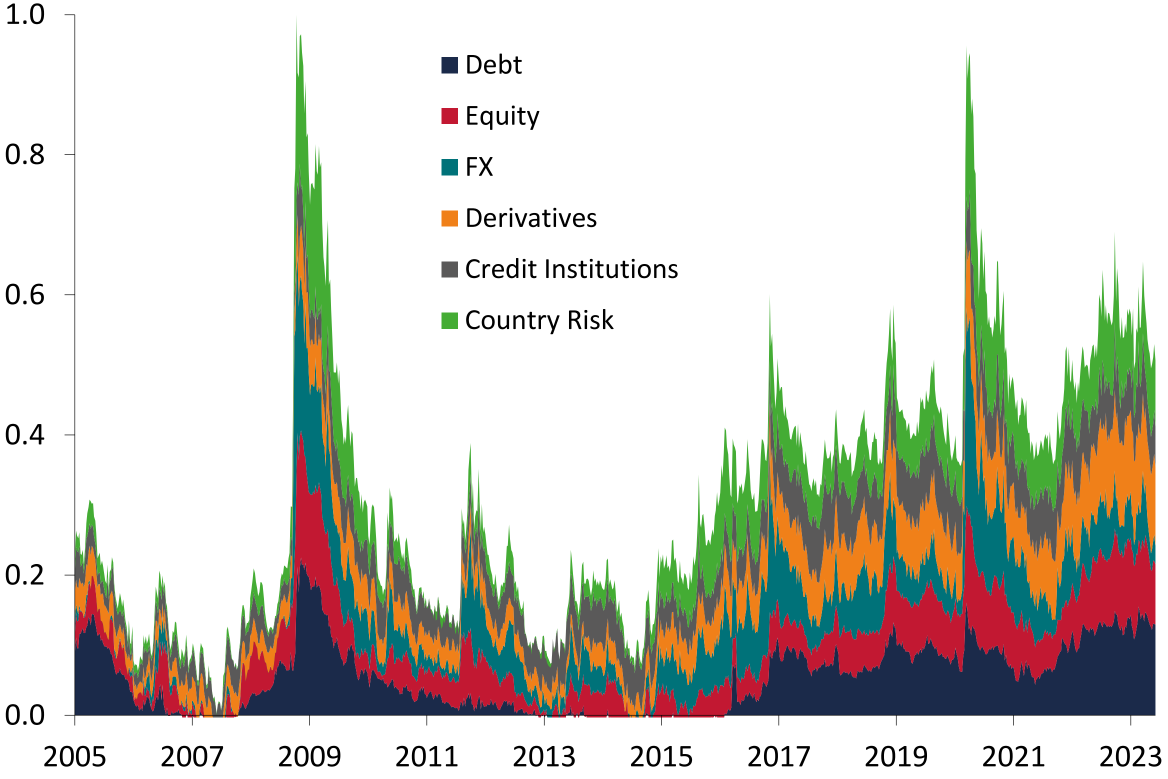
Data as of June 2023.
Source: Banco de México with data from Bloomberg.
1/ The gray area refers to range of emerging market economies. EMEs included in the sample are: Brazil, Chile, Colombia, the Philippines, Hungary, India, Indonesia, Malaysia, Poland and South Africa.

4 Mexican financial markets

During the first half of 2023, both the Mexican Financial Markets Stress Index (*IEMF*) and the Financial Conditions Index (FCI) increased, given the greater volatility in global financial markets caused by the events in the U.S. banking systems. However, between April and May, the uncertainty subsided, improving the *IEMF* at the margin, while the FCI continues registering some tightening.

Mexican Financial Market Stress Index [1/]

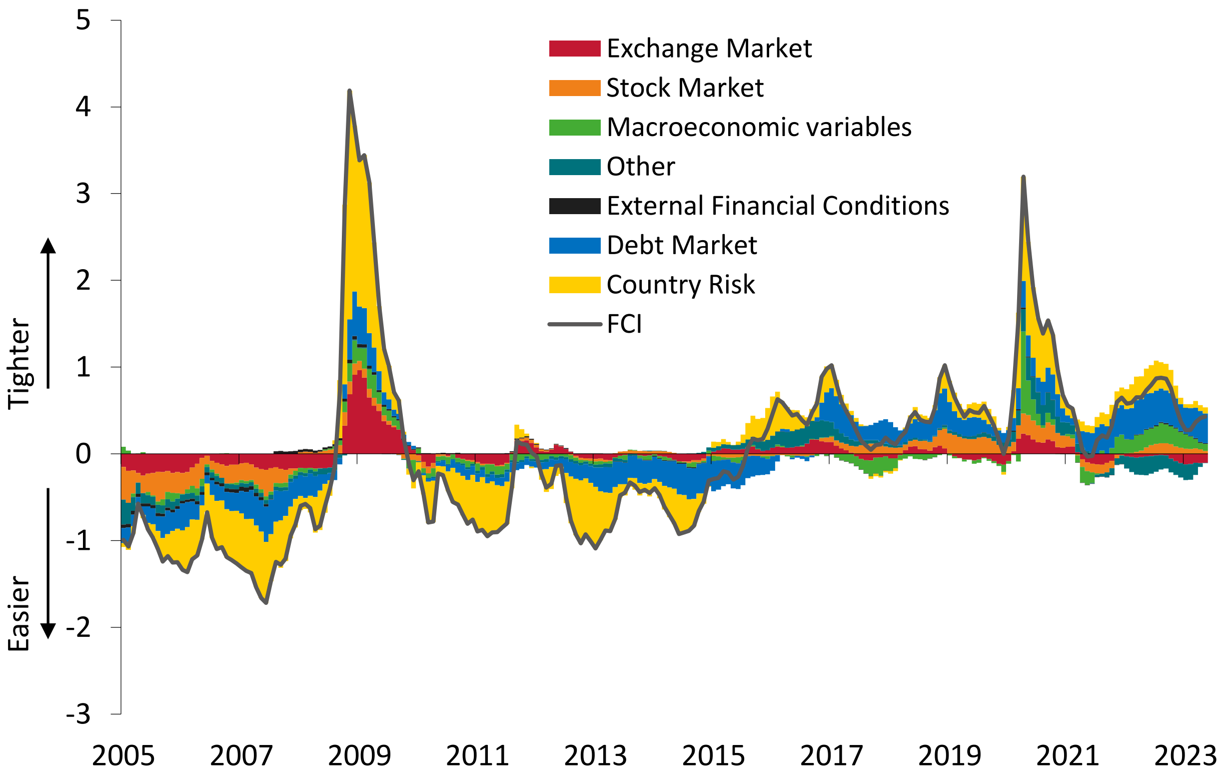
Stress level 2005-2022



Data as of June 9, 2023.
Source: Banco de México.
1/ The index was estimated using a principal component analysis on 36 standard variables of Mexican financial markets grouped into 6 categories (debt market, securities market, FX market, derivatives market, credit institutions, and country risk). Total components yields the IEMF scaled at interval [0,1].

Mexican Financial Conditions Index [1,2/]

Standard deviations



Data as of May 2023.
Source: Banco de México.
1/ For a description of the methodology, see Box 2.: Financial Conditions and Growth at Risk, Financial Stability Report, December 2019.
2/ The contributions of each variable to the FCI are estimated using a Kalman filter.

5 Macro-financial risks

- Although vulnerabilities in the financial system are limited, certain macro-financial risks prevail, and if they materialize they could have impacts on the financial system, highlighting the following:

  1. **More prolonged tightening of financial conditions.**
  2. **Lower-than-expected world economic growth.**
  3. **Systemic event that affects the global financial system.**
  4. **Weakening of aggregate demand.**
  5. **Adjustments in both sovereign debt and Pemex credit ratings.**

- These risks are considered in the stress test scenarios.

Contents

Developments in the U.S. banking systems and their impact

- In March 2023, the U.S. banking system experienced a stress episode caused by the failure of some regional banks that faced deposit runs, which led to high volatility and uncertainty in global financial markets. In response, U.S. financial authorities implemented timely measures to preserve the financial stability and to contain the potential contagion to other banks, thus preventing spill-over effects to other financial systems.

- Given their size, banks that failed were either not subject to the Basel prudential framework or had to comply with a simplified risk management framework, including capital and liquidity requirements. In addition, they were not part of the group of institutions for which the Federal Reserve conducts annual stress tests.

- The events in the U.S. banking system highlight the importance of:

  ✓ Maintaining an **adequate management of traditional financial risks**, mainly liquidity and interest rate risks.

  ✓ Implementing a **regulation that exposes and limits institutions´ risks**, allowing for a timely identification of their vulnerabilities.

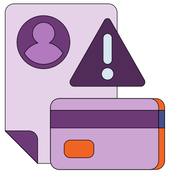
  ✓ Having **supervisory practices that can be adjusted with agility** as intermediaries increase in size, complexity and, their overall systemic impact.

Measures to promote and preserve the sound development of the financial system

In Mexico, commercial banks are required to comply with capital and liquidity requirements based on Basel III international standards.

During S1-2023, the financial authorities continued working on constantly improving the regulatory framework and **adopting international standards and best practices**.

In April 2023, the **Large Exposure Regulation** was implemented in order to identify and limit the concentration levels of exposures that credit institutions hold with their counterparties or group of connected counterparties.



Amendments were made to the **regulatory framework for credit and market risks.** In addition, risk management in the derivatives market was strengthened by establishing new guidelines for OTC derivative transactions and a sustainable taxonomy was published to classify several activities with environmental and social impact.

