INTERNATIONAL MONETARY FUND

IMF Country Report No. 23/356

MEXICO

2023 ARTICLE IV CONSULTATION—PRESS RELEASE AND STAFF REPORT

November 2023

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2023 Article IV consultation with Mexico, the following documents have been released and are included in this package:

- A **Press Release** summarizing the views of the Executive Board as expressed during its October 30, 2023 consideration of the staff report that concluded the Article IV consultation with Mexico.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on October 30, 2023, following discussions that ended on September 22, 2023, with the officials of Mexico on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on October 17, 2023.
- An **Informational Annex** prepared by the IMF staff.
- A **Staff Supplement** updating information on recent developments.

The documents listed below have been or will be separately released.

Selected Issues

The IMF's transparency policy allows for the deletion of market-sensitive information and premature disclosure of the authorities' policy intentions in published staff reports and other documents.

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International Monetary Fund
Washington, D.C.

PRESS RELEASE

PR23/370

IMF Executive Board Concludes 2023 Article IV Consultation with Mexico

FOR IMMEDIATE RELEASE

Washington, DC – **November 1, 2023:** On October 30, The Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation[1] with Mexico.

The Mexican economy is in the midst of a broad-based expansion. Growth is expected to be 3.2 percent in 2023, led by robust private consumption and investment, with notable strength in services and construction sector, and in auto production. The unemployment rate has fallen to 2.7 percent. Proactive monetary policy and a decline in global commodity prices are facilitating disinflation. Economic activity is projected to slow to 2.1 percent in 2024. Although fiscal policy is expected to loosen next year, its impact on growth will be blunted by binding capacity constraints, a continuation of tight monetary policy, and slowing growth in the U.S.

The authorities are projected to meet their 2023 fiscal targets. More restrained capital spending is expected to more than offset the lower tax revenue, especially on the VAT, yielding an overall deficit of 3.9 percent of GDP. This should result in a decline of gross public sector debt (by staff's definition) to 52.7 percent of GDP in 2023. Banxico has held its policy rate at 11.25 percent since March 2023 and stated it will keep rate on hold for an extended period. With inflation and long-run inflation expectations in check, the real rate is now firmly in contractionary territory.

The banking sector has strong capital positions and, as of May 2023, nonperforming loans are close to record lows at 2.2 percent of total loans. Higher freight costs, strong domestic demand, and adverse price developments increased the current account deficit slightly in 2022 to 1.2 percent of GDP. Higher demand-driven imports are expected to widen the deficit further in 2023 to 1.5 percent of GDP. International reserves remain at comfortable levels.

Executive Board Assessment[2]

Executive Directors agreed with the thrust of the staff appraisal. They noted that the authorities' very strong policies and policy frameworks were instrumental in restraining public debt and containing inflation, while achieving a broad-based economic expansion supported by robust private consumption and investment. Recognizing the opportunities for Mexico over the medium term, Directors noted that securing sustainable and inclusive growth will require continuing with a sound macroeconomic policy mix, accompanied by a broad set of structural reforms to address the existing bottlenecks and make the economy more climate resilient.

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[1] Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board.

[2] At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summings up can be found here: http://www.IMF.org/external/np/sec/misc/qualifiers.htm.

Directors generally cautioned against an overly procyclical near-term fiscal stance and underscored that decisive measures will be needed in 2025 and beyond to preserve fiscal sustainability over the medium term, while highlighting Mexico's strong track record of meeting fiscal targets. Going forward, Directors emphasized the need to boost non-oil revenues, which remain below Latin American and OECD peers, noting that higher fiscal space will create room for targeted social and infrastructure spending. They also saw scope to reform the medium-term fiscal framework to increase its flexibility and credibility. Directors agreed that greater transparency in fiscal reporting will improve accountability and welcomed the transparent recording of support to Pemex in 2024 budget, while emphasizing the importance of ensuring the company's commercial viability.

Directors agreed that the proactive approach of Banco de México to monetary policy has been instrumental in containing inflationary pressures and ensuring that inflation expectations remain well-anchored. In the face of upside risks to inflation, they recommended caution in reducing the policy rate before inflation is on a clearer downward path toward the target. Directors also underscored the importance of continuing to enhance communication practices. They agreed that the flexible exchange rate should continue to be the key tool to facilitate adjustment to external and domestic shocks.

Directors agreed that the financial system remains resilient, with high capital and liquidity buffers. They looked forward to continued implementation of key policy recommendations of the 2022 Financial Sector Assessment Program. Directors emphasized the need to address outstanding gaps in the AML/CFT framework and enhance collaboration between various AML/CFT agencies and anti-corruption bodies. They also welcomed Mexico volunteering for an assessment of the transnational aspects of corruption.

Directors underscored the importance of supply side reforms to improve potential growth and raise living standards, including by taking advantage of the diversification of global supply chains. Given the significant gender gaps, they emphasized that these reforms should comprise policies to further boost female labor force participation and remove legal impediments to female economic empowerment. Better tackling corruption and crime, expanding financial inclusion, as well as improving infrastructure and streamlining regulations will also be key.

Directors agreed that a comprehensive and well-sequenced climate change strategy can provide more durable sources of energy. Given the long-term risk of a reduction in global demand for hydrocarbons, they encouraged switching to low carbon and renewable sources of generation, including by considering increasing the price of carbon.

It is expected that the next Article IV Consultation with Mexico will be held on the standard 12-month cycle.

Mexico: Selected Economic Indicators, 2022–25

Population (millions, 2021):	130.0	GDP per capita (U.S. dollars, 2022)	11,279.2
Quota (SDR, millions):	8,912.70	Poverty headcount ratio (% of population, 2022) 1/	36.3

Main export products: cars and car parts, electronics, crude oil
Main import products: cars and car parts, electronics, refined petroleum
Key export markets: United States, EU and Canada
Key import markets: United States, China, EU

			Proj.	
	2022	2023	2024	2025
Output				
Real GDP (% change)	3.9	3.2	2.1	1.5
Employment				
Unemployment rate, period average (%)	3.3	2.9	3.1	3.4
Prices				
Consumer prices, end of period (%)	7.8	4.5	3.2	3
Consumer prices, period average (%)	7.9	5.5	3.8	3.1
General government finances 2/				
Revenue and grants (% GDP)	24.2	23.8	23.7	23.7
Expenditure (% GDP)	28.5	27.7	29.1	26.3
Overall fiscal balance (% GDP)	-4.3	-3.9	-5.4	-2.6
Gross public sector debt (% GDP)	54.1	52.7	54.7	55.1
Monetary and credit				
Broad money (% change)	7.3	8.0	7.3	4.5
Credit to non-financial private sector (% change) 3/	10.9	7.1	6.4	3.6
1-month Treasury bill yield (in percent)	7.6	N.A.	N.A.	N.A.
Balance of payments				
Current account balance (% GDP)	-1.2	-1.5	-1.4	-1.1
Foreign direct investment (% GDP)	1.5	1.4	1.4	1.5
Gross international reserves (US$ billions)	201.1	212.3	224.5	234.4
In months of next year's imports of goods and services	3.5	3.5	3.5	3.5
Total external debt (% GDP)	31.1	26.1	24.9	25.1
Exchange rate				
REER (% change)	5.3	...	...	...

Sources: World Bank Development Indicators, CONEVAL, National Institute of Statistics and Geography, National Council of Population, Bank of Mexico, Secretariat of Finance and Public Credit, and Fund staff estimates.

1/ CONEVAL uses a multi-dimensional approach to measuring poverty based on a "social deprivation index," which takes into account the level of income; education; access to health services; to social security; to food; and quality, size, and access to basic services in the dwelling.

2/ Data exclude state and local governments and include state-owned enterprises and public development banks.

3/ Includes domestic credit by banks, nonbank intermediaries, and social housing funds.

INTERNATIONAL MONETARY FUND

MEXICO

October 17, 2023

STAFF REPORT FOR THE 2023 ARTICLE IV CONSULTATION

KEY ISSUES

Context. A broad-based expansion is underway, with robust domestic demand. Inflation has started to recede, and prudent fiscal policy has kept public debt in check. The changes underway in the global economy—including a shift to a lower carbon economy and the reshaping of supply chains—provide an important opportunity for Mexico. However, a broad set of reforms will be needed to translate this opportunity into improved employment prospects and better living standards.

Outlook and risks. Economic activity is expected to moderate in the second half of 2023 and in 2024, reflecting the lack of economic slack, weaker U.S. growth, and tight monetary policy. Risks are balanced. While an abrupt global slowdown provides downside risks, the diversification of global supply chains could catalyze growth, boost investment, and increase employment opportunities. A more resilient than expected U.S. economy also represents an upside risk.

Main Policy Recommendations

Monetary policy. Given upside risks to inflation, Banco de México is appropriately cautious about not cutting the policy rate too quickly. An internal strategic review of the central bank's operational and communications practices would be valuable.

Fiscal policy. Maintaining a sustainable fiscal position while increasing needed public investments in infrastructure, education, and social support will require a re-examination of the tax system. A stronger institutional framework for fiscal policy would enhance credibility, guide expectations, and create greater fiscal space to respond to downside risks.

Financial sector policies. Policy priorities include enhancing the autonomy and resources of regulatory agencies, strengthening bank resolution and recovery, upgrading the macroprudential toolkit, and addressing gaps in implementation of the AML/CFT framework.

Structural reforms. Supply-side policies to facilitate female labor participation, tackle crime and corruption, improve access to finance, reduce the costs of formalization, remove regulatory hurdles, expand renewable energy supply, and promote competition would enable Mexico to capitalize on the potential gains from new opportunities.

Approved By
Nigel Chalk (WHD) and Martin Čihák (SPR)

Discussions were held in Mexico City during September 11–22, 2023. The mission met with Finance Secretary Ramírez de la O, Governor Rodríguez Ceja, Labor Secretary Bolaños, other officials, and representatives of the financial and private sectors. The team was headed by Bikas Joshi and comprised Francisco Arizala, Jean-Marc Fournier, and Matteo Ghilardi (all WHD); Samir Jahan (FAD); Tomohide Mineyama (SPR); Adrian Wardzynski (LEG); and Jeffrey Williams (MCM). Rodrigo Valdes (WHD) joined the concluding meetings. Alfonso Guerra and Maria Jose Posadas Bolanos (OED) participated in the discussions. Laila Azoor and Hugo Tuesta (both WHD) provided editorial and research assistance.

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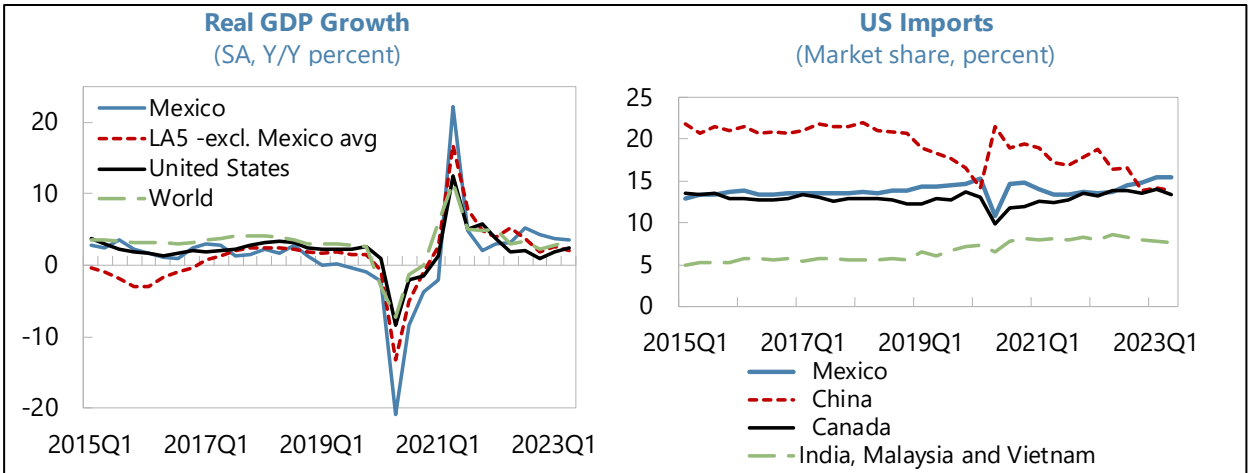
CONTEXT

1. Very strong policies and policy frameworks have enabled Mexico to weather recent global shocks. A delayed post-Covid recovery has continued through 2023, with robust domestic demand. Prudent fiscal policy has kept public debt in check and the proactive response from Banco de México (Banxico) has countered inflationary pressures. Despite a strong peso, the current account continues to register a modest deficit.



Sources: WEO, Bureau of Economic Analysis, and IMF staff calculations.

2. Mexico is well-placed to benefit from growth opportunities, including from "nearshoring" and the transition toward a lower carbon economy in the U.S., Mexico, and elsewhere. Maximizing these benefits will require addressing Mexico's long-standing structural challenges. An enhanced governance framework, improved access to finance, higher—and better targeted—public investments that relieve infrastructure bottlenecks, policies to facilitate female labor force participation, and additional provision of clean energy would all strengthen flexibility and increase Mexico's potential to capitalize on ongoing trends in the global economy.

3. National elections are scheduled for June 2024. Andrés Manuel López Obrador, the current President, is constitutionally precluded from seeking re-election. Elections will be held concurrently for the Senate and the Chamber of Deputies.

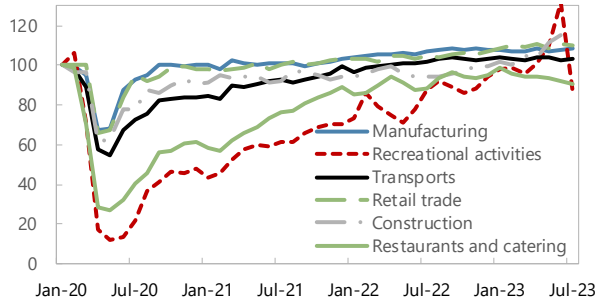
RECENT DEVELOPMENTS

4. Economic growth in 2023 has exceeded expectations. Real GDP grew 3.6 percent in the first half of the year, a marked recovery from the same period in 2022. Growth is becoming more broad-based as sectors that earlier lagged (e.g., construction and contact-intensive services) picked up momentum. Private investment jumped 18.1 percent y/y in the first half of 2023, while private consumption increased by 4.5 percent over the same period. Increased public investment has led construction to expand sharply in the second quarter. Overall manufacturing growth has been

moderate, although auto production has been particularly strong (up around 14 percent in first half of 2023 compared to the same period in 2022).

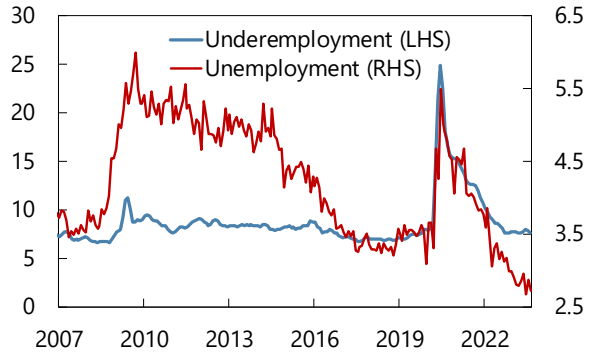
5. Strong domestic demand has exhausted slack. The unemployment rate has fallen to 2.7 percent and manufacturing capacity utilization is close to its record high. Informality has declined as labor market has tightened. Estimates suggest output in mid-2023 was modestly above potential (Box 1).

Real Output in Selected Sectors
(Real output index, Jan 2020 = 100)

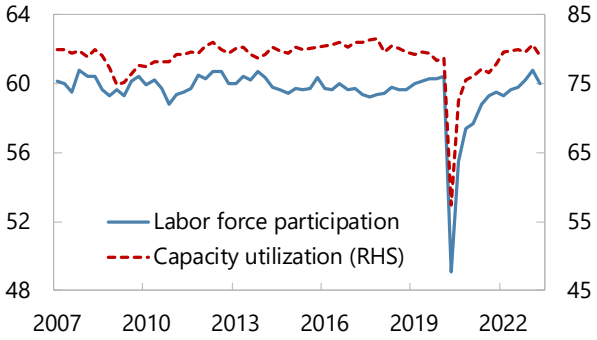


Source: INEGI.

Unemployment and Underemployment 1/
(Percent of EAP, INEGI)



Capacity Utilization and Labor Force Participation Rates
(Percent)

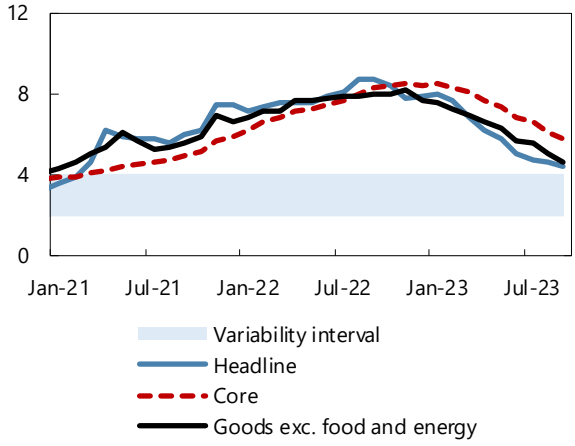


Sources: INEGI, Haver Analytics, and IMF staff calculations.

1/ Labor Force participation, unemployment and underemployment rates as the ratio of the economically active population (EAP) over the estimated population 15+. Seasonally adjusted by INEGI.

6. Inflation is receding. Headline inflation declined to 4.5 percent in September, from 7.8 percent at end-2022, impacted by a proactive monetary policy and a decline in global commodity prices. The disinflation process has been broad-based although services-sector inflation has remained sticky, reflecting higher business operating costs, solid demand, and wage pressures. At its last meeting on September 28, Banxico held the policy rate at 11¼ percent—6 percentage points above that of the U.S. Fed—and underscored the need to maintain the policy rate at the current level for an extended period, due to upside inflation risks.

Inflation
(In percent, y/y)

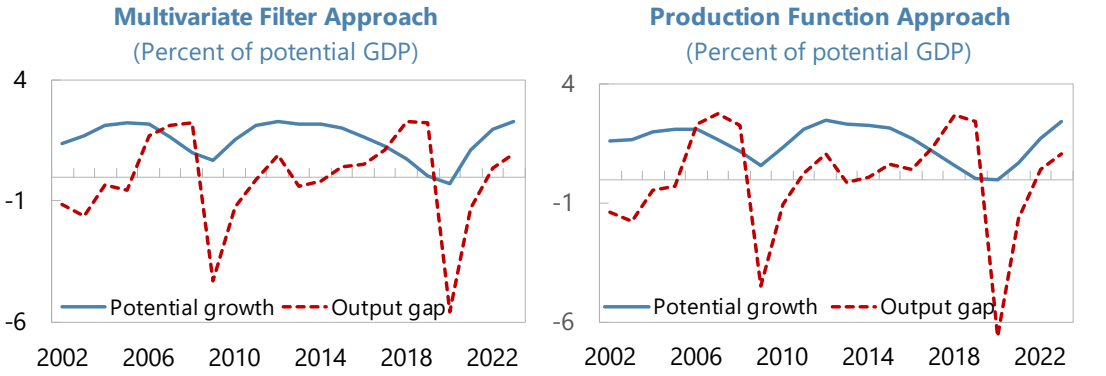


Sources: Haver Analytics, and IMF staff calculations.

Box 1. Measuring the Output Gap

Two methods are used to measure the output gap. First, a multivariate filter considers nominal GDP together with inflation and unemployment rate, following Alichi, et al. (2015). It includes basic economic identification restrictions, relating the output gap to labor market conditions and inflationary pressures, embedding a Philips curve and the Okun's law. Given its semi-structural nature, the multivariate filter may present a more accurate estimate of potential output than univariate filters (Laxton and Tetlow, 1992). Lastly, a production function approach provides total factor productivity as a residual, accounting for labor and capital accumulation, where capital is calculated with the perpetual inventory method, and labor is proxied by working age population given its availability over a longer horizon and the broad stability of the participation rate.

Evidence suggests that potential growth returned to pre-pandemic rates, while output gap is positive. Potential growth was broadly stable at around 2 percent before the pandemic, but during the COVID shock, output deviated from past trends. Potential growth has now reverted to pre-pandemic rates, with real growth stronger, suggesting an output gap turning mildly positive around one percent of potential GDP. While caution is warranted in interpreting these measures in real time, such concerns are mitigated by the use of methods employing a rich set of indicators. Further, observations that are robust in real time like record-low unemployment rate and record-high manufacturing capacity utilization rate in the first half of 2023 corroborate the assessment of a positive output gap.



Source: National Authorities, and IMF staff calculations.

7. The external position in 2022 is moderately stronger than the level implied by medium term fundamentals and desirable policies (Annex I). Higher freight costs, strong domestic demand, and a higher spread between crude oil (which Mexico exports) and refined products (which Mexico imports) widened the current account deficit slightly in 2022 to 1.2 percent of GDP. The oil trade deficit narrowed in the first half of 2023 as the spread between the price of crude and of refined products narrowed. The non-oil trade deficit fell due to strong nominal exports of manufactured goods as Mexico increased its market share in the U.S. Remittances rose 10 percent during the first half of 2023, likely reflecting the continued strength of U.S. labor markets. International reserves are adequate, at around 14 percent of GDP in 2022 (and 122 percent of the Fund's Assessing Reserve Adequacy metric). The IMF's Flexible Credit Line continues to provide a valuable additional buffer against external risks and helps to strengthen market confidence.

8. The balanced-budget rule was met in 2022. The investment-adjusted budgetary deficit of 0.2 percent of GDP was below the targeted deficit of 0.3 percent of GDP. However, the overall deficit was 4.3 percent of GDP, above the budgeted deficit of 3.4 percent of GDP. Higher oil prices boosted

revenue. However, excise taxes were reduced (to lower the retail price of fuel products), interest costs were higher, and spending on goods and services exceeded budgeted levels. There was, though, little market reaction to this higher public sector borrowing requirement. Gross public sector debt continued to fall to 54.1 percent of GDP at end-2022 (from 58.5 percent of GDP at end-2020).

Actual vs. Approved Budget 2022 1/
(Deviation in ppts of GDP)

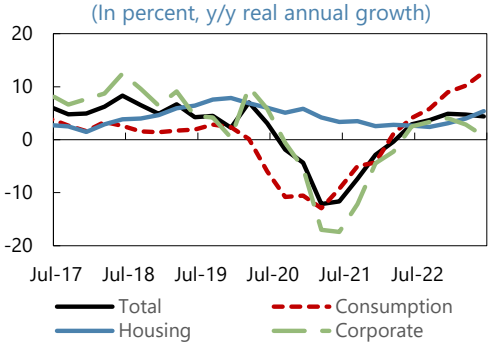
	Impact (Percent of GDP)
Revenues	**1.0**
Taxes	0.0
Social Contributions	0.1
Other Revenues	1.0
Expenditures	**2.0**
Primary Expenses	1.1
Interest Payments	0.9
Net acquisition of nonfinancial assets	0.0
Difference in PSBR	-0.9

Sources: National authorities, and IMF staff calculations.
1/ Contributions to the Public Sector Borrowing Requirement (PSBR).

9. Data for 2023, as of end-August, show lower-than-budgeted tax collections. Low collection rates from VAT—arising from lower receipts from imported goods (where tax compliance is typically higher) due to an appreciated peso—and excises were offset by higher revenues from public enterprises. On the expenditure side, higher subsidies and capital spending have been more-than-offset by an under-execution of other spending.

10. Credit-to-GDP remains below its pre-pandemic level. Growth in credit to the non-financial private sector (4.4 percent y/y in real terms through June) reflects a rapid expansion of consumer credit (12.7 percent y/y in real terms through June). On the other hand, real corporate lending has stagnated.

Bank Credit to Private Sector
(In percent, y/y real annual growth)

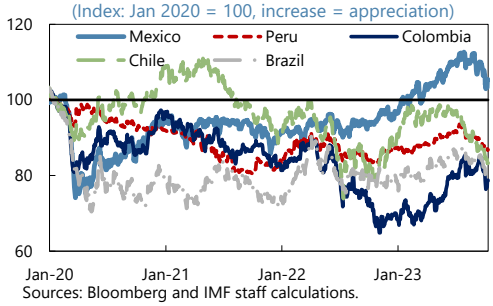


Source: Haver Analytics, Banxico, and IMF staff calculations.

11. Mexican banks remain well capitalized, and the financial system appears resilient to severe macrofinancial shocks. The 2022 Financial Sector Assessment Program (FSAP) highlighted the robustness of the banking system, with high capital and liquidity buffers. This strength was demonstrated during the turmoil in the U.S. banking system earlier this year—Mexican bank stock valuations fell but there were no signs of deposit outflows (despite 45 percent of deposits being uninsured). Banks are generally liquid, but loan concentration, exposures to contingent credit lines, and large holdings of sovereign debt securities merit continued supervisory attention.

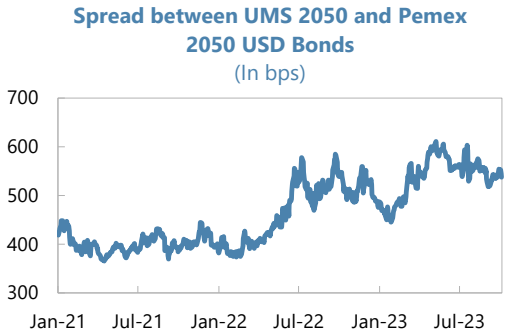
12. The peso has been among the best-performing currencies, appreciating about 10 percent versus the U.S. dollar over the last twelve months. The currency continues to benefit from the historically high policy rate differential between Mexico and the U.S. Remittances and a strong recovery in tourism have also supported the peso. Foreign investors have increased their exposure to local currency through FX purchases, interest rate swaps and domestic bonds (there were net inflows to local currency, domestically issued bonds in 2022, partially reversing outflows in prior years).

Exchange Rates Against the US Dollar
(Index: Jan 2020 = 100, increase = appreciation)



Sources: Bloomberg and IMF staff calculations.

13. Pemex revenues have fallen alongside the decline in oil prices. The decline of Mexican crude oil prices—33 percent on average lower in the first half of 2023 compared to the same period last year—has hit the company's earnings: net income after taxes in the first half of 2023 fell 67 percent relative to the same period in 2022. Although oil prices have risen in recent months, they remain below average levels in the first half of 2022. The decline in revenues has widened further the spread between sovereign and Pemex bonds. Despite higher funding costs, Pemex issued a US$2 billion 10-year bond in January.



Source: Bloomberg.

OUTLOOK AND RISKS

14. Economic growth is expected to moderate in the coming year. Growth is expected to reach 3.2 percent in 2023 and 2.1 percent in 2024. Although fiscal policy is expected to loosen next year, its growth impact will be blunted by binding capacity constraints, a continuation of tight monetary policy, and slowing growth in the U.S. The current account deficit is expected to widen moderately in 2023-24 with strong demand boosting imports. Employment growth should begin to slow in the coming months with a slight increase in the unemployment rate in 2024.

15. Inflation is projected to return to the variability band in the third quarter of 2024. Assuming the policy rate remains on hold until mid-2024, inflation should return to the central bank's target by 2025. Risks to inflation are, however, to the upside including the potential for further services price increases given the continued rise in wages and the increase in the fiscal deficit.

16. Absent supply-side reforms, medium-term growth is likely to be limited to around 2 percent. Despite macroeconomic stability and increasing trade openness, Mexico's per capita income growth (in PPP terms) has averaged around one-half of that experienced in the U.S. over the past 30 years. Weak governance, crime, corruption, a lack of access to finance, and pervasive informality have been important forces that have constrained productivity. The changes underway in the global economy—including the reshaping of global supply chains and a shift to lower carbon growth—provide an important opportunity for Mexico. However, a broad set of supply-side reforms, underpinned by a continuation of open trade policies, will be needed to translate this opportunity into better jobs and living standards.

17. Risks to the outlook are broadly balanced.

- Mexican exports account for about a third of GDP, with 80 percent sent to the U.S. Also, manufacturing in Mexico is concentrated in cyclical sectors such as automobiles. As such, near-term upside risks to U.S. growth create some upside also to Mexico.

- On the other hand, an abrupt U.S. slowdown would have a significant negative impact on Mexico. In particular, if U.S. inflation were to remain elevated, the Fed would need to keep rates higher for longer, which would have negative spillover effects for Mexico.

- Increased global risk aversion could trigger capital outflows, including unwinding of carry trade, weaken the peso, and increase financing costs. In this context, a weaker peso would put upward pressure on inflation keeping interest rates higher for longer (with negative impact on activity).

- If such macro risks materialize, the exchange rate should be allowed to move freely as a shock absorber while fiscal policy should, where necessary, support domestic demand. Monetary policy should respond if shocks feed into core inflation so as to ensure that inflation expectations remain anchored.

- The direct risks from climate change are increasing. Furthermore, if countries are successful in reducing their reliance on fossil fuels, Mexico could be disproportionately affected given its relatively high production costs.

- In the short-term, delays in implementing key infrastructure projects, such as the Maya Train and the Dos Bocas refinery, could weaken output. Alternatively, cost overruns on these projects would weaken the fiscal position.

- Heightened trade tensions within the USMCA could negatively impact the agriculture and manufacturing sectors. Conversely, the materialization of nearshoring projects would boost growth.

18. Authorities' views. Growth is likely to be stronger than projected by staff in 2024 and beyond, with implementation of infrastructure projects increasing Mexico's supply-side potential. Economic and financial turbulence from abroad remains the main source of uncertainty for Mexico, though strong macro fundamentals and financial buffers would provide support. Nearshoring is already underway and represents a growth opportunity. Inflation is expected to continue declining and return to Banxico's target by 2025, though the inflation outlook is still complex, and the balance of risks tilted to the upside.

POLICY DISCUSSIONS

A. Maintaining Fiscal Sustainability

19. The authorities are projected to meet their 2023 fiscal targets. Notwithstanding a lower-than-budgeted collection in tax revenues, the overall balance is expected to reach -3.9 percent of GDP, an increase of around 0.5 percent of GDP in the structural primary balance. More restrained capital spending is expected to more-than-offset the lower tax revenue, especially on the VAT. Under current policies, gross public sector debt is expected to fall to 52.7 percent of GDP in 2023.

20. The 2024 budget is procyclical, proposing a significant expansion in the fiscal position. With a fiscal impulse of 2.4 percent of GDP, the fiscal stance for 2024 is unhelpfully procyclical at a time when the economy is above potential and inflation is not yet back to target. The budget combines a realistic revenue forecast with sizable increases in current spending items—notably for wages, pensions, and social spending—resulting in a deficit of 5.4 percent of GDP. The medium-term budget framework envisages a large consolidation in 2025. While the authorities have a track record of meeting targets, achieving the 2025 fiscal target would necessitate additional measures of around 1.7 percent of GDP. A more prudent fiscal stance in 2024 would have been desirable—to avoid creating the conditions for higher interest rates, a stronger currency, and a higher debt-to-GDP ratio. The current fiscal stance puts additional burden on monetary policy in achieving the targeted disinflation. Under current policies, public debt would rise to 54.7 percent of GDP at end-2024 and stabilize at around 56 percent over the medium-term, conditional on the needed adjustment over the medium term. Public debt is assessed to be sustainable with high probability, with fiscal risks mitigated by the country access to international and domestic debt markets.

21. The explicit inclusion of support for Pemex in the budget increases transparency and should help facilitate a discussion of supporting the company versus other budgetary priorities. However, continued budgetary support to Pemex should be conditioned on a credible plan to ensure Pemex's commercial viability. Furthermore, Mexico's public sector contains many other entities that are distinct from the Federal government and the complex financial transactions between public sector entities—including through trust funds, state-affiliated enterprises, and development corporations—argues for a better reporting of consolidated fiscal outturns that is aligned with international accounting practices. Such an improvement in statistics would allow for better appreciation of the trade-offs among competing demands on public resources as well as help identify the size of potential fiscal risks and contingent liabilities.

22. Medium-term priorities necessitate tax reforms that boost non-oil revenue. As noted in the 2018 Article IV and in the 2022 Article IV, a gradual and permanent increase in spending of around 2 to 3 percent of GDP could boost growth and tackle social inequalities and help close fiscal gaps. It will be important to (i) boost public investment in a permanent and productive way; (ii) improve the targeting of social protection programs; and (iii) increase the efficiency of education spending. These increased demands need to be funded through measures that increase non-oil revenue. Options to boost revenues include: (i) eliminating the zero-rating for VAT and rationalizing exemptions (except for a few key foodstuffs); (ii) broadening the personal income tax by eliminating a range of exclusions and tax expenditures and lowering the threshold for the top personal income

Possible Yields from Tax Measures 1/

Measures	Estimated yield 2/
Value Added Tax 3/	**1.1-1.4**
Personal Income Tax 4/	0.6-0.9
Corporate Income Tax 5/	0.2-0.5
Total	1.9-2.8

1/ These estimates draw on Hannan, Honjo, and Raissi (2020).
2/ In percent of GDP.
3/ Refers to the removal of zero-rating and exemptions.
4/ Refers to the removal of deductions, exemptions, and sectoral schemes.
5/ Refers to the removal of employment allowances, deductions, exemptions, and deferrals.

tax bracket; (iii) improving compliance for the corporate income tax; and (iv) increasing property taxes.

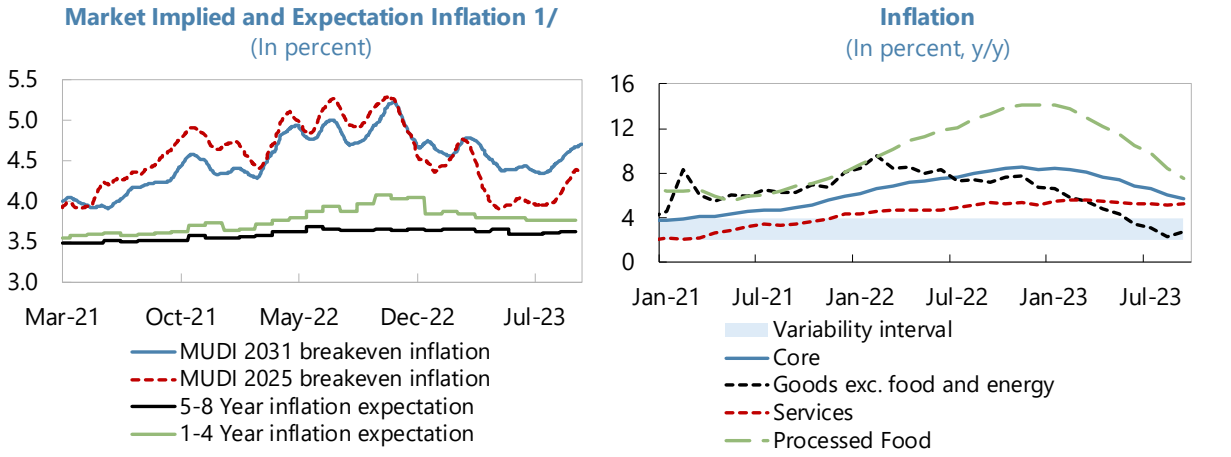
23. A stronger medium-term fiscal framework would increase the credibility of fiscal policy and create greater fiscal space to respond to downside risks. A framework that more clearly links the desired public debt level to annual budgetary decisions would greatly increase the transparency and accountability of fiscal policymaking. A broader revamp of the fiscal framework along these lines could include: (i) a well-calibrated debt anchor, (ii) introducing a credible medium-term budget framework; (iii) allowing for more countercyclical fiscal policy, potentially through the build-up of additional fiscal buffers; (iv) clarifying escape clauses from the fiscal rules and limiting them to specified exceptional circumstances; (v) increasing the analysis of the impact of policies; and (vi) improving fiscal forecasting capacity.

24. Targeted fiscal policies would help address gender gaps. The authorities have increased efforts to boost gender equality but would benefit from: (i) gender budgeting, with an integration of gender policies into the budget through a Gender Impact Assessment; (ii) better collection of gender-related data on social and economic outturns; (iii) increasing support for maternal health and childcare; (iv) improving allocations to the most effective social protection programs; (v) more targeted education support programs; (vi) abolishing the minimum contribution requirement for funded pensions; and (vii) adopting gender-sensitive employment practices in the public sector.

25. Authorities' views. The 2024 budget submitted to Congress is looser than previously planned. However, this stems from an increased expenditure related to the current administration's commitments—principally, pensions, wages, and healthcare reforms. Additionally, capital expenditure to complete key infrastructure projects will help Mexico seize the opportunity of nearshoring and boost connectivity and growth in the developing southern region. Needed consolidation in 2025, beyond the expiration of one-off capital expenses, could be met with continued improvements in tax efficiency and normalization of monetary policy. Pemex has been included in the budget to improve transparency, support its cash position, and guarantee its debt payments. The resources transferred to Pemex change the cash position but neither affect the overall public sector balance nor hinder the Federal Government expenditure, as the transfers require Pemex's balance improvement by the same amount. The current administration intends not to raise tax rates. Measures are being undertaken to address gender gaps, including plans to improve government provision of childcare.

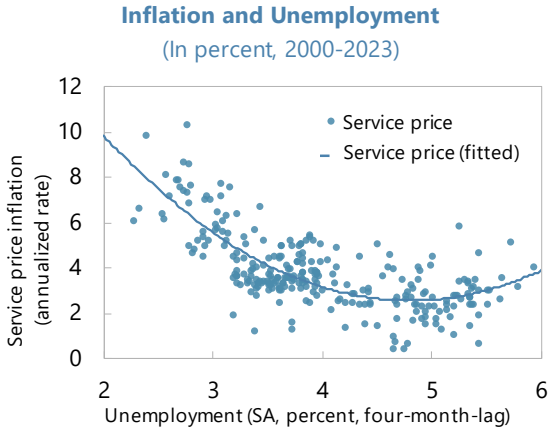
B. Durably Bringing Inflation Back to Target

26. A proactive approach to monetary policy has helped contain inflationary pressures. Banxico was one of the first major central banks to begin a tightening cycle, raising its policy rate from 4 percent in June 2021 to 11.25 percent in March 2023. The real rate is now firmly in contractionary territory. Inflation expectations have remained well-anchored, underscoring the credibility of the inflation targeting regime.



Sources: Bloomberg, Banxico, Haver Analytics, and IMF staff calculations.
1/ MUDI 2031 and MUDI 2025 were calculated as one-month moving average. The 1-4 and 5-8 year inflation expectation are the average of professional forecaster expectation from Central Bank survey responses.

27. Upside risks to inflation argue for caution in reducing the policy rate. Unemployment remains at low levels, and this has typically been associated—with a lag—with higher services inflation. Inflation in the services sector remains relatively high, potentially reflecting a feed through of wage pressures and past increases in the minimum wage. The procyclical budget for 2024 represents an additional near-term risk to the inflationary outlook. A model-based analysis (Box 2) indicates that the balance of risks supports a cautious pace of rate reduction. Staff forecasts assume that rate reductions will begin in mid-2024, once inflation is on a clearer downward path toward the target.



Sources: Haver Analytics, and IMF staff calculations.

28. After a period of significant changes, an internal strategic review of Banxico's operations and communications could be valuable. Banxico has implemented welcome reforms to progressively provide more information to help markets understand its policy decisions. In 2021, it provided the inflation forecast underpinning its decisions, and in 2022 it began providing qualitative forward guidance (e.g., starting in May 2023 the monetary policy statement indicated that rates would stay on hold "for an extended period"). Transparency considerations would argue for providing greater information on the assumptions—including the policy path—that underpin the authorities' projections. It will, though, be important to underscore that this information is a modal forecast that is conditional on a range of assumptions being realized. As such, it does not represent a policy commitment. Examining potential additional changes to monetary policy practices could be done in the context of an internal strategic review of Banxico's operations and communication, with the goal of enhancing policy effectiveness consistent with Banxico's legal mandate.

