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Banxico's June 2020 Financial Stability Report: Into the crisis on a firm footing

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- Last week, Banco de México published its June 2020 Financial Stability Report, which examines the evolution of aggregate financial risk indicators for the Mexican financial system and collective financial positions of its participants, and provides an assessment of the resilience of the banking system, among others.
- According to the document, amid the COVID-19 pandemic crisis and falling oil prices, there are four main risks for financial stability:
  1. The global economic slowdown and the uncertainty surrounding its recovery.
  2. Increased volatility in international financial markets and new adjustments in portfolio flows towards safer assets.
  3. A deeper than expected domestic contraction and uncertainty regarding its depth and duration.
  4. Additional rating downgrades to sovereign and Pemex's debt.
- The Central Bank emphasizes the virtuous role that the financial system may have as a "bridge that allows the channeling of resources and financing required by economic agents to face the health emergency." In this context, it argues that the temporary policy measures that financial authorities have put in place aim to avoid the system's natural pro-cyclical response and its consequent amplification effects.
- Banxico concludes that the Mexican financial system entered the crisis on a firm footing and has shown resilience towards the recent materialization of some risks. Notwithstanding, it acknowledges that perils could intensify going forward and thus bring about significant turmoil.

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Last week Banco de México published its June 2020 Financial Stability Report. The semi-annual document, which examines the evolution of aggregate financial risk indicators for the Mexican financial system and collective financial positions of its participants, and provides an assessment of the resilience of the banking system, becomes even more relevant than usual under current circumstances posing "one of the biggest challenges to the global financial system since the Financial Crisis of 2008-2009".

The Report can be divided into five broad topics: i) the description of recent macro-financial conditions, ii) the identification of the risks that the Mexican financial system faces under the present environment; iii) arising challenges and the summary of the extraordinary policy measures that financial authorities have implemented during the past few months; iv) the performance of aggregate risk indicators and the system's participants collective financial position in Q1-2020, i.e., towards the full impact of the COVID-19 crisis –although it also contains the first effects of it on the data already available for April and May–; and v) the results from a set of stress tests that assess banks' resilience in the event of specific macro and financial shocks related to the risks in ii.

Importantly, the Central Bank emphasizes the virtuous role that the financial system may have as a "bridge that allows the channeling of resources and financing required by economic agents to face the health emergency." In this context, it argues that the temporary policy measures that financial authorities have put in place aim to avoid the system's natural pro-cyclical response and the consequent amplification effects. It also underscores that the preservation of financial system's soundness is key for an orderly adjustment of domestic financial markets and of the economy as a whole. In this context, Banco de México ensures the continued and close monitoring of the evolution of financial markets in the country and assessment of their operating conditions. It also reaffirms that "strictly abiding by the legal framework," and in coordination with other authorities, it will take the necessary actions to continue fostering the sound development of the financial system.

All in all, Banxico concludes that the Mexican financial system entered the crisis on a firm footing, namely, with robust capital and liquidity positions, and argues that it has shown resilience towards the recent materialization of some risks. Notwithstanding, it acknowledges that perils could intensify and bring about significant turmoil in the financial system going forward, which could affect its well-functioning.

Risks for the Mexican financial system

The document considers four main macro-financial risks for financial stability:

1. The global economic slowdown and the uncertainty surrounding its recovery, which could significantly deteriorate the performance of financial institutions' loan portfolios, as sources of household and businesses' income erode.
2. Increased volatility in international financial markets and new adjustments in portfolio flows towards safer assets prompted by prolonged episodes of high risk aversion, which could further deteriorate domestic financial conditions and tighten the country's liquidity restrictions, which in turn would limit the system's ability to intermediate resources.
3. A deeper than expected domestic contraction and uncertainty regarding its depth and duration that could suggest future lower potential growth and, in consequence, diminish the economy's resilience and increase financial institutions' credit and market risks.
4. Additional rating downgrades to sovereign and Pemex's debt, which would increase risk premia and, hence, drive up government, businesses and financial institutions' financing costs. Eventually, this could spiral into a further deterioration in banks' loan portfolios and an additional reduction of local-currency-denominated bond holdings by foreign investors, with their consequent effect on domestic financial markets.