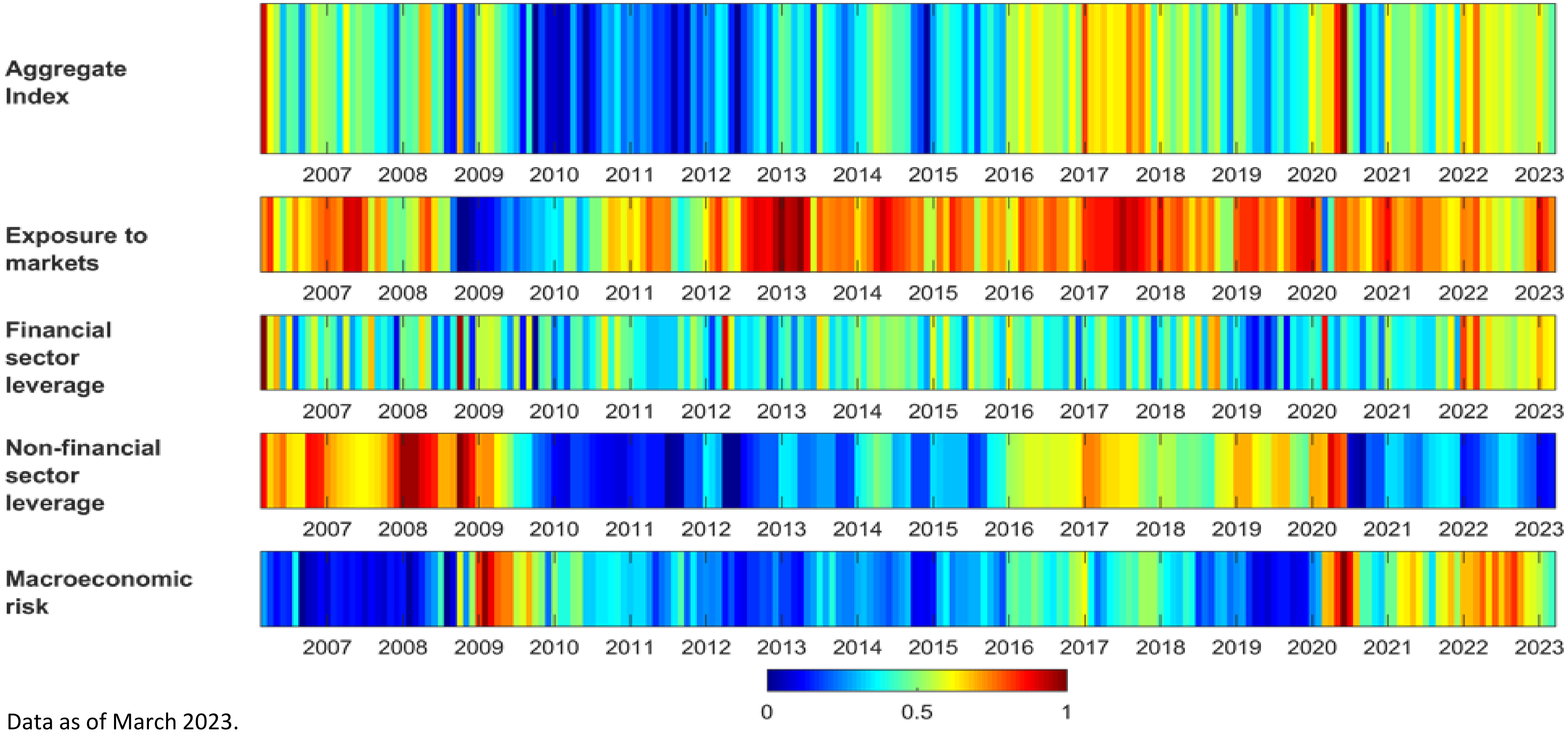
Whenever necessary, and in compliance with the legal framework, **Banco de México will continue taking actions** within its mandate in a timely manner to promote and preserve the sound development of the financial system.

Contents

❶ Heat maps of the Mexican financial system risks

As illustrated by the heat map, the aggregate risk of the financial system decreased slightly with respect to the end of 2022. However, the market exposure category, which measures risk appetite, increased because of the Mexican government inverted yield curve, to higher capital inflows, and to a decrease in global volatility.

Heat Maps of the Mexican Financial System Risks



Data as of March 2023.
Source: Banco de México.

2 *Survey on systemic risk perception among financial institutions*

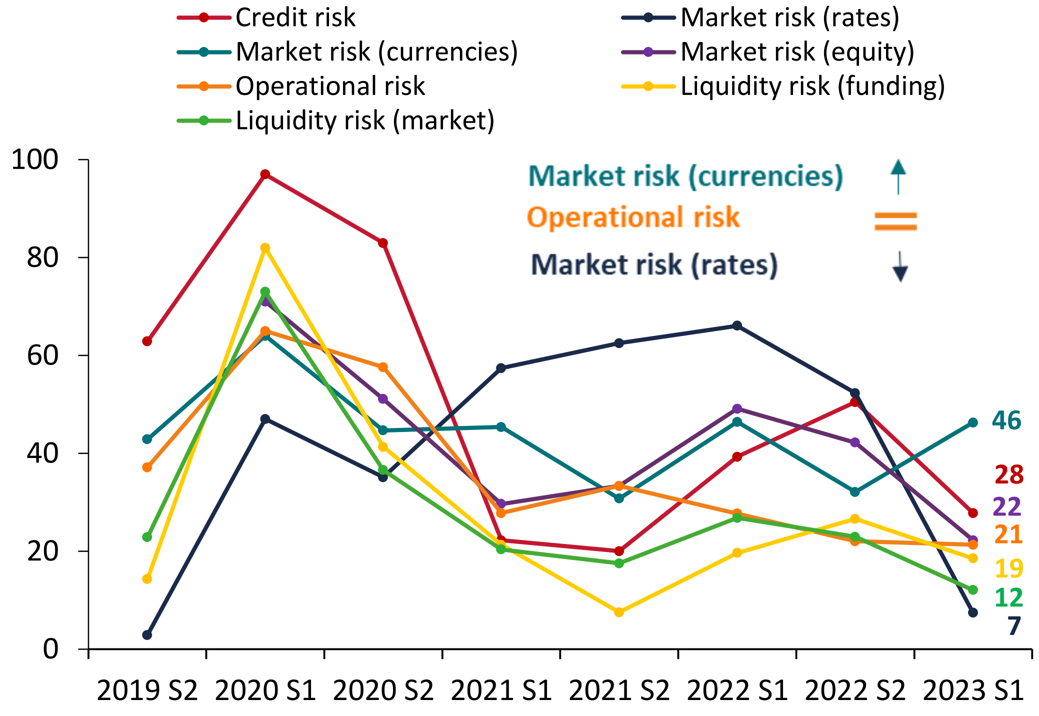
The most frequently mentioned external risk by financial intermediaries is the deterioration in growth prospects for the global economy, whereas the most frequently mentioned domestic risk was once again a higher-than-expected inflation. Regarding expectations for the main risks over the next 6 months, the increase in foreign exchange market risk is noteworthy.

Main sources of financial system risks 1/ 2/
Percent of total institutions

	November 2022 1/	May 2023 2/
External financial risks		
Deterioration of the global economic growth outlook	75	82
Inflation higher than expected	81	81
Deterioration of foreign market conditions*	64	63
Disorderly changes in foreign interest rates	65	55
Volatility in commodity prices	54	54
Domestic financial risks		
Inflation higher than expected	76	79
Deterioration of the domestic economic growth outlook	72	74
Deterioration of public finances	60	63
Fiscal, financial and economic policies	50	60
Deterioration of sovereign credit rating	54	53
Non-financial risks		
Political, geopolitical and social risks	87	94
Cybersecurity and IT risks	83	82
Violence and insecurity	66	71
Deterioration of the rule of law and impunity	54	52
COVID-19 (new wave)	45	35

1/ In the last survey 109 institutions participated.
2/ In the current survey 108 institutions participated.
* Exchange rate volatility, depreciation, and lack of liquidity.

Expectations regarding the evolution of risks (6m ahead) 1/
%



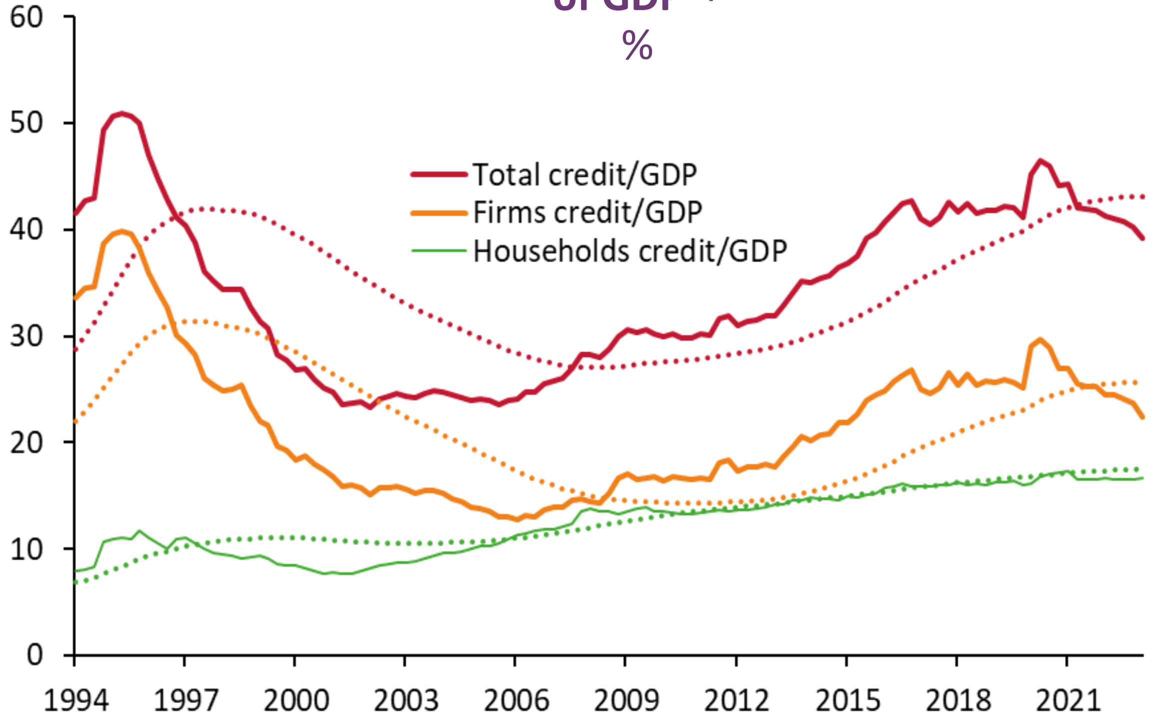
Data as of May 2023
Source: Banco de México

1/ The chart shows the difference between the percent of institutions that expect the risk increase and the institutions that expect the risk decrease.