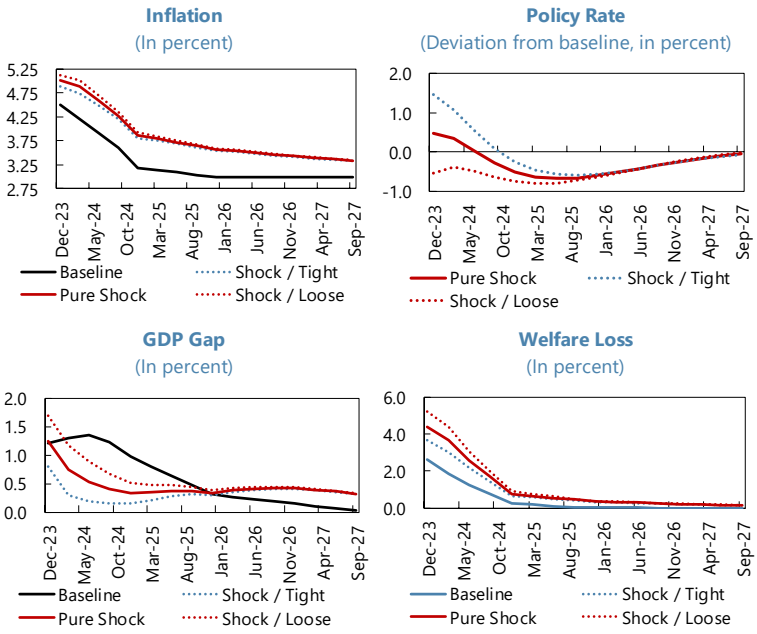
Box 2. Asymmetric Costs from Monetary Policy Errors

Inflation surprises, including slower-than-expected disinflation, raise questions about whether policy makers should react or 'see past' these events. A model-based comparison of two scenarios—with a too-tight and too-loose policy response to an inflation shock—suggests a hawkish bias may be less costly at the current juncture.

The disinflation process in emerging markets can be slow and subject to reversals. As inflation has begun to ebb, periods of upside surprises are likely, as with core inflation at the beginning of the year in Mexico and into the spring in the U.S. As they occur, it is unclear whether these shocks, like those at the beginning of the inflationary episode, would reverse quickly or be more persistent.

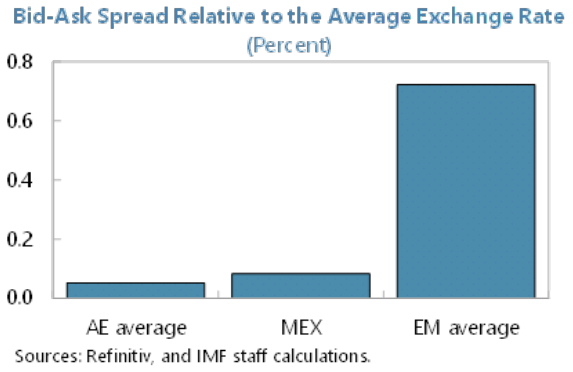
To assess the quantitative costs of these risks, two symmetric scenarios are considered. In a 'too-tight' scenario an inflation shock of 0.5 percent is met with a policy rate one percentage point higher than the rate implied by the calibrated Taylor rule. Symmetrically, in a 'too-loose' scenario an inflation shock of the same initial size is met with a policy error that sets the policy rate one percentage point below the one implied by the Taylor-rule. The scenarios are simulated in a Small Open Economy DSGE model capturing key aspects of EM monetary transmission, and parametrized using Mexican data (Chen and others, IMF WP 23/135).

Inflation starts and remains higher in the 'too-loose' scenario as loose policy exaggerates the initial shock and the 'too-tight' policy dampens it. However, the decline in GDP is larger in the 'too-tight" scenario as higher policy rates dampen demand. A quadratic loss function, penalizing deviations of output relative to potential output and inflation relative to the inflation target, is a simple and common metric for reflecting policy maker's desire to achieve macroeconomic stabilization.[1] The analysis suggests that, with a positive initial inflation and output gaps, a hawkish bias resulting in a 'too-tight' policy stance comes at a lower cost than a bias yielding a 'too-loose' policy stance.



[1] In the quadratic loss function, the weight of the output gap is ¼ of the weight of the inflation gap, following Yellen (2012) and Debortoli et al. (2019).

29. Exchange rate flexibility should continue to facilitate the adjustment to external and domestic shocks. Staff does not identify material frictions under the integrated policy framework



that would warrant regular foreign exchange (FX) interventions (Annex X). The FX market remains deep and liquid. Its depth is evident in the tight bid-ask spread; the peso's spread is below the 25th percentile of EMs and closer to the advanced economies' average. FX mismatches on domestic balance sheets are generally small and well-covered by natural and financial hedges. FX interventions have been limited to a few episodes of extreme volatility in recent years. Intervention should continue to be used only in the event that large shocks cause such frictions to manifest, including those arising from disruptions in liquidity conditions or malfunctioning of the FX market[1]. Changes in the policy rate, in the context of a market-determined exchange rate, should remain the principal mechanism to anchor inflation expectations and guide inflation back to the central bank's target.

30. Authorities' views. A restrictive stance to bring inflation back to its target is consistent with Banxico's legal mandate. Services inflation has proved persistent, and the inflation outlook is uncertain. To achieve an orderly and sustained convergence of headline inflation to the 3-percent target, it will be necessary to maintain the reference rate at its current level for an extended period. The flexible exchange rate is a key shock absorber. Therefore, FX interventions by Banxico have not targeted a specific level of the exchange rate, and, by using non-deliverable forwards in recent years, they have been consistent with the goal of maintaining adequate levels of reserves. The limited FX interventions have been consistent with the IPF. Banxico is continually improving its implementation of monetary policy and conducts regular internal evaluations of its operations and communications. As the lingering effects of the pandemic subside, Banxico will continue with its internal stocktaking to assess its policies in the context of the recent inflationary episode.

C. Deepening Financial System Resilience

31. Systemic vulnerabilities and liquidity risks in the financial system appear broadly contained. The financial system has high capital and liquidity buffers, low private sector leverage, and no sign of stretched asset prices. In the solvency and liquidity stress tests conducted under the 2022 FSAP, the banking system demonstrated resilience to a range of severe macro-financial shocks, although some smaller banks would require additional buffers to handle such stresses. Household sector risks are contained reflecting low leverage, absence of signs of house price misalignment, and stable mortgage loan-to-value ratios.

32. Some NBFIs have experienced stress but these firms do not pose a systemic risk to financial stability. Credit unions, Sofomes (multiple-purpose financial companies), Socaps (cooperatives), Sofipos (microfinance savings and loan entities) and other financial companies carry out credit intermediation or credit operations that complement the activity of banks. Much of this

[1] Assessments should continue to be informed by examining developments in excess exchange rate volatility and skewness, the bid-ask spread, and other liquidity and risk indicators.

financing is provided to targeted household groups and smaller businesses. While there has been some distress in the unregulated portion of the sector, mostly the result of poor governance or financial management, the affected firms do not pose a risk for financial stability since they are relatively small, non-deposit taking, and have little connectivity to the banking system. The sector only represents about 4 percent of the assets of the financial system. Offshore financial markets remain skittish of the sector, as reflected in bond spreads of those firms that have not restructured. While there could be some additional distress cases, the impact on the financial system should be minor.

33. Following the post-pandemic recovery in profits, Mexico's corporates are in a good position to weather the expected economic slowdown. Interest coverage ratios have recovered back to their pre-pandemic level as profits have improved (Annex IV). Accordingly, Moody's estimates of credit risk have receded. Vulnerabilities are, however, greater for the weaker tail of corporates which could lead to some pockets of corporate stress being revealed; these corporate vulnerabilities merit continued monitoring.

34. The 2022 FSAP highlighted several ways that authorities could improve the resiliency of the financial system (Annex III):

- The autonomy and resources of regulatory agencies, as well as the legal protection of supervisors, can be strengthened.
- The banking regulator, CNBV, should be enabled to effectively supervise financial conglomerates on a consolidated basis, even if they have not requested authorization to operate as a financial group.
- CNBV should closely monitor risks from loan concentrations and contingent credit lines and apply Pillar 2 requirements to address relevant risks as needed.
- CNBV could strengthen its risk-based supervisory approach with greater use of flexibility and application of expert judgement, and methodologies that are principles-based rather than rules-based.
- Bank resolution and recovery could be strengthened by removing impediments to banks' resolvability, eliminating barriers to the effective use of the purchase and assumption and bridge bank tools, and expanding the resolution regime's remit to financial holding companies.
- Banxico and CNBV could continue to develop their strategy of strengthening cybersecurity and enhance oversight, inspection and investigative powers and instruments.
- Publishing a macroprudential strategy and counter-cyclical buffer guidelines would further advance macroprudential policy. As part of these efforts, the authorities could consider expanding the macroprudential toolkit by introducing limits on loan-to-value (LTV) and debt-service-to-income ratios (DSTI). The authorities have undertaken a review of the international

experience with LTV and DSTI. A first draft on progress on these two workstreams is expected by end-2023 and by March-2024, respectively.

35. The authorities should continue to address the outstanding legal gaps in the Anti-Money Laundering/Combating the Financing of Terrorism (AML/CFT) framework and ensure its effective implementation. Substantive progress has been made in addressing a majority of the legal deficiencies identified in the 2018 Mutual Evaluation Report of Mexico.[2] However, deficiencies remain in relation to the AML/CFT regulation and supervision of Designated Non-Financial Businesses and Professions (DNFBPs), reporting of suspicious transactions, establishing an effective cash-couriers regime, and the inability of the CNBV to suspend or withdraw a banking license for AML/CFT breaches. Mexico should further create a beneficial ownership register to ensure corporate transparency and mitigate the risks of misuse of legal entities, including in relation to public procurement. The CNBVs risk-based supervision should ensure effective oversight over cross-border flows including verifying information on international wire transfers and the activities of money remitters. The SAT does not currently have the necessary legal powers to sufficiently supervise and enforce compliance by the DNFBPs in line with the risk-based approach. Adequate resources and budget should be allocated to the prosecution to ensure enforcement of money laundering and underlying predicate offenses. Mexico should consider to further leverage the available AML measures to better tackle financial crimes, such as corruption (see below) and tax evasion. The AML/CFT agencies, including the CNBV, SAT, the Financial Intelligence Unit (FIU), law enforcement, as well as anti-corruption bodies, should enhance their collaboration.

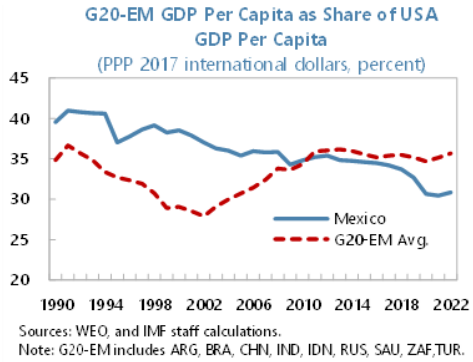
36. Authorities' views. The banking system is healthy and able to withstand various stress scenarios, with increased capital levels and near-record lows NPLs at commercial banks. Given their strong balance sheets, banks can expand credit further without increasing risks to the system. While some NBFIs have experienced difficulties over the past year, the sector is small and does not pose a systemic risk. Progress has been made in implementing several recommendations from the 2022 FSAP, but some recommendations—such as strengthening the autonomy of regulatory agencies and allowing for consolidated supervision of financial conglomerates—would require legislation. Recent initiatives include enhancements in monitoring and responding to cyber-attacks, including via simulation exercises, and formalizing coordination and collaboration protocols. Banxico's liquidity stress test framework has been updated. Earlier this year, the authority responsible for deposit insurance (IPAB) reformed its rules to shorten the resolution planning period for DSIBs. Continuing to carry out AML/CFT reforms is a priority, with relevant improvements made in the laws and their effective implementation in practice.

D. Making Growth Inclusive and Sustainable

37. Deeper reforms are needed to capitalize on the potential gains from new trade opportunities. Despite a significant increase in openness over the past 30 years, per capita output growth has lagged that of Mexico's G20 peers. Recent supply chain diversification has led Mexico to

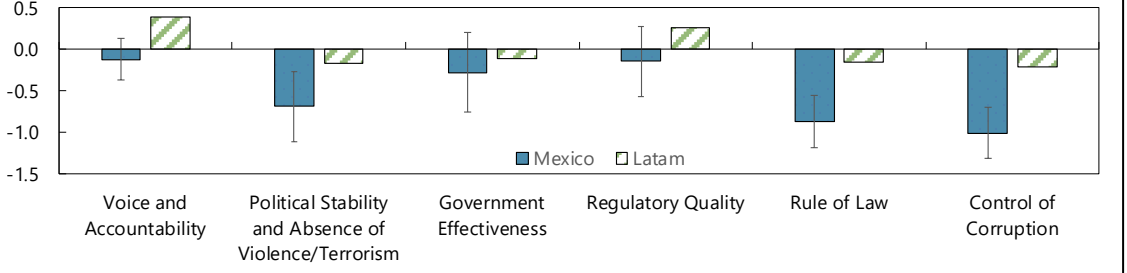
[2] See https://www.fatf-gafi.org/en/countries/detail/Mexico.html. For the current status on legal changes, see the 2023 Follow-Up Report of Mexico.

take over from China as the U.S. largest import partner. However, supply-side constraints are already becoming evident. Removing these constraints will be essential to attract new supply chains and capitalize on the domestic content rules of recent U.S. fiscal legislation (Box 3).



Sources: WEO, and IMF staff calculations.
Note: G20-EM includes ARG, BRA, CHN, IND, IDN, RUS, SAU, ZAF,TUR.

38. The authorities have a broad supply-side reform agenda. This comprises the completion of large infrastructure projects, trade promotion, further increases in the minimum wage to reduce inequality, and implementing the 2019 labor law (that includes a new labor resolution mechanism meant to reduce delays and legal uncertainties). Additional efforts could comprise policies that facilitate greater female labor participation (Box 4), tackle corruption and crime, improve access to finance, further reduce the costs of formalization, and strengthen the supply of energy.



Sources: Daniel Kaufmann (Natural Resource Governance Institute and Brookings Institution) and Aart Kraay (World Bank), and IMF staff calculations.
Note: Whiskers report 95 percent confidence interval. These are not available for the Latam average.

Box 3. Evidence on Nearshoring[1]

Mexico is expected to benefit from the growing interest in "nearshoring." Nearshoring—which refers to relocation of production and supply chains closer to final consumption to reduce risks of supply chain disruptions—has gained prominence in the policy arena given geopolitical fragmentation, disruptions during the pandemic, and Russia's invasion of Ukraine. Mexico seems well-placed, due to its proximity to the U.S., macroeconomic stability, relatively low labor costs, an existing supply chain ecosystem, and membership in USMCA, particularly given the tightening of regional rules of origin in certain sectors.

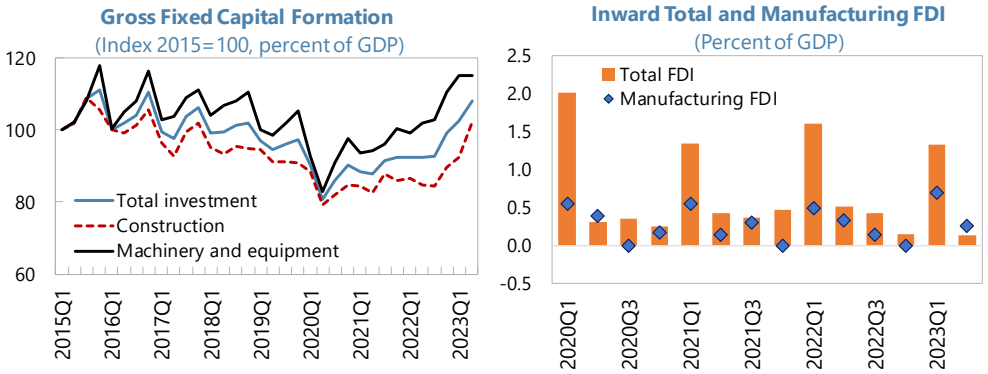
While many nearshoring-related investment plans have been announced, their impact is not yet evident in macroeconomic indicators. Based on news and market reports over the last two years, staff has identified more than US$11 billion of announced FDI plans, generally related to the automobile sector, electric vehicles (EV) and batteries, circuits, and automation. Some appear to be on the intensive margin (expanding capacity), some on the extensive (e.g., new EV plants), and some have elements of both. Investment horizons, where information is available, are around 2-3 years. However, delays from announcement to implementation are to be expected; it is difficult so far to pinpoint an impact of nearshoring in aggregate data. Trade signals are mixed; real exports declined in the first half of 2023 while Mexico has gained market shares in the U.S. Gross capital formation is just recovering, with investment in machinery and equipment surpassing pre-pandemic levels only recently. Inward FDI flows are lower in the first half of 2023 compared

Box 3. Evidence on Nearshoring[1] (concluded)

to the same period last year (text charts). More evidence is needed to attribute the recent pickup to nearshoring.

Should they materialize, new investments could raise exports and give rise to a renewed investment cycle, if supporting conditions are in place. A simple illustrative example could be instructive: inward FDI, at US$39 billion in 2022, has historically grown at 10 percent per year over 2000-22. The new US$11 billion announced plans, if considered to be in addition to the baseline (for illustrative purposes), would imply annual FDI growth of about 12 percent over 2023-25. Drawing on relationship between FDI growth and non-oil export growth, this increase in FDI could raise non-oil export growth from 7 percent per year to 7–12 percent per year, equivalent to about US$100 billion higher non-oil exports in 2025.

Nearshoring Is Not Yet Evident In Macroeconomic Indicators



Sources: National Authorities, Haver Analytics, and IMF staff calculations.

[1] Prepared by Faezeh Raei (SPR).

Box 4. A Deep Dive on Gender-Related Policy Issues

As part of the 2023 Article IV consultation, an interdepartmental team (comprising FAD, LEG, SPR, and WHD) did a "deep dive" on gender-related issues, focusing on constraints on Mexico's growth potential. This exercise consisted of three separate projects (see *Selected Issues)*:

i. *Key legal and institutional issues to support women's economic empowerment*. The chapter examines measures to further reduce gender gaps, highlighting possible legal reforms to close gender gaps by expanding women's rights—with equal pay for equal work; providing maternity, paternity, and parental leave; and by addressing challenges of unpaid care work and women's pension.

ii. *Fiscal policies to tackle gender issues*. This chapter outlines a range of fiscal measures that could be undertaken—in budgeting, revenue administration, and expenditure— to help close these gaps. It shows that targeted policies can effectively close gender gaps and enhance social and economic wellbeing.

iii. *Policies to boost female labor force participation*. This chapter uses an OLG model calibrated to Mexico to describe constraints on female labor force participation.

- The analysis suggests that implementation of childcare policies alone could increase female labor force participation by about 10 percentage points. This goes to 11 and 13 percentage points when childcare is combined with higher education and anti-discriminatory practices, respectively.

Given the disparity in educational attainment, the impact of implementing such policies is more pronounced in rural areas compared to urban regions.

39. Policies to boost female labor force participation could unlock significant growth potential. The gap between male and female labor participation rate in Mexico is among the highest in the OECD. Women are also more likely to work in the informal economy, especially in rural areas. The greater availability of affordable childcare seems to be an effective means to boost female labor force participation, but this may also result in an increased share of informal sector workers (Selected Issues Paper). Anti-discrimination policies and improvements in education would further help increase the incentive to join the labor force.

40. Mexico has made significant progress in removing legal impediments for women's economic empowerment. By law, women enjoy freedom of movement, decision to work, marry, own, dispose of, and inherit property, or to start and run a business, and have equal rights in the workplace. Gender-based discrimination and violence is prohibited. Mexico has imposed quotas for elected positions at the federal and local levels and has now achieved parity in Congress. Reforms in gender budgeting have also been institutionalized. Building on the progress achieved so far, further reforms aimed at closing remaining gender gaps could comprise: i) providing for paid maternity and paternity leave, ii) ensuring the provision of adequate childcare, iii) strengthening the implementation of the equal pay principle, iv) ensuring that women can fully exercise land ownership rights in rural areas, and v) promoting women representation in leadership positions in the private sector. In the fiscal law area, tax laws are drafted in gender-neutral language with no apparent explicit bias. However, the authorities could regularly analyze the tax laws for potential gender biases in tax legislations, enhance integration of national gender strategies to the budget process, tag budget programs with a gender perspective, provide safeguards during budget execution, and strengthen accountability.

41. Combatting corruption and enhancing the rule of law could yield large benefits. A lack of security is the main impediment to growth, according to firms' responses to the 2018 Economic Census (Box 5). Crime, corruption, and the weak rule of law deter firms from operating in the country. They also create additional operating costs (for security, bribes, and insurance), discourage firm growth (since smaller firms are less likely to be a target), and create worker shortage (as workers are diverted to illicit activities). Coordinated efforts are required at the national, state, and municipal levels to effectively implement the legal and institutional reforms of the anti-corruption framework and ensure its full operation and enforcement. Leveraging the AML framework could further help prevent, detect, and deter proceeds of corruption. The institutions created under the National Anti-Corruption System reforms should be further empowered and resourced to ensure adequate fulfilment of their respective mandates. Staff looks forward to Mexico's decision to participate in the IMF's voluntary assessment of transnational aspects of corruption, which recognizes the strength of the current AML framework and ongoing anti-bribery institutional and legal reforms, while recommending further measures to ensure adequate protection of reporting persons, clarify liability of legal persons, and promote effective enforcement.

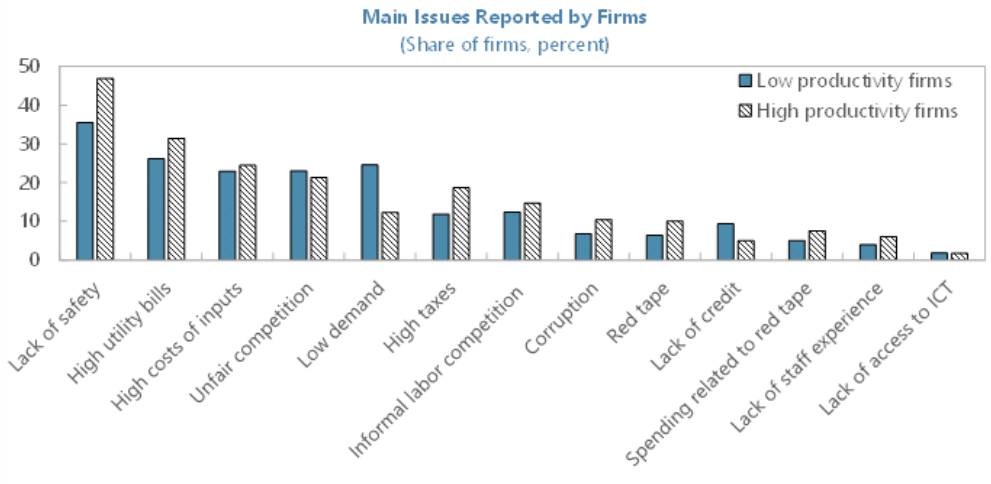
42. Further financial deepening could unlock growth. Domestic credit to the private sector in Mexico amounts to 36 percent of GDP versus an average of 69 percent in Brazil, Chile, Colombia, and Peru. Additionally, a large share of the population remains unbanked. Efforts in recent years

include increased access to bank branches and financial products, improved transparency, facilitation of bank switches, and broadened access with more digital connectivity. The 2018 Fintech law aimed to foster the creation of new sources of finance, although it may be too early to identify a sizeable impact on overall lending. To get the most out of these reforms, the authorities could consider strengthening the registry of movable assets to facilitate their use as collateral, and eliminating obstacles to collateral recovery, including through a strengthening of the functioning of the judicial system. In addition, enhanced financial education, better transparency on financial products, and increased connectivity, especially in more remote areas, would help support financial inclusion.

Box 5. Growth Impediments According to Firms

Many firms in Mexico remain small, which is a major obstacle to productivity growth. According to the 2018 Economic Census, covering all fixed establishments in municipalities of at least 2,500 inhabitants, almost 30 percent of employees work in establishments of less than 5 persons, against less than 5 percent in the U.S. for instance. About 15 percent of these small establishments are in the top quartile in term of productivity, against about 70 percent of establishments above 50 employees. Further, academic literature has identified hurdles that can distort factor allocation. This suggests that unlocking obstacle of firm growth with policies that facilitate factor allocation so that firms with the strongest potential are better able to grow and reap economies of scale could yield large productivity gains.

Perceptions of firms on the obstacles they face corroborate issues identified by the literature. Lack of safety stands out at the main obstacle, reflecting concerns on crime. This concern is more pronounced for the most productive firms, suggesting that crime can affect production factor allocation, which should be geared toward these firms. High utility bills come second, suggesting the need to improve effectiveness and competition in the telecommunication, energy, and water sectors. By contrast, very few firms highlight concerns on information and communication technology or access to experienced labor, though the latter is more often reported by high-productivity firms. More productive firms are also more concerned by taxes and by red tape. While these perceptions do not necessarily equate to effective binding constraints, these answers provide indications on which issues are likely important.



Sources: Economic Census, and IMF staff calculations.
Note: Perception question with multiple answers allowed. Low (respectively high) productivity firms are firms within the bottom (respectively top) quartile of productivity distribution.

43. Moderation in the growth of the minimum wage would help mitigate potential adverse effects on formal employment. The minimum wage has increased by 80 percent in real terms since 2018 and now stands at around one-half of the average formal-sector wage. The initial increases in the minimum wage likely raised wages for lower income workers but, more recently, the share of low-wage workers in the informal sector is increasing (suggesting higher minimum wages are likely negatively affecting employment outcomes). Further large minimum wage would likely increase informality and/or reduce job creation for lower income workers. Beyond containing minimum wage increases, informality could be reduced by lowering restrictions to layoffs, removing adverse incentives in the pension system, and reducing the regulatory costs of formalizing a business.

Sources: OECD, and IMF staff calculations.

44. Strengthening logistic and trade services would support private investment in tradable sectors. Improvements could focus on streamlining custom procedures, easing licenses and permits procedures in road transport and custom brokerage, and removing foreign direct investment restrictions in the transport sector. Streamlining business regulations at the same time as governance improvements are being made could magnify and accelerate potential growth gains.[3]

Sources: World Bank Logistic Performance Index (LPI), and IMF staff calculations.
Notes. World Bank LPI database scores and ranks countries along six key dimensions. Ranks and scores are subject to estimation errors and confidence intervals as is typical in such exercises. Singapore is the top performer in 2023 ranking 1 globally in overall LPI, and 1 or 2 in the subcategories.

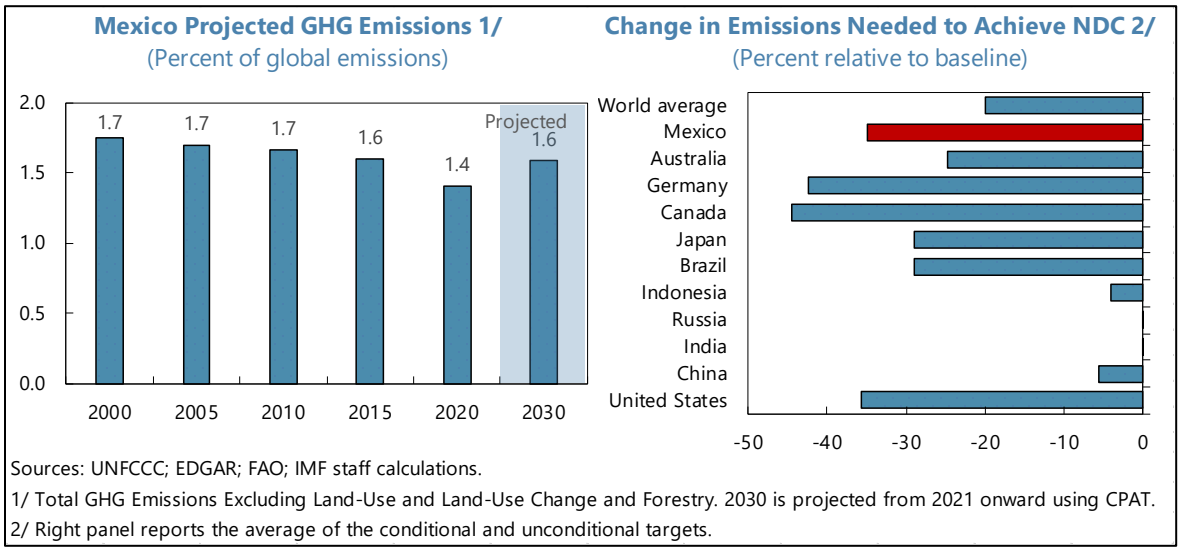
45. Authorities' views. Mexico's open trade policy, strategic investments in infrastructure, labor laws, and minimum-wage policy have promoted equitable growth, formal jobs, and labor force participation, particularly for women. These features should extend through the country as nearshoring materializes. Despite progress, gender gaps do exist, and there is a need to further strengthen policies to boost female labor force participation, in particular, reforming the childcare system and addressing the implementation gaps of the existing legal framework. Low financial depth indicators may mask firms separately obtaining financing from suppliers. A new law has been passed to provide more flexibility for customers to switch banks and encourage competition.

E. Mitigating Climate Change and Increasing Energy Supply

46. In November 2022, Mexico increased its 2030 greenhouse gas (GHG) emission reduction target from 22 percent to 30 percent. This is a material contribution to the global effort, as Mexico's GHG emissions amounted to 1.4 percent of global emissions in 2020. Achieving Mexico's Nationally Determined Contribution will require ambitious measures. The authorities'

[3] Budina et al., 2023, *IMF Staff Discussion Note*, No. 2023/007.

strategy comprises energy, transportation, waste management, residential sector, land use, land use change, forestry, agriculture, and industry. Priorities include combating deforestation and an ambitious zero-emission vehicle sales target (to 50 percent by 2030). The authorities have launched a new plan to promote green finance, and initiated efforts to issue green bonds to support green public spending projects. They have introduced a carbon tax and are working on implementing an emissions-trading system. However, the carbon tax rate remains modest at US$3.3 per ton, carbon taxes implemented by states are still at low effective rates, and the excise fuel tax is set at a relatively low rate.



Sources: UNFCCC; EDGAR; FAO; IMF staff calculations.
1/ Total GHG Emissions Excluding Land-Use and Land-Use Change and Forestry. 2030 is projected from 2021 onward using CPAT.
2/ Right panel reports the average of the conditional and unconditional targets.

47. There is a need to create incentives to expand renewable energy supply. The 2013 energy reform had attracted private firms to Mexico to develop renewable energy capacity. However, regulatory hurdles have disrupted operations, disincentivized investments, and slowed the energy transition. Reopening the energy sector to private competitors while increasing carbon pricing would catalyze the development of renewable energy and incentivize the transfer of foreign technology in the sector.[4] The authorities' ongoing plans to promote green finance and issue green bonds can further catalyze these initiatives. As documented in the FSAP, climate-related risk analysis for the financial sector supports an early transition to a low-carbon economy.

48. Subsidizing investments by Pemex risks creating costly stranded assets. Public transfers to Pemex continue to support investments in oil exploration and refining. At WTI prices of US$80 per barrel, about one sixth of Mexico's current oil fields would be non-economic. Given that operation costs in Mexico are higher than among most of its competitors, Mexico is at considerable risk from a structural decline in world oil prices and can face higher transition costs, especially in a delayed climate mitigation scenario.[5] For example, if climate-mitigation initiatives were to reduce oil prices to US$60, more than one quarter of production in Mexico would be uneconomical, leading to

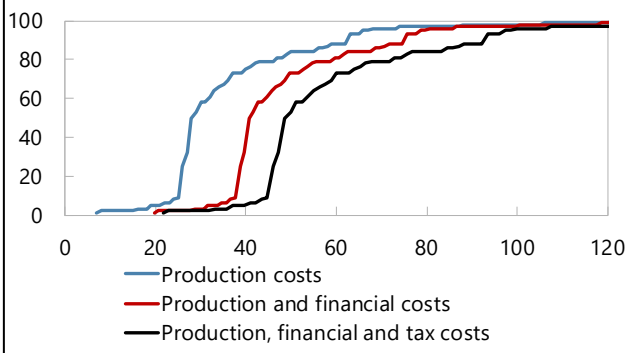
[4] The National Renewable Energy Laboratory finds significant unexploited potential for solar and wind generation in Mexico with projects being feasible across the country, lessening the need for distribution investments.

[5] This risk could be sharper to the scenario analyzed in Annex III, as risks from lower production of oil would be compounded by a lower price.

lower government revenues through profit-sharing agreements and increased losses at Pemex. The risk of continuing to create assets that could subsequently become stranded would be lowered if the government were to remove subsidies to fossil-fuel producers and improve competition in the energy sector, incentivizing SOEs to improve efficiency and cut costs (including by drawing on private sector expertise) or discontinue investment and production.

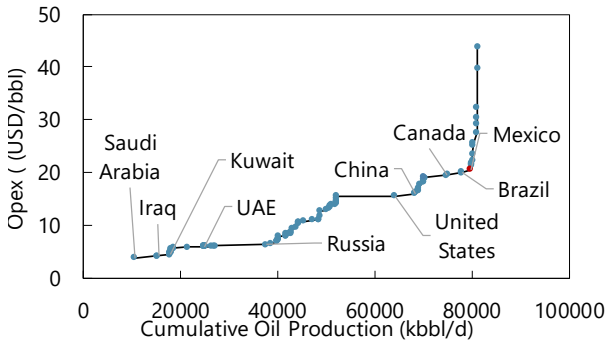
Oil Production Costs in Mexico, 2022 1/

(Share of oil production below a given oil price, percent)



Operation Expenditures and Oil Production, 2022 2/

(In USD/bbl and kbbl/d)



Sources: Rystad, Pemex and IMF staff calculation.

1/ Oil production costs is the breakeven price excluding taxes beyond which exploitation is economical, excluding past investment costs. The chart reports for a given oil price in the horizontal axis the share of oil production with costs below that oil price. Financial and tax costs are spread evenly, field-specific financial and tax costs may differ.

2/ Oil Productions as the sum of crude oil and condensates.

49. A higher carbon price would be essential to broadly align incentives with the government's ambitious climate goals (Annex VI). Staff simulations indicate that if Mexico alone implements a gradual increase of carbon prices or carbon-pricing equivalent to reach the international carbon price floor of US$50 per ton by 2030, greenhouse gas emissions could be reduced by 34 percent. Considering carbon prices only, this would come at a cost of around 1 percent of GDP or about 0.15 percentage point of growth per year compared to a baseline scenario with unchanged carbon prices. A coordinated implementation of the price floor in all countries would entail larger GDP costs of about 1½ percent of GDP due to spillovers from other countries. A reorientation of fiscal spending—including the removal of subsidies for Pemex, green public investment, increased subsidies for renewable energy, feebates, and regulatory requirements for renewable power generation—could catalyze this carbon tax plan. These policies should, however, be complemented by active labor market policies to facilitate job transitions as workers are displaced from fossil-fuel industries.

50. Authorities' views. The enhanced 2030 target sets up a broad-based strategy for Mexico articulated around four priorities: (i) nature-based solutions (such as a plan to combat deforestation), (ii) clean energy, (iii) low-carbon transport (such as the promotion of electric vehicles including with tax incentives) and (iv) regulation and industrial promotion. An ambitious promotion of green financing, and green government bonds complement this strategy. Further, the strategy comprises a plan for adaptation benefitting vulnerable people. Pemex contributes to the mitigation

effort with cogeneration and gas flaring reduction plans, and its continued operations are needed to generate adequate revenues to best protect its workers.

STAFF APPRAISAL

51. The Mexican economy continues to be resilient. Macroeconomic performance remains sound, thanks to Mexico's very strong policies and policy frameworks. A broad-based expansion is being supported by robust private consumption and investment, with notable strength in service sectors, construction, and auto production. Unemployment rate is close to record lows. Public debt remains in check and inflation is receding. Mexico's external position is moderately stronger than the level implied by medium-term fundamentals and desirable policies.

52. Securing sustainable and inclusive growth in a complex global environment will require a broad set of reforms. The ongoing reshaping of global supply chains and the global shift to a lower carbon economy provide important opportunities for Mexico. Capitalizing on this potential and competing with other production locations will require addressing Mexico's long-standing structural challenges. Higher and better-targeted public investment, better governance, increasing access to domestic sources of finance, increasing female labor force participation, and pivoting consumption toward cleaner sources of energy should all be components of a broad growth strategy.

53. Safeguarding fiscal sustainability will require decisive measures. The planned fiscal path for 2024 is unduly procyclical. Budgetary pressures from lower revenues are being compounded by a targeted increase in current spending (i.e., wages, pensions, and social spending) and higher front-loaded capital spending to complete flagship projects. The expected increase in the deficit to 5.4 percent of GDP—a fiscal impulse of 2.4 percent of potential GDP—will boost demand at a time when the economy is operating above potential and inflation is not yet back to the central bank's target. A tighter fiscal stance would lessen upward pressure on the currency, interest rates, and inflation. Hard choices are needed to unwind this stimulus in 2025.

54. Fiscal consolidation will need to combine a range of measures. Non-oil revenue remains significantly below Latin American and OECD peers and steps to boost revenues should include (i) eliminating the zero-rating for VAT and rationalizing exemptions; (ii) broadening the personal income tax; and (iii) increasing property taxes. Such measures would also create space for a gradual and permanent increase of capital and targeted social expenditure of around 2 to 3 percent of GDP to boost growth and tackle social inequalities. In addition, a stronger medium-term fiscal framework would strengthen the credibility of fiscal policy, ensure greater consistency in the policy mix, and institutionalize the government's long-standing commitment to fiscal responsibility.

55. Greater transparency in fiscal reporting would improve accountability. The clear recording of support to Pemex in the 2024 budget is a positive step forward that increases transparency and will help facilitate a discussion of trade-offs between directing public resources to Pemex instead of other budgetary priorities. Future budgetary support for Pemex should be

conditioned on credible plans to ensure Pemex's commercial viability. Furthermore, financial transactions undertaken by and between public entities—including trust funds, state-affiliated enterprises, and development corporations—necessitate a more robust and transparent reporting of fiscal outturns that is aligned with international accounting practices.

56. Banxico should continue to focus on its legal mandate of price stability. Banxico is correct to maintain a restrictive monetary policy until inflation indicators are durably heading toward its target. Based on the current macroeconomic outlook, this will likely require maintaining the policy rate at current levels until mid-2024.

57. Given the significant changes in Mexico's monetary policy and practices in the past few years, an internal strategic review of Banxico's operations and communications could prove useful. Banxico could assess the advances it has made in terms of its operations and communications, draw lessons from experiences in other countries, and identify ways to further enhance decision-making processes, communication practices, forecasting and analysis.

58. The flexible exchange rate should continue to be the key tool to facilitate adjustment to external and domestic shocks. Application of the IMF's Integrated Policy Framework does not identify material frictions that would warrant regular FX interventions in Mexico. The policy rate should remain the primary instrument to anchor inflation expectations and maintain inflation at Banxico's 3-percent target.

59. Important progress has been made in financial sector supervision. The financial system remains resilient to shocks and stress tests show that capital levels would remain above regulatory minima even in the most severe downside scenarios. Work should continue to implement the recommendations from the 2022 FSAP. Addressing outstanding gaps in the Anti-Money Laundering/Combating the Financing of Terrorism (AML/CFT) framework and enhancing collaboration between the various AML/CFT agencies and anti-corruption bodies would represent an important step forward.

60. Boosting female labor force participation and removing legal impediments to female economic empowerment would improve potential growth and raise living standards. The gap between male and female labor participation rate in Mexico is among the highest in the OECD. Targeted fiscal policies and legal reforms could help close gender gaps.

61. Better governance would improve the business environment. Better coordination among national, state, and municipal levels would be important to effectively implement the existing anti-corruption framework and ensure its proper enforcement. Staff look forward to Mexico's decision to participate in the IMF's voluntary assessment of transnational aspects of corruption.

62. Improvements in infrastructure and streamlined regulations would help attract private capital. Filling critical infrastructure gaps—in transport, water, and energy—would help meet the growing needs of firms investing in Mexico. Streamlining custom procedures, easing licensing and permitting procedures, and removing foreign direct investment restrictions would incentivize

investment and encourage technology transfer. Furthermore, deepening of domestic financial intermediation could provide additional resources for private investment.

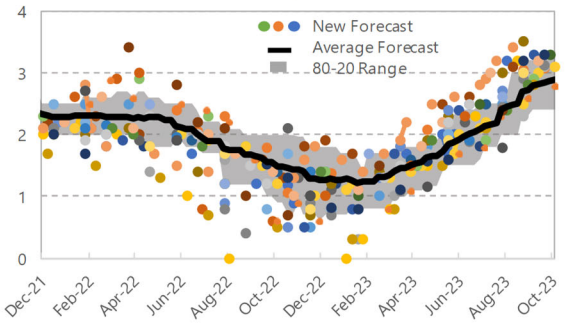
63. A comprehensive and well-sequenced climate change strategy can provide more durable sources of energy. New investments in the hydrocarbon sector should internalize the long-term risk of a reduction in changing global demand for hydrocarbons, particularly as Mexico is a relatively high-cost producer. It will be important that the authorities' increased focus on electrification (e.g., in transportation) is accompanied with a switch to low carbon and renewable sources of generation. Increasing the carbon tax—and/or the shadow price of carbon in the emission trading system—to around US$50 per ton would be broadly consistent with the authorities' emission goals.