The sudden deceleration in global and domestic economic activity has had a meaningful negative impact on households and business' income, therefore increasing the risk of observing higher non-performing loans through two channels:

a) High levels of unemployment and lower labor market participation levels, and the possibility that these become relatively persistent, can directly affect consumer loan portfolios, primarily through borrowers who work in the sectors most affected and who are self-employed or informal.
b) Businesses belonging to the most affected sectors and for which idiosyncratic characteristics such as size, liquidity constraints, leverage levels, and credit quality can directly affect business loan portfolios.

In the last respect, the Central Bank identifies the set of loans granted to non-financial institutions (i.e. businesses), in sectors that could be most affected by the pandemic. According to the analysis, around 40% of the bank's business loan portfolio lies on this set. Focusing only on small and medium business loans, the share of those related to the likely most affected sectors is smaller for bigger banks. In the case of smaller banks, the share of these credits relative to its capital is higher (especially for some of

them whose portfolio is more concentrated in the construction sector). When further examining this set of loans at a local level, and considering specific amplification factors such as economic and fiscal characteristics, and public health and socio-demographic conditions, the analysis concludes that the top five states with higher shares of these loans are Quintana Roo, Morelos, Sinaloa, San Luis Potosí and Guerrero –in which credits to leisure activities, tourism, durable consumption goods, constructions and retail sales ex-food activities dominate.

Arising challenges and policy measures

To mitigate the effects of the COVID-19 crisis on both financial and economic activities and, given the macro-financial risks in place, Banco de México points out the following challenges faced by the Mexican financial system:

I. The prevalence of favorable trading conditions in domestic financial markets, and the fostering of the proper-functioning of the payments systems.
II. Preventing that financial institutions' response amplifies agents' liquidity an operational problems.
III. Maintaining the required flow of credit and ensuring adequate liquidity conditions, both in domestic and foreign currency.
IV. Preventing solvent economic agents from becoming financially overstretched by temporary liquidity constraints.
V. The proper management of financial institutions' increased market, credit and operational risks.

Thus, with the objectives of providing support to credit, improving liquidity conditions, ensuring the proper functioning of financial markets, providing regulatory facilities, and ensuring operations and operational continuity, the Central Bank, frequently in coordination with other financial authorities, has implemented a set of wide-ranging extraordinary measures (see Table 1), of which the Report provides exhaustive details in Section IV and Annex 1.

Table 1. Measures to preserve the well-functioning of the financial system

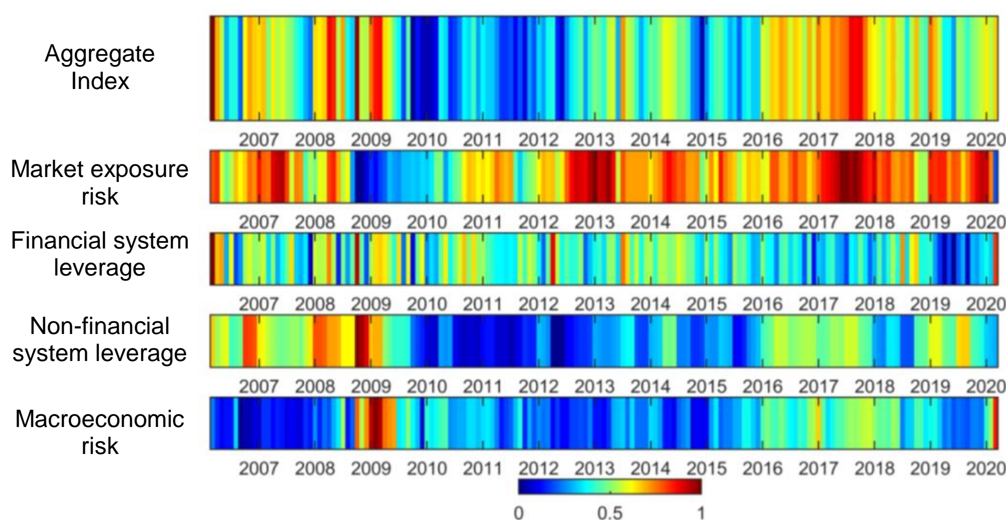
Measures	Intermediaries			Benefited agents		
				Firms		
	Banks	Funds	Others	Large	SME	Households
Intermediation measures						
Provision of resources to banking institutions to channel credit.	✖				✖	✖
Collateralized financing facility for commercial banks with corporate loans.	✖				✖	
Government securities term repurchase window	✖			✖	✖	✖
Corporate Securities Repurchase Facility	✖			✖		
Expansion of foreign exchange hedging program	✖	✖	✖			
US dollar auctions funded with swap line	✖					
Liability management operations	✖	✖	✖			
Strengthen the Market Makers program for government debt	✖		✖			
Increasing liquidity during trading hours.	✖					
Temporary securities swap window	✖					
Swaps of government securities	✖					
FX hedges settled by differences in USD with nonresident counterparts.	✖					
Reduced interest rate on the Ordinary Additional Liquidity Facility (FLAO)	✖			✖	✖	✖
Extending the securities eligible for the FLAO, foreign exchange hedging program operations, and USD credit	✖			✖	✖	✖
Extending the counterparts eligible for the FLAO	✖			✖	✖	✖
Regulatory actions						
Reduction of the Monetary Regulation Deposits	✖			✖	✖	✖
Temporary accounting flexibilities	✖	✖	✖	✖	✖	✖
Voluntary dividend suspension	✖		✖	✖	✖	✖
Use of capital buffers by banks	✖			✖	✖	✖
Temporary flexibilities on liquidity requirements	✖			✖	✖	✖
Temporary reporting flexibilities	✖		✖			
Oversight and inspection flexibilities by CNBV	✖	✖	✖			
Operational and business continuity for retirement savings institutions			✖			✖
Temporary exemptions to credit card minimum payments	✖		✖			✖
Cash handling operations	✖					✖