❸ Total financing to the non-financial private sector

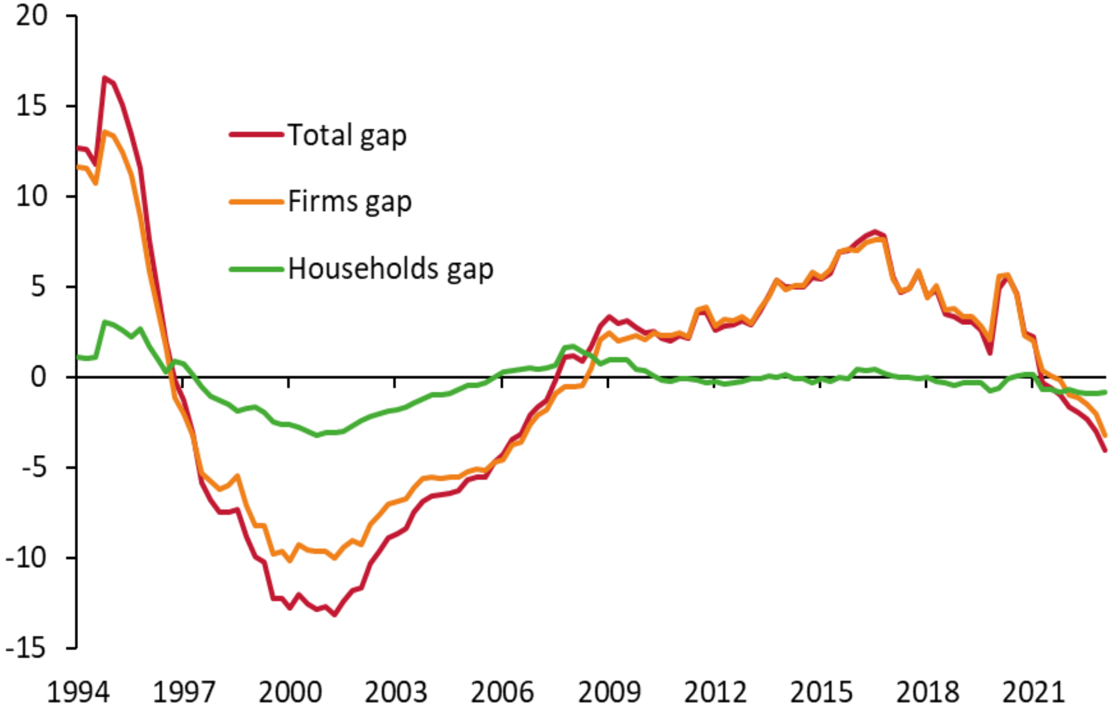
Total financing to the non-financial private sector remains below trend, registering eight consecutive quarters with a negative credit gap. The credit gap has widened in credit to households and businesses.

Credit to the non-financial private sector as a proportion of GDP 1/
%



Data as of March 2023.
Source: Banco de México.
1/ The dotted lines correspond to the long-term trend.

Credit gap 1/
%

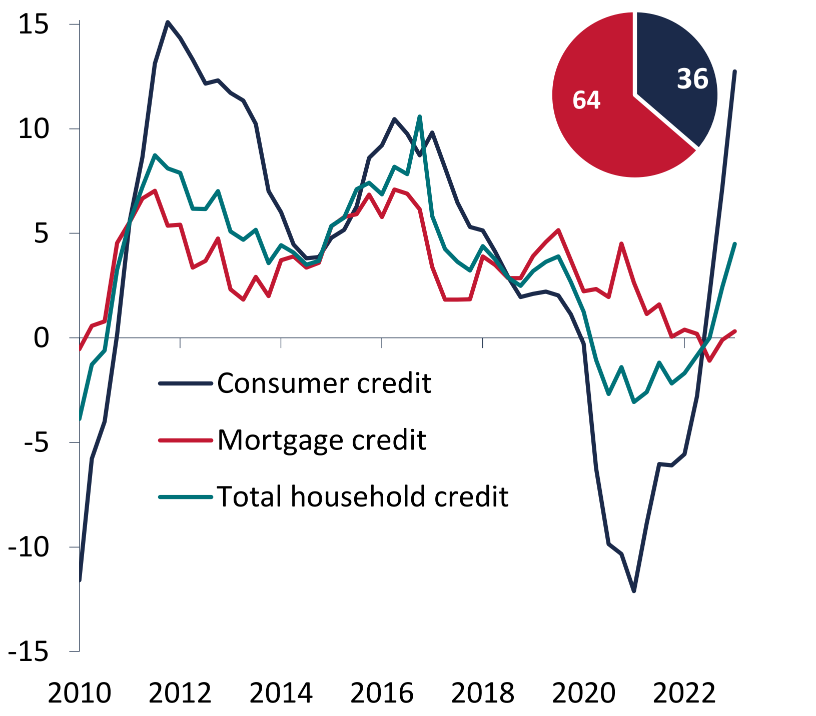


Data as of March 2023.
Source: Banco de México.
1/ Refers to the difference between the credit and its long-term trend.

4 Households' financial position

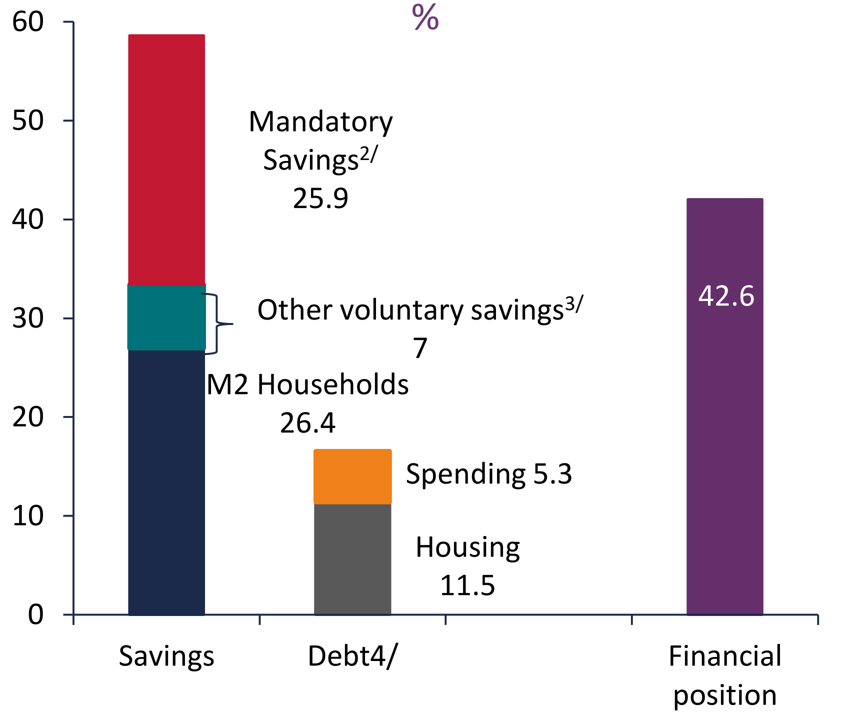
Total financing to households increased during the period. Consumer credit grew significantly, while mortgages increased only marginally. Households' financial position improved due to higher savings relative to indebtedness. Consumer credit granted by commercial banks continues showing positive growth rates in all segments.

Household credit growth [1/]
Real annual % change



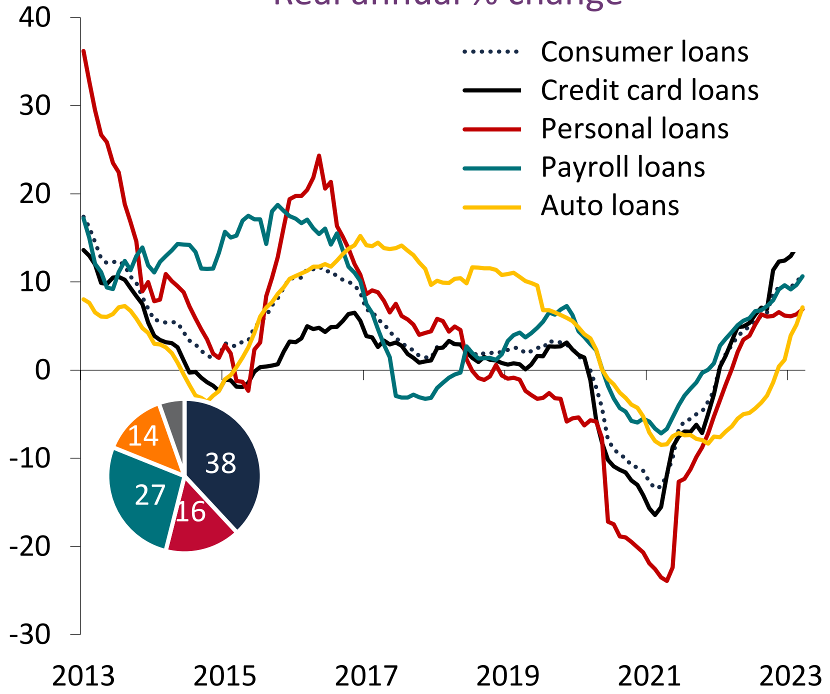
Data as of March 2023.
Source: Banco de México, BMV and Condusef.
1/ See the Financial Stability Report (full document) for details on what is included in each item.

Households' financial position [1/]
Share of GDP
%



Data as of March 2023. Source: Banco de México.
1/ The total may not add up due to rounding. Figures expressed as a percentage of average nominal GDP for the last four quarters. 2/ Includes housing and retirement savings funds.. 3/ Includes public and private securities issued by states, municipalities, OyEs and Fonadin and other bank liabilities held by households. 4/ Includes credit granted by commercial banks, development banks, savings and loan entities, credit unions and regulated sofomes.

Commercial banks' performing consumer loan portfolio
Real annual % change

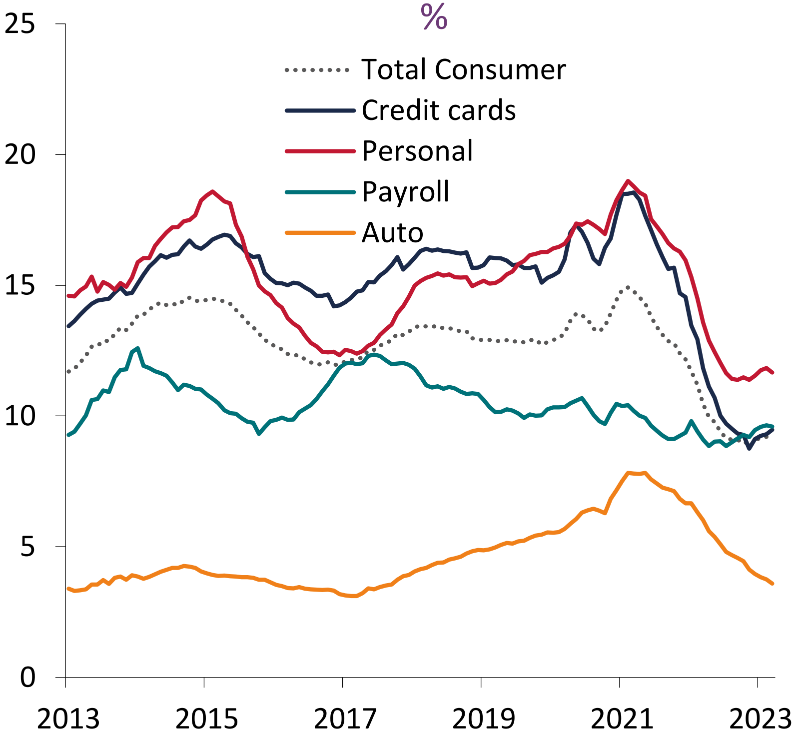


Data as of March 2023.
Source: CNBV.