64. It is recommended that the next Article IV consultation take place on the standard 12-month cycle.

Figure 1. Mexico: High Frequency Indicators

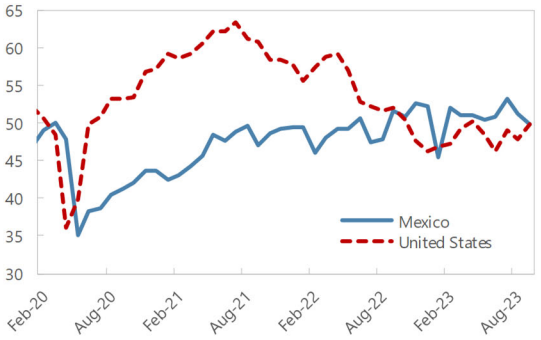
Private sector forecasts are revised up, reflecting the strong start of the year...

2023 GDP Growth Forecasts 1/



... as the economy is more resilient than the one of the US.

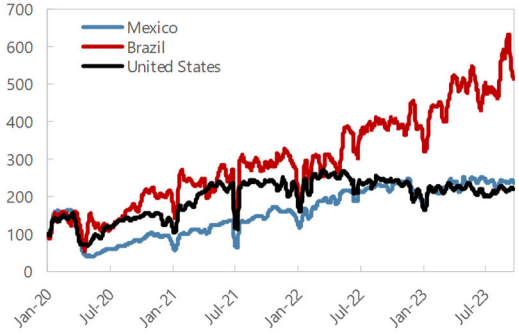
S&P Global Manufacturing PMI



However, employment job posting are stabilizing now...

Employment: New Job Postings Index

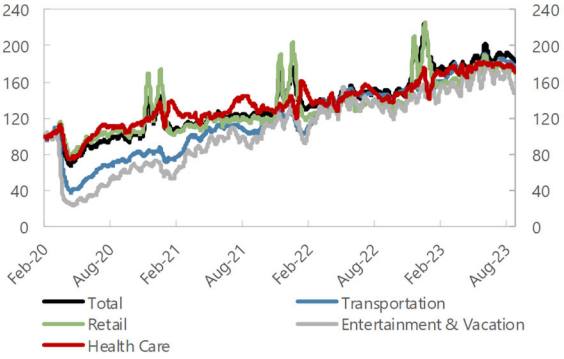
(Index, Jan 2020=100)



...as well as card transactions.

Card Transactions

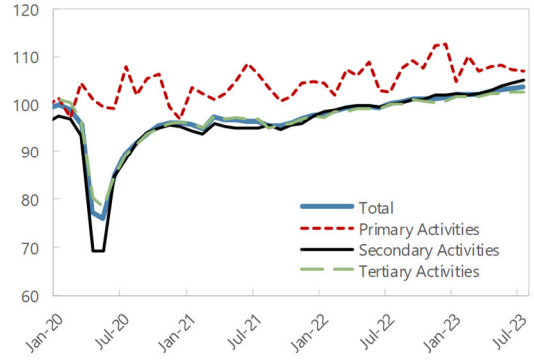
(14day MA, Index, 2020 Feb Avg. = 100)



The economy has now broadly recovered from the Covid-19 crisis...

Global Indicator of Economic Activity (IGAE)

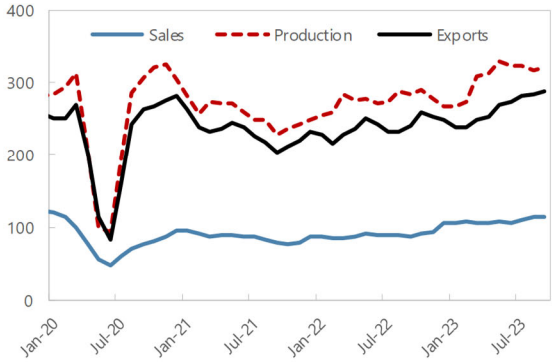
(Index, SA)



... and car production above pre-pandemic level is driving growth.

Light Vehicle Production 2/

(In thousand)

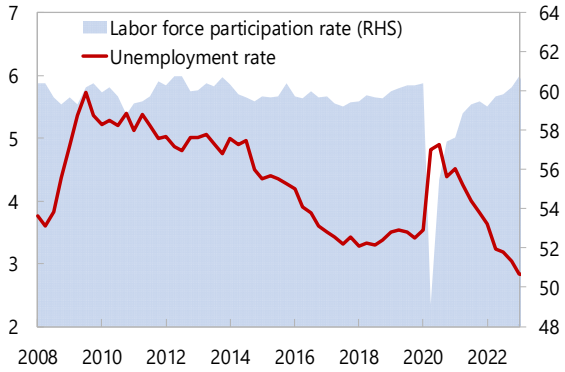


Sources: National authorities, Indeed, Haver Analytics, Bloomberg, and Refinitiv Eikon.
1/ In the top left panel, each new 2023 GDP forecast release is reflected with a dot and the horizontal axis is the release date.
2/ Calculated as the monthly average over 3 months.

Figure 2. Mexico: Labor Market Indicators

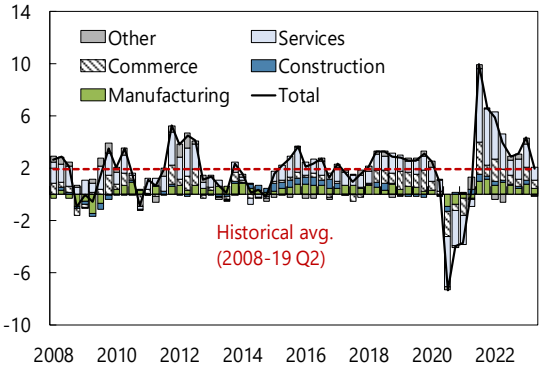
Participation is now record high while unemployment rate is record low

Unemployment Rate
(In percent, SA)



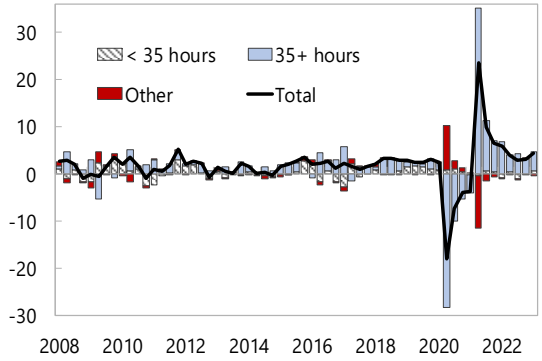
The job recovery is broad-based, with the largest contribution from services.

Contributions to Employment Growth by Sector
(Y/Y percent growth)



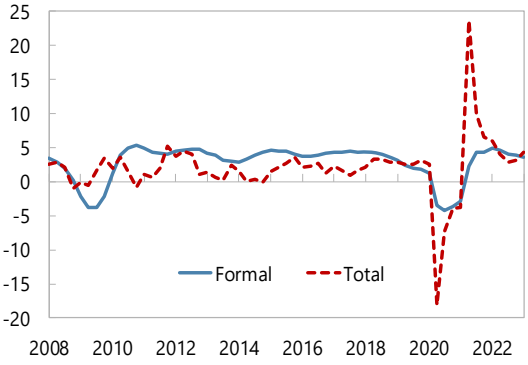
Full time jobs are driving the labor market recovery.

Contributions to Employment Growth by Hours
(Y/Y percent growth)



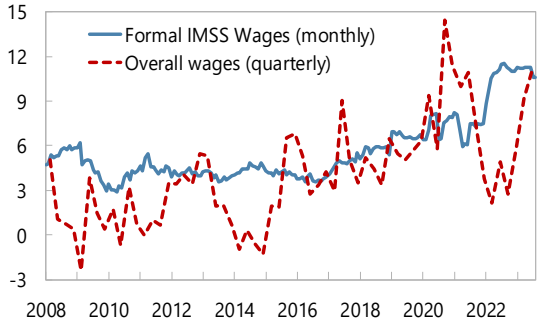
Both formal and informal employment are creating jobs.

Total and Formal Employment
(Y/Y percent growth)



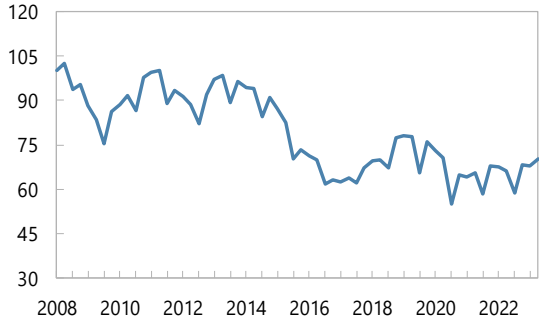
Nominal wages are rising strongly.

Average Nominal Wages
(Y/Y growth)



ULCs appear flat amid high seasonal variation.

Unit Labor Cost Real Effective Exchange Rate 1/
(Index, Mar. 2008=100)

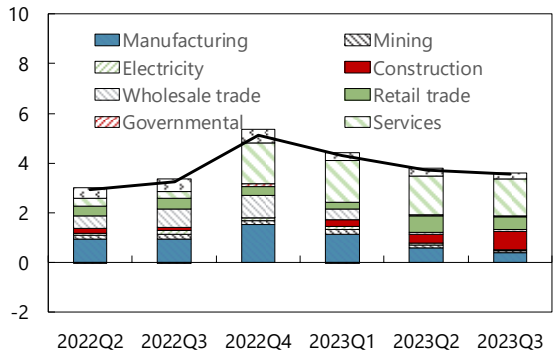


Sources: National Authorities, Haver Analytics, and IMF staff calculations.
1/ Cost Real Effective exchange rates was calculated taking the 4-quarter moving average.

Figure 3. Mexico: Real Sector

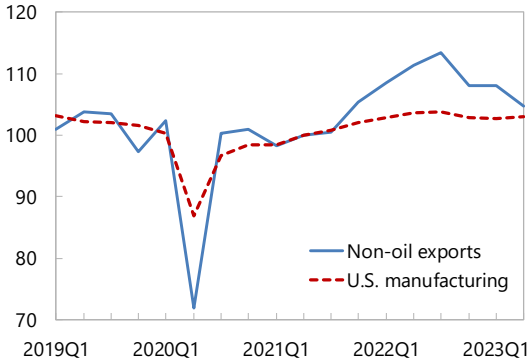
Services and construction are the main growth engines

Supply Contributions to Growth
(SAAR, percent, y/y)



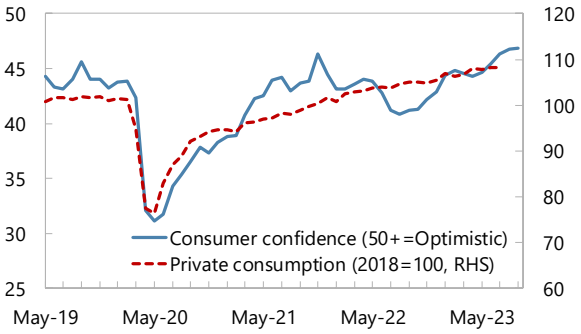
Real exports are declining amid stabilization of manufacturing activity in the US.

Real Export
(2021Q1 = 100, SA)



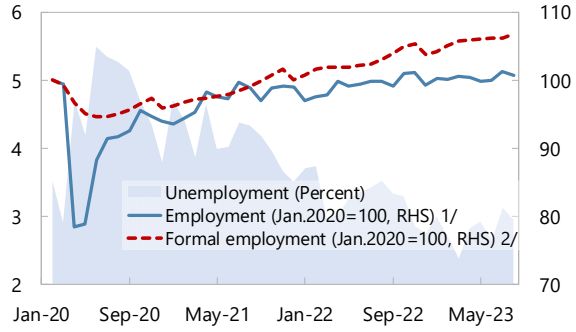
Private confidence is rebounding and consumption keeps growing as the pandemic constraints are dissipating...

Consumption
(Index, SA)



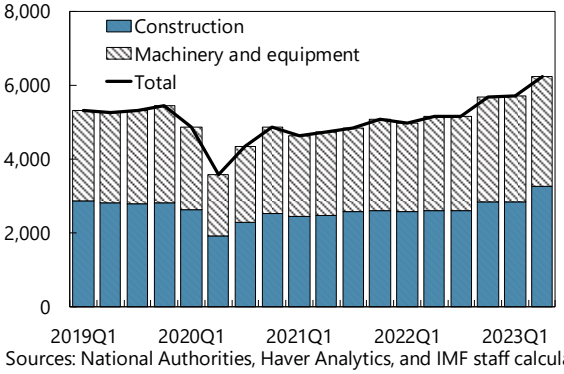
... while employment growth is strong

Employment
(NSA)



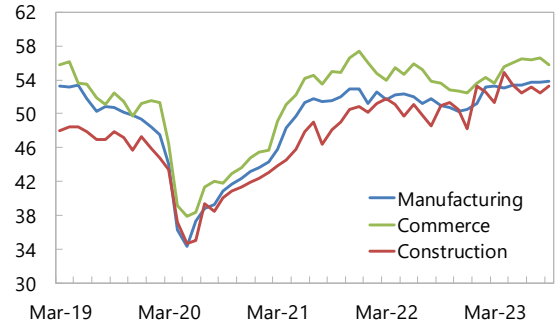
Gross fixed capital formation is rebounding...

Gross Fixed Capital Formation
(NSAAR, Billions of 2018 Pesos)



... and business confidence is resilient.

Business Confidence by Sector
(Index, SA)

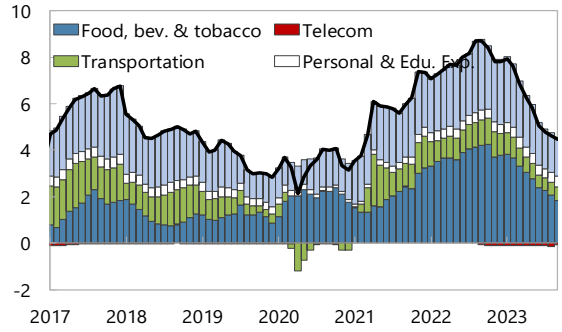


Sources: National Authorities, Haver Analytics, and IMF staff calculations.
1/ Employment is calculated as employment as a share of the economically active population.
2/ Formal employment is calculated as the number of IMSS-reporting employees, which does not capture self-employed formal workers.

Figure 4. Mexico: Prices and Inflation

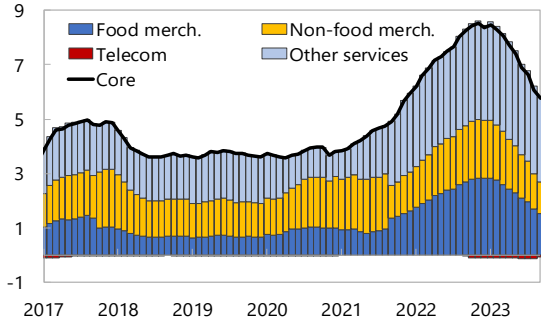
Headline inflation is receeding.

Contributions to Headline Inflation
(Y/Y, in percent)



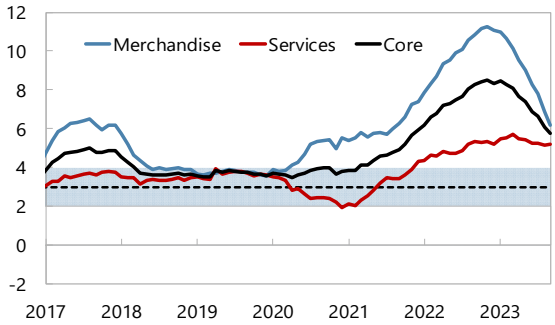
Core inflation is declining with a lag as services inflation has been more persistent...

Contributions to Core Inflation
(Y/Y, in percent)



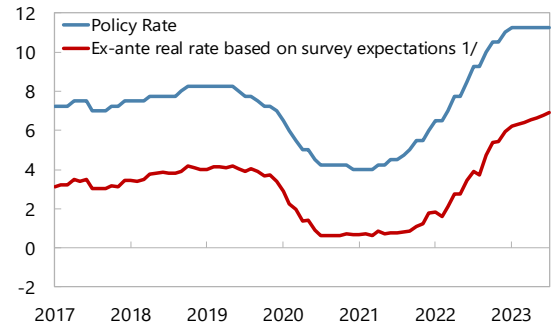
... while merchandise inflation is declining sharply, driving the decline in core inflation.

Inflation
(Y/Y percent growth)



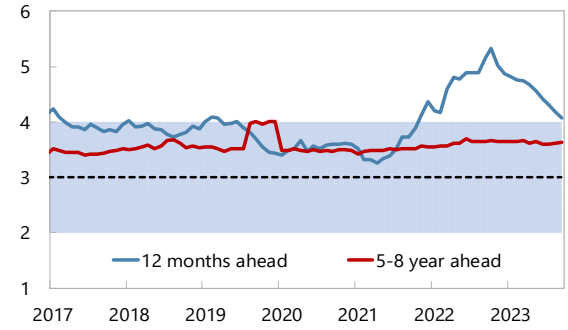
The policy rate has stabilized in nominal terms and increased in real terms as inflation expectations have declined.

Policy Rates
(In percent)



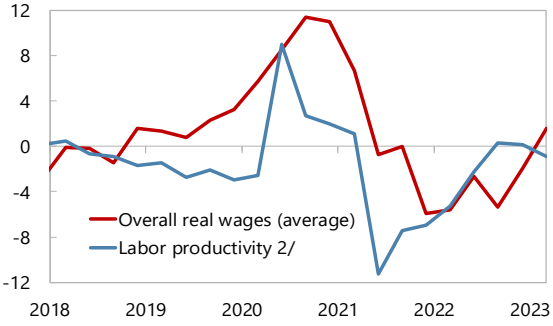
Short term survey-based expectations mirror the decline in actual inflation, while long-term inflation expectations have remained well anchored.

Survey-based Inflation Expectations
(In percent)



Real wages have struggled to keep pace with inflation, reflecting the decline in productivity during the pandemic.

Real Wages and Labor Productivity
(Y/Y percent growth)

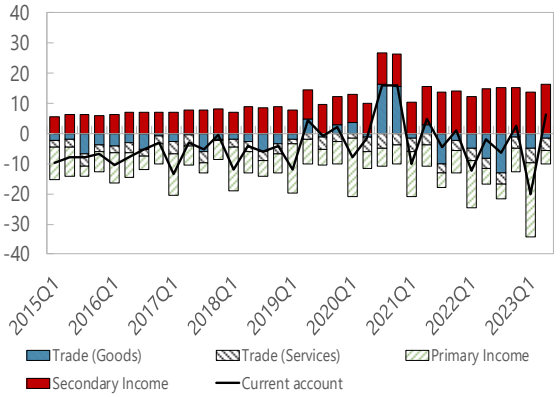


Sources: National Authorities, Haver Analytics, and IMF staff calculations.
1/ Calculation using the average inflation expectation for the next 12 months (NSA, %). Source: Banco de México. Survey on the Expectations of Private Sector Economists.
2/ Based on hours worked.

Figure 5. Mexico: External Sector

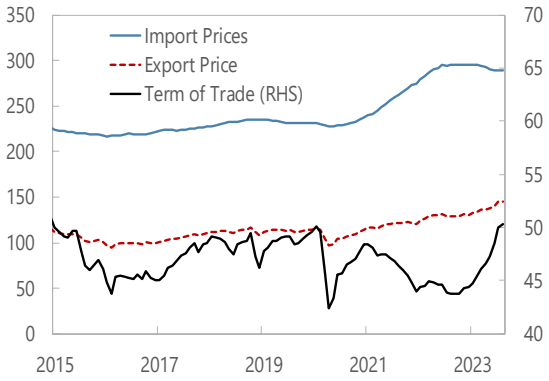
The current account balance has registered deficits so far this year.

Current Account Balance
(USD, billions)



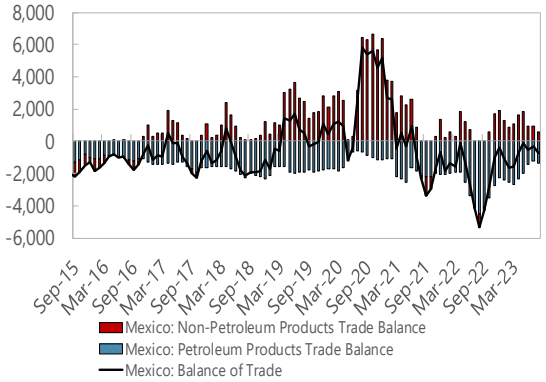
The terms of trade improved due to higher export prices.

Terms of Trade



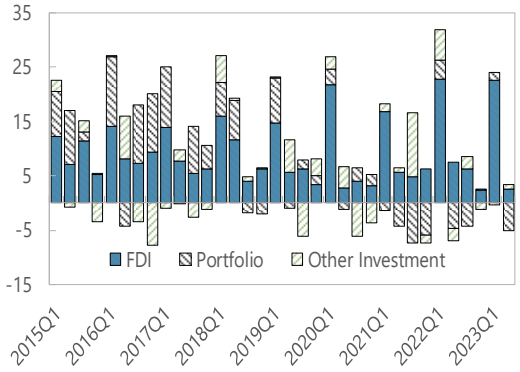
The trade deficit has remained to be in deficit.

Trade Balance
(NSA, USD millions, 3-month Average)



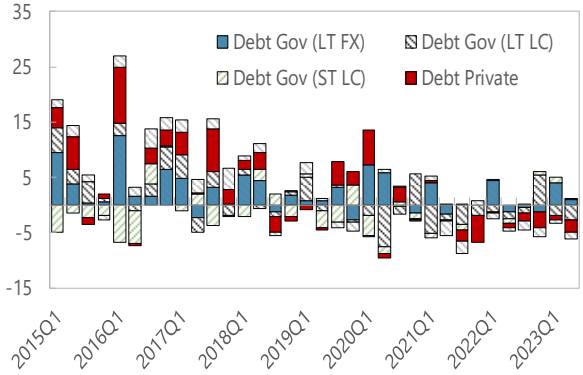
Capital flows remain resilient supported by strong FDI inflows despite high uncertainty.

Capital Inflows by Non-Residents
(USD, billions)



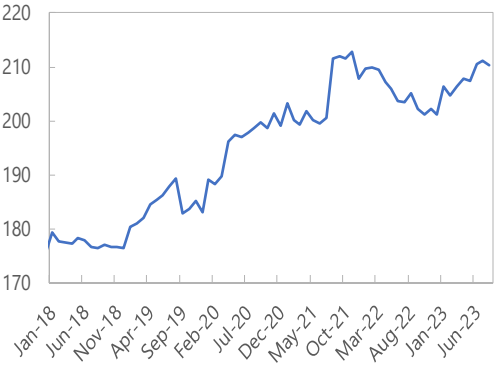
Domestic government bonds have seen inflows in recent quarters.

Portfolio Flows
(USD, billions)



Gross international reserves rebounded.

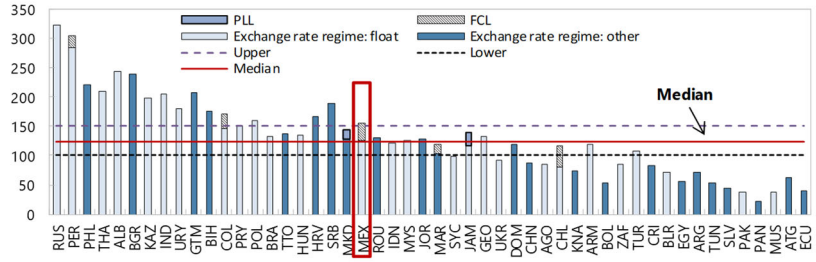
Gross International Reserves
(USD, billions)



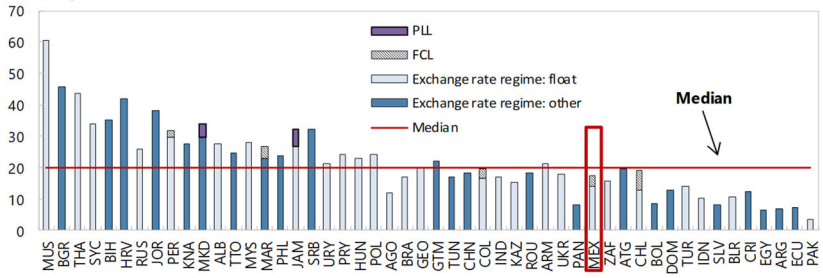
Sources: National Authorities, Haver Analytics, and IMF staff calculations.

Figure 6. Mexico: Reserve Coverage and FCLs in an International Perspective 1/

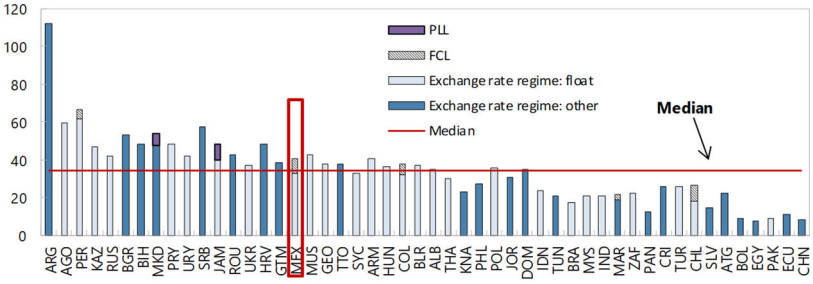
GIR to ARA Metric, 2022 2/3/4/
(In percent)



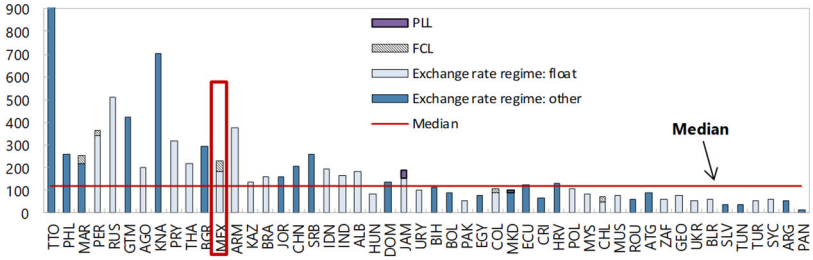
GIR to GDP, end-2022
(In percent)



GIR to Broad Money, end-2022
(In percent)



GIR to Short-term External Debt at Remaining Maturity plus Current Account Deficit (end-2022) 5/
(In percent)

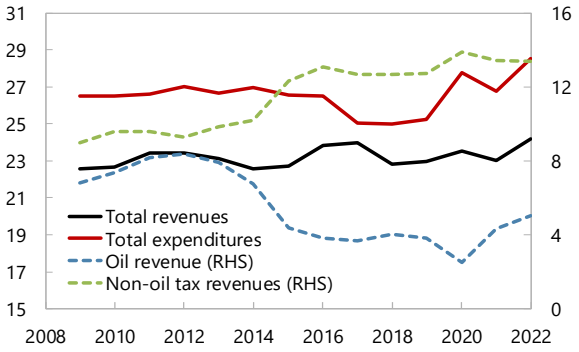


Sources: World Economic Outlook; IFS; and IMF staff estimates.
1/ The sample of countries included in these charts includes all EMEs for which data is available.
2/ The ARA metric provides a tool to help inform reserve adequacy assessments, but individual circumstances (for example, access to swap lines, market maturity, etc.) require additional judgment and, for this reason, mechanistic comparisons of the ARA metric do not provide a complete view.
3/ The ARA Metric is a weighted sum of potential drains on the BoP, depending on the country's exchange rate regime. For fixed exchange rates, ARA Metric = 10% × Exports + 10% × Broad Money + 30% × Short-term Debt + 20% × Other Liabilities. For floating exchange rates, ARA Metric = 5% × Exports + 5% × Broad Money + 30% × Short-term Debt + 15% × Other Liabilities. See "Guidance Note on the Assessment of Reserve Adequacy and Related Considerations", IMF, 2016.
4/ The upper and lower lines denote the 100-150 percent range of ARA metric, which are considered broadly adequate for precautionary purposes.
5/ The current account balance is set to zero if it is in surplus.

Figure 7. Mexico: Fiscal Sector

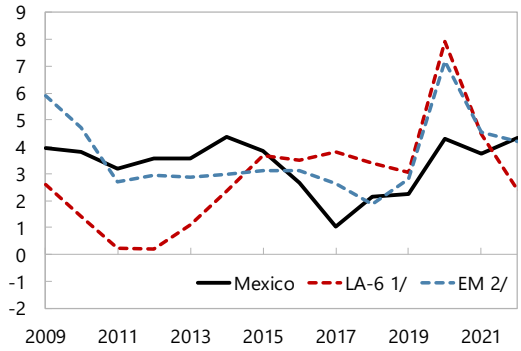
Revenue- and expenditure-to-GDP ratios rose in 2022 as higher oil prices increased Pemex revenues and fuel subsidies.

Public Sector Revenues and expenditures
(In percent of GDP)



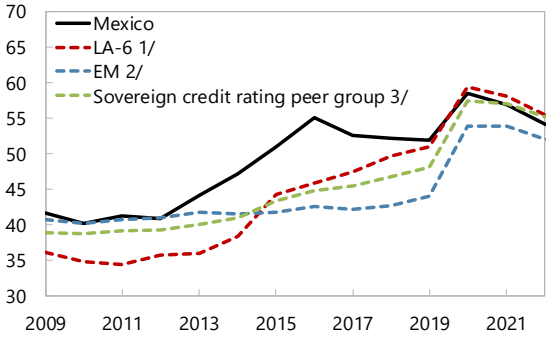
The deficit in Mexico was on par with emerging economy comparators but exceeded that of regional peers.

Overall Public Sector Deficit
(In percent of GDP)



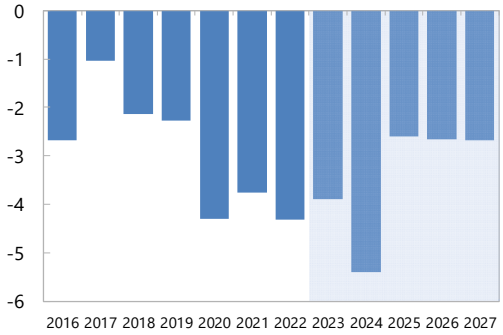
Public debt declined more in Mexico in 2022 compared to peer groups.

Gross Public Sector Debt
(In percent of GDP)



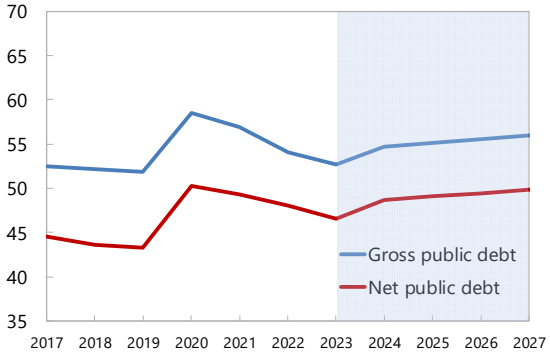
Overall deficit is likely to moderate slightly in 2023, while it is expected to widen in 2024

Fiscal Balance
(In percent of GDP)



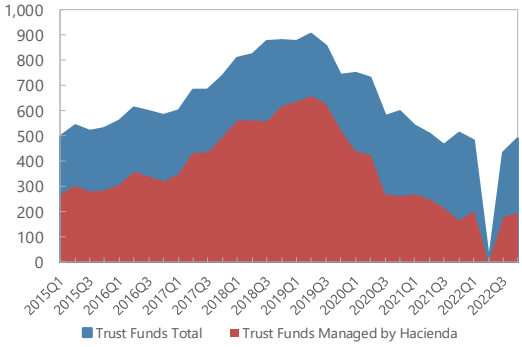
Public debt is projected to remain almost flat below 60 percent of GDP over the medium-term.

Public Sector Debt Path
(In percent of GDP)



The trust funds depleted during the pandemic have begun to be rebuilt.

Trust Funds Managed by Secretaría de Hacienda
(As of March 2023, in billions of pesos)

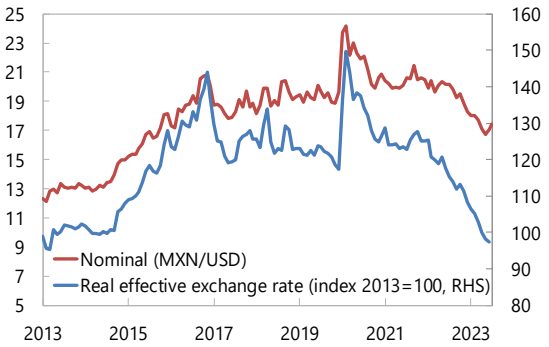


Sources: National authorities, World Economic Outlook, Fitch Ratings, and IMF staff calculations.
1/ LA-6 excluding Mexico is comprised of Brazil, Chile, Colombia, Peru, and Uruguay.
2/ EM comparator group is comprised of India, Indonesia, Poland, Russia, Thailand, and Turkey.
3/ Fitch sovereign credit rating peer group includes Brazil, Chile, Colombia, India, Poland, Russia, South Africa, Thailand, and Turkey.

Figure 8. Mexico: Financial Markets

The peso has strengthened significantly over the past year, in both real and effective terms

Exchange Rate
(As of September, 2023)

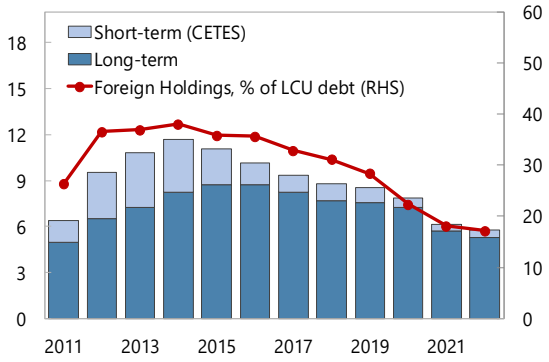


Shorter-dated yields have risen in response to policy hikes, leading to a reversal in the yield curve

Local Government Bonds Yields
(In percent; as of October, 2023)

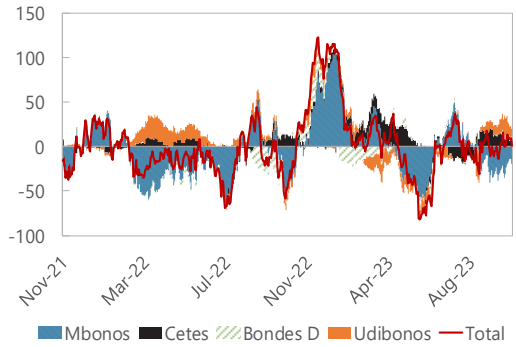
The share of peso-denominated bonds held by foreigners has continued to decline but at a slower pace than prior years

Sovereign Debt Holdings in Local Currency
(In percent of GDP; June, 2023)



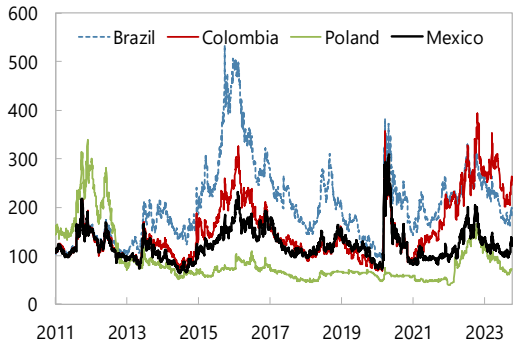
Flows have been stable, and fairly balanced across bond type

Foreign Inflows in Local Currency Debt 1/
(30 day Moving Sum, MXN bn)



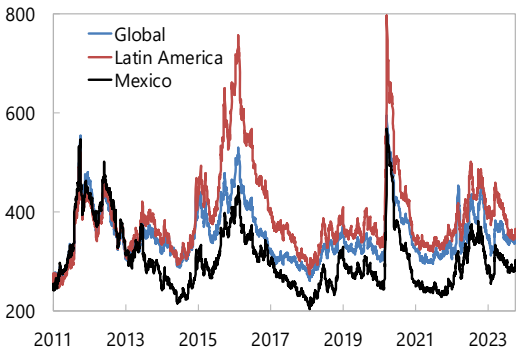
Mexico's sovereign spreads have behaved well and remain below regional peers

Sovereign Risk Spreads
(5Y CDS spread, in basis points; as of October 11, 2023)



Spreads on dollar-denominated corporate bonds have been mostly stable over the past year

Corporate Risk Spread
(CEMBI spread, in basis points; as of October 11, 2023)

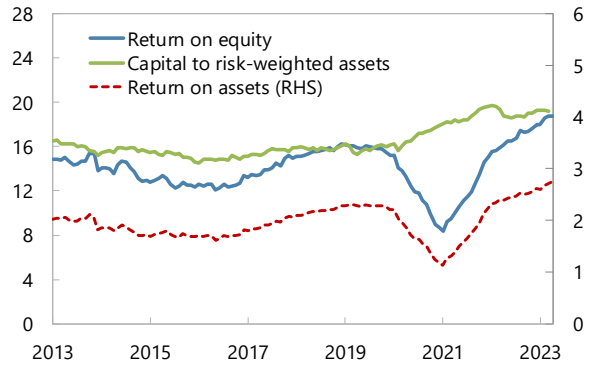


Sources: Bloomberg, Haver Analytics, National authorities, and IMF staff calculations.
1/ Flows associated with Pemex transaction on 11/20/2020 have been removed.

Figure 9. Mexico: Banking System

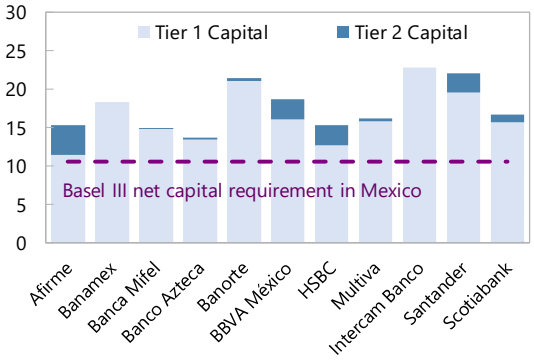
Bank capital has continued to improve, and profitability has more than recovered from the pandemic downturn.

Commercial and Development Banking Sector
(In percent; as of August, 2023)



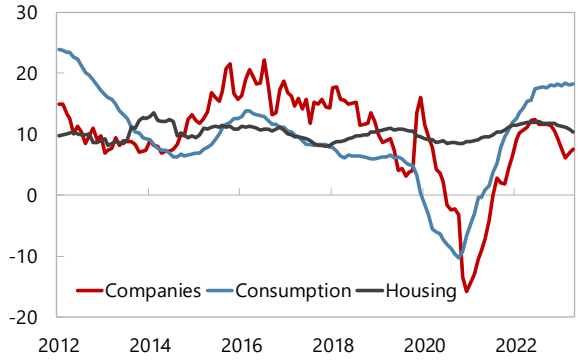
All major banks exceed capital requirements.

Capital to Risk-Weighted Assets
(In percent; as of July, 2023)



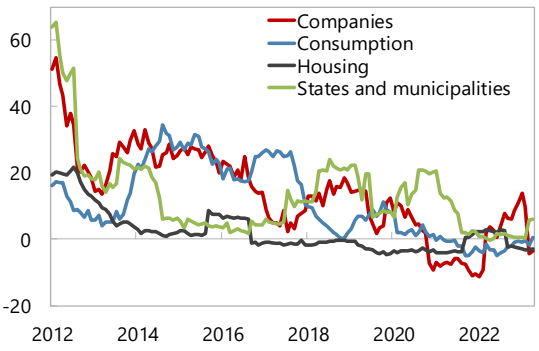
Consumption credit has been very dynamic…

Commercial Bank Credit Growth by Sector
(Y/Y monthly growth, nominal; as of August, 2023)



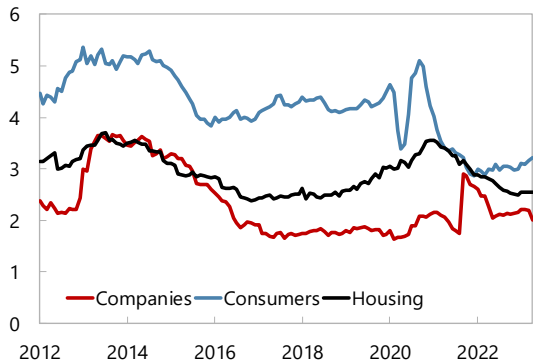
…while credit from development banks has stagnated.

Development Bank Credit Growth by Sector
(Y/Y monthly growth, nominal; as of August, 2023)



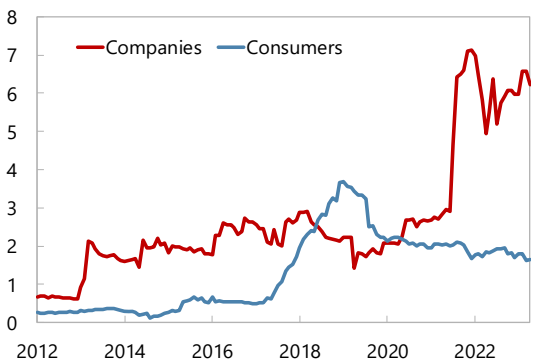
Non-performing loans at commercial banks have been stable at low levels.