Source: Finamex Economic Research with data from Banco de México Financial Stanility Report.

Aggregate risk indicators and financial system participants' financial positions

Aggregate risk indicators, which have remained moderate until Q4-2019 and the first months of Q1-2020, increased in March. Accordingly, the Mexican financial system's heat-map signaled that the aggregate risk of the system increased due to higher macroeconomic risk (public debt, prices, current account, and terms of trade) and increased risk for the financial sector's leverage (banking debt, and delinquency ratios), (see Figure 1). In contrast, market exposure risk (non-resident holdings, interest rate spreads, yields, and volatility) shows the peril derived from high-risk appetite decreased. As businesses' leverage risk remained relatively stable.

Figure 1. Heat-map of the Mexican financial system's risks

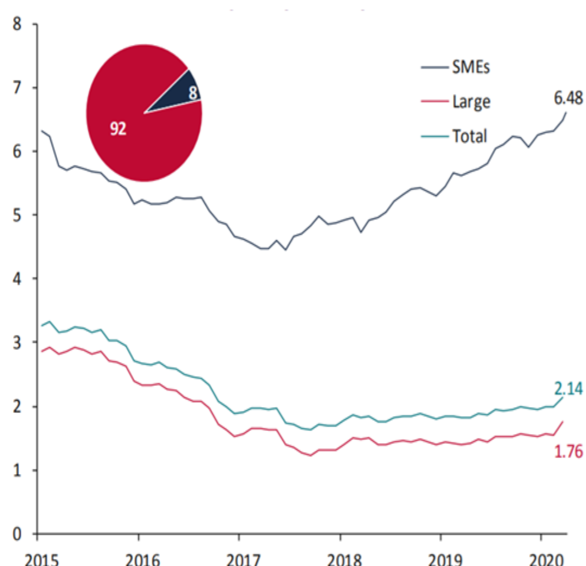


Notes: Data as of March 2020. The methodology can be found in the 2018 Annual Financial Stability.
Source: Banco de México's June 2020 Financial Stability Report.

A comprehensive analysis of aggregate risk indicators is useful for the better design of macroprudential tools. Within this assessment, Banxico analyzes financial position metrics across the financial system's primary players, namely, households, businesses, the public sector and financial institutions (commercial and development banks, among others). The document reveals that before the financial shock resulting from the COVID-19 pandemic, financing in the Mexican economy was characterized by a downward trend caused by the slowdown in both domestic and external funding. Worth noting, however, financing rose during Q1-2020, thanks to both higher external funding due to exchange rate depreciation and an increase