4 Households' financial position

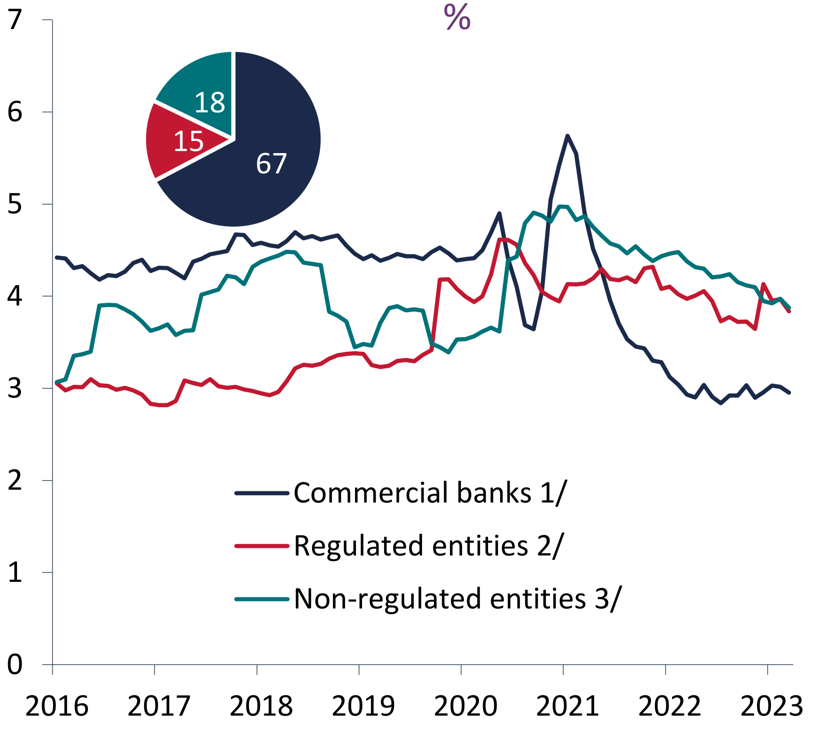
The non-performing loan ratio of the consumer bank loan portfolio rebounded slightly as of Q4-2022, due to higher delinquency levels in credit card and personal loan portfolios. The non-performing loan ratio of other lenders decreased slightly since the last Report, while that of the mortgage loan portfolio has continued increasing for some institutions.

Adjusted non-performing loan ratio of banks' consumer loan portfolio 1/
%



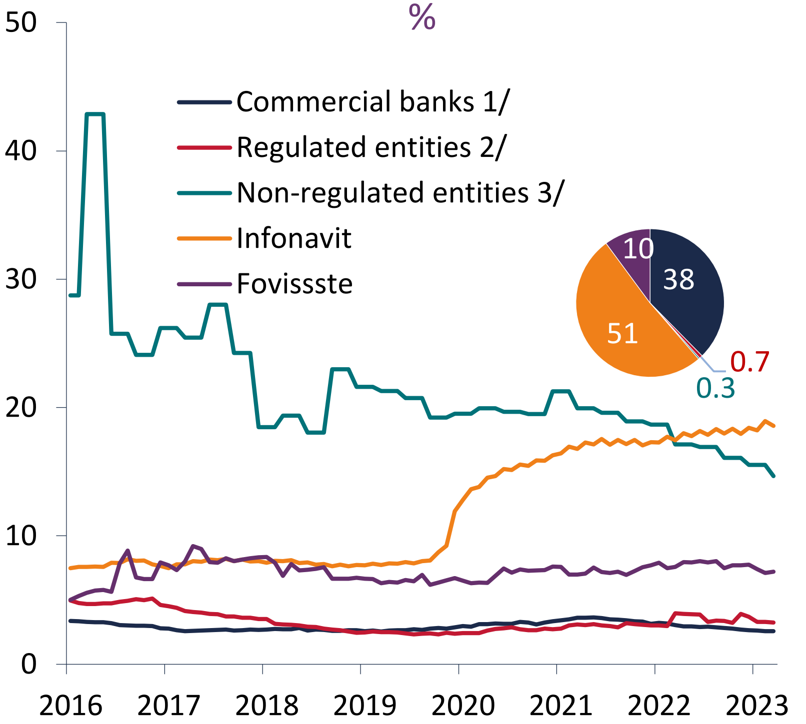
Data as of March 2023.
Source: CNBV.
1/ Includes regulated sofomes with equity links to banks.

Non-performing loan ratio of consumer loan portfolio by type of granting entity
%



Data as of March 2023.
Source: Banco de México (SIE), CNBV, BMV and Condusef.
1/ Includes the loan portfolio of sofomes regulated that have an equity link with a bank.
2/ Includes the loan portfolio of development banks and regulated non-bank financial institutions such as socaps, sofipos, and regulated sofomes for having publicly issued debt. 3/ Includes non-regulated sofomes.

Non-performing loan ratio of mortgages by type of granting entity
%

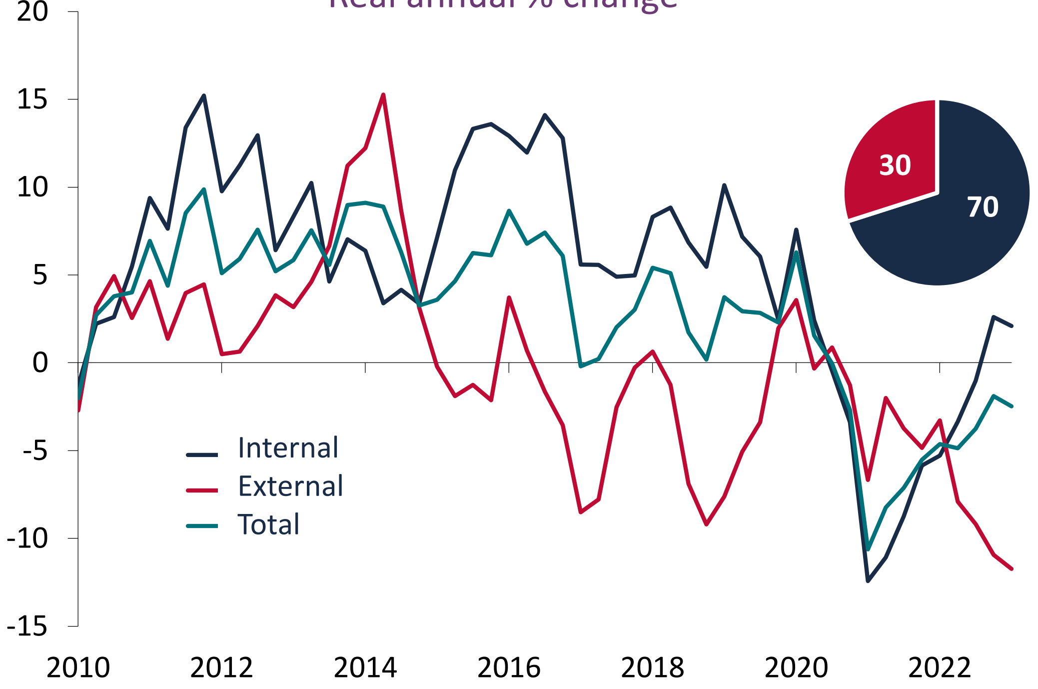


Data as of March 2023.
Source: Banco de México (SIE), CNBV, BMV and Condusef.
1/ Includes the loan portfolio of regulated sofomes for having a link with a bank. 2/ Includes the loan portfolio of development banks and regulated non-bank financial institutions such as socaps, sofipos, and sofomes regulated issuing debt. 3/ Includes non-regulated sofomes.

5 Non-financial private firms’ financial position

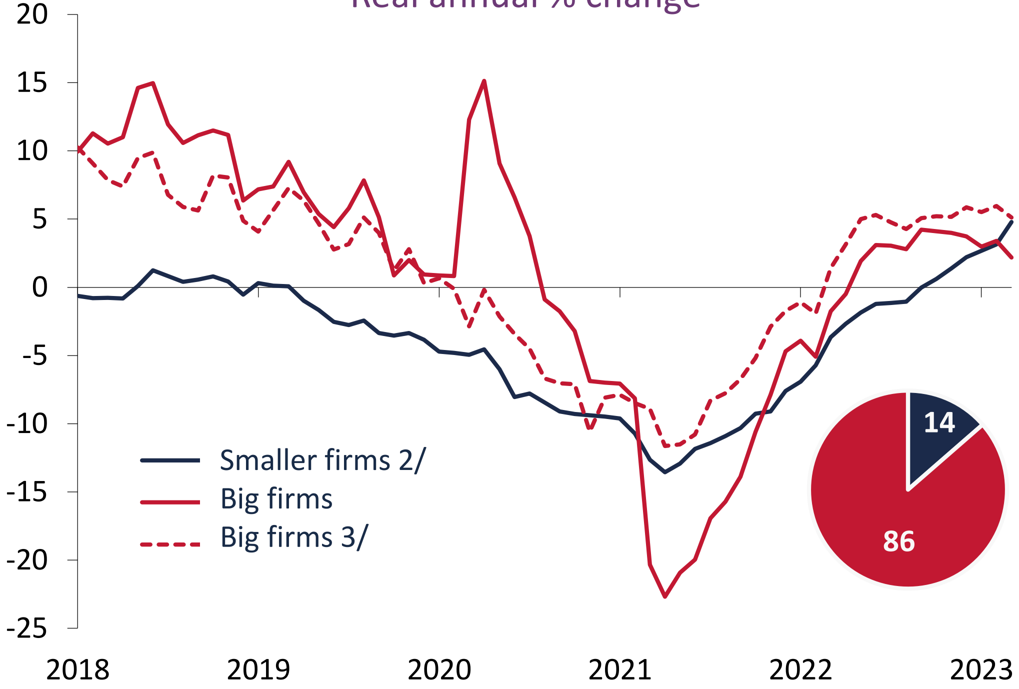
Total lending to non-financial private firms in Mexico continues declining in real terms. By type of source, the external component shows ten quarters of contraction and the domestic component recorded positive growth in its three sources. Bank lending to firms has increased in real annual terms, mainly due to the increase in the portfolio of larger firms and the growth in recent months of the portfolio of smaller firms.

Total financing to private non-financial firms 1/
Real annual % change



Data as of March 2023.
Source: Banco de México, BMV and Ministry of Finance (SHCP).
1/ The percentages consider the figures related to non-regulated entities granting financing.