Total Commercial Bank NPLs
(In percent of outstanding loans; as of August, 2023)



…however, at development banks, non-performing loans from corporates have risen.

Total Development Bank NPLs
(In percent of oustanding loans; as of August, 2023)



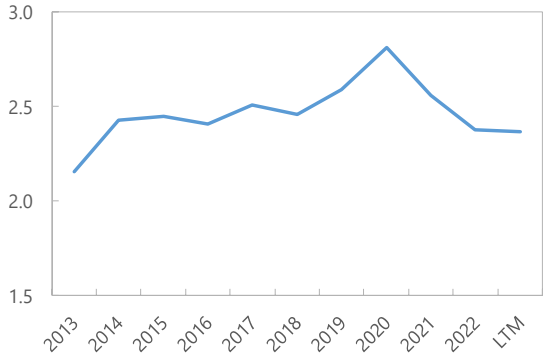
Sources: Bloomberg, Haver Analytics, National authorities, and IMF staff calculations.

Figure 10. Mexico: Nonfinancial Corporate Sector 1/

Nonfinancial corporate leverage has continued to decline following the pandemic

Total Debt to Total EBITDA

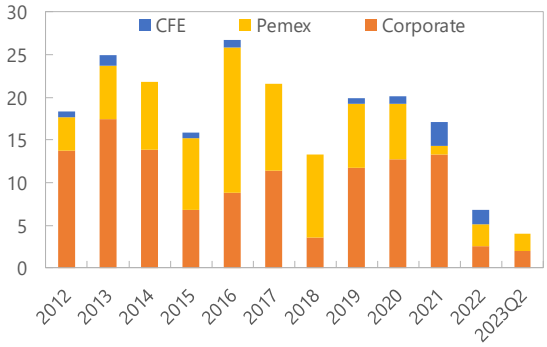
(In percent, median)



Issuance in hard currency remains weak, reflecting a global trend from emerging market corporates

Hard Currency Issuance 1/

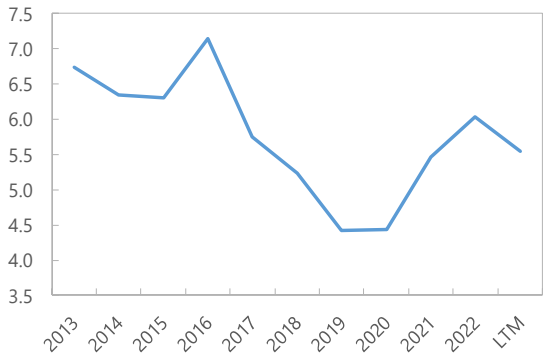
(In US$ billion)



Debt servicing capacity has recently declined …

Interest Coverage Ratio

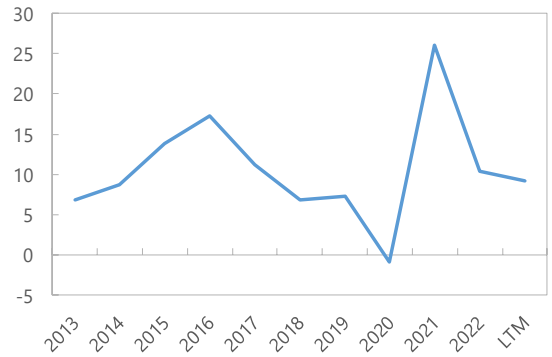
(Earnings in multiples of Interest Expense, median)



…as has profitability.

EBITDA Growth

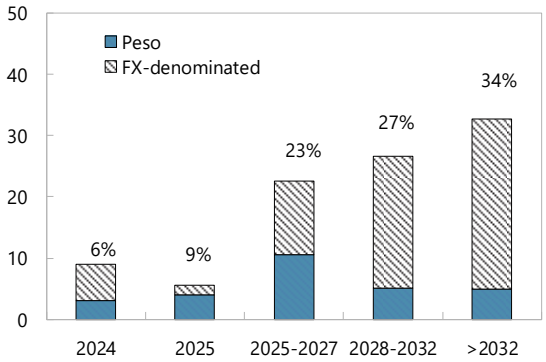
(year-on-year percent change, median)



Near-term maturities encompass only a small portion of corporate debt

Nonfinancial Corporate Bond Maturity Profile

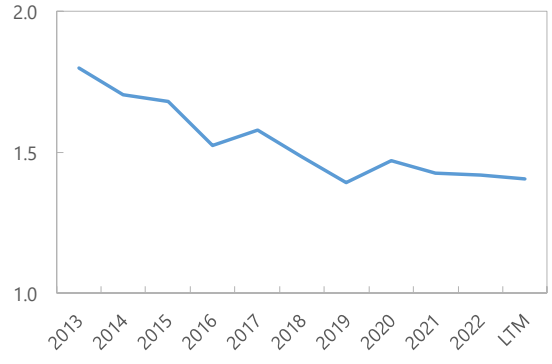
(In US$ billion)



Current ratios have been fairly stable after declining in the years before the pandemic

Current ratio: Current Assets to Current Liabilities

(Multiples, median)



Sources: Bloomberg, Haver Analytics, National authorities, and IMF staff calculations.

1/ Totals exclude any hard currency issuance in local law

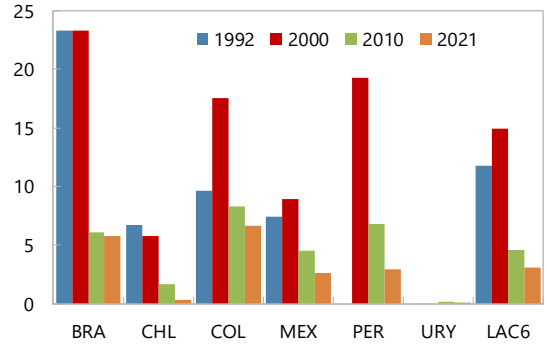
LTM= Last 12 months, 2022Q3-2023Q2.

Figure 11. Mexico: Social Indicators in Regional Context

Extreme poverty has declined over the past 25 years.

Poverty Headcount Ratio at $2.15 1/

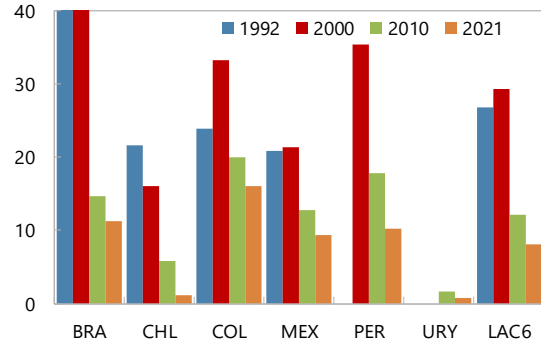
(2017 PPP, percent of population)



Still, poverty in Mexico is slightly higher than the LAC6 average.

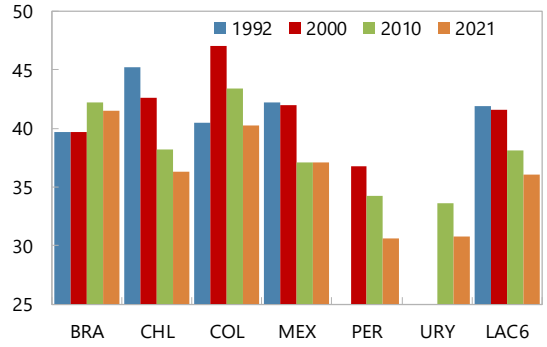
Poverty Headcount Ratio at $3.65 2/

(2017 PPP, percent of population)



Income inequality is slightly above the regional average.

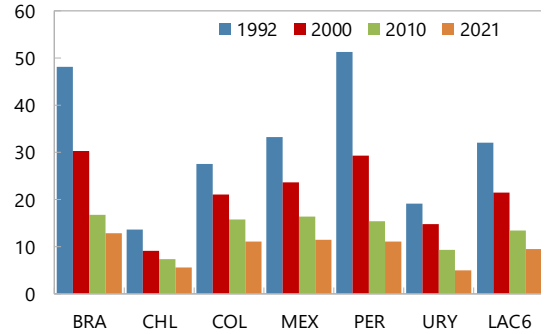
Income Share Held by Highest 10 Percent



Poverty and inequality go along with higher than average infant mortality rates.

Infant Mortality Rate

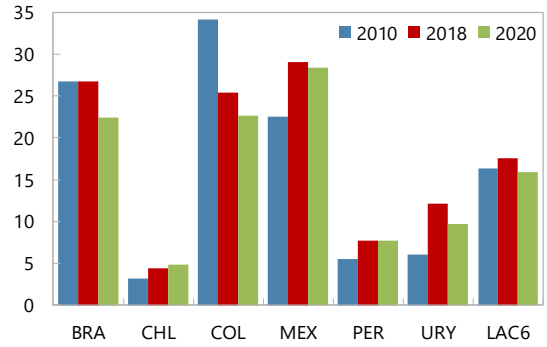
(Per 1,000 live births)



The homicide rate remains high.

Intentional Homicides

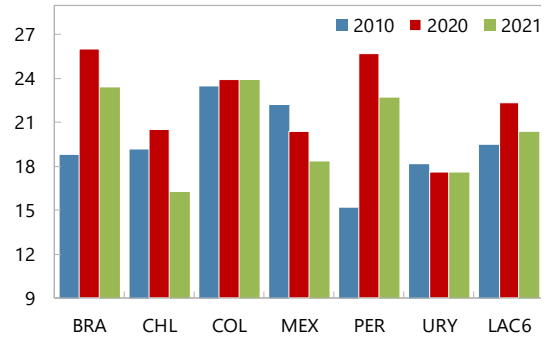
(Per 100,000 people)



A large but declining share of youth is excluded from education or employment.

Share of Youth not in Education, Employment or Training

(Total, percent of youth population)



Source: World Development Indicators.
1/ Poverty headcount ratio at $2.15 a day (2017 PPP) as a percent of population.
2/ Poverty headcount ratio at $3.65 a day (2017 PPP) as a percent of population.

Table 1. Mexico: Selected Economic, Financial, and Social Indicators

I. Social and Demographic Indicators

GDP per capita (U.S. dollars, 2022)	11,279.2	Poverty headcount ratio (% of population, 2022) 1/	36.3
Population (millions, 2022)	130.0	Income share of highest 20 perc. / lowest 20 perc. (2022)	8.4
Life expectancy at birth (years, 2022)	75.5	Adult literacy rate (2020)	95.2
Infant mortality rate (per thousand, 2021)	11.4	Gross primary education enrollment rate (2020) 2/	103.7

II. Economic Indicators

					Proj.					
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
	(Annual percentage change, unless otherwise indicated)									
National accounts (in real terms)										
GDP	-0.3	-8.7	5.8	3.9	3.2	2.1	1.5	1.8	2.0	2.1
Consumption	0.8	-9.3	6.8	5.5	3.7	1.6	1.2	1.7	2.0	2.1
Private	1.2	-10.6	8.1	6.2	4.0	1.6	1.1	1.6	1.9	2.1
Public	-1.6	-0.7	-0.5	1.3	1.5	1.5	2.0	2.4	2.4	2.4
Investment	-4.2	-18.4	10.2	8.5	14.4	0.7	1.4	1.8	2.0	2.1
Fixed	-4.4	-17.3	9.3	8.6	14.6	0.6	1.4	1.9	2.0	2.1
Private	-2.9	-18.6	11.2	9.5	15.2	0.6	1.4	1.8	2.0	2.1
Public	-14.8	-6.6	-3.6	2.0	10.0	0.7	1.5	2.5	2.5	2.5
Inventories 3/	0.0	-0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exports of goods and services	1.2	-7.0	7.2	9.0	-2.6	2.9	2.2	3.0	3.1	3.1
Imports of goods and services	-1.1	-12.0	15.0	8.9	6.5	1.0	1.4	2.7	3.0	3.1
GDP per capita	-1.2	-9.4	5.2	3.1	2.3	1.3	0.6	1.0	1.2	1.3
External sector										
External current account balance (in percent of GDP)	-0.4	2.0	-0.6	-1.2	-1.5	-1.4	-1.1	-0.9	-0.9	-0.9
Exports of goods, f.o.b. 4/	2.2	-9.4	18.6	16.7	2.2	5.4	4.0	4.9	4.7	4.4
Imports of goods, f.o.b. 4/	-2.0	-15.9	32.0	19.6	2.9	6.4	3.4	3.9	4.7	4.6
Net capital flows (in percent of GDP) 5/	-1.4	0.8	-0.9	-0.9	-2.1	-2.0	-1.6	-1.2	-1.3	-1.3
Terms of trade (goods, improvement +)	2.3	0.8	-1.7	-2.1	8.8	-2.8	-0.2	0.6	-0.2	-0.2
Gross international reserves (in billions of U.S. dollars)	183.0	199.1	207.7	201.1	212.3	224.5	234.4	242.3	249.8	257.5
Exchange rates										
Real effective exchange rate (avg, appreciation +)	3.2	-7.7	5.9	5.3	...	...	...	...	...	...
Nominal exchange rate (MXN/USD) (eop, appreciation +)	4.3	-5.9	-3.2	5.7	...	...	...	...	...	...
Inflation, Employment and Population										
Consumer prices (end-of-period)	2.8	3.2	7.4	7.8	4.5	3.2	3.0	3.0	3.0	3.0
Core consumer prices (end-of-period)	3.6	3.8	5.9	8.3	5.0	3.1	3.0	3.0	3.0	3.0
Formal sector employment, IMSS-insured workers (average)	2.3	-2.5	1.9	4.3	...	...	...	...	...	...
National unemployment rate (annual average)	3.5	4.4	4.1	3.3	2.9	3.1	3.4	3.6	3.7	3.7
Unit labor costs: manufacturing (real terms, average)	3.6	10.4	4.3	11.3	...	...	...	...	...	...
Total population 6/	1.0	0.8	0.6	0.8	0.9	0.9	0.8	0.8	0.7	0.7
Working-age population 6/	1.3	1.1	1.0	1.1	1.2	1.1	1.0	0.9	0.8	0.8
Money and credit										
Financial system credit to non-financial private sector 7/	3.0	0.9	4.2	10.9	7.1	6.4	3.6	3.8	3.6	3.8
Broad money	4.7	13.4	9.5	7.3	8.0	7.3	4.5	4.7	4.5	4.7
Monetary policy rate	7.25	4.25	5.50	10.50	11.25	10.00	8.00	6.75	6.50	6.50
Public sector finances (in percent of GDP) 8/										
General government revenue	23.0	23.5	23.0	24.2	23.8	23.7	23.7	23.5	23.5	23.3
General government expenditure	25.2	27.8	26.8	28.5	27.7	29.1	26.3	26.1	26.1	25.9
Overall fiscal balance	-2.3	-4.3	-3.8	-4.3	-3.9	-5.4	-2.6	-2.7	-2.7	-2.7
Structural primary balance 9/	1.0	0.5	0.4	0.9	1.4	-1.0	1.6	1.5	1.5	1.4
Fiscal impulse 10/	0.0	0.5	0.1	-0.5	-0.5	2.4	-2.6	0.1	0.0	0.1
Gross public sector debt	51.9	58.5	56.9	54.1	52.7	54.7	55.1	55.5	55.9	56.3
Memorandum items										
Nominal GDP (billions of pesos)	25,143.1	24,079.8	26,608.7	29,503.8	32,022.3	34,540.8	36,266.4	38,149.7	40,076.4	42,146.2
Output gap (in percent of potential GDP)	2.4	-2.7	-2.0	0.0	1.1	1.2	0.5	0.2	0.0	0.0

Sources: World Bank Development Indicators, CONEVAL, National Institute of Statistics and Geography, National Council of Population, Bank of Mexico, Ministry of Finance and Public Credit, and Fund staff estimates.

1/ CONEVAL uses a multi-dimensional approach to measure poverty based on a "social deprivation index," which takes into account the level of income; education; access to health services; to social security; to food; and quality, size, and access to basic services in the dwelling.
2/ Percent of population enrolled in primary school regardless of age as a share of the population of official primary education age.
3/ Contribution to growth. Excludes statistical discrepancy.
4/ Excludes goods procured in ports by carriers.
5/ Excludes reserve assets
6/ Based on CONAPO population projections.
7/ Includes domestic credit by banks, nonbank intermediaries, and social housing funds.
8/ Data exclude state and local governments and include state-owned enterprises and public development banks.
9/ Adjusting revenues for the economic and oil-price cycles and excluding one-off items (e.g. oil hedge income and Bank of Mexico transfers), in percent of potential GDP.
10/ Negative of the change in the structural primary fiscal balance.

Table 2. Mexico: Statement of Operations of the Public Sector, Authorities' Presentation 1/

(In percent of GDP)

				Proj.					
	2020	2021	2022	2023	2024	2025	2026	2027	2028
Budgetary revenue, by type	**22.2**	**22.4**	**22.4**	**21.7**	**21.3**	**21.2**	**21.1**	**21.1**	**21.1**
Oil revenue	2.5	4.3	5.0	3.5	3.1	3.1	2.9	2.8	2.6
Non-oil tax revenue	13.9	13.4	12.9	13.9	14.3	14.2	14.2	14.3	14.4
Non-oil non-tax revenue	5.8	4.7	4.4	4.3	3.9	3.9	4.0	4.0	4.0
Budgetary revenue, by entity	**22.2**	**22.4**	**22.4**	**21.7**	**21.3**	**21.2**	**21.1**	**21.1**	**21.1**
Federal government revenue	17.0	16.2	16.2	16.1	16.0	15.9	15.8	15.9	16.0
Tax revenue, *of which:*	13.9	13.4	12.9	13.9	14.3	14.2	14.2	14.3	14.4
Excises (including fuel)	1.9	1.5	0.4	1.5	1.9	1.9	1.9	1.9	2.0
Nontax revenue	3.1	2.8	3.3	2.2	1.7	1.7	1.6	1.6	1.6
Public enterprises	5.2	6.2	6.1	5.6	5.3	5.3	5.2	5.1	5.1
PEMEX	1.7	3.0	2.9	2.3	2.2	2.2	2.0	1.9	1.8
Other	3.5	3.2	3.3	3.2	3.1	3.2	3.2	3.2	3.2
Budgetary expenditure	**24.9**	**25.3**	**25.6**	**25.0**	**26.1**	**23.3**	**23.2**	**23.2**	**23.2**
Primary	22.0	22.7	22.8	21.6	22.5	22.0	21.9	21.6	21.6
Programmable	18.5	19.3	19.2	17.9	18.7	18.2	18.0	17.8	17.8
Current	15.2	14.9	14.9	14.5	15.5	15.3	15.3	15.1	15.2
Wages	5.4	5.1	4.8	4.8	5.1	4.8	4.8	4.7	4.7
Pensions 2/	4.0	3.9	4.0	4.2	4.4	4.5	4.6	4.7	4.9
Subsidies and transfers	3.2	3.1	3.2	3.2	3.7	3.7	3.6	3.5	3.5
Other	2.7	2.7	2.8	2.3	2.3	2.3	2.3	2.2	2.2
Capital	3.3	4.4	4.3	3.4	3.2	2.9	2.8	2.7	2.6
Physical capital	2.7	2.6	3.2	2.8	2.6	2.4	2.3	2.2	2.2
Financial capital 3/	0.6	1.8	1.2	0.6	0.6	0.5	0.4	0.4	0.4
Nonprogrammable	3.6	3.5	3.6	3.7	3.8	3.8	3.8	3.8	3.8
Of which: revenue sharing	3.5	3.4	3.6	3.6	3.7	3.7	3.7	3.7	3.7
Interest payments	**2.8**	**2.6**	**2.8**	**3.4**	**3.7**	**3.1**	**2.5**	**2.5**	**2.4**
Unspecified measures	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**-1.7**	**-1.2**	**-0.9**	**-0.8**
Traditional Balance	**-2.7**	**-2.9**	**-3.2**	**-3.3**	**-4.9**	**-2.1**	**-2.2**	**-2.2**	**-2.2**
Adjustments to the traditional balance	**-1.5**	**-0.9**	**-1.1**	**-0.6**	**-0.5**	**-0.5**	**-0.5**	**-0.5**	**-0.5**
Public Sector Borrowing Requirements 4/	**4.3**	**3.8**	**4.3**	**3.9**	**5.4**	**2.6**	**2.7**	**2.7**	**2.7**
Memorandum items									
Structural current spending	10.5	9.9	9.9						
Structural current spending real growth (y/y, in percent)	2.1	-0.3	4.1						

Sources: Ministry of Finance and Public Credit; and IMF staff estimates.

1/ Data exclude state and local governments, and include state-owned enterprises and public development banks.

2/ Includes social assistance benefits.

3/ Due to lack of disaggregated data this item includes both financing and capital transfers.

4/ The 2020 PSBR is adjusted for some statistical discrepancies between above-the-line and below-the-line numbers.

Table 3. Mexico: Statement of Operations of the Public Sector, GFSM 2014 Presentation 1/

(In percent of GDP)

				Proj.					
	2020	2021	2022	2023	2024	2025	2026	2027	2028
Revenue	**23.5**	**23.0**	**24.2**	**23.8**	**23.7**	**23.7**	**23.5**	**23.5**	**23.3**
Taxes	**13.9**	**13.4**	**13.4**	**13.9**	**14.3**	**14.2**	**14.2**	**14.3**	**14.2**
Taxes on income, profits and capital gains	7.3	7.1	7.7	7.8	7.8	7.8	7.8	7.8	7.8
Taxes on goods and services	6.0	5.7	5.0	5.4	5.8	5.8	5.7	5.8	5.7
Value added tax	4.1	4.2	4.1	3.9	3.9	3.9	3.9	3.9	3.9
Excises	1.9	1.5	0.8	1.5	1.9	1.9	1.9	1.9	1.8
Taxes on international trade and transactions	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Other taxes	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Social contributions	**2.4**	**2.3**	**2.3**	**2.2**	**2.2**	**2.3**	**2.3**	**2.3**	**2.3**
Other revenue	**7.3**	**7.3**	**8.6**	**7.7**	**7.2**	**7.2**	**7.0**	**6.9**	**6.8**
Property income	3.2	2.7	3.2	2.0	1.7	1.6	1.6	1.6	1.5
Other	4.0	4.6	5.4	5.7	5.5	5.5	5.4	5.3	5.2
Total expenditure	**27.8**	**26.8**	**28.5**	**27.7**	**29.1**	**26.3**	**26.1**	**26.1**	**25.9**
Expense	**26.1**	**25.1**	**26.3**	**25.7**	**27.0**	**26.0**	**25.6**	**25.5**	**25.3**
Compensation of employees	3.5	3.3	3.3	3.2	3.4	3.3	3.3	3.2	3.2
Purchases of goods and services	3.6	3.5	3.0	2.5	2.8	2.8	2.7	2.7	2.6
Interest 2/	4.3	4.0	5.4	5.7	4.9	4.6	4.4	4.3	4.2
Subsidies and transfers	2.2	2.4	2.9	2.6	3.1	3.1	3.0	2.8	2.6
Grants 3/	8.2	7.7	7.6	7.4	7.7	7.8	7.8	7.8	7.8
Social benefits	4.0	3.9	4.0	4.2	4.4	4.5	4.6	4.7	4.9
Other expense	0.4	0.2	0.2	0.1	0.6	0.0	-0.1	0.1	0.0
Net acquisition of nonfinancial assets 4/	**1.7**	**1.7**	**2.2**	**2.1**	**2.1**	**2.0**	**1.7**	**1.6**	**1.5**
Unspecified measures	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**-1.7**	**-1.2**	**-0.9**	**-0.8**
Gross Operating Balance	**-2.6**	**-2.1**	**-2.1**	**-1.8**	**-3.3**	**-2.3**	**-2.1**	**-2.0**	**-2.0**
Overall Fiscal Balance (Net lending/borrowing) 5/	**-4.3**	**-3.8**	**-4.3**	**-3.9**	**-5.4**	**-2.6**	**-2.7**	**-2.7**	**-2.7**
Primary net lending/borrowing	**-0.5**	**0.0**	**0.7**	**1.6**	**-0.7**	**1.8**	**1.6**	**1.5**	**1.4**
Memorandum items									
Primary expenditure	23.5	22.8	23.2	22.0	24.2	21.7	21.7	21.8	21.7
Current expenditure	26.1	25.1	26.3	25.6	27.0	24.2	24.5	24.6	24.5
Structural fiscal balance	-3.3	-3.3	-4.2	-4.2	-5.7	-2.8	-2.7	-2.7	-2.7
Structural primary balance 6/	0.5	0.4	0.9	1.4	-1.0	1.6	1.5	1.5	1.4
Fiscal impulse 7/	0.5	0.1	-0.5	-0.5	2.4	-2.6	0.1	0.0	0.1
Gross public sector debt 8/	58.5	56.9	54.1	52.7	54.7	55.1	55.5	55.9	56.3
In domestic currency (percentage of total debt)	67.7	69.3	73.0	74.0	73.7	72.6	71.5	70.9	70.3
In foreign currency (percentage of total debt)	32.3	30.7	27.0	26.0	26.3	27.4	28.5	29.1	29.7
Net public sector debt 9/	50.2	49.3	48.0	46.6	48.7	49.1	49.4	49.9	50.2

Sources: Ministry of Finance and Public Credit; and Fund staff estimates and projections.

1/ Data exclude state and local governments, and include state-owned enterprises and public development banks.

2/ Interest payments differ from official data due to adjustments to account for changes in valuation and interest rates.

3/ Includes transfers to state and local governments under revenue-sharing agreements with the federal government.

4/ This category differs from official data on physical capital spending due to adjustments to account for Pidiregas amortizations included in budget figures and the reclassification of earmarked transfers to sub-national governments.

5/ The 2020 PSBR is adjusted for some statistical discrepancies between above-the-line and below-the-line numbers.

6/ Adjusting revenues for the economic and oil-price cycles and excluding one-off items (e.g. oil hedge income and Bank of Mexico transfers), in percent of potential.

7/ Negative of the change in the structural primary fiscal balance.

8/ Corresponds to the gross stock of public sector borrowing requirements, calculated as the net stock of public sector borrowing requirements as published by the authorities plus public sector financial assets.

9/ Corresponds to the net stock of public sector borrowing requirements (i.e., net of public sector financial assets) as published by the authorities.

Table 4a. Mexico: Summary Balance of Payments
(In billions of U.S. dollars)

	2020	2021	2022	Proj. 2023	2024	2025	2026	2027	2028
Current account	**22.5**	**-8.3**	**-18.0**	**-26.6**	**-28.5**	**-23.6**	**-18.9**	**-21.1**	**-21.8**
Merchandise goods trade balance	34.2	-10.8	-26.9	-32.2	-40.6	-38.3	-33.7	-35.7	-38.6
Exports, f.o.b. 2/	417.2	494.9	577.7	590.2	621.9	646.8	678.3	710.1	741.6
o/w Manufactures	373.8	436.1	508.4	534.9	565.0	589.7	615.7	641.9	678.9
o/w Petroleum and derivatives 1/	17.7	29.4	39.0	30.8	30.0	28.6	27.3	26.2	25.2
Imports, f.o.b. 2/	383.0	505.7	604.6	622.4	662.4	685.1	712.0	745.8	780.1
o/w Petroleum and derivatives 1/	31.4	53.9	74.1	57.9	57.9	57.8	57.7	57.5	57.7
Services, net	-15.5	-15.0	-15.2	-18.7	-18.3	-19.4	-20.2	-21.1	-21.5
Primary income, net	-37.0	-33.9	-33.8	-40.3	-38.8	-39.1	-41.7	-43.4	-43.8
Secondary income (mostly remittances), net	40.8	51.4	58.1	64.9	69.3	73.3	76.9	79.3	82.4
Capital Account, net	**0.0**	**0.0**	**-0.1**	**-0.1**	**-0.1**	**-0.1**	**-0.1**	**-0.1**	**-0.1**
Financial Account (Net lending (+)/Net borrowing (-))	**20.8**	**-1.7**	**-14.9**	**-26.7**	**-28.6**	**-23.6**	**-19.0**	**-21.2**	**-21.8**
Foreign direct investment, net	-26.5	-34.0	-21.9	-24.6	-27.7	-31.3	-35.2	-39.4	-44.0
Net acquisition of financial assets	5.0	-0.2	17.2	17.8	18.4	18.7	19.2	19.7	20.2
Net incurrence of liabilities	31.5	33.7	39.1	42.4	46.1	50.0	54.4	59.1	64.2
Portfolio investment, net	10.3	41.6	5.1	-4.4	-11.8	-14.4	-16.8	-17.9	-19.2
Net acquisition of financial assets	16.5	22.7	-0.3	2.7	2.8	3.0	3.1	3.3	3.4
Net incurrence of liabilities	6.1	-18.9	-5.4	7.0	14.6	17.3	19.9	21.1	22.6
Public Sector 3/	0.3	-11.1	3.6	5.4	12.9	15.5	17.9	18.9	20.1
o/w Local currency domestic-issued bonds	-10.6	-13.6	2.3	-1.9	3.7	7.4	8.8	10.3	10.0
Private sector 4/	8.1	-9.8	-8.3	1.6	1.7	1.8	2.0	2.3	2.5
Securities issued abroad	7.9	-6.6	-3.7	0.6	0.6	0.6	0.7	0.8	0.9
Equity	0.2	-3.2	-4.7	1.0	1.1	1.2	1.3	1.5	1.6
Financial derivatives, net	-1.8	2.1	2.9	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Other investments, net	26.8	-21.7	0.6	-8.8	-1.2	12.2	25.2	28.7	33.7
Net acquisition of financial assets	23.1	-9.5	4.8	-2.3	3.8	15.2	27.7	30.7	34.8
Net incurrence of liabilities	-3.7	12.3	4.2	6.5	5.0	3.0	2.5	2.0	1.1
Change in Reserves Assets	12.0	10.3	-1.7	11.2	12.2	9.9	7.9	7.5	7.7
Total change in gross reserves assets	16.0	8.7	-6.6	11.2	12.2	9.9	7.9	7.5	7.7
Valuation change	4.0	-1.6	-4.9	0.0	0.0	0.0	0.0	0.0	0.0
Errors and Omissions	**-1.7**	**6.7**	**3.2**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
International Investment Position, net	**-551.9**	**-554.5**	**-614.9**	**-609.7**	**-635.7**	**-658.7**	**-677.5**	**-698.8**	**-721.6**
Memorandum items									
Hydrocarbons exports volume growth (in percent)	2.8	-6.2	-3.6	6.2	0.3	-0.5	-1.0	-1.1	-1.1
Non-hydrocarbons exports volume growth (in percent)	-5.1	5.9	8.7	-3.0	3.0	2.2	3.1	3.2	3.2
Hydrocarbons imports volume growth (in percent)	-30.3	-4.5	27.6	2.1	1.9	1.7	1.8	2.0	1.8
Non-hydrocarbons imports volume growth (in percent)	-10.5	15.9	8.5	6.4	1.0	1.4	2.7	3.0	3.1
Crude oil export volume (in millions of bbl/day) 5/	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Gross international reserves (in billions of U.S. dollars)	199.1	207.7	201.1	212.3	224.5	234.4	242.3	249.8	257.5
Gross domestic product (in billions of U.S. dollars)	1,120.7	1,312.6	1,465.9	1,811.5	1,994.1	2,081.2	2,171.3	2,260.1	2,356.8

Sources: Bank of Mexico, National Institute of Statistics and Geography, PEMEX, and Fund staff estimates.
1/ Crude oil, derivatives, petrochemicals, and natural gas.
2/ Excludes goods procured in ports by carriers.
3/ Public sector is the sum of central bank, general government, and other financial corporations (e.g. development banks).
4/ Private sector is the sum of deposit taking corporations (excl. the central bank), nonfinancial corporations, households, NPISHs, and pidiregas.
5/ Crude oil export volumes reported by PEMEX.

Table 4b. Mexico: Summary Balance of Payments

(In percent of GDP)

	2020	2021	2022	Proj. 2023	2024	2025	2026	2027	2028
Current account	**2.0**	**-0.6**	**-1.2**	**-1.5**	**-1.4**	**-1.1**	**-0.9**	**-0.9**	**-0.9**
Merchandise goods trade balance	3.1	-0.8	-1.8	-1.8	-2.0	-1.8	-1.6	-1.6	-1.6
Exports, f.o.b. 2/	37.2	37.7	39.4	32.6	31.2	31.1	31.2	31.4	31.5
o/w Manufactures	33.4	33.2	34.7	29.5	28.3	28.3	28.4	28.4	28.8
o/w Petroleum and derivatives 1/	1.6	2.2	2.7	1.7	1.5	1.4	1.3	1.2	1.1
Imports, f.o.b. 2/	34.2	38.5	41.2	34.4	33.2	32.9	32.8	33.0	33.1
o/w Petroleum and derivatives 1/	2.8	4.1	5.1	3.2	2.9	2.8	2.7	2.5	2.4
Services, net	-1.4	-1.1	-1.0	-1.0	-0.9	-0.9	-0.9	-0.9	-0.9
Primary income, net	-3.3	-2.6	-2.3	-2.2	-1.9	-1.9	-1.9	-1.9	-1.9
Secondary income (mostly remittances), net	3.6	3.9	4.0	3.6	3.5	3.5	3.5	3.5	3.5
Capital Account, net	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Financial Account (Net lending (+)/Net borrowing (-))	**1.9**	**-0.1**	**-1.0**	**-1.5**	**-1.4**	**-1.1**	**-0.9**	**-0.9**	**-0.9**
Foreign direct investment, net	-2.4	-2.6	-1.5	-1.4	-1.4	-1.5	-1.6	-1.7	-1.9
Net acquisition of financial assets	0.4	0.0	1.2	1.0	0.9	0.9	0.9	0.9	0.9
Net incurrence of liabilities	2.8	2.6	2.7	2.3	2.3	2.4	2.5	2.6	2.7
Portfolio investment, net	0.9	3.2	0.3	-0.2	-0.6	-0.7	-0.8	-0.8	-0.8
Net acquisition of financial assets	1.5	1.7	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Net incurrence of liabilities	0.5	-1.4	-0.4	0.4	0.7	0.8	0.9	0.9	1.0
Public Sector 3/	0.0	-0.8	0.2	0.3	0.6	0.7	0.8	0.8	0.9
o/w Local currency domestic-issued bonds	-0.9	-1.0	0.2	-0.1	0.2	0.4	0.4	0.5	0.4
Private sector 4/	0.7	-0.7	-0.6	0.1	0.1	0.1	0.1	0.1	0.1
Securities issued abroad	0.7	-0.5	-0.3	0.0	0.0	0.0	0.0	0.0	0.0
Equity	0.0	-0.2	-0.3	0.1	0.1	0.1	0.1	0.1	0.1
Financial derivatives, net	-0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Other investments, net	2.4	-1.7	0.0	-0.5	-0.1	0.6	1.2	1.3	1.4
Net acquisition of financial assets	2.1	-0.7	0.3	-0.1	0.2	0.7	1.3	1.4	1.5
Net incurrence of liabilities	-0.3	0.9	0.3	0.4	0.3	0.1	0.1	0.1	0.0
Change in Reserves Assets	1.1	0.8	-0.1	0.6	0.6	0.5	0.4	0.3	0.3
Total change in gross reserves assets	1.4	0.7	-0.5	0.6	0.6	0.5	0.4	0.3	0.3
Valuation change	0.4	-0.1	-0.3	0.0	0.0	0.0	0.0	0.0	0.0
Errors and Omissions	**-0.2**	**0.5**	**0.2**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
International Investment Position, net	**-49.2**	**-42.2**	**-41.9**	**-33.7**	**-31.9**	**-31.7**	**-31.2**	**-30.9**	**-30.6**

Sources: Bank of Mexico, National Institute of Statistics and Geography, and Fund staff estimates.
1/ Crude oil, derivatives, petrochemicals, and natural gas.
2/ Excludes goods procured in ports by carriers.
3/ Public sector is the sum of central bank, general government, and other financial corporations (e.g. development banks).
4/ Private sector is the sum of deposit taking corporations (excl. the central bank), nonfinancial corporations, households, NPISHs, and pidiregas.

Table 5. Mexico: Financial Soundness Indicators

(In percent)

	2020	2021	2022	2023	Latest data available 1/
Capital Adequacy					
Regulatory capital to risk-weighted assets	17.7	19.5	19.0	19.2	April
Regulatory Tier 1 capital to risk-weighted assets	16.1	18.1	17.6	18.0	April
Capital to assets	9.7	10.9	9.8	10.1	April
Gross asset position in financial derivatives to capital	82.7	49.4	62.9	54.7	April
Gross liability position in financial derivatives to capital	84.8	50.0	63.1	52.6	April
Asset Quality					
Nonperforming loans to total gross loans	2.6	2.0	2.1	2.2	May
Provisions to Nonperforming loans	152.4	147.0	160.1	154.6	May
Earnings and Profitability					
Return on assets	1.2	2.1	2.6	2.7	May
Return on equity	9.0	14.6	17.6	18.7	May
Liquidity					
Liquid assets to short-term liabilities	136.8	152.9	128.5	108.9	March
Liquid assets to total assets	33.1	34.5	30.1	29.1	May
Customer deposits to total (noninterbank) loans	105.8	109.3	106.3	104.2	May
Trading income to total income	5.5	6.7	9.5	10.6	May

Source: Financial Soundness Indicators.
1/ End of period.

Table 6. Mexico: Financial Indicators and Measures of External Vulnerabilities

	2020	2021	2022	2023	Latest data available
Financial market indicators					
Exchange rate (per U.S. dollar, period average)	21.5	20.3	20.1	17.9	Aug-23
(year-to-date percent change, + appreciation)	-11.5	5.6	0.7	11.8	Aug-23
28-day treasury auction rate (percent; period average)	5.3	4.4	7.6	11.1	Aug-23
EMBIG Mexico spread (basis points; period average)	474.4	354.2	404.3	382.5	Aug-23
Sovereign 10-year local currency bond yield (period average)	6.3	6.9	8.8	8.9	Aug-23
Stock exchange index (period average, year on year percent change)	-9.0	26.4	1.4	5.4	Aug-23
Financial system					
Bank of Mexico net international reserves (US$ billion)	195.7	202.4	199.1	210.3	Proj.
Financial system credit on non-financial private sector (year on year percent change) 1/	0.9	4.2	10.9	7.1	Proj.
Nonperforming loans to total gross loans (deposit takers)	2.6	2.0	2.1	2.2	May-23
External vulnerability indicators					
Gross financing needs (billions of US$) 2/	80.9	97.9	77.3	115.3	Proj.
Gross international reserves (end-year, billions of US$) 3/	199.1	207.7	201.1	210.4	Aug-23
Change (billions of US$)	16.0	8.7	-6.6	2.0	Aug-23
Months of imports of goods and services	5.6	4.5	3.6	3.7	Proj.
Months of imports plus interest payments	5.3	4.3	3.5	3.5	Proj.
Percent of broad money	37.9	37.3	31.7	27.6	Proj.
Percent of portfolio liabilities	37.6	40.5	41.9	43.5	Proj.
Percent of short-term debt (by residual maturity)	242.8	315.2	253.4	252.9	Proj.
Percent of ARA Metric 4/	127.2	130.5	121.7	123.1	Proj.
Percent of GDP	17.8	15.8	13.7	11.9	Jun-23
Gross total external debt (in percent of GDP)	41.4	34.1	31.1	26.1	Proj.
Of which: In local currency	8.5	6.1	5.6	4.4	Proj.
Of which: Public debt	27.8	22.5	20.4	16.9	Proj.
Of which: Private debt	13.6	11.6	10.7	9.3	Proj.
Financial sector	2.1	1.7			
Nonfinancial sector	11.5	9.9			
Gross total external debt (billions of US$)	463.8	447.8	456.1	473.6	Proj.
Of which: In local currency	95.0	80.0	82.3	80.4	Proj.
Of which: Public debt	311.7	295.2	299.7	305.8	Proj.
Of which: Private debt	152.1	152.7	156.4	167.8	Proj.
Financial sector	23.0	22.9			
Nonfinancial sector	129.1	129.8			
External debt service (in percent of GDP)	10.0	8.0	6.2	5.7	Proj.

Sources: Bank of Mexico, National Banking and Securities Commission, National Institute of Statistics and Geography, Ministry of Finance and Public Credit, and Fund staff estimates.

1/ Includes domestic credit by banks, nonbank intermediaries, and social housing funds.

2/ Corresponds to the sum of the current account deficit, amortization payments, and the change in gross international reserves.

3/ Excludes balances under bilateral payments accounts. Includes SDR2.337 billion of the general SDR allocation and SDR 0.224 billion of the special SDR allocation in 2009, and SDR 8.542 billion in the general SDR allocation in 2021.