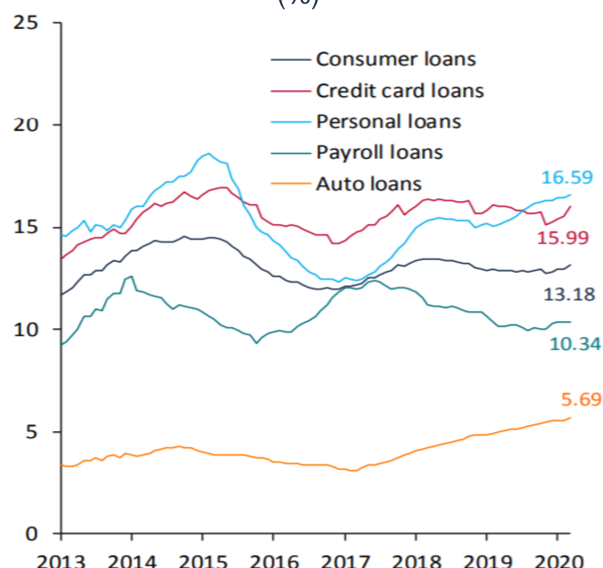
in domestic financing to businesses through the use of previously granted credit lines. Meanwhile, household credit growth –both for consumption and mortgages– continued its downward trend. With respect to non-preforming-loans in both portfolios, they remained relatively stable, except for those related to SME loans, which continued its upward trend (see Figures 2A and 2B).

Figure 2A. Delinquency rate by firm size
(%)



Notes: Data from the Banking Commission as of March 2020. The pie chart shows the total percentage of portfolio by firm size. Source: Banco de México's June 2020 Financial Stability Report.

Figure 2B. Adjusted delinquency rate of banks' consumer loan portfolio
(%)



Notes: Data as of March 2020 and 3-year simulations starting from such date. Includes regulated Sofomes with links to banks. Source: Banco de México's June 2020 Financial Stability Report.

Public sector's financial position concerns focus on Pemex's financial situation that remains compromised given its lower revenues and higher expenditures. Unlike CFE, whose risk increased in line with the sovereign's, there is a critical risk premium above the sovereign in the case of Pemex, which can be explained by a higher market perception of a sharp deterioration in the company's financial position after the fall in oil prices. On sub-nationals, the Central Bank emphasized the risk they represent to public finances, as local governments could present a decrease in their revenues, and in the resources coming from federal non-earmarked transfers. Both factors could create pressures on their indebtedness ratios.

The banking sector's capitalization levels and asset/liabilities composition allow it to enter this episode on a firm footing which, according to the Bank, provides room for expanding its activities. Although regulatory capital decreased in March, it remained at high levels and above the minimum regulatory threshold. Bank's profitability also declined in March, mainly due to the increase in credit provisions. Worth noting though, the delay of dividend payments strengthened measures of basic capital, hence allowing banks to face rising risks. During the same period, credit and market risks also increased, as concentration and probability of default for business loans and default correlations for consumer loans and mortgages went up, on the one hand, and changes in portfolio composition increased interest rate exposure, on the other hand. Liquidity coverage ratios remained above the minimum required level, due in part to the temporal exceptions for liquidity metrics that Banxico and CNBV (National Banking and Assets Commission) recently implemented. Furthermore, an indicator that measures the liability-coverage horizon suggests that only a small proportion of banks (4.4%) could not fulfill its obligations for a 20-days period. The latter, while potential contagion slightly increased as well as the severity of the losses in the contagion chain.

Regarding development banks, which may play a vital role as a vehicle for the implementation of countercyclical policies, different indicators suggest they are financially sound, in general terms.