Portfolio by firm size 1/
Real annual % change



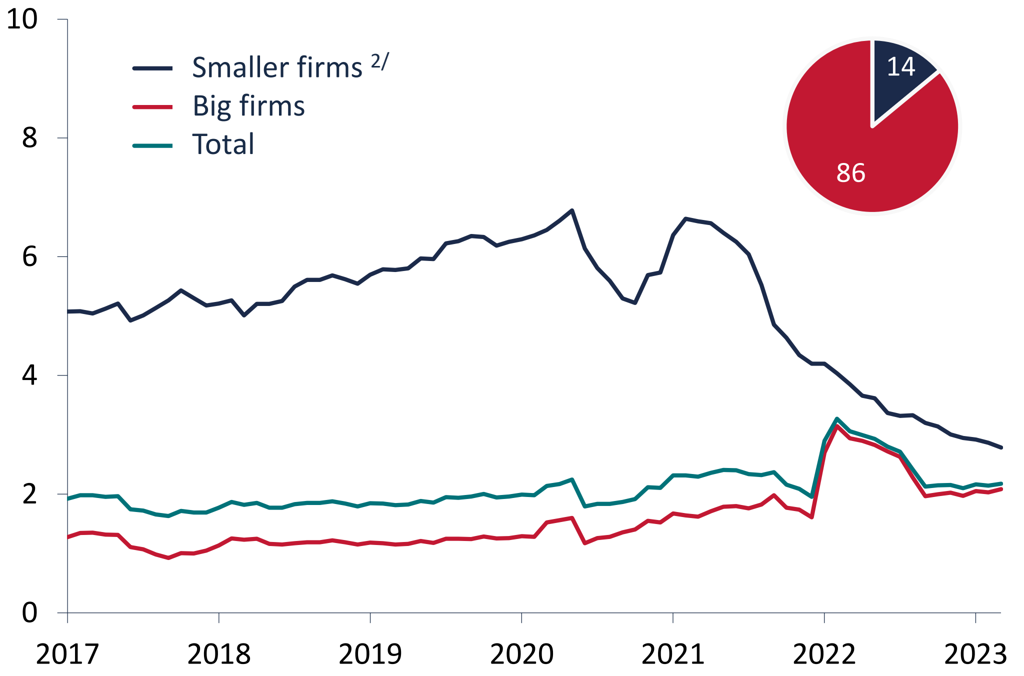
Data as of March 2023.
Source: CNBV.
1/ Bank portfolio. The pie chart shows the total percentage of the portfolio for each segment.
2/ Non-financial private firms not listed on the Mexican Stock Exchange with historical maximum credits of less than 100 million pesos. 3/ Large-size firms excluding those that had a monthly increase in their balance of more than 15% in Mar-20.

5 Non-financial private firms' financial position

The non-performing loan ratio of commercial banks' portfolio remained at practically the same levels during the fourth quarter of 2022 and the first quarter of 2023, after having declined during the first three quarters of 2022. In contrast, the non-performing loan ratio of the non-regulated non-bank financial intermediaries' credit portfolio rose during the period.

Non-performing loan ratio of non-financial firms' loan, by firm size [1/]

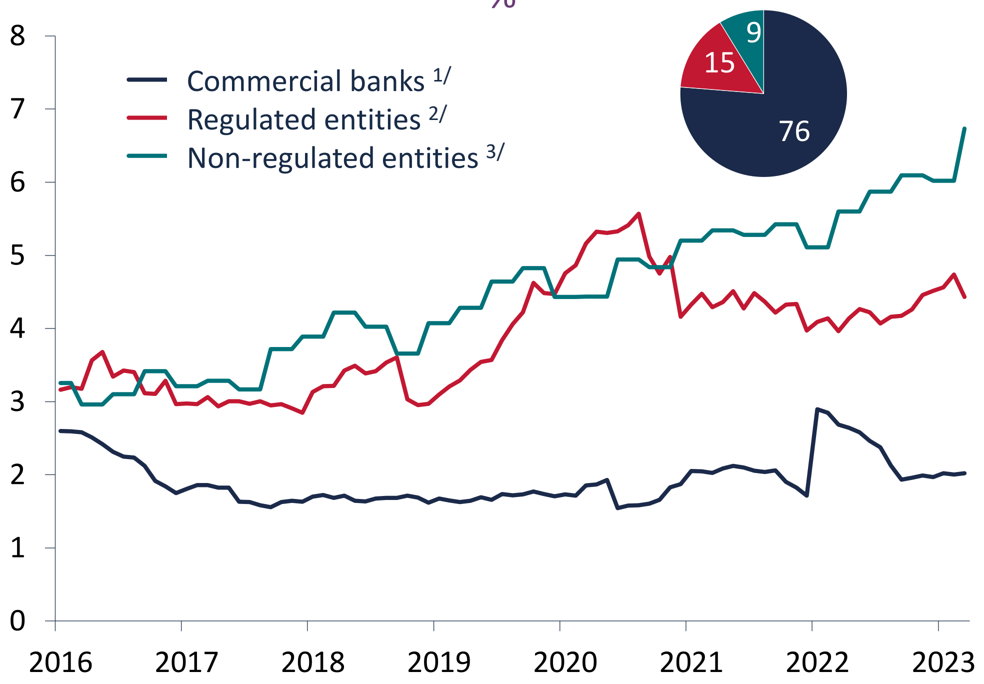
%



Data as of March 2023.
Source: CNBV.
1/ Bank portfolio. The pie chart shows the total percentage of the portfolio for each segment.
2/ Non-financial private companies not listed on the Mexican stock exchange with loans of less than 100 million pesos.

Non-performing loan ratio of non-financial firms' loan, by lender

%

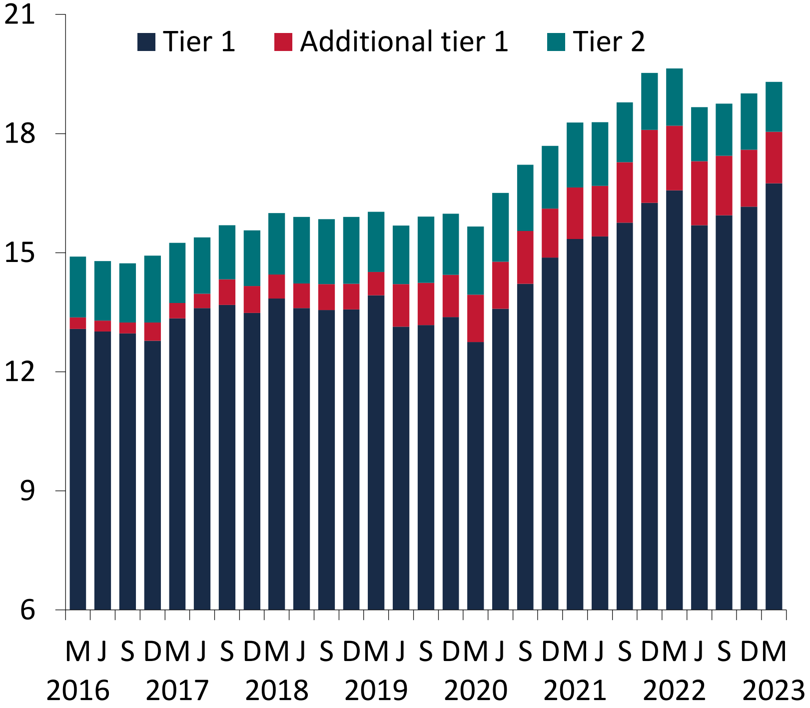


Data as of March 2023.
Source: Banco de México (SIE), CNBV, BMV and Condusef.
1/ Includes the loan portfolio of regulated sofomes for having a link with a bank with a bank, regardless if they are the bank's subsidiaries or not. 2/ Includes the loan portfolio of regulated financial entities such as socaps, sofipos, credit unions, regulated sofomes for issuing debt, bonded warehouses, and development trusts (FIRA, FND, FOVI and FIFOMI). 3/ Includes the portfolio of non-regulated sofomes and financial entities that predominantly grant credit, as part of the line of business, such as financial leasing companies and some financial arms of automotive companies.

6 Institutions: commercial banks

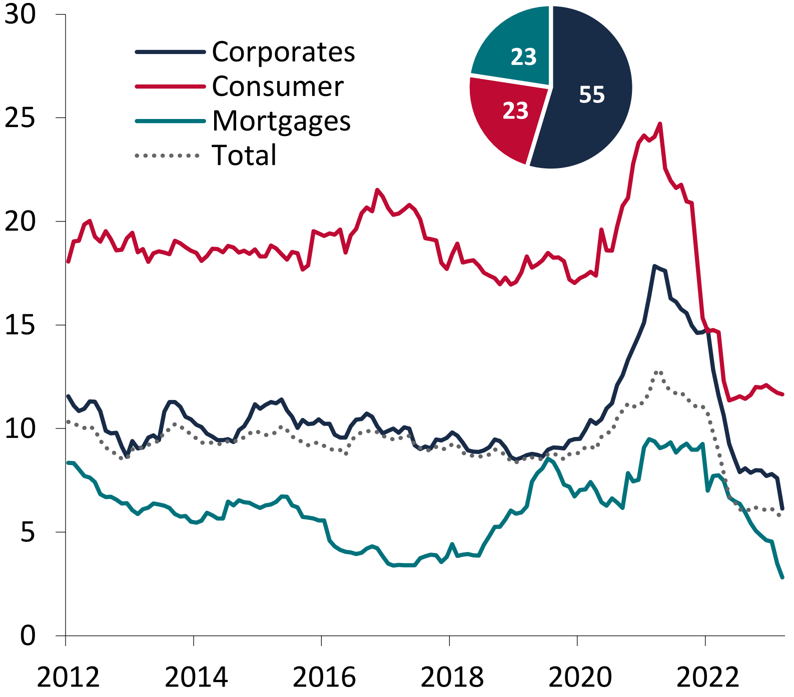
The Capital Adequacy Ratio (CAR) of commercial banks increased between September and March, and thus remained at high levels. On the other hand, its credit risk, measured as the Conditional Value at Risk (CVaR), continued decreasing, while the CAR net of risk increased. Hence, the sector remains in a solid position to face possible risks associated with the economic juncture.

Structure of banks' Capital Adequacy Ratio (CAR)1/
%



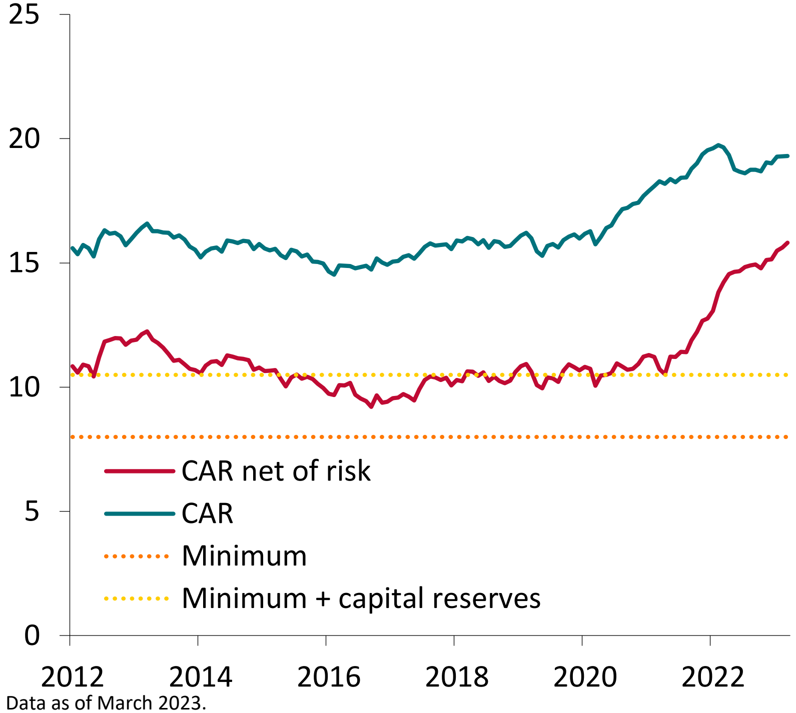
Data as of March 2023.
Source: Banco de México.
1/ The Capital Adequacy Ratio (CAR) is calculated by dividing net capital by risk weighted assets. Net capital is the regulatory capital that includes the Tier 1, Additional Tier 1, and the Tier 2 capital.