4/ The ARA metric was developed by the Strategy and Policy Review Department at the IMF to assess reserve adequacy. Weights to individual components were revised in December 2014 for the whole time series.

Table 7. Mexico: Monetary Indicators 1/

(In billions of Pesos)

	2019	2020	2021	2022	Proj. 2023
Banco de México					
Net foreign assets	3,397	3,876	3,941	3,636	3,415
Net international reserves	3,457	3,966	4,254	3,917	3,679
Gross international reserves 2/	3,457	3,966	4,254	3,917	3,679
Reserve liabilities	0	0	0	0	0
Other net foreign assets	-60	-90	-312	-281	-264
Net domestic assets	-1,654	-1,758	-1,500	-936	-497
Net domestic credit	-1,706	-1,640	-1,376	-1,143	-1,135
Net credit to non-financial public sector	-1,640	-1,778	-1,400	-1,045	-1,134
Credit to non-financial private sector	0	0	0	0	0
Net credit to financial corporations	-66	138	24	-98	-1
Net claims on other depository corporations	-66	138	24	-98	-1
Net claims on other financial corporations	0	0	0	0	0
Capital account	-113	53	52	-288	-707
Other items net	-61	-64	-72	-81	-70
Monetary base	1,742	2,118	2,441	2,700	2,916
Other Depository Corporations					
Net foreign assets	-60	142	340	287	310
Foreign assets	738	940	1,013	1,104	1,193
Foreign liabilities	798	798	672	817	883
Net domestic assets	8,646	9,230	9,863	10,592	11,421
Net credit to the public sector	3,750	4,239	4,437	4,588	4,945
Claims on non-financial public sector	4,214	4,644	4,880	5,096	5,497
in pesos	4,037	4,442	4,701	4,893	5,281
in FX	178	202	178	204	215
Liabilities to the nonfinancial public sector	464	405	442	508	552
Credit to the private sector	6,976	6,665	6,971	7,675	8,219
Local Currency	6,198	5,941	6,198	6,823	7,284
Foreign Currency	778	724	773	852	935
Net credit to the financial system	868	690	806	1,094	864
Other	-2,948	-2,364	-2,351	-2,765	-2,607
Liabilities to the private sector	8,586	9,372	10,204	10,879	11,731
Liquid liabilities	7,688	8,572	9,248	9,840	10,621
Local currency	7,112	7,905	8,481	9,068	9,773
Foreign currency	575	667	766	772	848
Non liquid liabilities	898	800	956	1,039	1,110
Local currency	861	762	915	981	1,047
Foreign currency	38	38	41	57	63
Total Banking System					
Net foreign assets	3,336	4,017	4,281	3,922	3,725
Net domestic assets	6,992	7,472	8,363	9,656	10,924
Liquid liabilities	9,430	10,691	11,688	12,540	13,538
Non-liquid liabilities	898	800	956	1,039	1,110
Memorandum items					
Monetary base (percent change)	4.1	21.6	15.2	10.6	8.1
Currency in circulation (percent change)	4.0	21.6	15.2	10.3	8.1
Broad money (percent change)	4.7	13.4	9.5	7.3	8.1
Bank credit to the non-financial private sector (growth rate)	10.7	-4.5	4.6	10.1	7.1
Bank credit to the non-financial private sector (as percent of GDP)	27.7	27.7	26.2	26.0	25.7

Source: Bank of Mexico, National Institute of Statistics and Geography and Fund staff estimates.
1/ Data of the monetary sector are prepared based on the IMF's methodological criteria and do not necessarily coincide with the definitions published by Bank of Mexico.
2/ Excludes balances under bilateral payments accounts. Includes SDR 8.542 billion in the general SDR allocation in 2021.

Annex I. External Sector Assessment

Overall Assessment: *The external position in 2022 was moderately stronger than the level implied by medium-term fundamentals and desirable policies.* Although Mexico's CA deficit widened to 1.2 percent of GDP in 2022, its adjusted external position strengthened owing to the impact of the more accommodative fiscal stance in other economies. The CA deficit is expected to widen moderately in 2023-24 but hover around 1 percent of GDP in the medium term.

Potential Policy Responses: Further structural reforms to address investment obstacles are critical to boost investment and growth in the medium and long terms and to maintain external sustainability. The reforms should include tackling economic informality and governance gaps, initiating private sector participation in energy, and reforming Pemex's business strategy and governance. The floating exchange rate should continue to serve as a shock absorber, with FX interventions employed only to prevent disorderly market conditions. The IMF's Flexible Credit Line with Mexico continues to provide an added buffer against global tail risks.

Foreign Asset and Liability Position and Trajectory	**Background.** The NIIP is projected to improve from –41 percent of GDP in 2022 to about –31 percent of GDP over the medium term, driven mainly by a decline in foreign liabilities. Foreign assets in 2022 were mostly direct investment (16 percent of GDP) and international reserves (14 percent of GDP). Foreign liabilities were mostly direct investment (48 percent of GDP) and portfolio investment (33 percent of GDP). **Assessment.** While the NIIP is sustainable and the relatively high share of local currency denomination in its foreign public liabilities reduces FX risks, the large gross foreign portfolio liabilities could be a source of vulnerability in case of global financial volatility. Vulnerabilities from exchange rate volatility are moderate, as most Mexican firms with FX debt have natural hedges and actively manage their FX exposures.					
2022 (% GDP)	NIIP: –41	Gross Assets: 50	Debt Assets: 17	Gross Liab.: 91	Debt Liab.: 32	
Current Account	**Background.** The CA deficit was 1.2 percent of GDP in 2022, up from 0.6 percent in 2021, mainly reflecting a lower (by 1.0 percent of GDP) trade balance partly offset by a higher (by 0.3 percent of GDP) primary income balance. The trade balance declined as both higher oil- and non-oil imports more than offset higher exports. The decline in the CA reflected lower public savings, while the private sector showed higher savings, partly offset by higher investment. The CA deficit is expected to widen moderately in 2023-24 with strong demand boosting imports. Over the medium term, the CA balance is projected to hover around a deficit of 1 percent of GDP. **Assessment.** The EBA model estimates a cyclically adjusted CA balance of –0.4 percent of GDP and a cyclically adjusted CA norm of –1.6 percent of GDP. This implies an EBA model CA gap of 1.2 percent of GDP, reflecting policy gaps (0.4 percent of GDP, mostly driven by the fiscal gap of 0.6 percent of GDP) and an unidentified residual (0.8 percent of GDP). The estimated fiscal gap of 0.6 percent of GDP reflects a relatively tighter fiscal stance than in the rest of the world. IMF staff adjustments have been made to account for the transitory impact of the COVID-19 pandemic on tourism and travel services (–0.2 percent of GDP) and the transport balance (0.7 percent of GDP). In other words, the CA would have been stronger if it were not for the impact of higher transport costs on the transport services balance. Including these adjustments, the staff assesses the midpoint CA gap at 1.7 percent of GDP, with a range of 1.2 to 2.1 percent of GDP. The estimated standard error of the CA norm is 0.5 percent of GDP.					
2022 (% GDP)	CA: –1.2	Cycl. Adj. CA: –0.4	EBA Norm: –1.6	EBA Gap: 1.2	COVID-19 Adj.: 0.4	Other Adj.: 0.0	Staff Gap: 1.7
Real Exchange Rate	**Background.** In 2022, the peso fluctuated in a relatively narrow range of about 19 to 21 pesos per dollar. Average REER in 2022 appreciated by about 5 percent compared with the 2021 average, mostly driven by a nominal appreciation, reflected in an average NEER appreciation of 4 percent in 2022 compared with the average 2021 NEER. As of August 2023, the REER was 21.9 percent above the 2022 average reflecting recent nominal appreciation. **Assessment.** The IMF staff CA gap implies a REER undervaluation of about 4.9 percent (with a semielasticity of 0.34 applied). The EBA REER index and level models estimate an undervaluation of 3.8 percent and an overvaluation of 14.9 percent, respectively, in 2022. The staff's overall assessment, based on the CA gap approach, is a REER undervaluation in the range of 3.6 to 6.3 percent, with a midpoint of 4.9 percent. This assessment is subject to high uncertainty, including due to large unidentified CA model residuals.					
Capital and Financial Accounts: Flows and Policy Measures	**Background.** In 2022, Mexico recorded net financial account inflows to the tune of 1.0 percent of GDP, compared with 0.1 percent of GDP in 2021. This reflected mainly net inflows of FDI of 1.5 percent of GDP, which portfolio outflows offset somewhat. The net portfolio balance registered an outflow (0.3 percent of GDP), though lower than in the previous year (3.2 percent of GDP). **Assessment.** The long maturity of sovereign debt and the relatively high share of local-currency-denominated debt reduce the exposure of government finances to FX depreciation and refinancing risks. The banking sector is resilient, and FX risks of nonfinancial corporate debt are generally covered by natural and financial hedges. However, the strong presence of foreign investors leaves Mexico exposed to capital flow reversals and risk premium increases.					
FX Intervention and Reserves Level	**Background.** The central bank remains committed to a free-floating exchange rate and uses discretionary FX intervention to prevent disorderly market conditions. At the end of 2022, gross international reserves were $201 billion (14 percent of GDP), down from $208 billion at the end of 2021. As of end-September 2023, gross international reserves were $210 billion. In 2022, no FX intervention was conducted. **Assessment.** At 122 percent of the ARA metric and 253 percent of short-term debt (at remaining maturity), the level of Mexico's foreign reserves at the end of 2022 remains adequate. The IMF staff recommends that the authorities continue to maintain reserves at an adequate level over the medium term. The Flexible Credit Line arrangement continues to provide an additional buffer.					

Annex II. Risk Assessment Matrix[1]

Risks	Likelihood	Impact	Policy Response
Global Risks			
Commodity price volatility. A succession of supply disruptions (e.g., due to conflicts, uncertainty, and export restrictions) and demand fluctuations causes recurrent commodity price volatility, external and fiscal pressures in EMDEs, contagion effects, and social and economic instability.	**High**	**Medium.** Oil and food price shocks feed through to headline and core inflation.	Monetary policy should respond if shocks feed into core inflation and ensure that inflation expectations remain anchored.
Monetary policy miscalibration. Amid high economic uncertainty and financial sector fragility, major central banks pause monetary policy tightening or pivot to loosen policy stance prematurely, de-anchoring inflation expectations, triggering a wage-price spiral and spillovers to financial markets.	**Medium**	**High.** Spillovers to financial markets would affect Mexico through tighter financial conditions and capital outflows.	Let the exchange rate act as a shock absorber. Tighten monetary policy, consistent with Banxico's price-stability mandate, if inflation in Mexico is affected by additional price pressures. Frontload fiscal expenditure plans and delay revenue measures to provide support during the downturn without adding to domestic price pressures.
Abrupt global slowdown or U.S. recession: Amid tight labor markets and/or commodity price shocks, inflation remains elevated, prompting the Fed to keep rates higher for longer and resulting in more abrupt financial, housing, and commercial real estate market correction, and "hard landing."	**Medium**	**High.** The Fed could tighten more and faster in response to persistently high inflation. The resulting U.S. "hard landing" would transmit to Mexico through reduced external demand and remittances as well as tighter financial conditions and capital outflows.	Tighten monetary policy, consistent with Banxico's price-stability mandate, if inflation in Mexico is affected by additional price pressures, decoupling from the Fed when appropriate. Frontload fiscal expenditure plans and delay revenue measures to provide support during the downturn without adding to domestic price pressures.

[1] The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path. The relative likelihood is the staff's subjective assessment of the risks surrounding the baseline ("low" is meant to indicate a probability below 10 percent, "medium" a probability between 10 and 30 percent, and "high" a probability between 30 and 50 percent). The RAM reflects staff views on the source of risks and overall level of concern as of the time of discussions with the authorities. Non-mutually exclusive risks may interact and materialize jointly.

Risks	Likelihood	Impact	Policy Response
Deepening geo-economic fragmentation. Broader and deeper conflict(s) and weakened international cooperation result in a more rapid reconfiguration of trade and FDI, supply disruptions, protectionism, technological and payments systems fragmentation, rising input costs, financial instability, a fracturing of international monetary and financial systems, and lower potential growth.	**High**	**Low.** Reduced global productivity and demand and higher input costs will weigh on Mexican growth, but nearshoring elements of the U.S. supply chain could have a net positive impact.	Implement structural reforms to ensure the economy can adjust flexibly to rotations in export demand. Measures could include labor market reforms to reduce informality and allow for smoother sectoral reallocation and reforms to strengthen business climate and rule of law.
Disorderly energy transition. Disorderly shift to net-zero emissions (e.g., owing to shortages in critical metals) and climate policy uncertainty cause supply disruptions, stranded assets, market volatility, and subdued investment and growth.	**Medium**	**Low.** Given the relatively slower energy transition, dependency on critical metals is moderate.	If lower oil prices create stranded assets, restrict Pemex projects to the cheapest fields and accelerate the transition to green energy. Accelerate transition to production of electrical vehicles.
Domestic Risks			
Slower-than-anticipated fiscal consolidation in the context of the forthcoming electoral cycle, leading to steady increase in public debt and an increase in country risk premiums.	**Medium**	**Medium.** A moderate risk of debt distress and the strength of the fiscal framework would dampen the market stress.	Tighten monetary policy if price pressures are observed. Resume the consolidation effort, especially if country risk premiums rise.
Social discontent. High inflation, real income loss, and spillovers from crises in other countries (including migration) worsen inequality, trigger social unrest, and give rise to financing pressures and detrimental populist policies. This exacerbates imbalances, slows growth, and triggers market repricing.	**Medium**	**Medium.** A global wave of social discontent is likely to fall more lightly on Mexico in the current political context.	Increase and better target social transfers to alleviate stress vulnerable households while adjusting monetary policy to anchor inflation expectations. Accelerate investment plans in low-income regions.

Annex III. Key FSAP Recommendations[1]

FSAP Recommendations	Development
Cross-Cutting Themes	
Enhance the autonomy of regulatory government agencies and legal protection of supervisors.	No measures taken.
Assess and enhance the organizational structure and resource needs of individual agencies.	No measures taken.
Enhance the oversight of the Interbank Electronic Payment System (SPEI) relative to the PFMI and cybersecurity.	Authorities are reviewing the recommendation in order to enhance the oversight of SPEI, in accordance with its mandate and organizational arrangements. In particular, Banco de México is evaluating the potential creation of an independent oversight unit within the Directorate General of Payment Systems and Market Infrastructures.
Systemic Risk Analysis	
Monitor the dynamics of contingent credit lines and portfolio concentration closely and use Pillar 2 requirements to address relevant risks, as needed.	Authorities are monitoring the dynamics of contingent credit lines and are working to improve regulatory reporting for them.
Expand the liquidity stress test framework; incorporate in the Supervisory Review Process to inform Pillar 2 requirements for banks.	Banco de México is working to improve their liquidity stress test framework. In 4Q2022 Banco de México implemented a liquidity stress test based on cashflows and maturity ladder, and the distance to liquidity stress indicator. In 2023, the stress test is being expanded to include concentration risks (including HNWI). Also, Banco de México is working on a system-wide liquidity stress test to assess the resilience of different intermediaries, this project is expected to be completed by 2024.
Financial Sector Oversight	
Develop and publish a macroprudential policy strategy.	Authorities are working on a review of macroprudential strategies. The proposal should be ready to be discussed with other authorities by 4Q2023.
Consider expanding the macroprudential toolkit with limits on loan-to-value and debt-service-to-income ratios.	Authorities have a project to review the international experience on LTV and DSTI, in order to assess possible implementation of these tools in México. The evaluation is expected to be completed by 2024.
Ensure effective consolidated supervision of financial holding companies.	No measures taken.
Refine the risk-based supervisory methodology (CEFER) to effectively assess banks' adherence to adequate risk management practices.	No measures taken.

[1] This annex is based on information provided by the authorities.

FSAP Recommendations	Development
Continue developing the cybersecurity strategy for the financial system; improve cybersecurity regulatory and supervisory practices.	Authorities have enhanced the structures and procedures to exchange information in the Data Security Incidents Response Group (Grupo de Respuesta a Incidentes de Seguridad de la Información, GRI). There are several projects to improve cybersecurity regulation and supervisory practices, such as: - Updating the cybersecurity strategies of the financial system; - Clarifying roles and responsibilities related to cyber risks. Banco de México has developed a modification project of Internal Regulations that clarifies roles and responsibilities about cybersecurity, between different units. The modification is pending formalization; - Setting clear regulatory requirements for FMI; DALI, CCV and Asigna. Banco de México has reviewed and updated a regulation project for CCV based on international cybersecurity frameworks. This project, still in drafting process, is being discussed by authorities.
Improve cyber response and recovery capabilities; conduct market-wide cyber crisis simulation exercises.	Authorities are working on several projects to improve cyber response and recovery capabilities, such as: - Conducting market-wide cyber crisis simulation exercises that include the financial system; - Conducting a red team exercise on Banco de México's IT environment; - Developing a cyber-map to assess transmission channels. Banco de México has defined the scope of the cyber mapping for the systemically important FMIs it regulates; -Developing and operationalizing a network for information exchange. Authorities have implemented an information exchange network and published a sharing information guide between the financial system authorities; -Playing an effective role in enhancing cyber deterrence. Banco de México published in May 2022 a guide for collecting forensic evidence for the financial system.
Issue supervisory guidance on climate-related risk management, governance, and business strategies; introduce disclosure requirements of climate and ESG information.	The issuance of supervision expectations and guidelines will be part of an institutional project of Mexican Financial Authorities for 2024/2025. In August of 2023, Banco de México submitted to public consultation amendments to Provisions 4/2012 (in relation to derivatives) to incorporate the identification, measurement, assessment and track- keeping of climate and environmental risks stemming from derivative products under the functions of the Risk Management Unit, which shall be documented through policies, procedures and methodologies.

FSAP Recommendations	Development
Financial Integrity	
Implement the remaining 2018 Mutual Evaluation Report recommendations.	No measures taken.
Systemic Liquidity and Crisis Management	
Review the liquidity risk mitigation framework for development banks.	No measures taken.
Explore options to enhance the ELA framework.	Banco de México is preparing an assessment of its liquidity facilities and will determine if changes are warranted.
Further strengthen mechanisms to ensure the credibility and feasibility of banks' financial contingency arrangements while preserving resolvability and cost-effective resolutions.	Banco de México is preparing to resume drills to access its liquidity facilities.
Introduce statutory bail-in powers and eliminate barriers to the effective use of the P&A and bridge bank tools.	No measures taken.
Shorten the resolution planning cycle for D-SIBs and midsize banks, and eliminate impediments to banks' resolvability.	In the 2Q23, IPAB reformed its rules to shorten the resolution planning cycle for DSIBs.
Financial Development Issues	
Broaden the scope of regulated fintech activities; finalize the implementation of open finance (¶61-62).	As part of the activities of the National Council for Financial Inclusion (CNIF, for its Spanish acronym), in 2Q2023 CNBV and Banco de México aimed to define the regulation needed to implement open banking within the context of art. 76 of the Fintech Law. Among other aspects, the discussions have covered different use-case scenarios and the needed types of data, consumers' consent and personal data protections, authentication methods, the architecture for data exchange through APIs and cybersecurity considerations.
Establish a national climate finance strategy; set ambitious climate finance targets for development financial institutions (¶64).	In March 2023, the Ministry of Finance published the "Sustainable Taxonomy", a classification system that allows the identification and definition of activities, assets or investment projects with positive environmental and social impacts, based on established goals and criteria. The goal is to provide certainty and transparency to financial markets, encourage investment in sustainable activities, and better monitor financial flows for sustainability, with precise and consistent definitions.

Annex IV. Debt Sustainability Analysis

A. Sovereign Risk and Debt Sustainability Analysis

Annex IV. Figure 1. Mexico: Risk of Sovereign Stress

Horizon	Mechanical signal	Final assessment	Comments
Overall	...	**Moderate**	The overall risk of sovereign stress is judged to be moderate. Higher public sector borrowing requirements due to inflation-related interest payments and capital execution resulted in a looser fiscal stance in 2022. A strong economic performance to-date combined with spending restraint will help to guide debt levels downwards in 2023 but high real interest rates and a procyclical policy stance in 2024 will exert some pressure over the medium-term. The unwinding of debt servicing costs, a return to trend growth and a tight fiscal stance will help contain the debt path and more favorable conditions will see debt decline over the extended 10-year period.
Near term 1/			
Medium term	**Moderate**	**Moderate**	Medium-term risks are assessed as moderate. Fanchart analysis suggests that baseline projections are reasonable but risks remain around the non-stabilization of debt by the end of the projection period. GFN analysis indicates that financing needs will be broadly stable. The standardized stress tests suggest that additional financing needs could reach close to 15 percent of GDP in a stress scenario but the domestic banking and non-depository sectors could pick up slack.
Fanchart	**Moderate**	...	
GFN	**Moderate**	...	
Stress test	...	...	
Long term	...	**Moderate**	Both the large amortization and natural resource modules were flagged as relevant for Mexico. The large amortization module indicates that GFN and public debt-to-GDP ratios could be large in some scenarios absent proactive government policy. Nonetheless, staff's central scenario indicates declining ratios over time and staff judge the likelihood or preemptory policy action to be high enough to avert most worst case scenarios. Given the importance of oil revenues to Mexico's revenue base, the natural resources module indicates that oil depletion in the long-term could have large impacts on debt ratios. This analysis underscores staff advice to widen the revenue base and better mobilize domestic revenues.
Sustainability assessment 2/		Sustainable with high probability	The projected debt path is expected to increase over the main projection period but decline over the extended 10-year period while GFN is expected to rise with looser fiscal policy in 2024 before declining and broadly stablizing. Debt is therefore judged to be sustainable but notable risks from further shocks remain, particularly given the global macroeconomic context and the tight fiscal stance underpinning debt dynamics.
Debt stabilization in the baseline			No

DSA Summary Assessment

Commentary: The risk of Mexico experiencing sovereign stress is moderate overall and its public debt is assessed to be sustainable with high probability over the extended time horizon give a track record of fiscal prudence and potential growth exceeding the 10-year historical average real GDP growth rate. The public debt ratio is not expected to decline in the medium-term. While still manageable under most downside scenarios, fan chart analysis suggests that public debt ratios could increase materially in the medium-term, possibly constraining policy options and leading to moderate risks of sovereign stress. Over the long-term, a run down in oil reserves is the most palpable risk to debt levels, as highlighted by the long-term analysis. This underscores staff advice to widen the revenue base and better mobilize domestic revenues.

Source: Fund staff.
Note: The risk of sovereign stress is a broader concept than debt sustainability. Unsustainable debt can only be resolved through exceptional measures (such as debt restructuring). In contrast, a sovereign can face stress without its debt necessarily being unsustainable, and there can be various measures—that do not involve a debt restructuring—to remedy such a situation, such as fiscal adjustment and new financing.
1/ The near-term assessment is not applicable in cases where there is a disbursing IMF arrangement. In surveillance-only cases or in cases with precautionary IMF arrangements, the near-term assessment is performed but not published.
2/ A debt sustainability assessment is optional for surveillance-only cases and mandatory in cases where there is a Fund arrangement. The mechanical signal of the debt sustainability assessment is deleted before publication. In surveillance-only cases or cases with IMF arrangements with normal access, the qualifier indicating probability of sustainable debt ("with high probability" or "but not with high probability") is deleted before publication.

Annex IV. Figure 2. Mexico: Debt Coverage and Disclosures

						Comments
1. Debt coverage in the DSA: 1/	CG	GG	NFPS	CPS	Other	
1a. If central government, are non-central government entities insignificant?					n.a.	

2. Subsectors included in the chosen coverage in (1) above:

		Subsectors captured in the baseline	Inclusion	Comments
CPS / NFPS / GG: expected / CG	1	Budgetary central government	Yes	
	2	Extra budgetary funds (EBFs)	Yes	
	3	Social security funds (SSFs)	Yes	
	4	State governments	No	See commentary below.
	5	Local governments	No	See commentary below.
	6	Public nonfinancial corporations	Yes	
	7	Central bank	No	
	8	Other public financial corporations	Yes	

3. Instrument coverage:	Currency & deposits	Loans	Debt securities	Oth acct. payable 2/	**IPSGSs 3/**	See commentary below.

4. Accounting principles:	Basis of recording		Valuation of debt stock		
	Non-cash basis 4/	Cash basis	Nominal value 5/	Face value 6/	Market value 7/

5. Debt consolidation across sectors:	Consolidated	Non-consolidated

Color code: chosen coverage; Missing from recommended coverage; Not applicable

Reporting on Intra-Government Debt Holdings

		Issuer \ Holder	Budget. central govt	Extra-budget. funds (EBFs)	Social security funds (SSFs)	State govt.	Local govt.	Nonfin. pub. corp.	Central bank	Oth. pub. fin corp	Total
CPS / NFPS / GG: expected / CG	1	Budget. central govt						216.8	347.7	395.2	959.7
	2	Extra-budget. funds									0
	3	Social security funds									0
	4	State govt.						0.4		1.1	1.5
	5	Local govt.									0
	6	Nonfin pub. corp.							0.6	11	11.6
	7	Central bank									0
	8	Oth. pub. fin. corp						33.2	138		171.2
		Total	0	0	0	0	0	250.4	486.3	407.3	1144

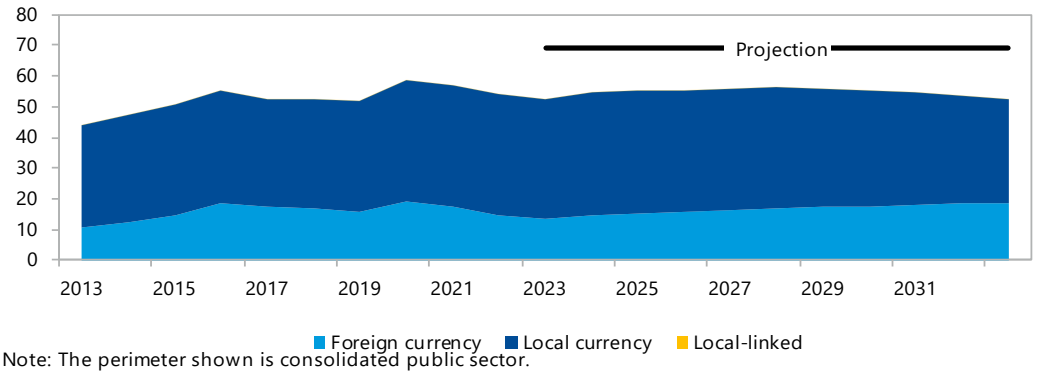
1/ CG=Central government; GG=General government; NFPS=Nonfinancial public sector; PS=Public sector.
2/ Stock of arrears could be used as a proxy in the absence of accrual data on other accounts payable.
3/ Insurance, Pension, and Standardized Guarantee Schemes, typically including government employee pension liabilities.
4/ Includes accrual recording, commitment basis, due for payment, etc.
5/ Nominal value at any moment in time is the amount the debtor owes to the creditor. It reflects the value of the instrument at creation and subsequent economic flows (such as transactions, exchange rate, and other valuation changes other than market price changes, and other volume changes).
6/ The face value of a debt instrument is the undiscounted amount of principal to be paid at (or before) maturity.
7/ Market value of debt instruments is the value as if they were acquired in market transactions on the balance sheet reporting date (reference date). Only traded debt securities have observed market values.

Commentary: Data on debt of sub-national governments are not readily available. Regulatory limits on state and local governments debt burden limits risks. Debt is not consolidated across the Federal government and Non-Financial Public Sector and the aggregate debt data represents the gross amount of all individual debt liabilities.

Annex IV. Figure 3. Mexico: Public Debt Structure Indicators

Debt by Currency

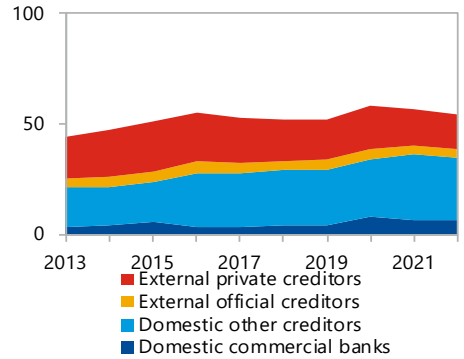
(Percent of GDP)



Note: The perimeter shown is consolidated public sector.

Public Debt by Holder

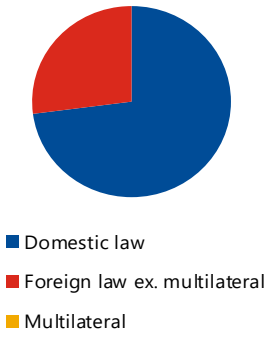
(Percent of GDP)



Note: The perimeter shown is consolidated public sector.

Public Debt by Governing Law, 2022

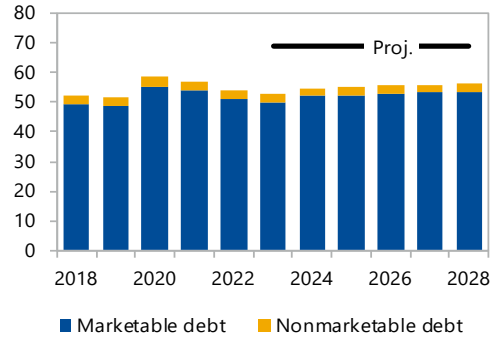
(Percent)



Note: The perimeter shown is consolidated public sector.

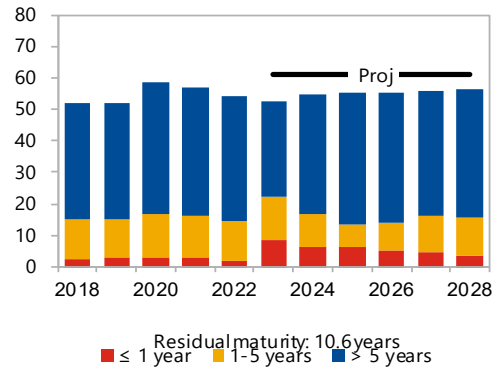
Debt by Instruments

(Percent of GDP)



Public Debt by Maturity (Percent of GDP)

(Percent of GDP)



Note: The perimeter shown is consolidated public sector.

Commentary: The shares of foreign and domestic currency-denominated liabilities in total public debt are expected to be broadly stable in the projection period. The rising share of domestic other creditors reflects the increased holdings of public debt liabilities by domestic pension funds following pension reforms. Small amounts of non-marketable debt principally relate to external official lending. While overall debt as a ratio to GDP will increase over the projection period, the share of liabilities with longer maturities is expected to increase relative to the pre-projection period, in-line with the government's debt management strategy.

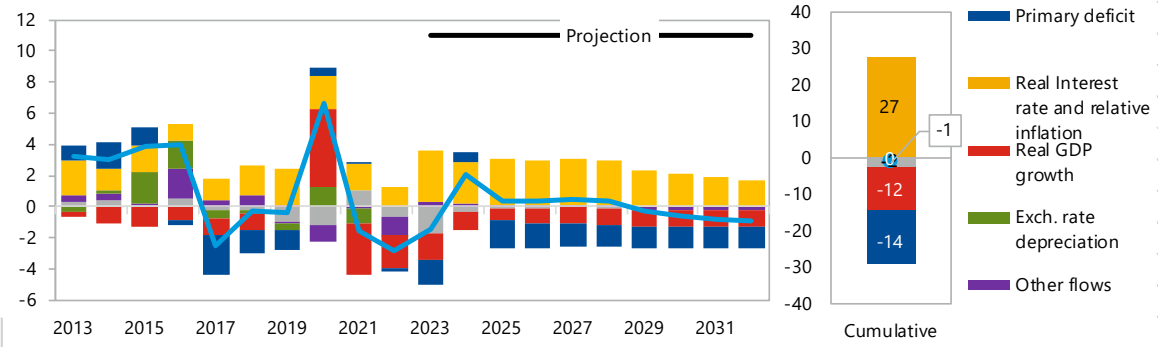
Annex IV. Figure 4. Mexico: Baseline Scenario

(Percent of GDP unless otherwise indicated)

	Actual	Medium-term projection						Extended projection			
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Public debt	54.1	52.7	54.7	55.1	55.5	55.9	56.3	56.0	55.4	54.6	53.7
Change in public debt	-2.8	-1.4	2.1	0.4	0.4	0.4	0.3	-0.3	-0.6	-0.8	-0.9
Contribution of identified flows	-2.2	0.3	2.4	0.5	0.4	0.5	0.4	-0.3	-0.6	-0.8	-0.9
Primary deficit	-0.2	-1.6	0.7	-1.8	-1.6	-1.5	-1.4	-1.4	-1.4	-1.4	-1.4
Noninterest revenues	23.9	23.6	23.5	23.5	23.3	23.3	23.1	23.1	23.1	23.1	23.1
Noninterest expenditures	23.7	22.0	24.2	21.7	21.7	21.8	21.7	21.7	21.7	21.7	21.7
Automatic debt dynamics	-0.9	1.6	1.5	2.2	1.9	1.8	1.7	1.3	1.0	0.8	0.7
Real interest rate and relative inflation	1.3	3.3	2.6	3.0	2.9	2.9	2.8	2.4	2.1	1.9	1.7
Real interest rate	1.4	3.1	2.2	2.8	2.7	2.7	2.6	2.2	1.9	1.7	1.5
Relative inflation	0.0	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Real growth rate	-2.1	-1.7	-1.1	-0.8	-1.0	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1
Real exchange rate	-0.1	...	...	...	...	...	...	...	...	...	...
Other identified flows	-1.1	0.3	0.3	0.1	0.1	0.1	0.1	-0.2	-0.2	-0.2	-0.2
Contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other transactions	-1.1	0.3	0.3	0.1	0.1	0.1	0.1	-0.2	-0.2	-0.2	-0.2
Contribution of residual	-0.7	-1.7	-0.3	-0.1	-0.1	0.0	-0.1	0.0	0.0	0.0	0.0
Gross financing needs	13.1	12.4	13.4	9.7	10.8	10.8	10.6	10.3	10.2	10.3	9.9
of which: debt service	13.6	14.2	12.9	11.7	12.6	12.5	12.2	11.8	11.7	11.8	11.5
Local currency	11.7	12.5	11.4	9.9	10.6	10.2	10.0	9.8	9.7	9.8	9.4
Foreign currency	1.9	1.7	1.5	1.8	2.0	2.3	2.2	2.1	2.0	2.0	2.1
Memo:											
Real GDP growth (percent)	3.9	3.2	2.1	1.5	1.8	2.0	2.1	2.0	2.0	2.0	2.0
Inflation (GDP deflator; percent)	6.7	5.2	5.6	3.5	3.4	3.0	3.0	3.0	3.0	3.0	3.0
Nominal GDP growth (percent)	10.9	8.5	7.9	5.0	5.2	5.1	5.2	5.1	5.1	5.1	5.1
Effective interest rate (percent)	9.4	11.4	10.1	8.8	8.5	8.2	8.0	7.1	6.6	6.2	5.9

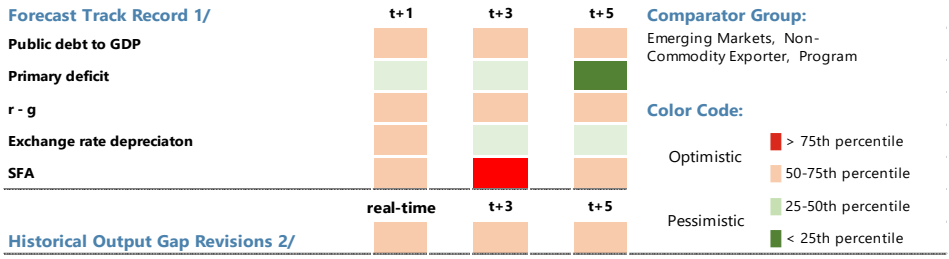
Contribution to Change in Public Debt

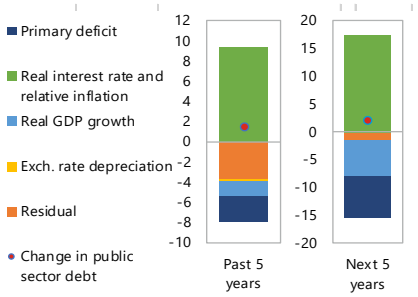
(Percent of GDP)

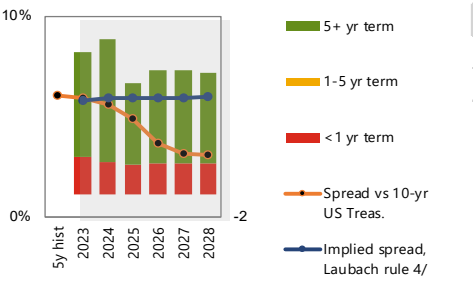


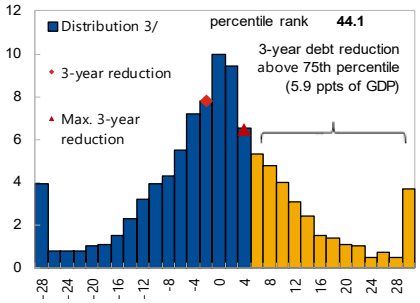
Commentary: A strong growth performance helped contain debt pressures in 2022 and is expected to work in tandem with a tighter fiscal stance to reduce the debt ratio in 2023. A large fiscal expansion in 2024 will exert upwards pressure on debt ratios in the medium-term despite a rapid consolidation thereafter. This persistence is due to high real interest rates (reflecting structural and conjunctural factors) and the need to finance the looser stance with greater debt issuance. As debt servicing costs begin to moderate by 2028, Mexico's tight fiscal stance and trend growth will dominate other debt drivers and serve to lower debt ratios in the extended projection period. The pace of fiscal tightening and sustained tight fiscal stance, though notable amongst emerging market peers, is within bounds for Mexico given a sustained track record of fiscal prudence.

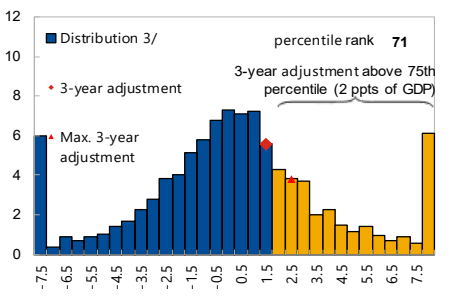
Annex IV. Figure 5. Mexico: Realism of Baseline Assumptions

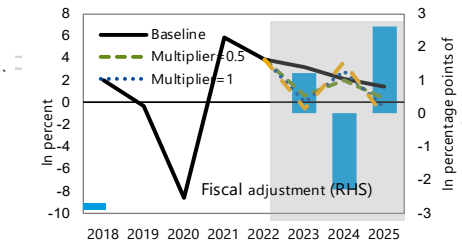


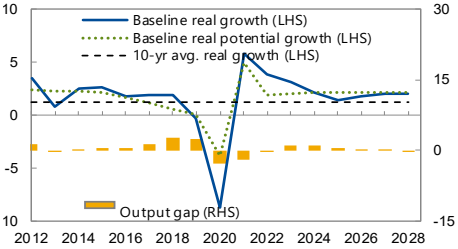












Commentary: The forecast track record is generally within bounds for optimism, excepting the SFA projections. With the exception of the contribution of GDP growth, debt creating flows are broadly compositionally similar between the last and next 5 years. The higher contribution of GDP growth over the next 5 years is substantiated by a very strong recent performance and potential output growth above the 10-year average real growth rate. Spreads are expected to contract relative to the Laubach rule given sensitivity to the loosening of monetary policy. While the three-year debt and CAPB adjustments are above the median of the distribution of comparator countries' experience, they are well below Mexico's past maximum. The effect of fiscal adjustments on growth reflects the economy's position relative to the output gap. Sustained positive output gaps in 2023-25 blunt the effects of the tightening and loosening of fiscal policy, resulting in smaller multipliers relative to the in-built analysis. The positive output gap trends to zero by the end of the projection period as the economy reaches steady state. Real projected potential growth is expected to outstrip the average of the preceding ten years given developments such as infrastructure spending.

Source : IMF Staff.

1/ Projections made in the October and April WEO vintage. Program status not used in creating comparator group due to lack of data.

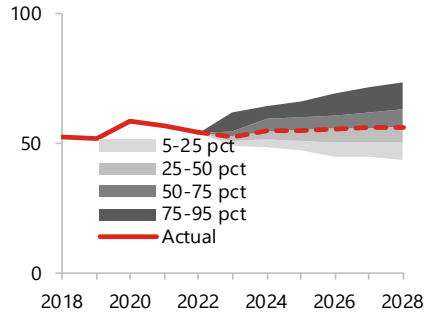
2/ Calculated as the percentile rank of the country's output gap revisions (defined as the difference between real time/period ahead estima and final estimates in the latest October WEO) in the total distribution of revisions across the data sample.