Stress tests

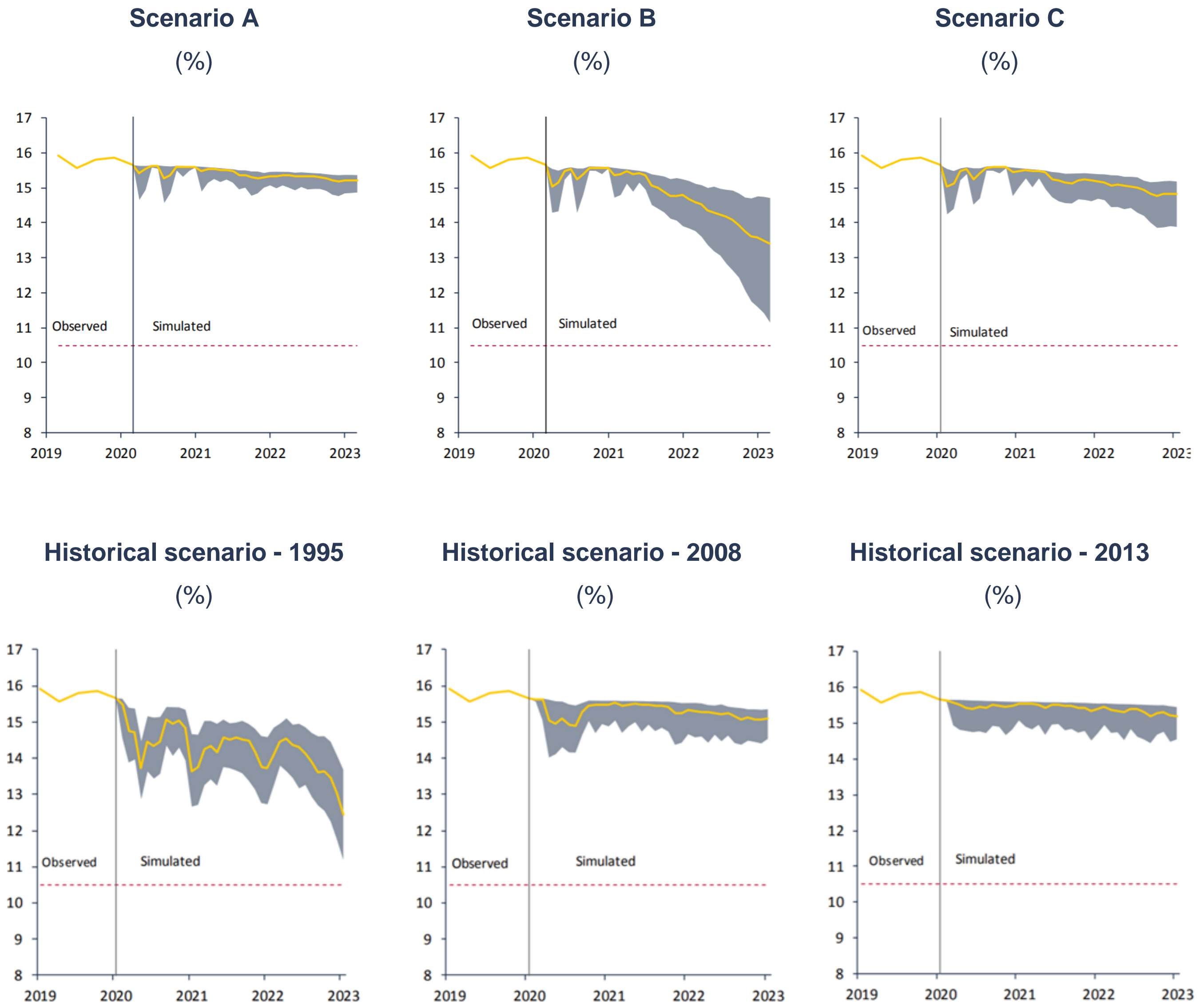
Chapter V presents stress tests for the banking system under six scenarios entailing different combinations of macro-financial risks: A) economic slowdown due to health crisis; B) sharper contraction of the domestic economy; C) higher volatility with a recomposition; and three historical cases that reproduce the shocks faced by the Mexican economy during H1) the Tequila crisis, H2) the global financial crisis, and H3) the volatility episode around the announcement of the taper tantrum in May 2013.

The Central Banks emphasizes that these top-to-bottom exercises are limited since they do not consider idiosyncratic elements regarding loan origination nor possible mitigation measures that could be implemented, and acknowledges that the system's dynamics "could become more complicated or intensify depending on the interaction and feedback among the different vulnerabilities," amid a highly uncertain environment.

The results suggest that, although banks' capital would be significantly eroded in some scenarios, risk-weighted assets would decrease, and some banking institutions may reach capitalization levels below regulatory minimums –the latter of which represent a small share of total assets. The banking system's average capital adequacy ratios would remain above regulatory minimum plus capital buffers, as