Credit Conditional Value at Risk (CVaR) by type of portfolio 1/
% of portfolio



Data as of March 2023.
Source: Banco de México, CNBV and Buró de crédito.
1/ Using a time horizon of a year and a 99.9% confidence level, the pie chart shows the percentage of the total performing balance for each segment of portfolio.

Capital Adequacy Ratio Net of Risk 1/
%

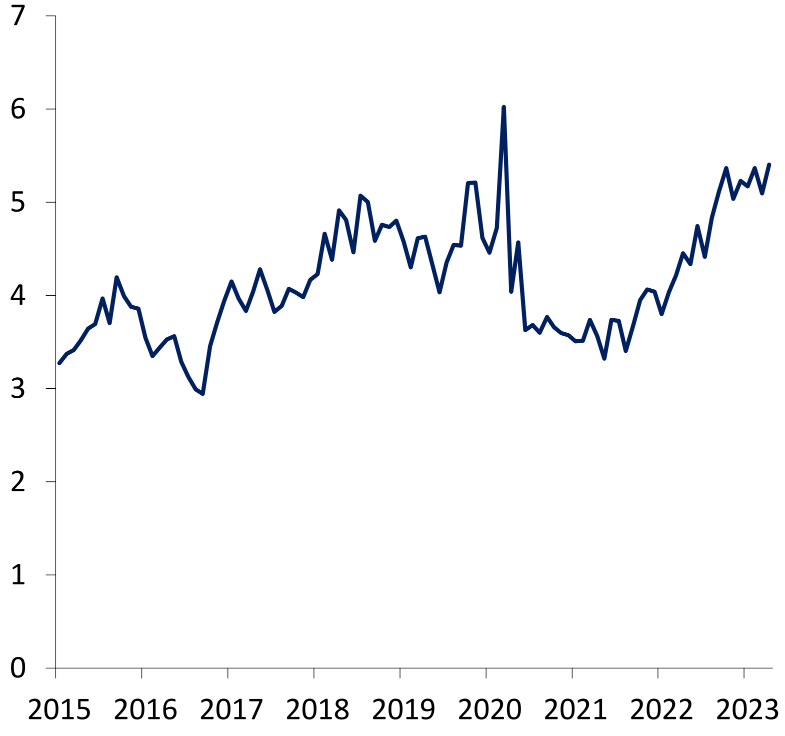


Data as of March 2023.
Source: Banco de México, CNBV and Buró de Crédito. 1/ Estimated as the capital adequacy ratio that results from reducing the CVaR at a 99.9% confidence level, both of net capital and risk weighted assets. This indicator assumes that the credit portfolio has losses for an amount equivalent to CVaR at 99.9%, which the bank assumes by directly reflecting the capital loss without affecting its reserves and considering that said portfolio was weighted by the effects of determining capital requirements at 100%.

6 Institutions: commercial banks

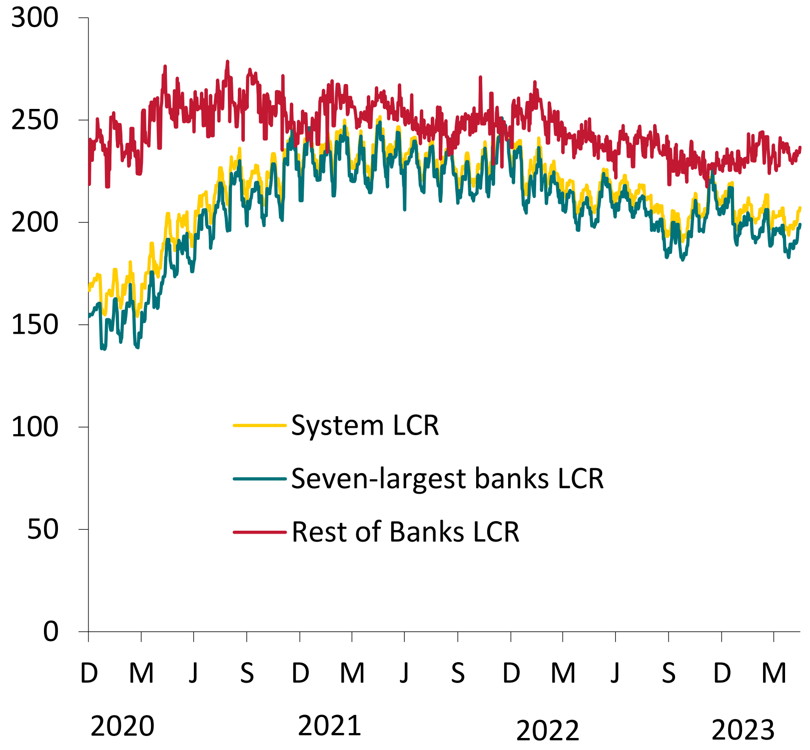
Since the release of the last Report, there was a slight increase in market risk of commercial banks, although they maintain abundant liquidity, with indicators exceeding both regulatory minima and the levels observed prior to the pandemic.

Market Conditional Value at Risk (CVaR) of commercial banks at 99.9% confidence level
% of net capital



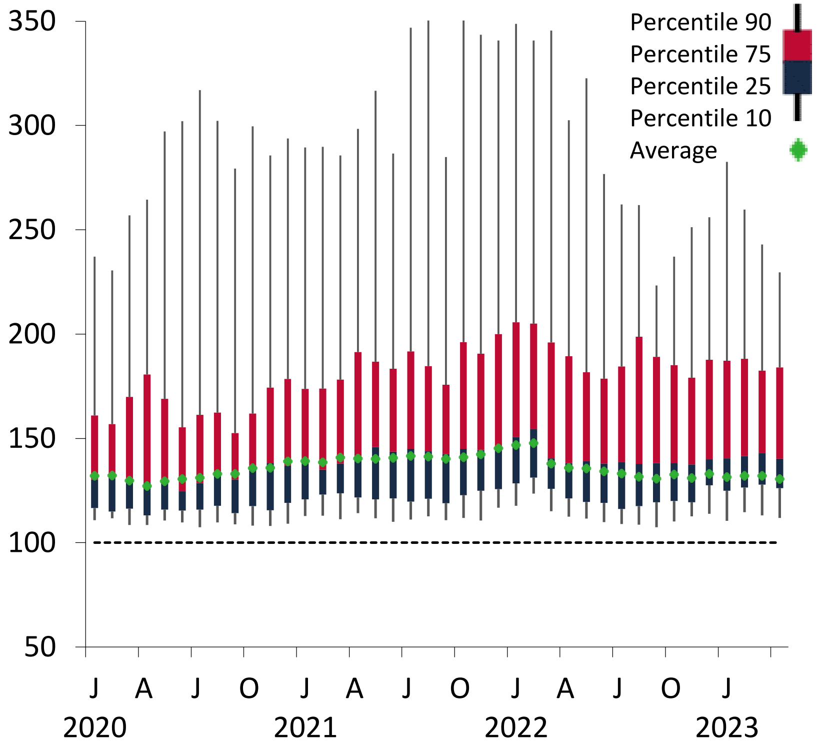
Data as of April 2023.
Source: Banco de México, CNBV, BMV, Bloomberg, Valmer.

Liquidity Coverage Ratio (LCR)
%



Data as of May 15, 2023.
Source: Banco de México.

Distribution of Net Stable Funding Ratio (NSFR)
%



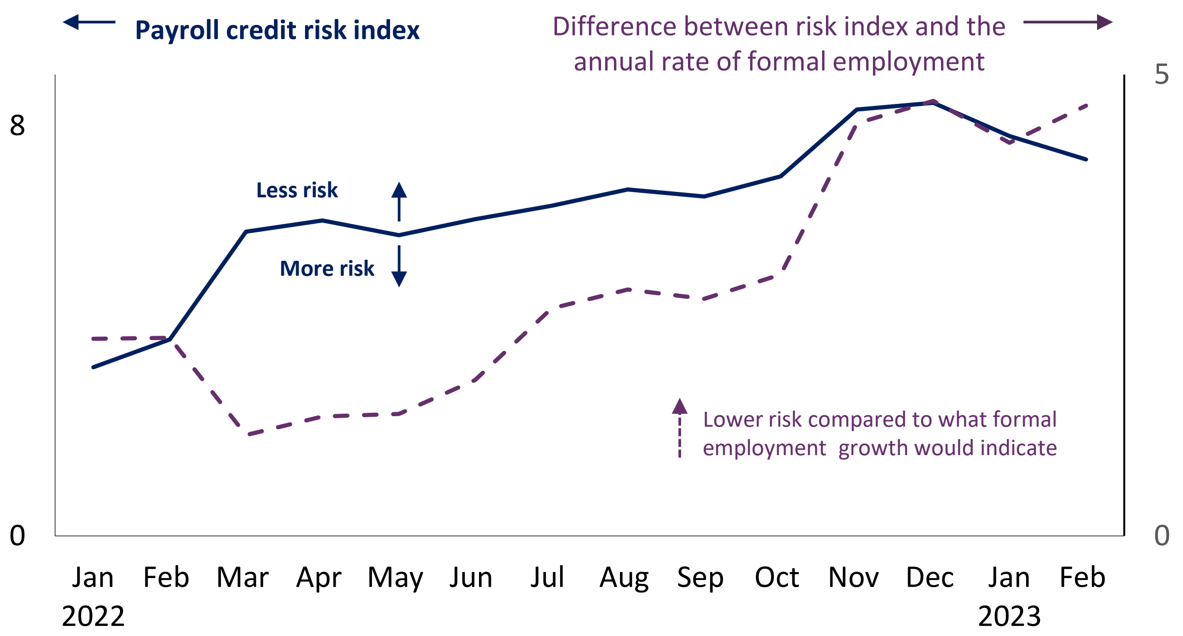
Data as of April 2023.
Source: Banco de México.