3/ Data cover annual obervations from 1990 to 2019 for MAC advanced and emerging economies. Percent of sample on vertical axis.

4/ The Laubach (2009) rule is a linear rule assuming bond spreads increase by about 4 bps in response to a 1 ppt increase in the projected debt-to-GDP ratio.

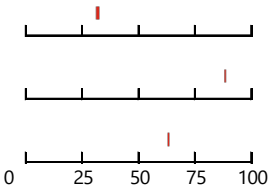
Annex IV. Figure 6. Mexico: Medium-Term Risk Assessment

Final Fanchart
(Percent of GDP)

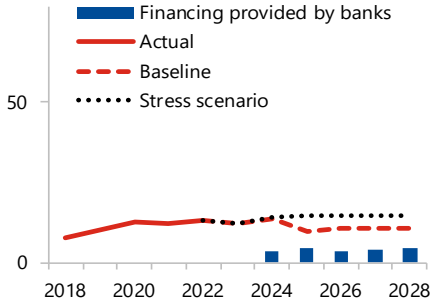


Debt fanchart module

	Value	Contrib [1/]	Percentile in peer group [2/]
Fanchart width *(percent of GDP)*	30.0	0.4	
Probability of debt non-stabilization *(percent)*	55.1	0.5	
Terminal debt-to-GDP x institutions index	37.5	0.8	
Debt fanchart index (DFI)		1.7	
Risk signal: [3/]		**Moderate**	

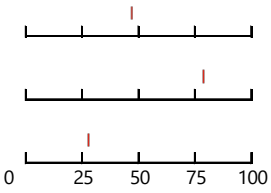


Gross Financing Needs
(Percent of GDP)



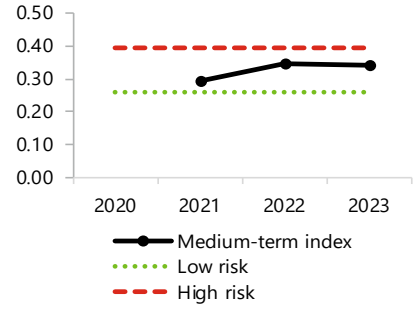
Gross financing needs (GFN) module

	Value	Contrib [1/]	Percentile in peer group [2/]
Average baseline GFN *(percent of GDP)*	11.3	3.8	
Banks' claims on the gen. govt *(pct bank assets)*	25.9	8.4	
Chg. In banks' claims in stress *(pct banks' assets)*	10.9	3.7	
GFN financeability index (GFI)		15.9	
Risk signal: [4/]		**Moderate**	



Banking crisis Commodity prices Exchange rate Contingent liab. Natural disaster

Medium-Term Index
(Index number)



Medium-term risk analysis

	Value	Value	Weight	Contribution
Debt fanchart index (normalized)	1.71	0.38	0.50	0.19
GFN finaceability index (normalized)	15.89	0.31	0.50	0.15
Medium-term index		0.3		
Risk signal: 5/		**Moderate**		
Final assessment:		**Moderate**		

Prob. of missed crisis, 2023-2028, if stress not predicted: 18.2 pct.

Prob. of false alarms, 2023-2028, if stress predicted: 21.6 pct.

Commentary: The medium-term analysis suggests a moderate risk of sovereign stress over that time horizon. The main issue suggested by the analysis is a substantial increases in the public debt ratio under low-probability downside scenarios. The increase in gross financing needs under a stress scenario is moderate. The change in bank claims under stress scenarios is relatively small, but the initial share of claims on the Federal government in banks' assets is in the upper quartile amongst comparator countries. The banking system should be able to absorb the increased government financing needs under a stress scenario. Institutional investors other than banks, particularly pension funds, could also likely absorb additional financing needs.

Source: IMF staff estimates and projections.

1/ See Annex IV of IMF, 2022, Staff Guidance Note on the Sovereign Risk and Debt Sustainability Framework for details on index calculation.

2/ The comparison group is emerging markets, non-commodity exporter, program.

3/ The signal is low risk if the DFI is below 1.13; high risk if the DFI is above 2.08; and otherwise, it is moderate risk.

4/ The signal is low risk if the GFI is below 7.6; high risk if the DFI is above 17.9; and otherwise, it is moderate risk.

5/ The signal is low risk if the GFI is below 0.26; high risk if the DFI is above 0.40; and otherwise, it is moderate risk.

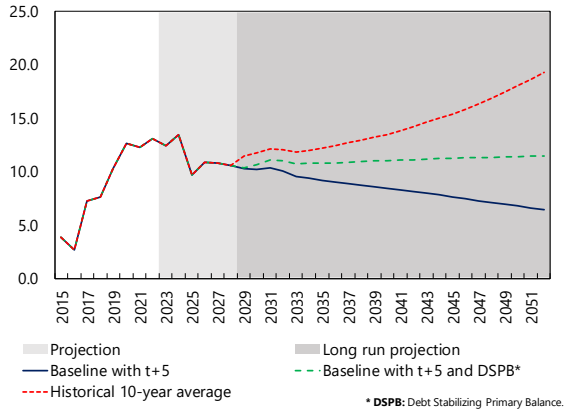
Annex IV. Figure 7. Mexico: Long-Term Analysis: Large Amortization and Natural Resources

Large Amortization Trigger

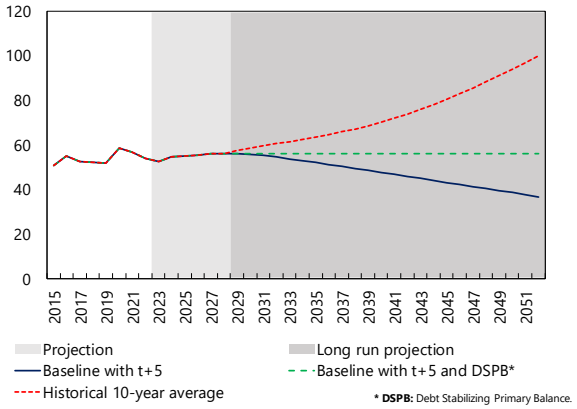
Projection	Variable	Risk Indication
Medium-term extrapolation	GFN-to-GDP ratio Amortization-to-GDP ratio Amortization	
Medium-term extrapolation with debt stabilizing	GFN-to-GDP ratio Amortization-to-GDP ratio Amortization	
Historical average assumptions	GFN-to-GDP ratio Amortization-to-GDP ratio Amortization	
Overall Risk Indication		

Alternative Baseline Long-Term Projections

GFN-to-GDP Ratio



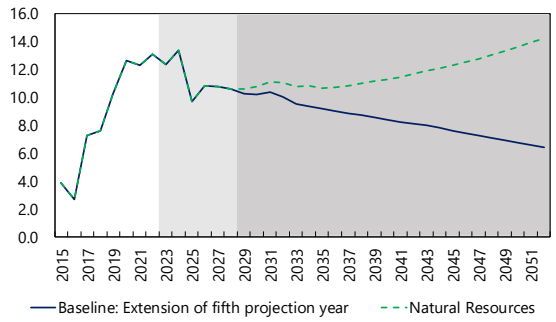
Total Public Debt-to-GDP Ratio



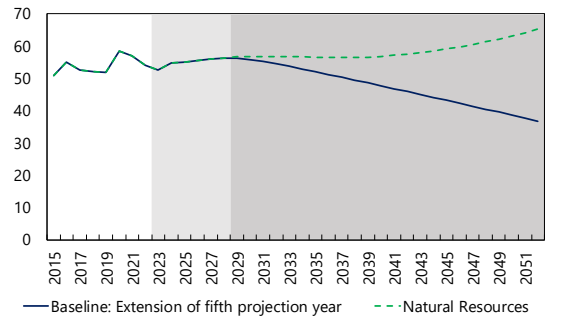
Commentary: Staff's baseline scenario, Baseline with t+5, shows both GFN- and public debt-to-GDP ratios declining over the long-term as Mexico converges to steady-state growth and a concomitant fiscal stance. While the Baseline with t+5 and DSPB scenario shows stabilization of the long-term GFN and public debt ratios at higher levels than staff's baseline, this is due to the fact that a smaller primary surplus is required to stabilize debt than is consistent with the projected steady-state. Extrapolating historical relationships between key debt drivers , both the GFN- and GDP-to-debt ratios rise rapidly over the long-run in the Historical 10-year average scenario. In all scenarios, goverment policy is assumed to be passive and while this analysis provides some illustration of risks, staff judge the likelihood of preemptory action averting worst case scenarios to be high given Mexico's track record of fiscal prudence and proactive debt management policies.

Natural Resources

GFN-to-GDP Ratio



Total Public Debt-to-GDP Ratio



Commentary: Given the importance of oil revenues to the government's revenue base and its contribution to the Mexican economy, depletion of oil reserves would result in rapid and large increases in GFN- and public debt-to-GDP ratios. The illustration provided by the long-term module underscores staff advice to increase domestic revenue mobilization and widen the revenue base.

B. External Debt Sustainability

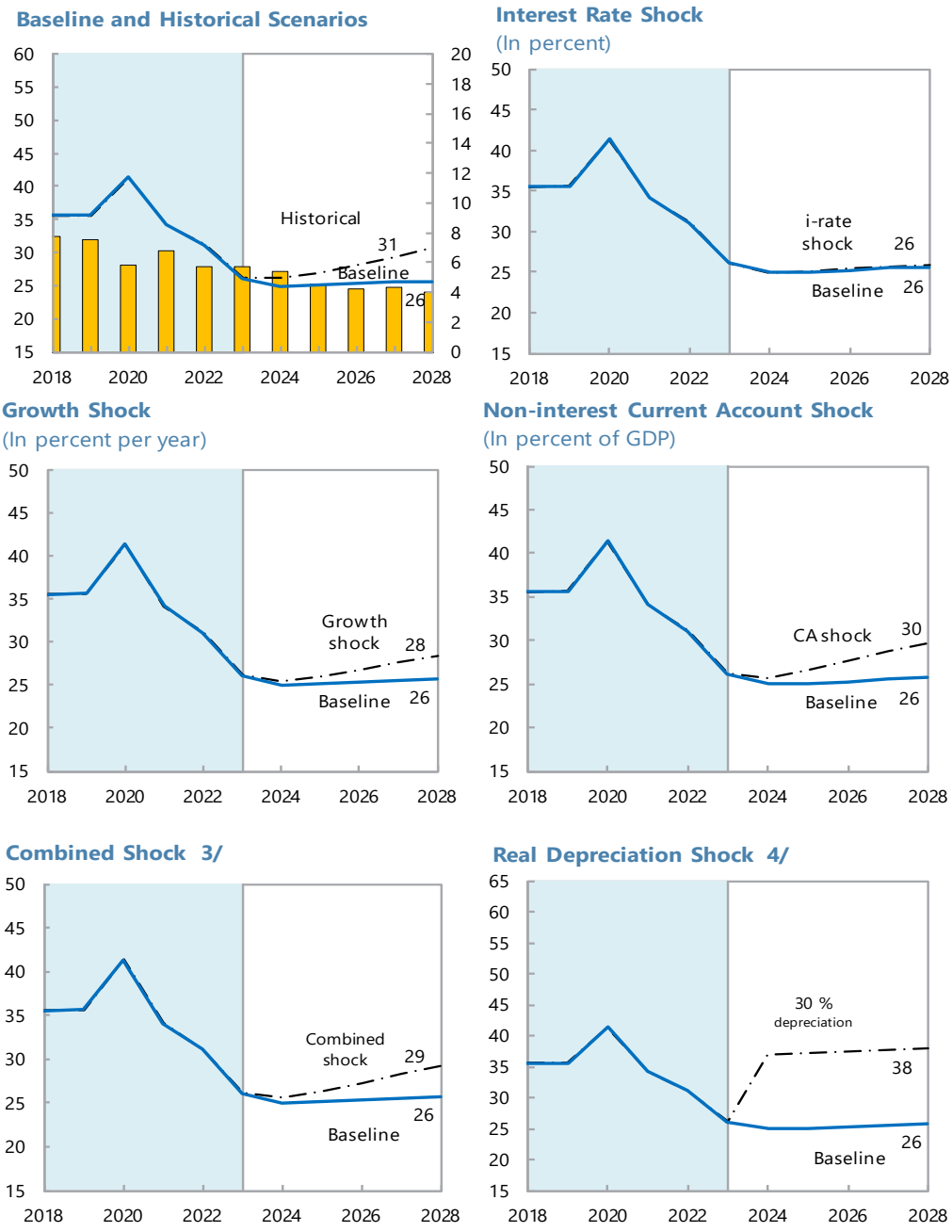
Mexico's external debt as a ratio to GDP is comparatively low and is projected to continue to decline in 2023. The decline is mainly due to robust growth, as well as continued strong remittance inflows, which have contributed to modest current account deficits. The main risks to the external debt trajectory relate to growth underperformance, higher risk premia, and large currency depreciation. However, their potential impact is mitigated by several factors, especially favorable maturity and currency structures of public and private external debt.

1. The baseline projections: Gross external debt is expected to continue to decline to around 26 percent of GDP by end-2023. The decline is mainly driven by strong nominal GDP growth (in U.S. dollar terms), but also by robust remittances at levels well above recent historical averages and steady FDI. In the medium-term, the external debt ratio is expected to remain broadly stable at around 26 percent of GDP.

2. Risks and mitigating factors: The major downside risks to the external debt trajectory are weaker-than-expected growth, possibly owing to a global slowdown, domestic policy missteps and/or climate-change related risks, and a sharp tightening of global financial conditions, leading to a spike in risk premia on Mexico's external debt liabilities, a weaker peso, and more capital flow volatility. Currency depreciation is a significant risk; for example, a 30 percent depreciation of the peso in real effective terms could raise the external debt to about 38 percent of GDP. However, several factors mitigate the impact of potential shocks on Mexico's external debt position. Rollover risks for the public sector external debt, which constitute around two-thirds of Mexico's external debt, are mitigated by a favorable maturity structure (more than 90 percent of debt has a residual maturity of more than one year), currency composition (around 30 percent of external public debt is denominated in peso), and prudent debt management by the government. Private sector external debt, which is concentrated in the non-financial corporate sector, consists of mostly medium- and long-term maturities, while foreign exchange risks are well-covered by natural and financial hedges. The banking sector is well capitalized and liquid and assessed to be resilient to large shocks.

Annex IV. Figure 8. Mexico: External Debt Sustainability: Bound Tests 1/ 2/

(External debt in percent of GDP)



Sources: International Monetary Fund, Country desk data, and staff estimates.
1/ Shaded areas represent actual data. Individual shocks are permanent one-half standard deviation shocks. Figures in the boxes represent average projections for the respective variables in the baseline and scenario being presented. Ten-year historical average for the variable is also shown.
2/ For historical scenarios, the historical averages are calculated over the ten-year period, and the information is used to project debt dynamics five years ahead.
3/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and current account balance.
4/ One-time real depreciation of 30 percent.

Annex IV. Table 1. Mexico: External Debt Sustainability Framework

(In percent of GDP, unless otherwise indicated)

	Actual							Projections						
	2018	2019	2020	2021	2022			2023	2024	2025	2026	2027	2028	Debt-stabilizing non-interest current account 6/
Baseline: External debt	35.6	35.6	41.4	34.1	31.1			**26.1**	**24.9**	**25.1**	**25.3**	**25.5**	**25.7**	**-2.2**
Change in external debt	-1.1	0.0	5.8	-7.3	-3.0			-5.0	-1.2	0.1	0.2	0.2	0.2	
Identified external debt-creating flows (4+8+9)	-2.1	-3.3	0.7	-6.7	-4.3			-1.5	-1.2	-1.4	-1.9	-2.0	-2.1	
Current account deficit, excluding interest payments	0.2	-1.6	-4.2	-1.1	-0.4			0.1	0.1	-0.3	-0.6	-0.5	-0.5	
Deficit in balance of goods and services	-80.2	-77.4	-77.5	-83.2	-88.3			-2.8	-3.0	-2.8	-2.5	-2.5	-2.6	
Exports	39.1	38.5	39.6	40.6	42.7			35.6	34.0	33.9	34.1	34.3	34.4	
Imports	-41.2	-38.9	-37.9	-42.6	-45.6			-38.4	-37.0	-36.7	-36.6	-36.8	-37.0	
Net non-debt creating capital inflows (negative)	-2.2	-2.4	-2.1	-1.8	-2.0			-2.1	-2.1	-2.2	-2.3	-2.4	-2.5	
Automatic debt dynamics 1/	-0.2	0.7	6.9	-3.9	-1.9			0.5	0.8	1.0	1.0	1.0	0.9	
Contribution from nominal interest rate	1.8	2.0	2.2	1.7	1.7			1.3	1.3	1.4	1.4	1.4	1.4	
Contribution from real GDP growth	-0.7	0.1	3.6	-2.1	-1.2			-0.8	-0.5	-0.3	-0.4	-0.5	-0.5	
Contribution from price and exchange rate changes 2/	-1.4	-1.4	1.2	-3.5	-2.3			...	...	...	...	...	...	
Residual, incl. change in gross foreign assets (2-3) 3/	1.0	3.4	5.1	-0.5	1.3			-3.5	0.0	1.6	2.1	2.2	2.3	
External debt-to-exports ratio (in percent)	91.1	92.5	104.6	84.0	72.8			73.4	73.3	73.9	74.1	74.3	74.6	
Gross external financing needs (in billions of US dollars) 4/	97.1	97.9	64.9	89.2	83.9			104.1	106.9	94.4	91.6	98.7	94.7	
in percent of GDP	7.7	7.5	5.8	6.8	5.7	10-Year	10-Year	5.7	5.4	4.5	4.2	4.4	4.0	
Scenario with key variables at their historical averages 5/								**26.1**	**26.3**	**26.8**	**28.0**	**29.3**	**30.8**	**-1.4**
Key Macroeconomic Assumptions Underlying Baseline						Historical Average	Standard Deviation							
Real GDP growth (in percent)	2.0	-0.3	-8.7	5.8	3.9	1.2	3.9	3.2	2.1	1.5	1.8	2.0	2.1	
GDP deflator in US dollars (change in percent)	3.5	4.2	-6.0	10.7	7.5	0.7	7.9	19.8	7.8	2.9	2.5	2.1	2.2	
Nominal external interest rate (in percent)	5.2	5.9	5.2	4.8	5.4	5.2	0.4	5.4	5.6	5.8	5.9	5.9	5.7	
Growth of exports (US dollar terms, in percent)	9.6	2.4	-11.7	20.2	17.5	5.1	9.6	3.0	5.1	4.1	4.9	4.7	4.6	
Growth of imports (US dollar terms, in percent)	10.0	-1.9	-16.3	31.6	19.6	5.7	13.1	4.1	5.9	3.6	4.1	4.8	4.7	
Current account balance, excluding interest payments	-0.2	1.6	4.2	1.1	0.4	0.4	1.6	-0.1	-0.1	0.3	0.6	0.5	0.5	
Net non-debt creating capital inflows	2.2	2.4	2.1	1.8	2.0	2.3	0.4	2.1	2.1	2.2	2.3	2.4	2.5	

1/ Derived as [r - g - r(1+g) + ea(1+r)]/(1+g+r+gr) times previous period debt stock, with r = nominal effective interest rate on external debt; g = real GDP growth rate, e = nominal appreciation (increase in dollar value of domestic currency), and a = share of domestic-currency denominated debt in total external debt.

2/ The contribution from price and exchange rate changes is defined as [-r(1+g) + ea(1+r)]/(1+g+r+gr) times previous period debt stock. r increases with an appreciating domestic currency (e > 0) and rising inflation (based on GDP deflator).

3/ For projection, line includes the impact of price and exchange rate changes.

4/ Defined as current account deficit, plus amortization on medium- and long-term debt, plus short-term debt at end of previous period, excluding reserve accumulation.

5/ The key variables include real GDP growth; nominal interest rate; dollar deflator growth; and both non-interest current account and non-debt inflows in percent of GDP.

6/ Long-run, constant balance that stabilizes the debt ratio assuming that key variables (real GDP growth, nominal interest rate, dollar deflator growth, and non-debt inflows in percent of GDP) remain at their levels of the last projection year.

Annex V. Corporate Sector Risks Through the Pandemic and High Interest Rates[1]

Mexico's corporates have endured two sequential and very different shocks. The real-side shocks to both demand and supply from the pandemic were followed by a financial-side shock to interest rates as monetary policy has sought to contain inflation. While this has challenged the traditionally well-insulated Mexican corporate system, Mexican corporates have proven resilient. Building on recent risk work in last year's FSAP, a machine learning model highlights key contributors to corporate risk evolution over this period. There does appear, however, to be an emerging pocket at the risky end of the distribution which deviated from general improvement in 2022 and merits careful monitoring.

1. The Mexican corporate sector has traditionally been considered well-insulated from economic shocks. Mexico has a small number of large publicly listed firms. High levels of market concentration and tight regulation in the banking sector have led to large, liquid firms with robust profitability and contained foreign currency risk.[2]

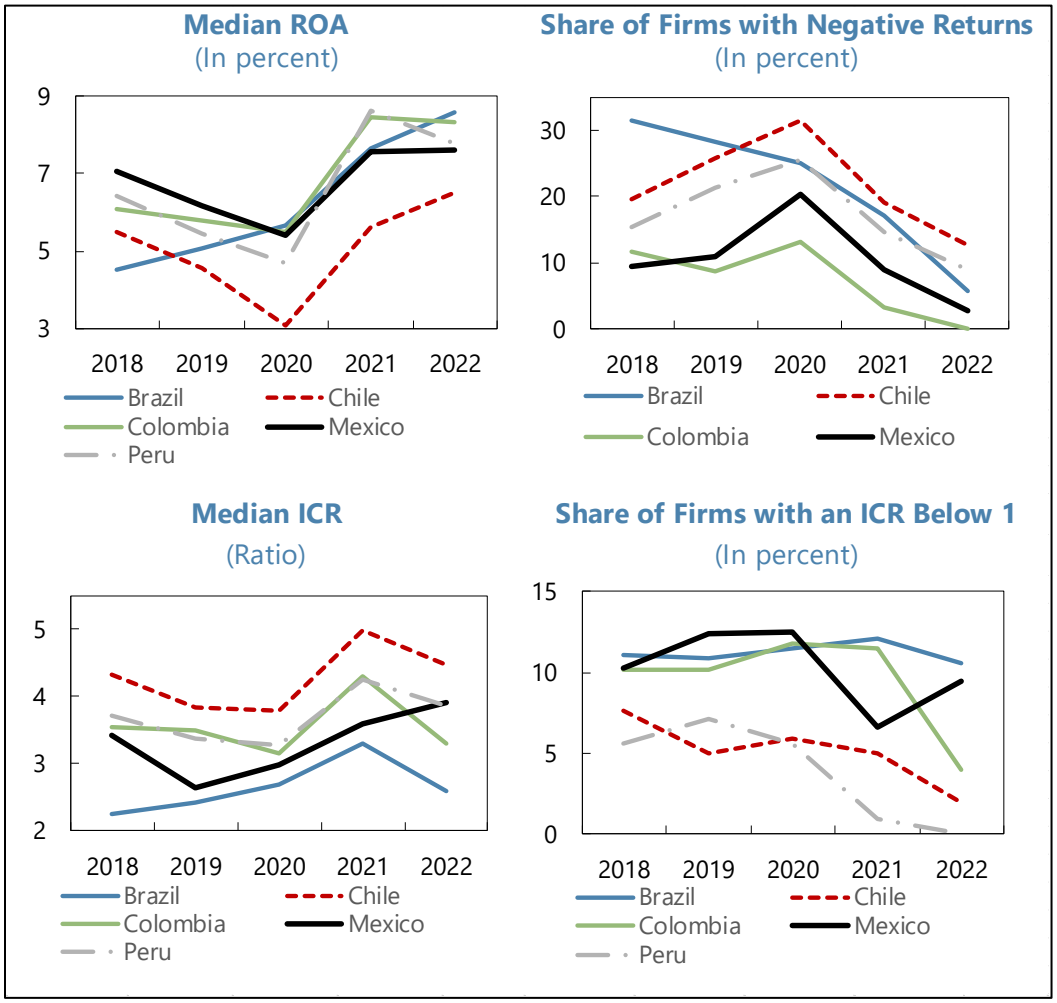
2. Yet the pandemic and the current high-interest rate period present unique challenges. The pandemic presented unprecedented challenges with Mexico seeing limited fiscal support and one of the world's highest health burdens as measured by excess mortality. The recovery was more rapid than expected but brought with it new challenges—tight labor markets, unique supply chain disruptions, and a surprise bout of global inflation necessitating steep policy rate hikes. At 11.25 percent the Mexican policy rate is currently at its highest level since its introduction 15 years ago and well above previous peaks. Borrowing rates have followed, with private short-term debt rates approaching 12 percent, above even its peak during the GFC and well above the post-GFC peak of 9.3 during the previous hiking cycle.[3]

3. Mexican corporate accounting ratios have held up well, but a high-stress subset may be developing. Profitability has been resilient. After a dip in 2020, the median firm in the Capital IQ database saw a strong recovery in return on assets (ROA) in 2021 which held through 2022, registering at the top of the post-GFC range. The share of firms reporting negative profits has fallen precipitously from near 20 percent in 2020 to about 3 percent. Interest coverage ratios (ICRs) tell a similar story, weaker during the pandemic (and in this case in the high-policy-rate period preceding it) and improving during the recovery. Interestingly, in Mexico the share of companies with an ICR below one increased in 2022, unlike in other LA5 economies (Brazil, Chile, Colombia, Peru), suggesting there may be a pocket of higher risk corporates developing.

[1] Prepared by Kevin Wiseman (SPR).

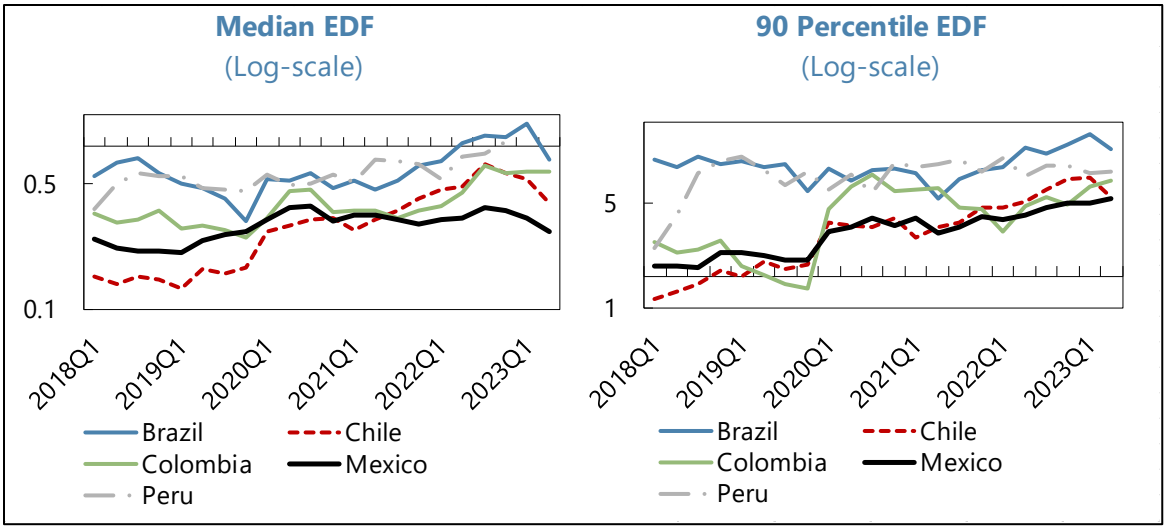
[2] For example, the Mexico 2016 FSAP found that risks from the corporate sector in a sharp devaluation scenario were minimal considering only natural hedges.

[3] See Mexico's 2020 Article IV Staff Report, and the IMF Fiscal Monitor from October 2020.



4. Ratings agency default risks tell a broadly similar story. The Moody's expected default frequency (EDF) for the median Mexican non-financial private corporates spiked during the GFC, bottomed out during the low interest rate period, but rose during the 2016-18 hiking cycle and remained elevated through the pandemic. Median risks are easing by this metric recently as they have fallen since a peak in 2022Q3 and are recovering to pre-pandemic levels. Yet again, for a subset of firms risks do not appear to have abated since the pandemic but are only deteriorating—the 90th percentile of the EDF distribution plateaued during the pandemic as did the median, but began rising again in 2022 and has continued through 2023Q2, with risks now comparable to the GFC by this metric.

5. To better understand these dynamics, we use machine learning methods to model Moody's EDFs and unpack their evolution. This appendix extends the analysis of corporate sector risks in the 2022 FSAP with an extra year of observations. It offers an assessment of risk evolution in 2022, including in high-risk firms, and an additional general perspective on the determinants of corporate sector risks leveraging Shapley values.



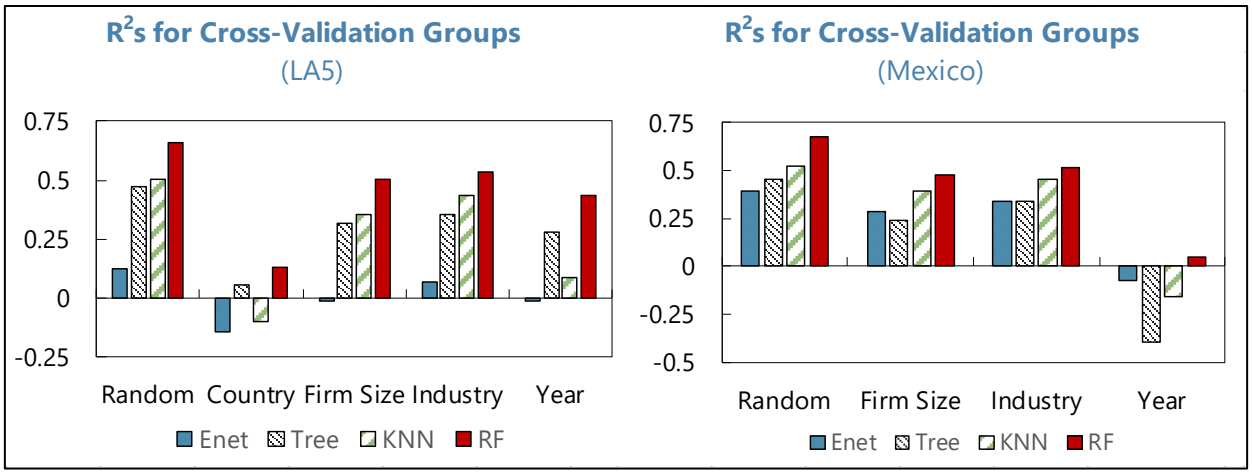
C. Modeling

6. The core dataset comprises firm microdata for LA5 economies from Capital IQ combined with default risks assessed by Moody's. The Capital IQ data features more than 70 thousand observations, reflecting an average of 100 Mexican firms per year over the period 2000-2022. The Moody's dataset has more than 10 thousand EDFs for firms in the LA5 economies from 2000-2022, with 80 Mexican firms in an average year. The matched dataset contains over 7 thousand observations with an average of 60 Mexican corporates in a typical year. In addition to firm microdata, a few key macroeconomic variables have been included—GDP growth, the Financial Conditions Index (FCI) and its lag, and short- and long-term interest rates.

7. Corporate microdata present a number of modeling challenges. Firms are highly heterogeneous, and many metrics have thick-tailed distributions with substantial outliers. Data quality issues and data missingness are also substantial and require robust methods. While these features can be very challenging to linear models, less conventional machine learning models often take them in stride. Moreover, default risks for corporates are thought to be nonlinear in key metrics and sensitive to interactions between explanatory variables, a challenge that can be more robustly accommodated in some machine learning methods.

8. Consistent evaluation of model performance requires out-of-sample assessment. While OLS and related classical methods have in-sample measures of goodness of fit, typically machine learning models do not, and in-sample performance is misleadingly successful. Models are evaluated here by cross-validation. The estimation sample is divided into subgroups or 'folds.' Each fold is removed from the sample, the model is estimated on the remaining sample, and then the model's performance is evaluated on the 'hold out' fold. This is repeated for each fold and average performance across folds is used as an overall metric of performance. The method of division of the sample into folds is critical in understanding how the model applies to observations other than those it has been estimated on. It is rare that new observations can be considered to have been drawn from the estimation sample, particularly with forecasting where new observations have their

own time effects. This study considers random allocation of observations across fold but also divides folds by country, firm size, time, and industry.



9. Candidate models are evaluated in a horse race. Without a strong prior on which model is best suited to this task, a variety of models with different levels of flexibility, complexity, and robustness are evaluated. Note that neural networks, among the most celebrated machine learning methods, are widely seen as too flexible for datasets of this size and have not been included. To better understand each model's performance this horse race has been conducted along two dimensions—the method of grouping cross folds, and the group of sample countries. It is often considered that conditions and accounting practices across countries are so diverse that including corporates from different countries in the same estimation is likely to reduce performance, and this also should be tested.

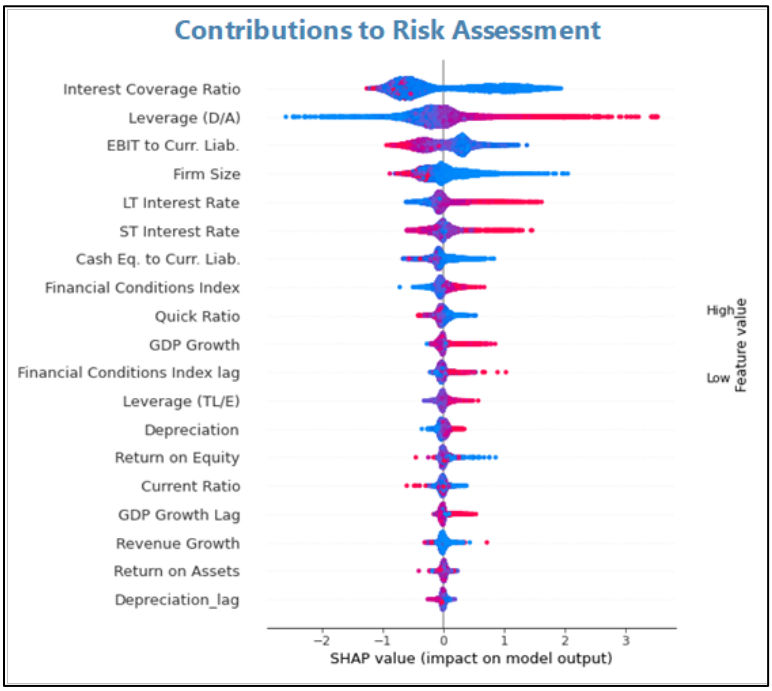
10. The Random Forest (RF) model consistently outperforms other methods. The figures above present the average coefficient of determination (equivalent to R^2 in an in-sample OLS context) of different models (elastic net—a penalized linear regression, decision tree, K-Nearest Neighbors, and Random Forest) for different fold splitting criteria and country pooling.[4] As can be seen in the charts, the random forest model is the best performing method under any combination of CV grouping method and country pooling.

11. The horse race also highlights other key aspects of firm EDF estimation. Model performance deteriorates significantly outside of the estimation set, especially across countries and time periods. This offers some support to the view that corporate samples should not be pooled across countries. On the other hand, a pooled sample performs much better out of sample when folds are split by blocks of time. The key consideration here is the macroeconomic variables in the model. While the model is estimated on more than 7 thousand observations, the number of macroeconomic observations per country is less than 20 and even these are not independent. Additional countries provide the model information about how things may work under different

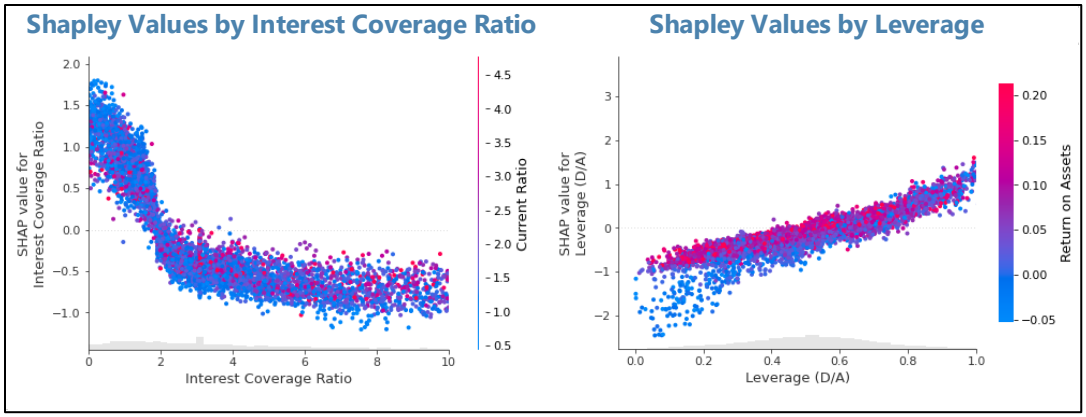
[4] Note that a classic OLS model was also evaluated but it's out of sample performance was badly negative—model predictions added more noise to the data so that residual variance was higher than sample variance.

macroeconomic circumstances, for example with Brazil's 2015 episode substantially rounding out the information that can be drawn from the Mexican experience over the last two decades.

12. The winning model confirms the importance of ICRs, leverage, and profitability. The random forest model is the average over a large number of decisions trees, each of which considers a different subsample of observations and explanatory variables. Its complex and nonlinear assessments can be summarized with Shapley values—additive summaries of the contributions of each variable to the model's overall assessment first developed for cooperative game theory. The 'beeswarm' below represents this decomposition, with variables listed in order of their average absolute contribution to risk assessment and where the color of the dots represents high (red) or low (blue) values for the variable in question. ICR is the most important variable in the model, with high risks associated with very low values. Similarly, the expected but opposite relationship is found with leverage where high values raise risks and low values mitigate them. This is followed by earnings to short term liabilities, firm size, and interest rates, all with the expected 'signs.'



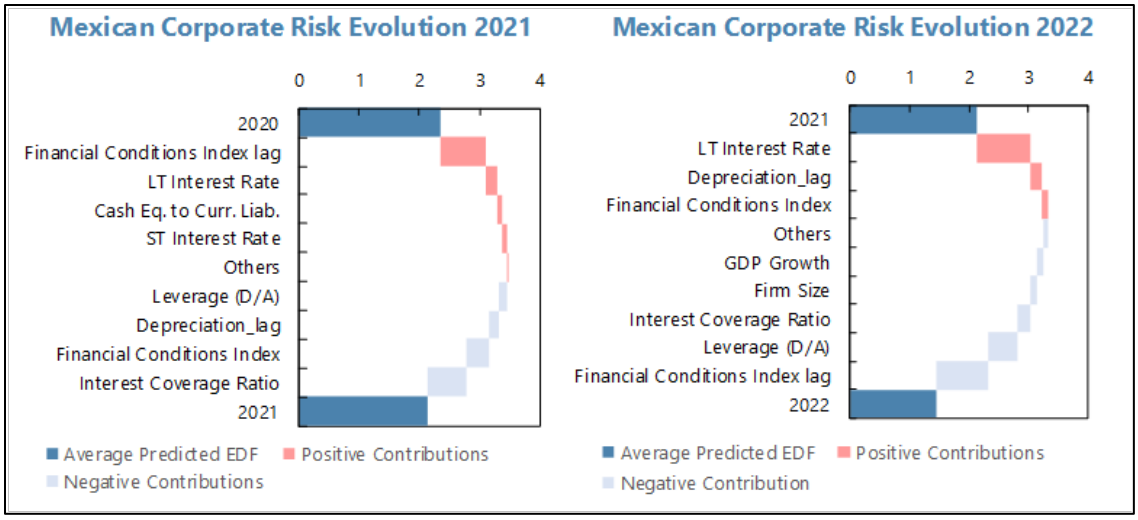
13. Shapley values can also highlight nonlinear and interaction effects found by the model. The effect of ICRs on risk is nonlinear—it falls sharply as ICR improves over the range of 0-3 but then flattens out, with values above three not adding much to risk reduction. Leverage, by contrast, has a roughly linear relationship with risk throughout the sample range, but has key risk interactions. In the scatterplot below, observations with higher ROAs are in pink while lower ROAs are in blue. Risks declines with leverage, but especially so for low-ROA firms. Here the beneficial effects of low leverage are greater for firms with risk exposure on other dimensions.