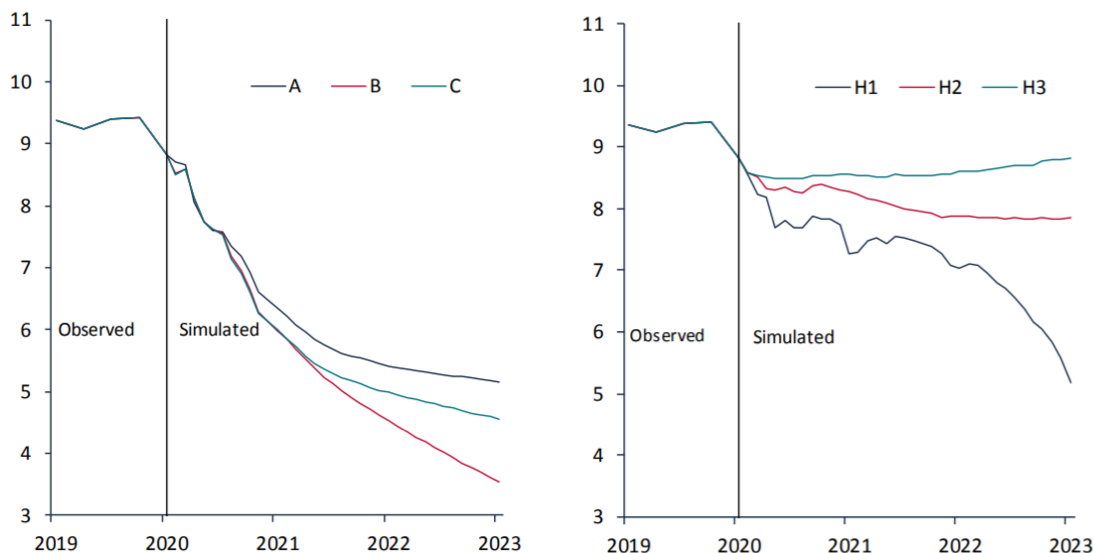
its leverage ratios would remain above the 3% minimum requirement, even in the most adverse scenarios (see Figure 3 and Figure 4).

Figure 3. Financial system Capital Adequacy Ratio (CAR)*



Notes: Data as of March 2020 and 3-year simulations starting from such date. The horizontal line refers to minimum CAR plus capital buffers. These results should in no way be interpreted as a forecast for the 3 years analyzed.
Source: Banco de México's June 2020 Financial Stability Report.

Figure 4. Average leverage ratio by alternative scenarios
(%)



Notes: Data as of March 2020 and 3-year simulations starting from such date.
Source: Banco de México's June 2020 Financial Stability Report

Technical boxes

Finally, the Report presents five specialized boxes with a timely analysis that, in some cases, allows us to identify some of Banxico's potential concerns.

- In Box 1, *Measures implemented in different jurisdictions to maintain financial stability*, the Bank presents a summary of the measures implemented to preserve financial stability amid the economic implications of the COVID-19 pandemic. Due to the evolution of the measures implemented since the end of January, it is possible to identify four stages: liquidity stress, stabilization, recession, and recovery.
- In Box 2, *Financial conditions and growth at risk in the face of COVID-19*, the Bank examines the substantial tightening of global financial conditions driven by the significant adjustments in financial markets after the COVID-19 pandemic. A Growth at Risk exercise describes the increase in this tightening, coupled with the slowdown in economic activity. It concludes that the distribution of growth projections' has shifted to the left-hand side over a horizon of three and nine months.

- In Box 3, *Determinants of non-financial private sector delinquency*, Banxico argues that delinquency dynamics are closely linked to economic activity and hence could suffer the pandemic's effects. The box analyzes potential scenarios of default in the face of the shocks materialized throughout the Q1-2020. The results suggest that delinquency rates for loan portfolios are affected by economic activity, wages, the price of oil, and the NBER indicator of recessions for the United States. Although authorities have taken measures to mitigate this risk, it becomes critical to monitor the evolution of non-performing loans to avoid a sharp deterioration in credit.
- In Box 4, *Public insecurity's impact on the cost of financing*, the Bank explains that lower financing costs can increase the profitability of productive projects that would not otherwise be carried out, thus increasing economic growth. The exercise presented shows that higher homicide rates are related to higher banking financing costs for businesses in Mexico. It demonstrates that an increase of one standard deviation in the homicide rate is related to a 5.7 basis point increase in the cost of financing. Moreover, this relationship exists for borrowers who often lack alternative sources of funding.
- In Box 5, *Evolution of sovereign and Pemex credit risk*, the Central Bank breaks down the sovereign and Pemex's CDS into global and idiosyncratic factors. On sovereign risk, the estimates show that global factors explain most of its increase during March and early April. Once the global effect begins to dissipate, idiosyncratic factors almost wholly account for sovereign risk dynamics. On the Pemex's front, although the pattern is similar in terms of the relative impact of contributions, it becomes evident that idiosyncratic factors explain to a great extent default risk dynamics since March and almost entirely by the end of April.

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