❼ Exposure of commercial banks to changes in economic activity and formal employment

Economic growth and employment dynamics are determining factors for credit risk faced by commercial banks.

Payroll portfolio credit risk due to changes in formal employment 1/

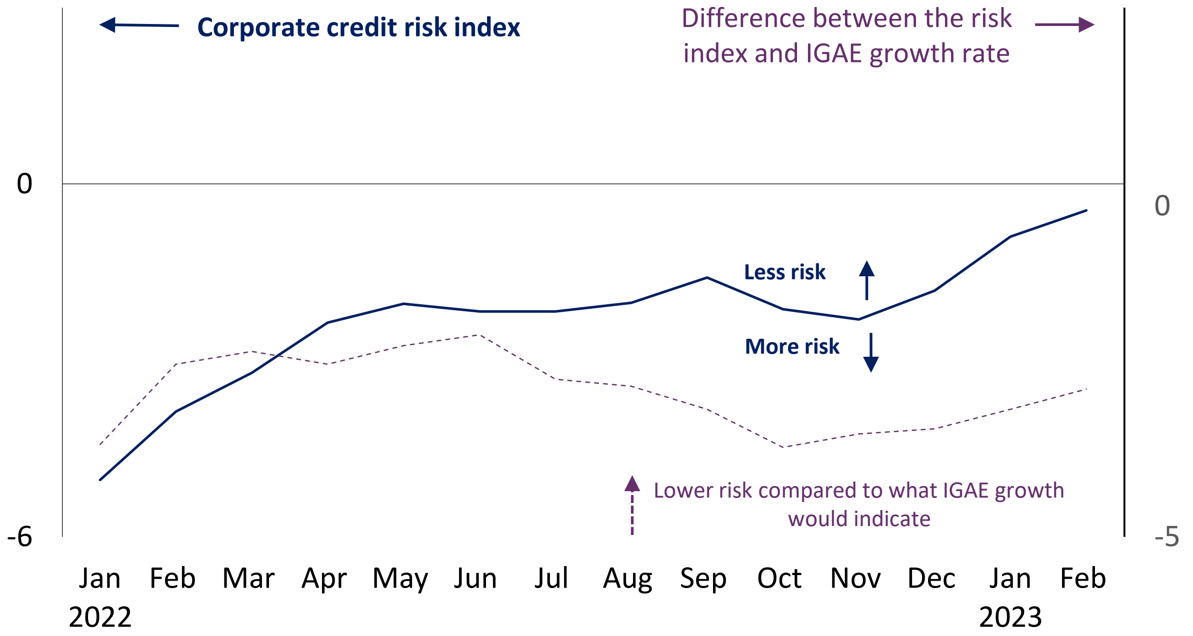
Annual % change



Data as of February 2023.
Source: Banco de México with own data and data from INEGI.
1/ The indicator is constructed as the sum of economic growth in the different sectors. In this sum, the weight of each sector's growth is equal to its share in the corporate loan portfolio. Thus, the indicator captures the risk of aggregate and sectoral changes in economic growth.

Credit risk of non-financial firms due to changes in economic activity 1/

% change (rate without base effect; 0 = IGAE February 2020)



Data as of February 2023.
Source: Banco de México with own data, data from INEGI and IMSS.
1/ The indicator is constructed as the weighted sum of growth in formal employment in Mexico's different labor markets. In this sum, the weight of the labor market corresponding to a state, gender and high or low wage level is equal to its share on payroll credit.

8 Other risks: operational continuity risks

The **operability of financial markets' infrastructures** and payment systems managed and run by Banco de México **has remained above the set goals.**[1/]

In order to verify that all necessary elements are in place to face any event that could affect such operability, **exercises of operational continuity mechanisms continued to be implemented** jointly with the participants during the period.

In this context, it should be noted that **payment systems' services have continued operating without being affected by any incident**.

1/ For more details on the goals set for operational continuity of market infrastructures, see: *Programa de trabajo 2021-2022*.

8 Other risks: cyber risks

- **Cyber risks are still among the most relevant risks** for the global financial system.
  - However, since institutions in Mexico report not having detected activities or attacks that could be attributable to the military conflict between Russia and Ukraine, **the cyber threat level has been downgraded** from “orange" to “yellow".
- Banco de México has been involved in several actions to encourage both authorities and financial institutions to **continue strengthening their protection and response schemes** in light of these events, for example:

Technological tools that will allow financial authorities to exchange information on attacks and threats **were enabled**, to both promote incident prevention actions and coordinate possible response actions.

Cybersecurity risk indices based on international best practices have also been developed and monitored.

❽ Other risks: environmental risks and sustainable investing

Banco de México has continued working actively to **encourage financial system participants to internalize climate-related risks**. It also continues improving and expanding both the tools and the analysis it has carried out in this area.

The Sustainable Finance Committee, through Banco de México, continued working on the creation of a **Sustainable Finance Training Hub** to provide free access to virtual guides and a digital repository of current and relevant material for training purposes in this area.

Regarding **the accumulated thematic bonds' issuance** by domestic issuers, both public and private, **it is highlighted that at the end of 2022 the level was of 266 billion pesos,** figure **higher than those observed in previous years**, while in 2023 these issuances have been characterized by a continued dynamism.

Contents

Stress tests to commercial banks

The stress tests carried out by Banco de México are simulations performed to **assess the resilience of the Mexican banking system** under extreme adverse economic scenarios, as part of its function to promote and preserve the sound development of the financial system.

The scenarios considered **should not be taken as a forecast** of the expected performance of the economy or be associated with a probability of occurrence.

The purpose of the **credit stress tests** is to assess if, under extreme adverse economic conditions, the banking system could continue performing its financial intermediation functions, maintaining a **capital adequacy ratio** above regulatory minima.

Credit stress tests

Scenarios[1/]

Assumptions on macrofinancial variables

Additional assumptions:

A **Prolonged tight global financial conditions**

- Uncertain and highly volatile conditions in international financial markets.
- Exchange rate and interest rate pressures.
- Higher risk premia, increased financing costs for households and firms.
- Lower credit growth and higher delinquency levels.

B **Slowdown in global economic activity**

- The US economy slows down and enters recession.
- The growth rates of the Mexican economy could be affected and would cause an environment of volatility in financial markets affecting the exchange rate.
- Lower industrial activity and a fall in imports in the United States.
- The banking system would be affected by slower growth and a lower demand for credit.
- Higher unemployment rates that could deteriorate the credit portfolio faster and cause greater losses.

1. ***This exercise is common to all institutions*** *and does not consider idiosyncratic problems related to loan origination.*
2. ***It disregards possible mitigation measures*** *that could be implemented by the institutions in the simulation (counterfactual simulation of partial equilibrium rather than general equilibrium).*

1/ For more detailed information on these scenarios, refer to the complete version of this *Report*.

Credit stress tests

Scenarios[1/]

Assumptions on macrofinancial variables

Additional assumptions:

C — **Occurrence of a systemic event with global impact**

- Higher levels of risk aversion, and a weakening in global economic activity.
- Lower capital flows to emerging economies, exchange rate pressures, and a slowdown in global economic activity.
- A slower recovery of economic activity.

D — **Weakening of domestic aggregate demand**

- Weakening of domestic consumption and investment.
- Lower levels of employment and negative effects on capital flows to Mexico, exerting pressure on the exchange rate.
- Credit crunch, which would have an impact on banks' profitability.

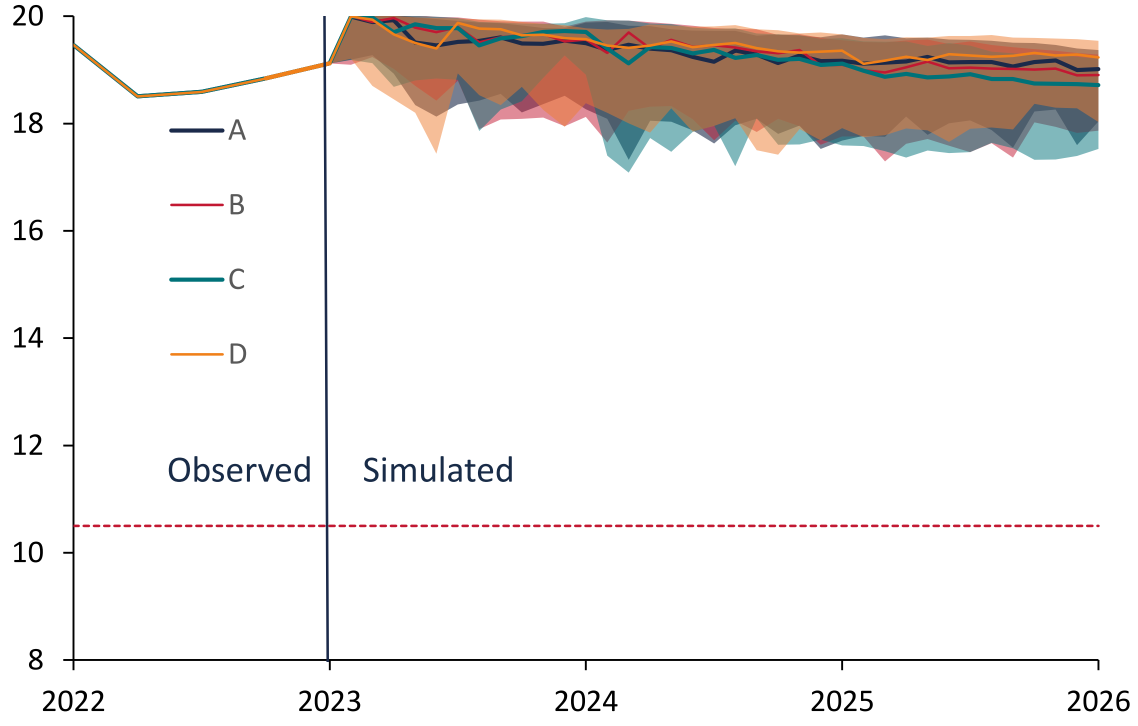
1. ***This exercise is common to all institutions*** *and does not consider idiosyncratic problems related to loan origination.*
2. ***It disregards possible mitigation measures*** *that could be implemented by the institutions in the simulation (counterfactual simulation of partial equilibrium rather than general equilibrium).*

1/ For more detailed information on these scenarios, refer to the complete version of this *Report*.