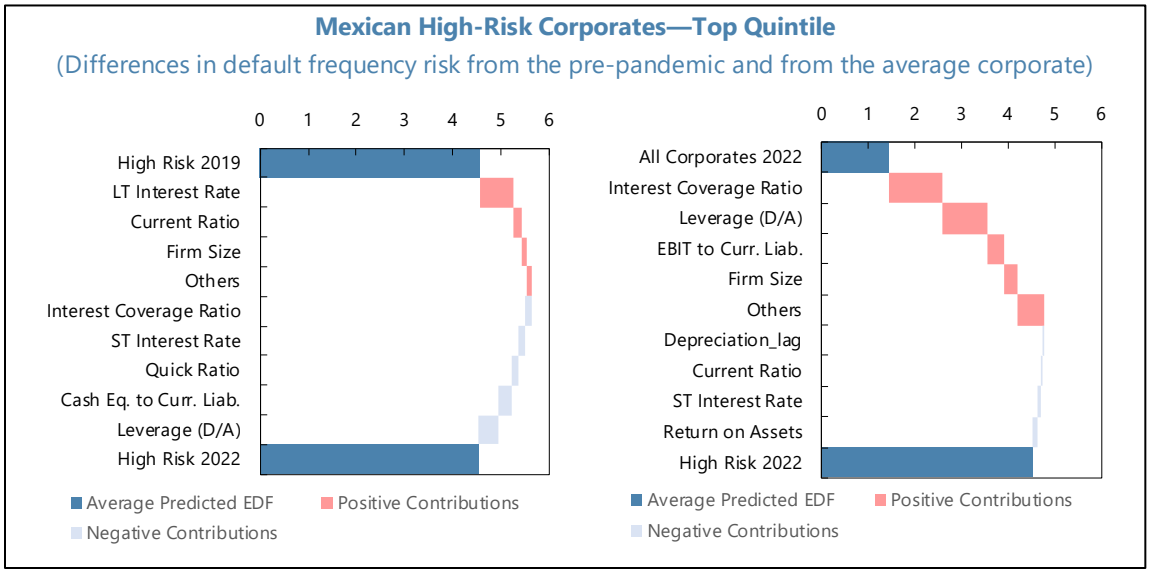
D. Evolution of Corporate Sector Risk

14. Risk indicators deteriorated across the board in 2020, partially offset by interest rates. The estimated model can be used to better understand the key drivers of risk evolution in Mexican corporates. Corporate-specific Shapley values are additive and can be averaged to explore the evolution of corporate sector risks through the pandemic. Waterfall charts present the key variables contributing to the rise and fall in risks. In 2020, for example, risks rose dramatically on elevated leverage and deteriorating interest coverage ratios. General financial conditions, captured by the IMF's financial conditions index and its lag, further contributed to corporate challenges. Long-term interest rates actually eased in Mexico in 2020 when measured as a gap to a long-term trend which is affected by the period of tight monetary policy in the preceding years, and contributed to lower corporate risks.

15. Risks since 2020 have eased as profitability recovered but tighter monetary policy is impinging on further improvement. As general financial conditions recede further in the rear-view mirror, firm fundamentals have helped ease risks. Interest coverage ratios improved on lower interest rates and a resumption of revenues. ICRs improved again in 2022, and leverage with them, resulting in another substantial risk reduction. At the same time the long-term interest rate is now exerting a countervailing influence. With the pandemic fading further from view, high interest rates will continue to exert an aggravating factor to corporate default risk in 2023 and until domestic and global conditions can ease.



16. Risks rose in 2022 for the highest-risk quintile of firms, bucking the trend. The emergence of a high-risk pocket among firms is reflected in the annual Moody's EDF data and, even more so, in the model-based aggregates. In the model, the top 20 percent of firms now see risks close to where they were at the time of the pandemic. For these firms, interest rates are putting pressure on interest coverage ratios more forcefully, while liquidity is also under pressure. Relative to the average Mexican corporate in the sample, these firms see similar benefits and costs from the macro environment (small contributions in absolute magnitude) but have poor ICRs, leverage, and liquidity, and tend to be smaller as well.



E. Evolution of Corporate Sector Risk

17. While risks have eased through the recovery, the costs of high interest rates are having an impact. For the average Mexican corporate, interest rates have reduced but not fully offset factors bringing risks down in 2022. Some of the beneficial trends will ease in 2023, so interest rate

risks merit ongoing scrutiny. They are already a substantial problem, however, for high-risk Mexican firms, whose risks have not declined with the rest of corporates over the recovery period. Some of these companies may simply have had bad years for revenues, but for many interest payments are already becoming unmanageable. These firms could be a harbinger for other firms with longer debt maturities that will be rolled over in the medium term. Distressed firms could soon start impinging on growth and employment as well as banking sector health, where they will have an outsized effect. It will be important to monitor these developments carefully and consider interventions as necessary if a higher-for-longer scenario materializes.

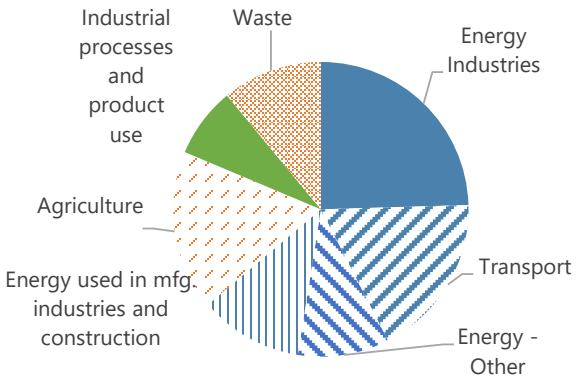
Annex VI. Mexico's Energy Plans and Climate Mitigation Policies[1]

Energy and climate change policies are closely intertwined. Global climate mitigation policies are reshaping the energy demand mix, and energy is at the origin of two thirds of emissions in Mexico. And as energy production and distribution are essentially done by SOEs in Mexico (Pemex, CFE), the government is playing a central role in shaping the energy policy. This annex presents (i) the energy and climate change context (ii) a closer look at economic risks related to climate change, including disaster risks and risks on fossil fuel production, especially for Pemex and (iii) climate and energy related policies to achieve Mexico's NDCs.

A. Context: Climate Change and Energy in Mexico

1. Energy use is at the origin of almost two thirds of greenhouse gas[2] (GHG) emissions in Mexico. Energy industries themselves emit 25 percent of greenhouse gas emissions, while energy used by other sectors—predominantly transport—amount to another 39 percent. This share has been broadly stable over time. The share of agricultural emissions has declined from 25 percent in 1990 to 18 percent in 2021 reflecting the relative decline of the sector while the contribution of waste increased from 9 percent in 1990 to 11 percent in 2021. The large share of energy in GHG emissions is not specific to Mexico and is broadly similar for the OECD average for instance. Given the disproportionate role of energy in these emissions, a deep structural change in that sector is needed to curb climate change.

Greenhouse Gas Emissions by Sectors, 2021



Sources: UNFCCC; EDGAR; FAO; IMF staff calculations.
Note: Total GHG Emissions Excluding Land-Use and Land-Use Change and Forestry.

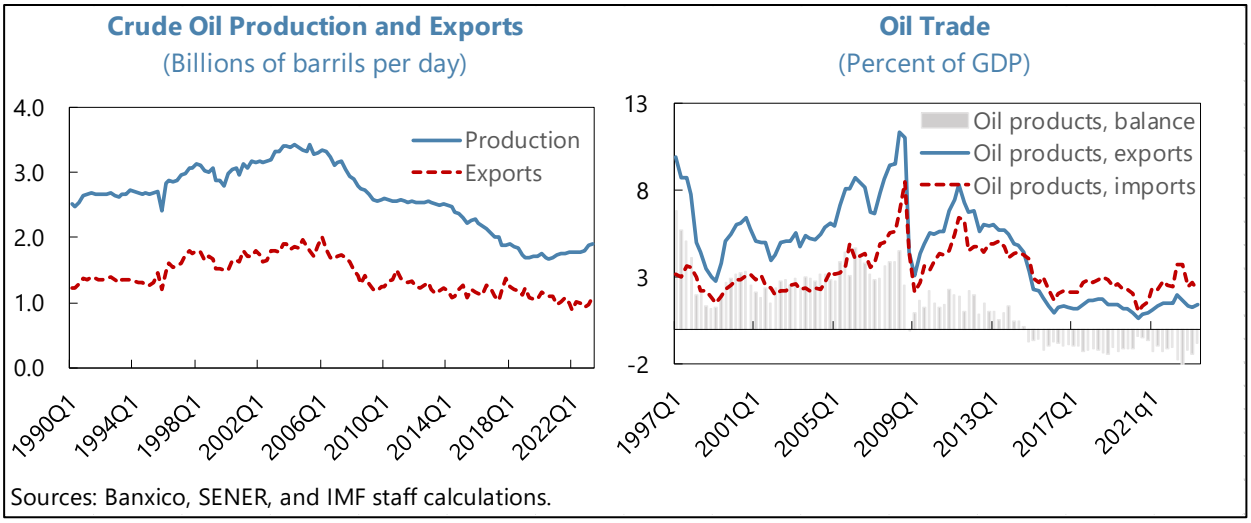
2. Turning to fossil fuel production in Mexico, oil stands out as relatively more important. The magnitude of oil production volume is broadly comparable to its internal consumption. By contrast, natural gas production, which has historically been less important amounts to about 15 percent of internal demand. Likewise, Mexico is net importer of coal with imports being more than 19 times larger than exports in 2019.

3. However, oil production and exports have declined sharply since the 2000s. Thanks to new field discoveries in the 70s, Mexico crude oil production increased sharply around 1980. As historical fields matured, crude oil production and exports volumes peaked in 2005 and 2006

[1] Prepared by Jean-Marc Fournier (WHD) and Sneha Thube (RES).

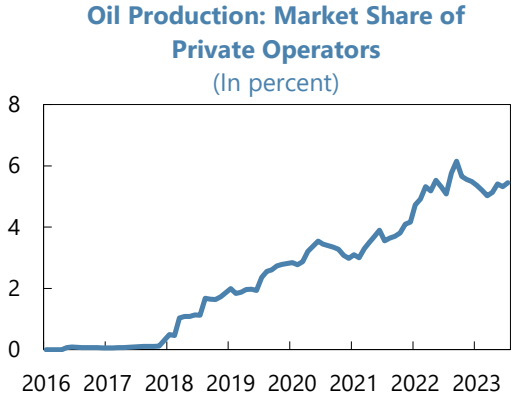
[2] GHG emissions in this paper excludes the GHG absorption from Land-use and Land-Use Change and Forestry (LULUCF) emissions.

respectively. Oil export revenues peaked slightly later in 2008 buoyed by record high oil prices. Since then, the decline has been significant, with current production about 40 percent below its peak level. The 2022 crude oil and condensate reserves were at around 6 billion of barrels and these were about 60 percent below their 2006 level, albeit these are ticking up slightly in first half of 2023.[3] Also, Mexico imports refined products which are more expensive, as a result the oil balance is now negative of 1-2 percent of GDP, against a positive balance around 2-4 percent of GDP in the 2000s.



Sources: Banxico, SENER, and IMF staff calculations.

4. Government involvement in the energy sector is high as a shareholder and as a regulator. The state-owned oil company, PEMEX, controls about 95 percent of oil production. The state-owned electricity company *Comisión Federal de Electricidad* (CFE) is operating the grid in addition to a dominant share of electricity production. Further, the government has paused the 2013 energy reform which was opening energy markets to private and international competitors. The authorities halted oil and gas auctions, increased its regulatory involvement, with actions to favor Pemex include easing revocation of licenses to the private sector, imposing onerous storage capacity constraints on competitors, and declaring Pemex the operator of an oil field that spanned private and public claims. The retail fuel price mechanism ensures that fuel inflation is aligned with consumer inflation. It comprises a flexible excise tax replaced by an outright subsidy when oil prices are high. For CFE, actions first included privileging CFE's own brown energy generation over cheaper green energy sources and stalling the granting of permits for new green installations. Further, the latest electricity law has replaced auctions by nonmarket-based policies, with regulatory power given to the CFE. This has created conflicts of



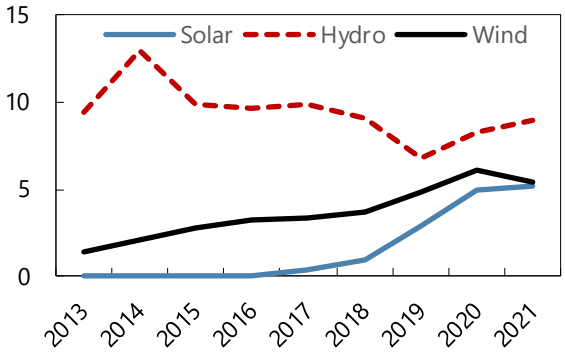
Sources: PEMEX, and IMF staff calculations.

[3] Reserves according to the rule 4-10 of Regulation S-X.

interest and disrupted contracts signed under the 2013 reform. While these actions partially reversed the 2013 energy reforms, Parliament rejected the change in the constitution needed for a full reversal, and private operator have been able to acquire a modest market share in oil production.

5. Potential for renewable energy is high. While about four fifth of electricity and heat is produced with fossil fuels, predominantly with gas, production of wind and solar electricity production is rising. Further, National solar PV capacity potential could generate about 50,000 TWh/yr or more than 100 times the electricity demand and wind capacity potential could generate about 15 times the electricity demand according to NREL Renewable Energy Data. This potential spreads across the country, which could help containing the size of necessary related grid investments.

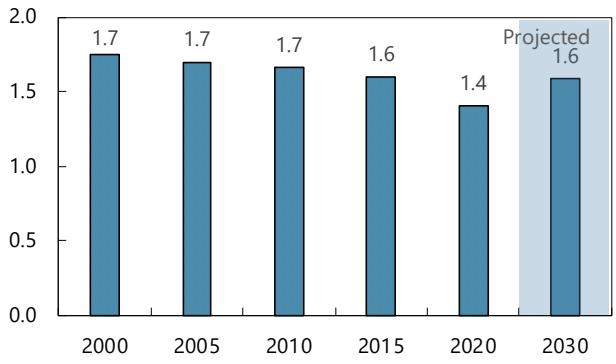
Share of Electricity and Heat Generation from Selected Renewable Energy Sources
(In percent)



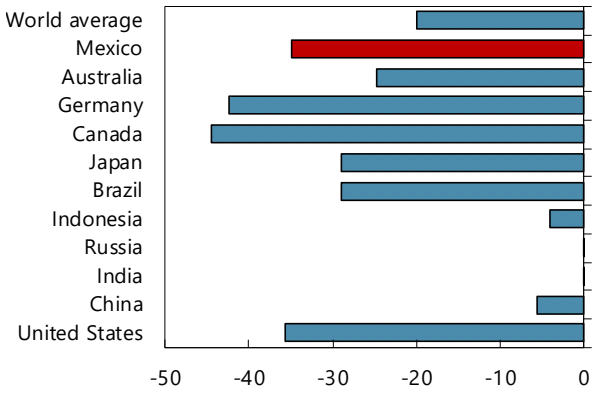
Sources: International Renewable Energy Agency (IRENA); and IMF Staff Calculations.
Note: Hydro as hydropower excluding Pumped Storage.

6. In November, the authorities tightened the unconditional CO2 emission reduction target from 22 to 30 percent by 2030, and the conditional target from 36 to 40 percent. Mexico's target is a meaningful contribution to the global mitigation effort as this is a relatively large country at the origin of 1.4 percent of global emissions as of 2020.

Mexico Projected GHG Emissions 1/
(Percent of global emissions)



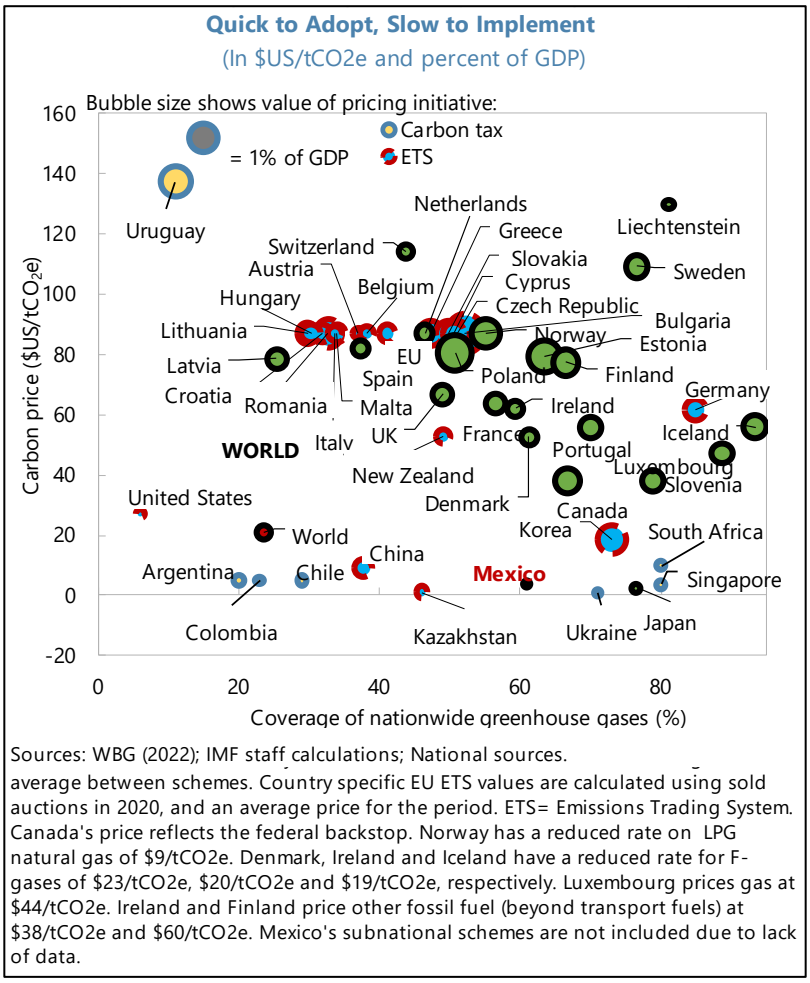
Change in Emissions Needed to Achieve NDC 2/
(Percent relative to baseline)



Sources: UNFCCC; EDGAR; FAO; IMF staff calculations.
1/ Total GHG Emissions Excluding Land-Use and Land-Use Change and Forestry. 2030 is projected from 2021 onward using CPAT.
2/ Right panel reports the average of the conditional and unconditional targets.

7. As for policies to meet this target, the government has been an early adopter of the carbon tax and is setting up an ETS, but carbon prices remain modest. The federal carbon tax levied on emissions in excess of the emission rate of natural gas is stable at 3.3 USD/ton, while the

ETS is at a pilot phase and is not expected to generate revenues before 2025. A rising number of states are complementing this with local carbon taxes, but this represents modest effective taxation rates so far. Priorities rather include combating deforestation and raising the share of electric vehicle sales (to 50 percent by 2030), with an exemption of the new vehicle sales tax, a progressive levy of 2 to 17 percent of the vehicle value. The authorities have launched a plan to foster green finance, and initiated efforts to issue green bonds to support green public spending projects. Pemex has initiated a carbon emission restraint plan with reduction of gas flaring, and scaling up cogeneration.



Sources: WBG (2022); IMF staff calculations; National sources.
average between schemes. Country specific EU ETS values are calculated using sold auctions in 2020, and an average price for the period. ETS= Emissions Trading System. Canada's price reflects the federal backstop. Norway has a reduced rate on LPG natural gas of $9/tCO2e. Denmark, Ireland and Iceland have a reduced rate for F-gases of $23/tCO2e, $20/tCO2e and $19/tCO2e, respectively. Luxembourg prices gas at $44/tCO2e. Ireland and Finland price other fossil fuel (beyond transport fuels) at $38/tCO2e and $60/tCO2e. Mexico's subnational schemes are not included due to lack of data.

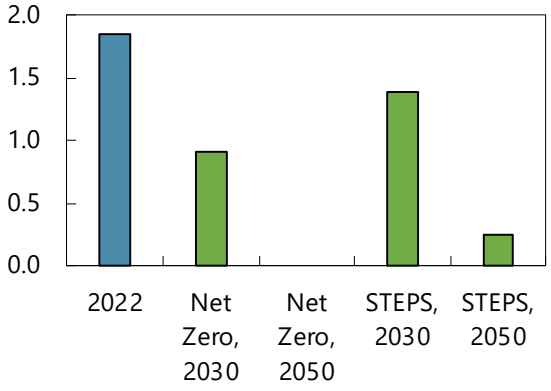
B. Climate-Change-Induced Risks

8. Brown investments in Pemex create the risk of accumulating stranded assets in a decisive global mitigation scenario. In the International Energy Agency (IEA) global scenario reaching net-zero emission by 2050, global oil production would shrink by almost one fourth from 2022 to 2030, and the decline would be even steeper in the subsequent years. This could be consistent with a halt in oil investment aimed at increasing capacity, so that oil production would decline by 7 percent per year (Boer, Pescatori and Stuermer, 2023). Should the transition be driven by demand-side policies, oil price swings can be large as supply is relatively inelastic in the short run. Boer, Pescatori and Stuermer (2023) find a risk that oil prices could go down to USD 25 to 30 by

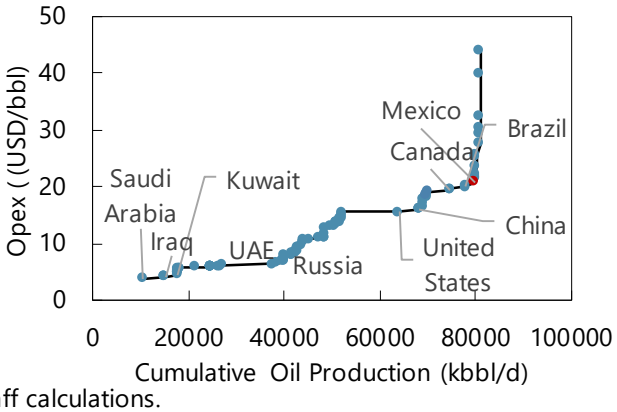
2030 in such a scenario, and further decline to USD 15 by 2050. While these scenarios are indicative, it is worth noting that oil prices in 2022 USD reached lows around USD 20 in 1998-99. Further, the implementation of climate mitigation policies geared to meet Mexico's own NDC target would also depress demand for oil production in Mexico.

9. Mexico is at risk because of higher production costs in off-shore fields than in on-shore fields of the Persian Gulf region. At WTI prices of US$80 per barrel, about one sixth of Mexico's current oil fields would be non-economic when including the profit-sharing tax and sunk investment costs. As time passes both the cheapest and the most expansive fields are expected to be depleted first, so that by 2030 oil production costs would be more concentrated around USD 25 to 35 per barrel when abstracting from sunk investment costs. In a net-zero scenario driven by demand-side policies, the cheapest onshore fields such as in the Persian Gulf region would thus gain market shares while most off-shore fields including those on Mexico would be at higher risk of becoming non-economic (Boer, Pescatori and Stuermer, 2023). In an illustrative net-zero scenario in which oil price would go down to USD 30, oil production would be divided by 2, and revenues by 5. In the milder Stated Policies Scenario (STEPS) from the IAE reflecting existing policies and those under development, oil price would decline to USD 68, oil production in Mexico by one fourth, and real oil revenues by one third, still putting oil plans at risks. Conversely, risks may be even larger under a delayed action scenario in which needed policies would be sharper (Laliotis and Lamichhane, 2023). Further, by 2050, the net zero scenario from the IEA suggests that global oil production could be about one fifth of current production, so that oil production prospects in Mexico would become very limited.

Production Prospects under Demand-side Climate Mitigation Scenarios 1/
(Millions of barrils per day)



Operation Expenditures and Oil Production, 2022
(In USD/bbl and kbbl/d)



Sources: CNH; Boer et al. (2023); Rystad; and IMF staff calculations.
1/ CNH and Boer, Lukas, Andrea Pescatori and Martin Stuermer. 2023. Not All Energy Transitions Are Alike: Disentangling the Effects of Demand and Supply-Side Policies on Future Oil Prices, IMF Working Paper No. 23/160.

10. Mexico would be at risk as well in the case of insufficient global climate mitigation given its exposure to natural disasters. Frequency of high-intensity tropical cyclones, floods and

droughts are expected to increase with global warning (Knutson et al., 2020; Tabari, 2020; Pokhrel et al., 2021). Their economic impacts can be large in Mexico. Considering cyclones and floods, Dolk, Laliotis and Lamichhane (2023) find that in a high-emission scenario, a sequence of adverse cyclones and floods could reduce GDP by 2 percentage points. Banxico (2022) estimates that severe drought as those that happened in about 15 percent of municipalities in 2021 can cost about 0.5 percentage points of GDP, and such droughts would become more frequent in case of global warming. The authorities have established an adaptation plan with 27 lines of action in 5 themes: (i) prevention of adverse effects on population; (ii) resilience of production including food; (iii) biodiversity and eco-system protection; (iv) integration of water management; and (v) protection of strategic infrastructure and heritage.

C. Climate Mitigation Policy Options

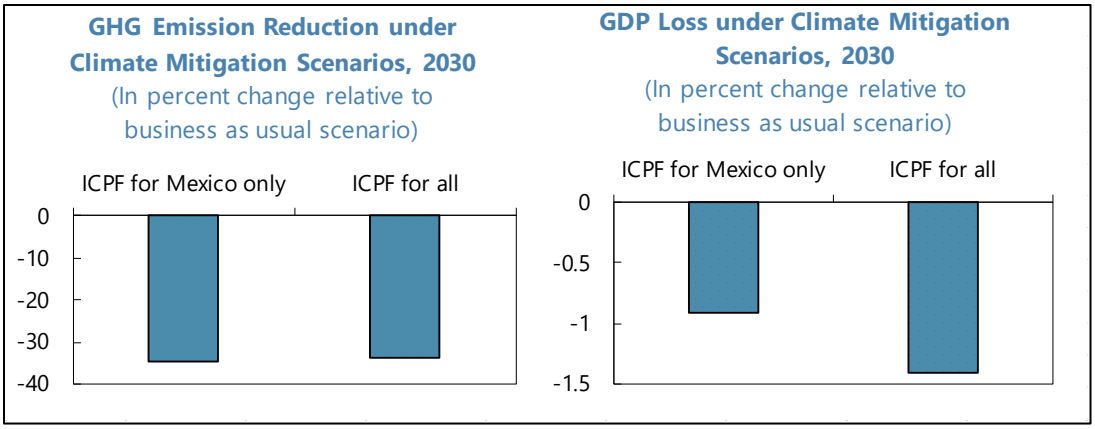
11. A model-based analysis illustrates that scaling up of the carbon price would be instrumental in meeting the NDC target. The IMF-ENV global Computable General Equilibrium (CGE) model provides quantitative insights on medium to long term impacts of such policies (see section D). This is using the 2022 NDC update baseline for emissions, with 2013 as the reference year for policies, thus excluding the federal carbon tax of about USD 3.3 dollar per ton introduced in 2014 and the more recently introduced sub-regional carbon pricing initiatives like those in Zacatecas, Queretaro, Yucatan and Durango.[4] Global decarbonization efforts are modelled as proposed under the International Carbon Price Floor (ICPF) proposal (Parry et al. 2021). Effects of national and global decarbonization are isolated by modeling two policy scenarios, (i) a broad-based carbon price floor only in Mexico (*ICPF for Mexico only*) while rest of the world continues with current policies only, and (ii) a carbon price floor globally (*ICPF for all*) modelled here as each country implementing either the ICPF floor or their NDC carbon price commitment, whichever is larger. In line with the ICPF proposal, Mexico as a middle-income country gradually implements a carbon price floor of USD 50 per ton of CO2-eq emissions by 2030 and carbon revenues are assumed to reduce distortionary wage taxes[5]. A carbon price floor unilaterally implemented only in Mexico reduces GHG emissions by 34 percent relative to baseline by 2030 and keeps Mexico on track to reach its 2030 NDC target[6]. This emission reduction entails a modest output cost of 0.9 percent of GDP level by 2030.[7]

[4] Using an alternative baseline with current carbon tax policies as a baseline would not induce material differences.

[5] This means that the policy is budget neutral. Previous IMF work illustrates the sensitivity of GDP results to the choice of recycling mechanism used to inject carbon revenues back in the economy (see Black et al. (2022)).

[6] In case the carbon tax instrument cannot be scaled up to $50/tCO2-eq by 2030, other policy instruments that are equivalent to this carbon price could also deliver the same emission reduction however, the economic costs could differ (see Chateau et al. (2022)).

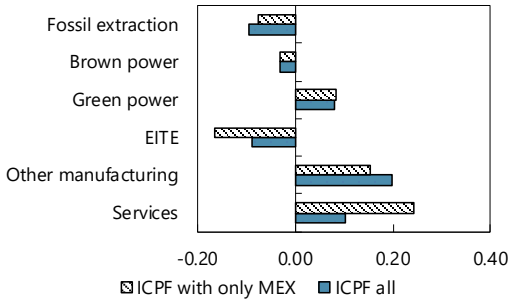
[7] These results are inherently surrounded by uncertainties, such as those related to behavioral responses, technology and innovation and policy design and instruments which may affect output in transition scenarios. An alternative modeling exercise carried by Black et al. (2021) for instance suggested that a higher carbon tax may be needed to achieve such a mitigation outcome. They also found that marginal output effects could be slightly positive.



12. Scale of global decarbonization has cost spillovers in Mexico through changes in international fossil prices. Under internationally coordinated mitigation action, as modelled in the second policy scenario, effects in Mexico differ. In such a scenario, higher global decarbonization reduces the global reliance and therefore demand for fossil commodities and imposes a downward pressure on world prices of crude oil and natural gas. As a result, countries exporting these fossils face an additional cost via reduction in fossil revenues and therefore, in Mexico the output cost when all countries are decarbonizing is 1.4 percentage point of GDP relative to baseline by 2030. The emission reduction in Mexico would be marginally smaller as a slightly lower oil price would dampen the carbon price effect. Nonetheless, coordinated global mitigation maintains Mexico on its NDC goal.

13. Mitigation policies should be complemented by active labor market policies to facilitate job transitions as workers are displaced from fossil-fuel industries. Model-based simulations with very few labor mobility frictions illustrate the scope of the needed reallocation in employment from carbon-intensive to low or no-carbon sectors. Impacts on total employment in Mexico across the two policy scenarios are similar. However, differences are seen across sectoral impacts. In the power generation sector, employment increases by about 32 percent in both scenarios. This is accompanied by a shift of employment from brown to green power sectors and implies an increase of about 0.1 percent in the initially low share of labor employed in green power along with a small reduction in that of brown power sectors. Employment share in the fossil extraction sectors also falls by about 0.1 percent relative to baseline. The labor shares of energy intensive and trade exposed (EITE) sectors sees the largest reduction when Mexico unilaterally follows mitigation policies because these sectors see losses in competitiveness owing to increased producer prices for energy commodities with a carbon price. However, with all countries following ICPF the losses are partly offset because trading partners also see an increase in energy prices.

Employment Reallocation
(Changes in shares in percentage points, deviation from BaU)



Sources: IMF-ENV model, and IMF staff calculations.
Note: EITE=Energy-Intensive and trade exposed industries.

Differently, the share of labor employed in service and non-EITE manufacturing sectors increases under carbon pricing. Chateau, Bibas and Lanzi (2018) discuss the needed education and training policies to enable such a swift change, which is key to preserve social cohesion as low- skilled workers will generally be more affected by climate mitigation policies.

D. IMF-ENV Model Description

14. The model is a recursive dynamic neo-classical, global, general equilibrium model, built primarily on a database of national economies and set of bilateral trade flows. The central input of the model is the data of the GTAP V10 database. The database contains country-specific input-output tables for 141 countries and 65 commodities and real macro flows. The database also represents world trade flows comprehensively for a given starting year. The currently used version 10 is based on data from 2014. The model describes how economic activities and agents are inter-linked across several economic sectors and countries or regions. The model is based on the activities of the key actors: firms, households, and markets. Firms purchase inputs and primary factors to produce goods and services. Households receive the factor income and in turn demand the goods and services produced by firms. Markets determine equilibrium prices for factors, goods, and services. Frictions on factor or product markets are limited, except as described below. Only real economic flows are considered in the model; in addition, heterogeneity of firms and households are not considered.

15. The model is solved as a sequence of comparative static equilibria. The factors of production are exogenous for each time step and linked between time periods with accumulation expressions, like the dynamic of a Solow growth model. Output production is implemented as a series of nested constant-elasticity-of-substitution (CES) functions to capture the different substitutability across all inputs. International trade is modeled using the so-called "Armington" specification that posits that demand for goods are differentiated by region of origin. This specification uses a full set of bilateral flows and prices by traded commodity. In contrast to intermediate inputs, primary factors of production are not mobile across countries.

16. While the capital market is characterized by real rigidities, the labor market is not. One major characteristic of the model is to feature vintage capital stocks in such a way that a firm's production structure and a firm's behavior are different in the short and long run. In each year, new investment is flexible and can be allocated across activities until the return to the "new" capital is equalized across sectors; the "old" (existing) capital stock, on the contrary, is mostly fixed and cannot be reallocated across sectors without costs. Consequently, short run elasticities of substitution across inputs in production processes (or substitution possibilities) are much lower than in the long run and make capital adjustments more realistic. In contrast, labor (and land) market frictions are limited: in each year, labor (land) can shift across sectors with no adjustment cost until wages (land prices) equalize; and the labor (land) supply responds with some elasticity to changes in net-of-taxes wage rate (land price).

17. The model also links economic activity to environmental outcomes. Emissions of greenhouses gases and other air pollutants emissions are linked to economic activities either with fixed coefficients, like for emissions from fuel combustion, or with emission intensities which decrease (nonlinearly) with carbon prices—Marginal Abatement Cost (MAC) curves. This latter case applies to emissions associated to non-energy input uses (e.g., N2O emissions resulting from fertilizer uses) or to output processes (like CH4 emissions from waste management or CO2 emissions from cement manufacturing). In the very long run, the model may overestimate the cost of decarbonization, since it does not consider radical technology innovations that could materialize at this longer horizon (hydrogen, second generation of nuclear and biofuel technologies, carbon capture and storage technology). While some of these new technologies are at an experimental stage, it is difficult to include them in the model now due to lack of information about the future costs of these technologies if they were deployed on an industrial scale.

18. The model can be used for scenario analysis and quantitative policy assessments. For scenario analysis, the model projects up to 2030 an internally consistent set of trends of all economic, sectoral, trade-related, and environmental variables. Environmental variables are greenhouses gases and air pollutants. In this context, the model can be used to analyze economic impacts of various drivers of structural changes like technological progress, increases in living standards, changes in preferences and in production modes. For scenario analysis, a set of external projections are generally required. A second use for the model is quantitative economic and environmental policy assessment for the coming decades, including scenarios of a transition to a low carbon economy. In this case the model assesses the costs and benefits of different sets of policy instruments for reaching given targets like GHGs emission reduction.

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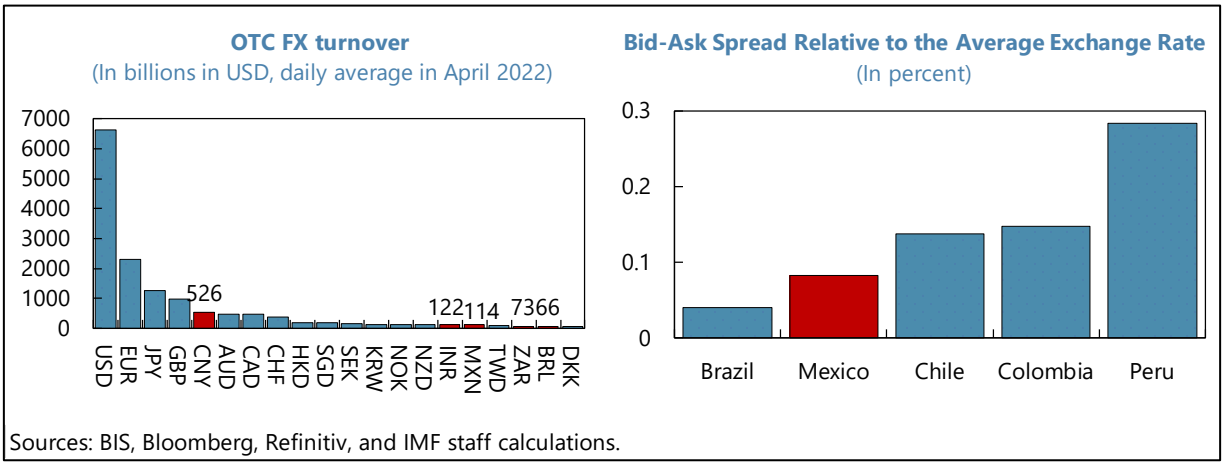
Annex VII. Considerations for FX Interventions Under the Integrated Policy Framework[1]

A. Context

1. The exchange rate remains the key shock absorber for Mexico. The Mexican peso has been freely floating for nearly three decades. It was the sixteenth most traded currency in the world in 2022 and the third-most traded currency among emerging market (EM) economies, behind the Chinese renminbi and the Indian rupee. It is supported by Mexico's strong economic fundamentals; lately, it has also benefited from being a carry trade currency, due to Mexico's relatively high interest rates and strong economic linkages with the U.S. The FX market is deep, as evident in the tight bid-ask spread, with the peso's spread below the 25th percentile of EMs.



Sources: BIS, Bloomberg, Refinitiv, and IMF staff calculations.

2. Foreign exchange interventions (FXI) have been rarely used and have not been aimed at managing the exchange rate. Under the free-floating exchange rate regime, FXI has been occasionally conducted to (i) provide liquidity and restore proper functioning of the FX market during market stress or (ii) accelerate or slow the accumulation of international reserves,[2] while not aiming to target a specific level of the exchange rate. In recent years, the use of FXI has been limited to a few episodes of extreme volatility, with amounts small compared to market turnover. U.S. dollar auctions were conducted at times of excessive volatility (October 2008 to April 2010: US$30 billion, November 2011 to April 2013: US$0.6 billion, December 2014 to February 2016: US$28 billion). In most of these auctions, the auctioned amount was prespecified to maintain floating exchange rates. Moreover, amid the global financial crisis (GFC, February 2009), Banxico intervened in the FX spot market through outright sales of U.S. dollars to supply liquidity (US$1.8 billion). A swap line with the

[1] Prepared by Tomohide Mineyama (SPR).

[2] From 1996 to 2001, a "put option" mechanism was used where the central bank sold U.S. dollar put options to the market through monthly auctions. The mechanism was also used after the global financial crisis (2010-11) to restore reserves. On the other hand, from 2003 to 2008, in order to slow reserve accumulation, the central bank sold half the international reserves accumulated during the previous quarter with pre-announced daily amounts to be auctioned.

Federal Reserve provided an additional U.S. dollar liquidity to banks through a credit auction by Banxico (April 2009, US$3.2 billion). In February 2017, the Foreign Exchange Commission introduced a mechanism for auctions of non-deliverable forwards (NDF) for up to US$20 billion to address heightened market volatility, with a total of US$5.5 billion allotted. The NDF are settled in local currency, and thus do not affect international reserves. During the period of severe market stress immediately after the outbreak of the COVID-19 pandemic, the peso initially depreciated against major currencies, helping facilitate the adjustment to the shock. Additionally, Banxico conducted limited FXI (US$2.0 billion) using the NDF mechanism during this period, while providing U.S. dollar liquidity to the domestic financial system using the swap line with the Federal Reserve. In all these episodes, relevant information about interventions was disclosed on the Banxico website in a transparent manner. In August 2023, with the assessment that the FX market conditions had returned to adequate levels of liquidity and depth, the Foreign Exchange Commission decided to gradually reduce the existing amount of the NDF mechanism. The full amount is expected to be unwound by the first quarter of 2024.

B. Considerations for FXI under the IPF

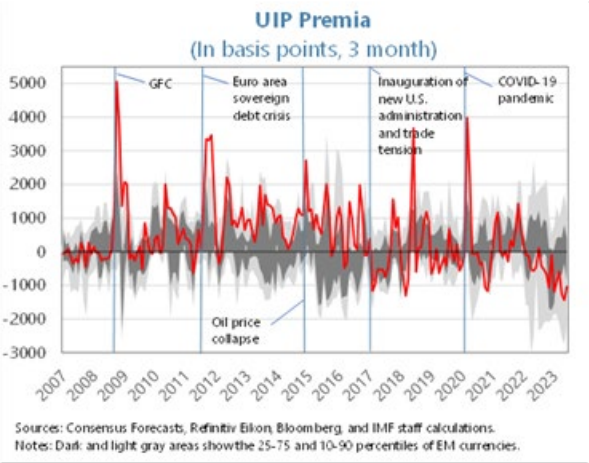
3. The Fund's Integrated Policy Framework (IPF) provides an organizing structure for considering an optimal combination of multiple policy tools. Justification for the use of multiple policy tools depends on the nature of the shock, country characteristics, and economic conditions at the time of the shock in order to achieve macroeconomic and financial stability. As such, FXI might complement or be weighed against other available policy options, including monetary policy, macroprudential policy, and capital flow management. To this end, the IPF adopts a frictions-based approach and identifies three "use cases" for FXI: (a) to address destabilizing premia from arbitrage frictions in shallow FX markets; (b) to counter financial stability risks from FX mismatches; and (c) to help preserve price stability when exchange rate changes risk de-anchoring inflation expectations. It is worth noting that there is an overlap between advice based on the IPF and disorderly market conditions (DMCs), where the use of FXI is justified.[3] The conditions generated by the interaction of the relevant shocks and frictions can be severe enough to constitute DMCs.