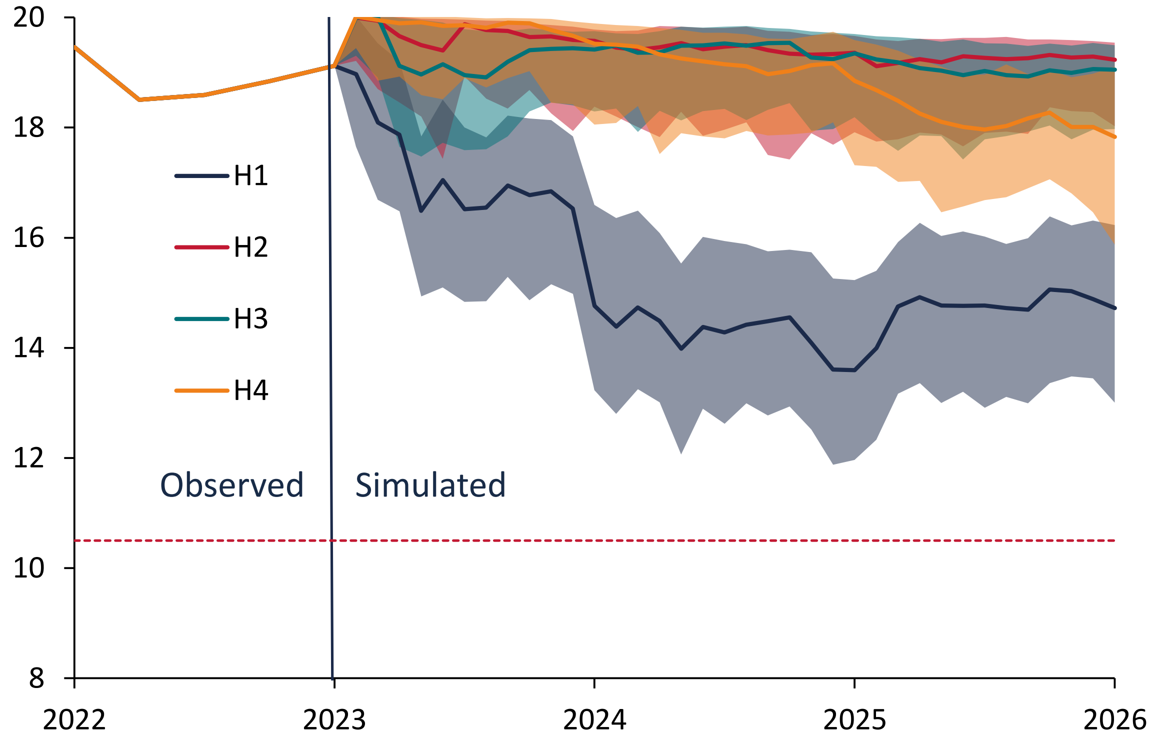
Credit stress tests

In all simulated scenarios, the results suggest that the Mexican banking system is at levels above the regulatory minimum plus capital supplements. Similarly, four historical scenarios were considered, scenario 4 (H4) replicates for the first time the economic crisis derived from COVID-19.

Financial system Capital Adequacy Ratio (CAR)
a) Scenarios A, B, C and D
%



Financial system Capital Adequacy Ratio (CAR)
a) Historical scenarios
%



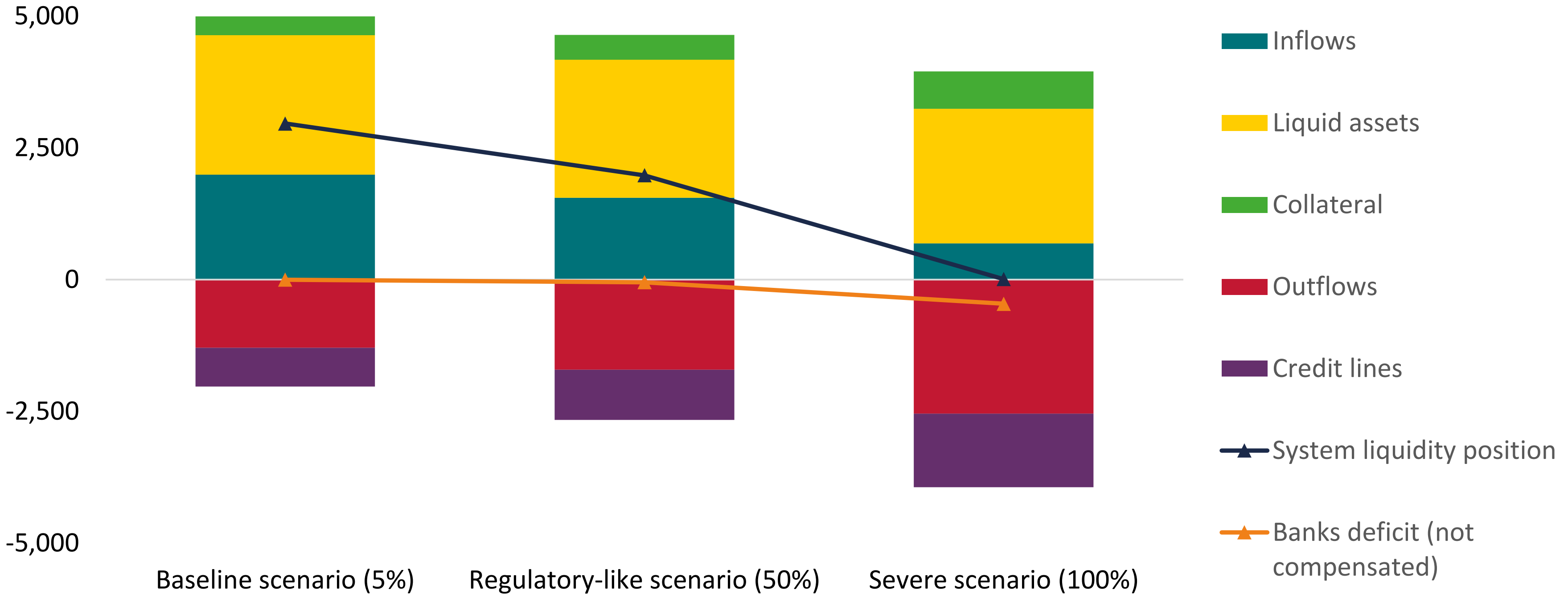
Data as of March 2023 and 3-year simulations starting from that date.

Source: Banco de México.

Liquidity stress tests

The results of the liquidity stress tests suggest that **its high liquidity position would allow banks, at the aggregate level, to face more severe stress episodes** than those experienced in the past and those proposed in the different stress scenarios. With data as of May 2023, the **banking sector as a whole would maintain a liquidity surplus** under the proposed stress scenarios **over a 90-day horizon**.

Liquidity stress scenarios over 90-day periods 1/
Billion MXN



Data as of May 15, 2023. Source: Banco de México.
1/ In the severe scenario (100% severity), a haircut to liquid assets of around 4% is considered. Repurchase agreements have a lower roll-over of 45% and a haircut for released collateral equal to that of assets is assumed. Inflows from the portfolio are not considered (haircut) of 100%. Wholesale funding (demand and term) has a run-off factor of 20% and retail funding (demand and term) has a run-off factor of 10%. Contingent outflows due to the exercise of credit lines and liquidity have a run-off factor of 40%. The baseline scenario and the scenario similar to the regulatory one correspond to a severity of 5% and 50% with respect to the severe scenario. The scenario similar to the regulatory one considers an aggregate outflow similar in magnitude to the outflow calculated under the liquidity coverage ratio (LCR) (see Box 9 of the FSR December 2022).

Climate stress tests

- **The purpose of these tests is to evaluate the resilience of the system** to a severe but possible adverse shock triggered by **extreme climate (hydrometeorological) events.**

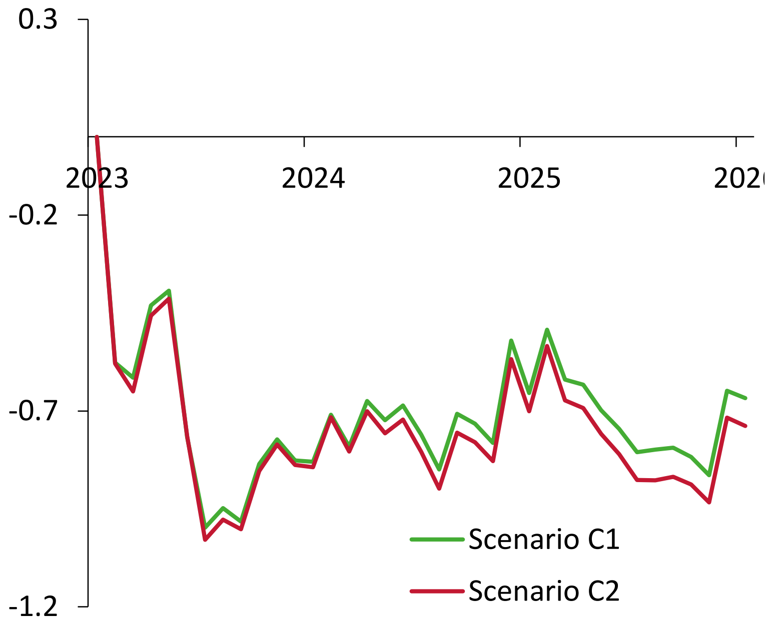
- The methodology assumes that recent historical events, in this case, the materialization of extreme hydrometeorological events, repeat and occur simultaneously. The exercise consists of three parts:

  1. Determine the **characteristics of the climate shock** that could jeopardize the financial system.

  2. Estimate the **direct losses and, by calculating the possible effect of the shock on the main macro-financial variables**, estimate **the potential losses** using the stress test methodology.

  3. Finally, it was estimated that, **in the base scenario (C1), which assumes a fall in GDP of one percentage point, the impact on the capital adequacy ratio (*CAR*) would correspond to a drop of 0.67 percentage points;** while **in the second scenario (C2)**, a 2% fall in GDP is assumed, and its impact on the *CAR* is equivalent to a drop of **0.74 percentage points.**

Results: CAR of the system vs. the base scenario
Percentage points



Data as of March 2023 and data at the end of the stress horizon.
Source: Banco de México.

Contents

Final remarks

1. During the first half of 2023, the global environment was complex and uncertain, partly due to the difficulties faced by several banks in the U.S. and Europe, persistently high inflation levels, tight financial conditions, and lower growth prospects.

2. In this environment, it is even more relevant to monitor the evolution of the financial system in Mexico, as this central bank has done so far.

3. In Mexico, the banking sector complies with strict regulatory requirements and, at an aggregate level, has sufficient capital and liquidity to face stress scenarios.

4. Thus, the Mexican financial system remains solid and resilient despite the recent developments in the US and European banking systems.

5. Banco de México will monitor the evolution of Mexican financial markets and will continue taking actions, in compliance with the legal framework.

Boxes

1. Margin requirements in Mexico for non-centrally cleared derivatives transactions
2. Listed Firms' Vulnerability Index
3. Range of natural value of portfolio flows
4. International regulatory proposals in the virtual assets market
5. Increasing occurrence of tropical cyclones and exposed credit in Mexico
6. Recent developments in the US banking system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