4. The IPF does not identify material frictions that would warrant regular FXI in Mexico. Staff assesses the three use cases as below:

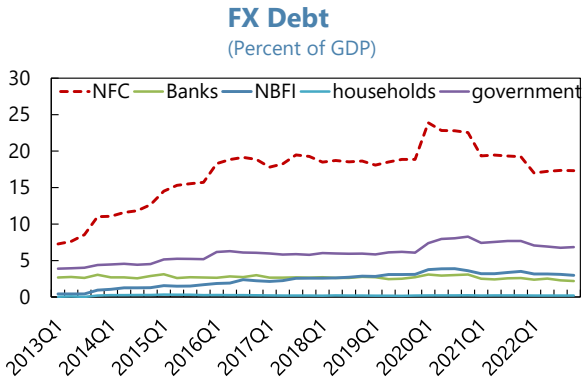
- *Destabilizing premia.* In a shallow FX market, surges of inflows and outflows and/or changes in investors' risk aversion could result in excessive and inefficient exchange rate fluctuations, undermining the role of adjustments through exchange rate changes. These fluctuations would materialize as volatile fluctuations in the uncovered interest rate (UIP) premia. Given the depth and liquidity of Mexican peso's FX market, UIP premia have remained in the interquartile range of the EM currencies most of the time. The premia did indeed jump in several episodes, including the GFC (2008-09), euro area sovereign debt crisis and subsequent turmoil in EMs

[3] See "Modernizing the Legal Framework for Surveillance—An Integrated Surveillance Decision," IMF Policy Paper, International Monetary Fund.

(2011-12), oil price collapse (2014-16), heightened volatility around the inauguration of a new U.S. administration and ensuing trade tension (2017-18), and onset of the COVID-19 pandemic (2020). These disruptions presumably reflect global shifts in market sentiments, as well as shocks to fundamentals, which might have been exacerbated by cross hedges of global investors in the context of a freely accessible nature of the peso. As noted above, the authorities conducted limited FXI in these episodes to provide liquidity to the market and restore the pricing mechanism. It is also notable that these surges did not persist and reverted to pre-shock levels fairly quickly. While the peso has appreciated over the past years (SR ¶12), observed premia do not exhibit excessive fluctuations, supporting the assertion that this development is supported by interest rate differentials with the U.S.



- *Balance sheet FX mismatch.* FX mismatches on balance sheets could be another source of financial stability risks, as a sharp exchange rate depreciation increases unhedged borrowers' debt burden. That said, in Mexico, these mismatches are generally small and well-covered by natural and financial hedges. Private sector's FX debt is concentrated in the non-financial corporate sector, while households' and financial institutions' FX debt is relatively small. Corporate sector's debt consists mostly of medium- and long-term maturities, and exchange rate risks are mitigated by natural and financial hedges by firms linked especially to the U.S. and their limited financial activities. In fact, the corporate sector has remained resilient over the past years, as evident in the stable spreads on dollar-denominated corporate bonds (SR Figure 8). This has been supported by robust direct and portfolio investment inflows despite high uncertainty (SR Figure 5). The banking sector is well capitalized and liquid and assessed to be resilient to large shocks. Banks' FX risks are contained under (ex-ante) macroprudential policy measures, including a limit on the net open position in foreign currency relative to capital and liquidity requirements to cover potential FX net outflows in different horizons. Risks associated with public FX debt is mitigated by its long maturity, as well as prudent fiscal and debt management by the government.



Sources: BIS, and IMF staff calculations.

- *De-anchoring of inflation expectations*. Under Banxico's inflation targeting framework and the peso's fully flexible exchange rate system, inflation expectations are anchored via policy rate changes and public communications of the central bank. As around 80 percent of imports goods

are intermediaries, most of which are for manufacturing processes associated with exports, exchange rate passthrough to domestic inflation and inflation expectations is not excessive. Despite the sharp rise in the actual inflation rate after the COVID-19 pandemic, long-run inflation expectations, measured by both market-based and survey-based indicators, remained well anchored (SR ¶26, Figure 4), in turn contributing to containing inflation. As such, the policy rate remains the key instrument to anchor inflation expectations.

5. External buffers remain more than sufficient to support credible and effective policy responses in the face of shocks, strengthening market confidence. Mexico's international reserves have remained adequate, with the Fund's Assessing Reserve Adequacy (ARA) metric around 120 percent, well above the 100 percent of adequacy level. The Fund's Flexible Credit Line (FCL) continues to provide an additional buffer and signals very strong economic fundamentals and sustained policy track records. These buffers increase policy space to respond to shocks, which in turn helps avoid disorderly shifts of market sentiments at the time of market stress.

6. While identifying the nature of shocks and frictions requires sound judgement, use cases for FXI under the IPF remain limited to exceptional circumstances in line with the Mexican authorities' policy framework. Policy makers would need to scrutinize the best information available, with judgement, to assess the impact of shocks in the context of frictions at that time. Given the limited IPF frictions identified at this juncture, it would be critical to monitor if large shocks increase such frictions. Consistent with the fully flexible exchange rate regime and inflation targeting framework, the use of FXI would be limited to the cases in which there is a clear disruption in the proper functioning of the FX market. In this regard, market liquidity and depth should be carefully monitored through various indicators, including bid-ask spreads, market volatility and skewness, and UIP premia, should shocks materialize. The policy rate should continue to be the primary instrument to anchor inflation expectations.

Annex VIII. Leveraging the Anti-Money Laundering Efforts to Support Anti-Corruption Efforts[1]

A. Interaction between Mexico's AML and AC Frameworks

1. Corruption and money laundering (ML) are symbiotic as they tend to co-occur. The presence of one tends to create and reciprocally reinforce the incidence of the other.[2] The strongest link between the two crimes is the need for corruption proceeds to be laundered by the criminals, which implicates the AML framework. Some of the AML measures—such as the enhanced due diligence measures applicable to Politically Exposed Persons (PEPs) that pose high risk for corruption and the filing of Suspicious Transaction Reports (STRs) by reportable entities—could, in turn, be helpful in detecting and preventing corruption in the first place. Furthermore, corruption could undermine the proper functioning and effectiveness of the AML/CFT framework (e.g., independence and governance of AML/CFT institutions). It is therefore important that frameworks aimed at tackling corruption and money laundering work in tandem to tackle financial crimes and limit their impact on the macroeconomy to help ensure a sustainable and inclusive economic growth and promote a conducive investment environment.

2. The 2020 National Risk Assessment on ML and terrorism financing ranked laundering of corruption proceeds among the highest risks in Mexico. The preliminary results from the most recent update to the National Risk Assessment confirm that corruption remains among the highest ML threats. Therefore, it is particularly relevant in the context of Mexico to further refine the understanding of risks of laundering of domestic corruption to highlight the key sectors at risk and the macroeconomic impact of those crimes. Such understanding of risks of corruption and laundering of its proceeds could help better inform policy determination under the AML and AC frameworks and ensure their better integration and complementarity.

3. The recognition of corruption as a substantial problem in Mexico led to the 2015 reforms. The National Anti-Corruption System (Sistema Nacional Anticorrupción or SNA) was introduced following amendments to the constitution, along with a package of new laws and legal amendments that provide for the regulatory and institutional framework in the fight against corruption.[3] The SNA is coordinated by the SNA Coordination Committee comprising seven

[1] Prepared by Adrian Wardzynski, with research support from Alessandro D'Amelio (both LEG).

[2] Countries that struggle to tackle take decisive actions against corruption usually have lower levels of compliance with AML standards. See C. Verdugo, Compliance with the AML/CFT International Standard: Lessons from a Cross-Country Analysis, IMF Working Paper, WP/11/177.

[3] In addition to changes to Article 113 of the Constitution, the AC legal package included the General Law on the National Anti-Corruption System (*Ley General del Sistema Nacional Anticorrupción*), the General Law on Administrative Responsibilities (*Ley General de Responsabilidades Administrativas*), the Law of Control and Accountability of the Federation (*Ley de Fiscalización y Rendición de Cuentas de la Federación*), amendments to the Organic Law of the Federal Court of Administrative Justice (*Ley Orgánica del Tribunal Federal de Justicia Administrativa*), amendments to the Organic Law of the Attorney's General Office (*Ley Orgánica de la Fiscalía General de la República*), amendments to the Federal Penal Code (*Código Penal Federal*), amendments to the Organic Law of Federal Public Administration (*Ley Orgánica de la Administración Pública Federal*).

national institutions. The Financial Intelligence Unit (FIU) and the AML supervisors, i.e., the National Banking and Securities Commission (Comisión Nacional Bancaria y de Valores or CNBV) and the tax authority (Servicio de Administración Tributaria or SAT), are indirectly represented at the Committee through the Ministry of Public Administration (MPA).

4. Policies of the SNA could reflect better the high risk of laundering of proceeds of corruption. The SNA Coordination Committee approved the National Anti-Corruption Policy (Prioridades e implementación de la Política Nacional or PNA) in January 2020 and the National Implementation Plan in January 2022. The overall effectiveness of the PNA will also depend on the strength of Mexico's AML framework, especially given that corruption is among the highest ML threats in Mexico. As part of operationalization of these policies, the priorities for the PNA and its implementation plan benchmarks should reflect AML measures and close coordination with AML authorities.

5. Coordinating policy priorities for AML and AC could achieve better outcomes. Such coordination could ensure common understanding of risks of corruption and ML and the vulnerabilities of different sectors for misuse, better allocation of resources, and prioritization of both frameworks to achieve common outcomes. At the operational level, the MPA, FIU, and AML supervisors should exchange information and cooperate by drawing on the synergies between their mandates and relevant information which would enable taking joint action against corruption and its proceeds. Given the importance of financial intelligence produced by the FIU to detect and disrupt proceeds of corruption, as well as the role of banks and other financial and non-financial gatekeepers in preventing access of "dirty money" into the formal and informal economy, it is important that the AML and AC policies are coordinated to ensure that the mutually reinforcing effects of the AML and AC frameworks are fully utilized.

B. Laundering of Proceeds of Corruption and AML Preventative Measures

6. PEPs are subject to enhanced due diligence under the AML framework in Mexico. The AML financial sector supervisor in Mexico, the CNBV, has dedicated criteria that it uses to verify whether banks and other financial institutions under its supervisory purview are compliant with the applicable preventive measures for PEPs. The CNBV has also published guidance to financial entities on the risks of corruption and related money laundering, which includes details on the necessary controls related to PEPs. There is also a list of PEPs published by the Ministry of Finance and Public Credit to further aid compliance by regulated entities.

7. The implementation of AML controls applicable to PEPs could be further strengthened and the major gaps in the legal framework of the non-financial sector addressed. The CNBV found numerous non-compliance issues in enhanced due diligence processes applied by financial institutions in relation to PEPs. These include inadequate risk assessment and monitoring of transactions to ensure alignment with the roles, level, and responsibilities of PEPs, failures to determine PEPs that may be controlling legal entities, reliance on outdated lists of PEPs, as well as other documentation and quality of information issues. While these are primarily about aspects of

effective implementation, the regulatory framework in the non-financial sector is not yet fully in place. Currently, the Designated Non-Financial Businesses and Professions (DNFBPs)—such as lawyers, notaries, accountants, real estate agents, or Trust and Company Service Providers—are not legally obliged under Mexico's AML legal framework to carry out due diligence checks in relation to PEPs.[4] This is particularly important given the key role that such gatekeepers play in laundering proceeds of corruption through activities such as running and managing of business activities of legal entities or purchasing of expensive real estate, among the most common techniques to launder corruption proceeds in Mexico.

8. STRs filed by the AML regulated entities are an important aspect of detecting financial crimes, including corruption. The FIU indicated that it receives more than 340,000 STRs per year. These cover suspicions of money laundering and its underlying financial crimes such as corruption or tax crimes.

9. Mexico's legal framework for STRs needs significant improvements, especially in relation to DNFBPs. Most of the technical deficiencies in relation to the STRs identified in the Financial Action Task Force (FATF) Mutual Evaluation Report published in 2018 remain unresolved.[5] In the case of the STRs obligations applicable to financial institutions, there are issues with the applicable timeframes and the level of suspicion required to trigger filing. In the case of the DNFBPs, the existing obligation to file Notices should be amended to ensure comprehensive coverage and alignment with the FATF Recommendations. This translates directly into the low levels of reports filed by the DNFBPs and the inability to effectively sanction such practices. More broadly, the overall AML regulatory and supervisory framework over the DNFBPs requires substantial strengthening.[6]

10. Mexico should address deficiencies in the implementation of the STR obligations and boost the capacity of the FIU to prioritize the STRs related to PEPs. In addition to addressing the legal deficiencies, the implementation of STR obligations should be further strengthened. Based on the supervisory activities of the CNBV, there are recurrent issues in the accuracy of the customer data that can compromise the integrity and reliability of the client records and related filing obligations. Further deficiencies were found by the CNBV in the application of the minimum criteria for the filing of reports under the "24-hours process" and the quality of information included in the STRs (i.e., the description of the underlying operations and the reasons for the suspicions). The FIU should further promote compliance with best practices on the filing of STRs, including those related to PEPs and suspicious activities related to laundering generated by corruption, and prioritize ensuing compliance and raising awareness of the DNBFPs. Given the large number of reports received by the FIU, the authorities should also ensure that it has adequate resources, both human and technological, to carry out sufficient screening of the received reports while prioritizing the STRs related to PEPs.

[4] See the Financial Action Task Force Follow-up Report on Mexico published in May 2023 and available at https://www.fatf-gafi.org/content/dam/fatf-gafi/fur/Follow-Up-Report-Mexico-2023.pdf.coredownload.pdf.

[5] For the 2018 Mutual Evaluation Report, see https://www.fatf-gafi.org/en/publications/Mutualevaluations/Mer-mexico-2018.html.

[6] See the 2023 Follow-Up Report available at https://www.fatf-gafi.org/content/dam/fatf-gafi/fur/Follow-Up-Report-Mexico-2023.pdf.coredownload.pdf.

11. Misuse of legal entities is among the techniques most used in Mexico to launder proceeds of crimes, including corruption. Shell companies and front companies are commonly utilized to conceal the beneficial ownership of assets and funds as well as the true purpose of transactions. These are also used by PEPs in Mexico to cover payment of bribes and embezzle public funds.

12. Implementation of the AML framework in Mexico does not adequately ensure availability of beneficial ownership information. The AML framework requires that regulated entities identify beneficial ownership information as part of their customer due diligence processes. There can be however doubts about the veracity of this source of beneficial ownership information in light of the effectiveness issues.[7] As identified by the CNBV, there are significant issues in the procedures followed by financial institutions to identify beneficial owners including for PEPs. Deficiencies have been identified in the collection and review of the necessary data and documentation that is essential for this largely factual test. The difficulties in reliance on the beneficial ownership information obtained through regulated entities were also acknowledged by the FIU that requires it for the purposes of financial analysis and production of financial intelligence reports for law enforcement agencies. The prosecutors generally rely on their own analysis—including review of the legal structure, board minutes, and field-based investigations—for the determination of beneficial ownership information. Given the key value of beneficial ownership information in tackling financial crimes, the authorities should step up supervisory oversight and apply proportional and dissuasive sanctions in cases of non-compliance. There are also significant issues in the legal framework applicable to the DNFBPs, including in relation to the understanding of the legal and control structure of the customers, which should be addressed through legislative changes.

13. The new beneficial ownership information requirements arising under the tax laws are currently underutilized for AML purposes. The amendments to the Federal Tax Code in November 2021, which took effect in January 2022, introduced new obligations pursuant to Article 32-B Ter on legal entities and their service providers to obtain and report beneficial ownership information to the Mexican tax authorities (SAT). These new rules were introduced to enable the SAT to obtain such information upon request and then report to foreign tax authorities in compliance with requirements arising under the international tax transparency standards overseen by the Global Forum on Transparency and Exchange of Information.[8] While these may also be of value for the broader entity transparency objectives and tackling of financial crimes, they have not been used to date in this context. Moreover, given the specific rationale for the introduction of these new obligations, there is no specific database that can be consulted by other competent authorities and regulated entities at the SAT for the beneficial ownership information that it has the ability to request. The SAT also does not verify the information. Mexico should introduce a beneficial

[7] For an analysis regarding the overall low effectiveness of the AML preventive measures, including those relating to beneficial ownership requirements, see the 2018 Mutual Evaluation Report of Mexico adopted by the FATF and available at https://www.fatf-gafi.org/en/countries/detail/Mexico.html.

[8] See https://www.oecd.org/publications/global-forum-on-transparency-and-exchange-of-information-for-tax-purposes-mexico-2023-second-round-6fd9ab78-en.htm.

ownership registry and establish relevant processes to ensure that the information collected is accurate, adequate, and up to date. Beneficial ownership information should also be required to be collected and verified as part of the public procurement process.

C. Prosecution of Money Laundering and Corruption

14. The jurisdiction and cooperation between the specialized prosecutor offices responsible for money laundering and corruption in Mexico should be enhanced. Money laundering cases are prosecuted by the Specialized Prosecutor Office for Organized Crime (Fiscalía Especializada en Materia de Delincuencia Organizada or FEMDO). This office can also carry out parallel investigations of money laundering and other financial crimes, such as corruption, if they are considered of high impact. In 2019 the Specialized Prosecutor Office for Corruption (Fiscalía Especializada en Combate a la Corrupción or FMCCO) was established. While this office was expected to take the lead on corruption-related cases, it has mainly dealt with matters relating to abuse of office, which is one of the forms of corruption. Corruption and bribery cases are not among its top five categories of cases and it has not yet prosecuted any high-level corruption cases. The authorities should clarify the jurisdiction between the FEMDO and FEMCCO and also provide for their close cooperation to avoid fragmentation that would adversely affect the effectiveness to prosecute corruption cases and related money laundering.

15. The authorities should ensure that there are strict AC policies applicable to the law enforcement authorities, at both federal and state levels, as well as the judiciary. The level of corruption in Mexico can affect the functioning of the law enforcement system and undermines the capacity to investigate and prosecute corruption and money laundering. The number prosecutions and convictions relating to corruption and money laundering is not commensurate with Mexico's risk profile. The authorities should take steps to increase resources, capacity, and expertise as well as ensure adequate budget of the law enforcement authorities. Confiscation and asset recovery should be seen as major policy objectives within the national AML and AC policies and implementation plans in order to ensure that crime does not pay.

INTERNATIONAL MONETARY FUND

MEXICO

STAFF REPORT FOR THE 2023 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

October 17, 2023

Prepared By

The Western Hemisphere Department
(in consultation with other departments)

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FUND RELATIONS

(As of September 30, 2023)

The 2023 Article IV discussions were held in Mexico City during September 11–22, 2023. The team comprised Bikas Joshi (head), Francisco Arizala, Jean-Marc Fournier, and Matteo Ghilardi (all WHD), Samir Jahan (FAD), Tomohide Mineyama (SPR), Adrian Wardzynski (LEG), and Jeffrey Williams (MCM). Rodrigo Valdes (WHD) joined the concluding meetings. Alfonso Guerra and Maria Jose Posadas Bolanos (OED) participated in the discussions. The team met with Finance Secretary Ramírez de la O, Governor Rodríguez Ceja, Labor Secretary Bolaños, other officials, and representatives of the financial and private sectors.

Mexico has accepted the obligations of Article VIII, sections 2, 3, and 4. Comprehensive economic data are available for Mexico on a timely basis and economic data are adequate for surveillance. It subscribes to the SDDS.

Membership Status: Joined December 31, 1945

General Resources Account:	**SDR Million**	**Percent of Quota**
Quota	8,912.70	100.00
Fund holdings of currency	6,312.34	70.82
Reserve position in Fund	2,600.39	29.18
New Arrangement to Borrow	5.09	

SDR Department:	**SDR Million**	**Percent of Allocation**
Net cumulative allocation	11,393.62	100.00
Holdings	12,046.70	105.73

Outstanding Purchases and Loans: None

Latest Financial Arrangements:

Type	**Arrangement Date**	**Expiration Date**	**Amount Approved (SDR Million)**	**Amount Drawn (SDR Million)**
FCL	Nov. 19, 2021	Nov. 18, 2023	35,650.80	0.00
FCL	Nov. 22, 2019	Nov. 18, 2021	44,563.50	0.00
FCL	Nov. 29, 2017	Nov. 21, 2019	53,476.20[1]	0.00
FCL	May 27, 2016	Nov. 28, 2017	62,388.90	0.00
FCL	Nov 26, 2014	May 26, 2016	47,292.00	0.00
FCL	Nov. 30, 2012	Nov. 25, 2014	47,292.00	0.00
FCL	Jan. 10, 2011	Nov. 29, 2012	47,292.00	0.00
FCL	Mar. 25,2010	Jan. 09, 2011	31,528.00	0.00
FCL	Apr 17, 2009	Mar. 24, 2010	31,528.00	0.00

[1] Access was reduced from 62,388.90 to 53,476.20 SDR million on November 26, 2018.

Projected Payments to the Fund (SDR million):

		Forthcoming			
	2023	**2024**	**2025**	**2026**	**2027**
Principal					
Charges / Interest	-6.20	-26.83	-26.80	-26.82	-26.82
Total	-6.20	-26.83	-26.80	-26.82	-26.82

Exchange Arrangements: The currency of Mexico is the Mexican peso. Mexico's de-jure and de-facto exchange rate arrangements are free-floating. Mexico has accepted the obligations under Article VIII, Section 2(a), 3, and 4, and maintains an exchange system that is free of multiple currency practices and restrictions on the making of payments and transfers for current international transactions.

Article IV Consultation: The last Article IV consultation was concluded by the Executive Board on November 4, 2022. The staff report was published as IMF Country Report No. 22/334.

Technical Assistance

Year	**Dept.**	**Purpose**
2023	MCM	Cyber Crisis Exercise
2021	FAD	Public Assets and Liabilities Management
2020	FAD	Fiscal Framework and Council
2018	FAD	Public Investment Management Assessment
2018	FAD	Tax policy and Compliance
2018	FAD	Fiscal Transparency Evaluation
2017	STA	Government Financial Statistics
2017	FAD	Tax policy
2017	MCM	Central Securities Depositories
2017	FAD	Revenue Administration
2016	FAD	Revenue Administration
2016	FAD	Workshop on Supervision of Subnational Finances
2015	STA	Balance of Payments
2015	FAD	Supervision of Subnational Finances
2014	FAD	Tax Policy and Compliance
2014	FAD	Treasury
2014	STA	Sectoral Balance Sheets
2014	STA	National Accounts
2014	STA	Balance of Payments
2013	MCM	Post-FSAP Follow Up
2012	FAD	Pension and Health Systems

Resident Representative: None

RELATIONS WITH THE WORLD BANK

https://www.worldbank.org/en/country/mexico

STATISTICAL ISSUES

I. Assessment of Data Adequacy for Surveillance
General: Data provision is adequate for surveillance.
National accounts: The national accounts follow the recommendations of the *System of National Accounts, 2008 (2008 SNA)*. Economic activities, products, household final consumption expenditure, and government final consumption expenditure are classified according to updated international classifications. Data sources and statistical techniques are robust. A wide range of source data is available, including economic censuses conducted every five years and a vast program of monthly and annual surveys, administrative data, as well as a business register of economic units that is regularly updated. INEGI (the National Statistical Office) disseminates annual and quarterly GDP statistics, sectoral accounts, and balance sheets. The 2021 data ROSC update found that the national accounts are of a high quality. Since 2015, Mexico has made significant improvements on the methodological and dissemination aspects of data quality. There are still some areas for further improvements, such as implementing chained GDP volume indices with previous period annual weights, the treatment of goods for processing abroad, and the coverage of illegal activities. In addition, some government transactions on a quarterly basis are recorded on a cash basis rather than on an accrual basis. The ROSC mission identified the need for greater consistency in data recording between the Bank of Mexico (Banxico), and the Ministry of Finance (SHCP) and for regular reconciliation exercises among compilers to resolve some discrepancies involving data on the public sector. Three technical assistance missions took place over the past fiscal year; two on developing a preliminary work plan to implement the use of chain-linked volume measures in economic surveys and national accounts; and one with Banxico, SHCP, and INEGI on harmonization of national accounts and government finance statistics. On August 29, INEGI disseminated the new national accounts series with fixed base year 2018, enhancing the measurement of informality and digital commerce. The areas of improvement identified by the 2021 ROSC mission are still pending to be implemented.
Prices: The concepts and definitions for both the CPI and PPI meet international standards. The CPI reference period is the second half of July 2018, and the basket is based on information from the National Survey of Household Expenditure 2012 and 2013, the 2014 Household Income and Expenditure Survey, and the 1999 COICOP classification. The PPI reference period is July 2019, and the basket of goods and weighting structure is based on the Economic Censuses and the System of National Accounts. The PPI covers agricultural, manufacturing, construction, and services sectors, which account for 79.2 percent of Mexican production. It excludes trade and some services.

Government finance statistics: Fiscal statistics are comprehensive and timely, except for the subnational sector. The authorities compile fiscal statistics following national concepts, definitions, and classifications to support domestic policy needs. The authorities also compile fiscal statistics in alignment with the *Government Finance Statistics Manual (GFSM2014)*. The 2021 Data ROSC mission pointed out that, while source data used for the national and international (*GFSM2014*) presentations are the same, differences in the classification of transactions and coverage of institutional units make it difficult for users to reconcile the different presentations. It recommended publishing a table of all institutional units in the public sector and its subsectors, clearly grouping them according to: 1) the coverage of units used in the national presentation; 2) the coverage used in the international presentation; and 3) the subsectors of the public sector as described in the *GFSM2014*. A full adoption of uniform accounting standards at the sub-national level would help obtain an improved measure of public fixed investment in the national accounts.

Pension liabilities are partially reported, while government securities are reported at face value. The official debt statistics do not include the stock of T-bonds issued to the Bank of Mexico (Banxico) for liquidity management purposes, and the accounting practices adopted by the federal government and Banxico differ.

Monetary and financial statistics: The methodological foundations of monetary statistics are generally sound. Availability of data on other financial intermediaries such as insurance companies and pension funds allow for the construction of a financial corporation's survey with full coverage of the Mexican financial system. Mexico reports data on some indicators of the Financial Access Survey (FAS), including gender disaggregated data on the use of basic financial services and the two indicators (commercial bank branches per 100,000 adults and ATMs per 100,000 adults) adopted by the UN to monitor Target 8.10 of the Sustainable Development Goals.

Financial sector surveillance: Mexico regularly reports monthly Financial Soundness Indicators (FSIs) to the IMF for publication. Currently, Mexico reports 14 core and 9 encouraged indicators for deposit takers, 2 additional FSI for OFCs,1 additional FSI for households and 1 additional FSI for real estate markets. FSIs on the non-financial corporate sector are not reported. Reporting has been temporarily interrupted following the publication of May 2021 data in order to revise historical and current data according to IFRS9 standards and is expected to resume by the end of the year. The authorities have periodically produced updated FSIs in the interim according to the old standard on request.

External sector statistics (ESS): The 2021 data ROSC update found that ESS are of a high quality. In 2017, Banxico migrated the BOP and IIP statistics to the *Balance of Payments and International Investment Position Manual (BPM6*), sixth edition, with the publication of quarterly *BPM6*-based BOP data and IIP data . The *External Debt Statistics, Guide for Compilers and Users, 2013* (*EDS Guide*) is yet to be fully implemented. Remaining issues relate to: (i) including the intercompany external debt and SDR allocations in external debt statistics disseminated by Banxico; (ii) extending the market valuation of liabilities to all financial

<table>
<tr><td colspan="2">institutions (some external debt are presented at face value); and (iii) recording the interest of the public sector external debt on an accrual basis.

Consistency could be improved between the IIP and external debt. There are also differences between the balance of payments and national accounts, notably in the financial account transactions and positions. The authorities participate in the coordinated direct investment survey and coordinated portfolio investment survey and disseminate the data template on international reserves and foreign currency liquidity (reserve template) and quarterly external debt statistics.</td></tr>
<tr><td colspan="2">II. Data Standards and Quality</td></tr>
<tr><td>Mexico subscribed to the IMF's Special Data Dissemination Standard (SDDS) on August 13, 1996. Mexico's latest SDDS Annual Observance Report and metadata are available on the Dissemination Standards Bulletin Board. Mexico uses periodicity and timeliness flexibility options on central government debt and takes a timeliness flexibility option on general government operations. Mexico exceeds SDDS periodicity and timeliness requirements in many other data categories.</td><td>An updated data module Report on the Observance of Standards and Codes (ROSC update) for Mexico was published in December 2021.</td></tr>
</table>

Table 1. Mexico: Table of Common Indicators Required for Surveillance

As of October 17, 2023							
	Date of latest observation	Date received	Frequency of Data[7]	Frequency of Reporting[7]	Frequency of Publication[7]	Data Quality-Methodological Soundness[8]	Data Quality Accuracy and Reliability[9]
Exchange Rates	Oct. 2023	Oct. 2023	D	D	D		
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[1]	Sep. 2023	Sep. 2023	W	W	W		
Reserve/Base Money	Sep. 2023	Sep. 2023	W	W	W	LO, O, O, LO	LO, O, O, O, O
Broad Money	Sep. 2023	Sep. 2023	M	M	M		
Central Bank Balance Sheet	Sep. 2023	Sep. 2023	W	W	W		
Consolidated Balance Sheet of the Banking System	Sep. 2023	Sep. 2023	M	M	M		
Interest Rates[2]	Oct. 2023	Oct. 2023	D	D	D		
Consumer Price Index	Sep. 2023	Oct. 2023	Bi-W	Bi-W	Bi-W	O, O, LNO, O	LO, LNO, O, O, LNO
Revenue, Expenditure, Balance and Composition of Financing[3]–Gen. Government[4]	Jul. 2023	Aug. 2023	M	M	M	LO, LO, LNO, LO	O, O, O, O, O
Revenue, Expenditure, Balance and Composition of Financing[3]–Central Government	Jul. 2023	Aug. 2023	M	M	M		
Stocks of Central Government and Central Government-Guaranteed Debt[5]	Jul. 2023	Aug. 2023	M	M	M		

Table 1. Mexico: Table of Common Indicators Required for Surveillance (concluded)

External Current Account Balance	Q2 2023	Aug. 2023	Q	Q	Q	LO, O, LO, LO	LO, O, O, O, LO
Exports and Imports of Goods and Services	Aug. 2023	Sep. 2023	M	M	M		
GDP/GNP	Q2 2023	Sep. 2023	Q	Q	Q	O, O, O, LO	O, O, LO, O, O
Gross External Debt	Q2 2023	Sep. 2023	Q	Q	Q	LO, O, LO, LO	LO, O, O, O, LO
International Investment Position[6]	Q2 2023	Sep. 2023	Q	Q	Q	LO, O, LO, LO	LO, O, O, O, LO

[1] Any reserve assets that are pledged or otherwise encumbered should be specified separately. Also, data should comprise short-term liabilities linked to a foreign currency but settled by other means as well as the notional values of financial derivatives to pay and to receive foreign currency, including those linked to a foreign currency but settled by other means.

[2] Both market-based and officially determined, including discount rates, money market rates, rates on treasury bills, notes, and bonds.

[3] Foreign, domestic bank, and domestic nonbank financing.

[4] The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.

[5] Including currency and maturity composition.

[6] Includes external gross financial asset and liability positions vis-à-vis nonresidents.

[7] Daily (D); Weekly (W); Monthly (M); Quarterly (Q); Annually (A); Irregular (I); Not Available (NA).

[8] Reflects the assessment provided in the data ROSC conducted in July 2021, except for consumer prices, which is based on the ROSC conducted in 2012 and monetary statistics, which is based on the ROSC conducted in 2010. For the dataset corresponding to the variable in each row, the assessment indicates whether international standards concerning (respectively) concepts and definitions, scope, classification/sectorization, and basis for recording are fully observed (O), largely observed (LO), largely not observed (LNO), or not observed (NO).

[9] Same as footnote 8, except referring to international standards concerning source data, assessment and validation of source data, statistical techniques, assessment and validation of intermediate data and statistical outputs, and revision studies.

INTERNATIONAL MONETARY FUND

MEXICO

STAFF REPORT FOR THE 2023 ARTICLE IV CONSULTATION—SUPPLEMENTARY INFORMATION

October 23, 2023

Prepared By

Legal and Western Hemisphere Departments

This statement provides an update on developments since the issuance of the staff report to the Executive Board on October 17, 2023. The update does not change the thrust of the staff appraisal.

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B. Supply Side of Corruption ____ 2

C. Facilitation of Proceeds of Foreign Corruption (Concealment-Side) ____ 3

TRANSNATIONAL ASPECTS OF CORRUPTION[1]

A. Introduction[2]

1. Foreign bribery risks are relatively limited but given the export-driven nature of the economy, further mitigating efforts are called for. Among the 500 largest multinational enterprises (MNEs) in the world, only one multinational enterprise (MNE) is headquartered in Mexico. It is also not among the major sources of foreign direct investment to the rest of the world.[3] Mexico has engaged in anti-bribery institutional and legal reforms and enhanced awareness of public officials to report foreign bribery. However, there has been no prosecution of foreign bribery cases. It is advisable for the authorities to take further measures, including to ensure adequate protection of reporting persons and promote effective enforcement.

2. While risks of laundering of proceeds of foreign corruption in Mexico are overall limited, they should be further mitigated. There is no indication of major threats of laundering of proceeds of foreign corruption in Mexico and the AML framework already includes several mitigating measures to detect and disrupt such proceeds including preventive measures in the financial sector focused on politically exposed persons (PEPs). This could be further enhanced by facilitating reporting of suspicious activities from the key gatekeepers, including in the non-financial sector (e.g., real estate agents, lawyers, accountants), which should also cover suspicions in relation to PEPs. The latter would require introducing the relevant regulatory into the preventive and supervisory framework for the non-financial sector, which should be seen as a priority. The authorities should further continue improving the availability, accuracy, and access to beneficial ownership information of companies to prevent their misuse for the laundering of foreign proceeds of corruption.[4]

B. Supply Side of Corruption[5]

3. Mexico has taken steps to enhance its anti-bribery legal and institutional framework, though more efforts are needed to address foreign bribery. It has engaged in important

[1] Prepared by Yao Deng and Adrian Wardzynski (both LEG).

[2] Mexico volunteered to have its legal and institutional frameworks assessed in the context of bilateral surveillance for purposes of determining whether it: (a) criminalizes and prosecutes the bribery of foreign public officials; and (b) has an effective AML/CFT system that is designed to prevent foreign officials from concealing the proceeds of corruption.

[3] See OECD- UNSD Multinational Enterprise Information Platform, and International Financial Statistics International Investment Position, Assets, Direct investment.

[4] For an analysis regarding the overall low effectiveness of the preventive measures set out in the AML framework see the 2018 Mutual Evaluation Report of Mexico adopted by the FATF and available at https://www.fatf-gafi.org/en/countries/detail/Mexico.html.

[5] Information relating to supply-side corruption in this annex draws on the WGB's Phase 4 Report of Mexico (October 2018), the follow-up report (August 2022, updated) and the additional written report (June 2023). The IMF staff and Mexico have provided additional views and information whose accuracy have not been verified by the WGB or the OECD Secretariat, and which do not prejudice the WGB's monitoring of the implementation of the OECD Anti-Bribery Convention.

institutional and legal reforms in the fight against foreign bribery, including amending the foreign bribery offense to be applicable to cases involving third party beneficiaries, making corporate liability for foreign bribery independent of the liability of the individual perpetrators, increasing the maximum sanctions for accounting offenses, and making bribes non-tax-deductible. In addition, it has initiated judicial statistical collection aiming to provide comprehensive information about foreign bribery enforcement and introduced successor liability into the criminal corporate liability framework. Mexico further took efforts to raise awareness of public officials of their obligation to report instances of foreign bribery through the provision of training. While acknowledging this progress, the 2022 follow-up report of the OECD Working Group on Bribery in International Business Transactions (WGB) expressed concerns over the adequacy of Mexico's efforts to address foreign bribery, especially given the export driven nature of the Mexican economy and the inclusion of high-risk sectors for corruption in exports, such as extractives, manufacturing, and agricultural products.

4. Looking forward, Mexico is encouraged to take further measures, inter alia, to ensure adequate whistleblower protection, clarify liability of legal persons, and enhance effective enforcement against foreign bribery. A specific law providing for whistleblower protection of public and private sector employees that report suspicions of foreign bribery has not been enacted, though a draft bill was reported as being under discussion.[6] In addition, obstacles to reporting by government agencies remain; for example, the tax authorities have difficulties in reporting or sharing suspicions of foreign bribery. While the liability of legal persons for foreign bribery is not clear under the current legal framework and the coverage of foreign bribery cases by the General Law on Administrative Responsibility needs to be further confirmed, the State-Owned Enterprises cannot be held liable for foreign bribery.[7] Most notably, however, Mexico is yet to successfully conclude its first foreign bribery case. The lack of proactive investigative measures in foreign bribery investigations poses challenges. According to the data available, there were only a few foreign bribery investigations in Mexico which did not progress to the prosecution stage. It will be important to take stock of the impact of the nomination of a Specialized Prosecutor for Combatting Corruption (FECC) since 2019 on the investigation and prosecution of foreign bribery. The authorities should take additional steps to prioritize detection, enforcement, and effective sanctioning of foreign bribery cases in line with the OECD WGB's Phase 4 recommendations.

C. Facilitation of Proceeds of Foreign Corruption (Concealment-Side)

5. Mexico's AML regime helps prevent laundering of foreign proceeds of corruption. The 2020 National Risk Assessment (NRA) carried out by Mexico recognized corruption, including transnational corruption, as a structural risk. Specific guidance was subsequently released on corruption risks along with several related typologies. The definition of Politically Exposed Persons (PEPs), which includes domestic and foreign PEPs, was further broadened following the 2018 Mutual

[6] The discussion on the draft was reported by Mexico in its 2023 Additional Written Report.

[7] In the Additional Written Report submitted to the OECD Working Group on Bribery in June 2023, Mexico stated that the criminal and administrative liabilities of legal persons belong to two different areas. Therefore, article 25 of the General Law of Administrative Responsibilities (LGRA) cannot be applied in the context of a criminal proceeding that involves a legal entity pursuant to article 421 of the National Code of Criminal Procedures.

Evaluation Report (MER) of Mexico to ensure its alignment with the FATF Recommendations and the Ministry of Finance and Public Credit issues a list of public officials that are considered PEPs.[8] The PEP provisions provide for enhanced due diligence, including close monitoring and possibility of verification of the source of funds and wealth. The CNBV has specific inspection criteria relating to corruption and beneficial ownership customer due diligence obligations imposed on certain financial institutions. The CNBV and Financial Intelligence Unit (FIU) also published guidelines on prevention and detection of corruption, including the risks and specific requirements relating to PEPs. Recently, there were further improvements in the Federal Tax Code relating to the availability of beneficial ownership information in Mexico that carry the potential to enhance the capacity of the authorities to prevent misuse of legal vehicles in concealing the ownership of illicit assets and proceeds, including those stemming from corruption. Mexico has also updated its NRA to expand its understanding of risks regarding the potential for misuse of the different types of legal persons based on complaints, criminal investigations, prosecutions, and convictions, as well as transnational requests.

6. The authorities should continue their efforts to prevent laundering of foreign proceeds of corruption by bolstering the applicability of the relevant AML measures. As part of its risk-based supervision carried out by the CNBV identified irregularities in the application of the enhanced due diligence applicable to PEPs, several issues with the effective implementation of the enhanced due diligence with respect to PEPs were identified. These include issues with effective monitoring of PEPs in line with their risk profile as well as issues with the identification and obtaining of information on PEPs that are beneficial owners. As far as beneficial ownership is concerned, significant deficiencies have also been found by the CNBV in the development of procedures and identification of beneficial owners by financial institutions, including collection of the necessary data and documentation. The CNBV further found that the STRs submitted by financial institutions do not always include all the relevant fields and improperly implement best practices issued by the FIU. The obligations regarding filing of Notices by the DNFBPs need to be amended to ensure compliance with the FATF Recommendations, particularly FATF Recommendation 23, and thus the relevant legal reform pending in the Mexican Congress should be approved and enacted without any further delays.[9] In the same vein, the authorities should, as a matter of priority, introduce the regulatory and supervisory framework over the DNFBPs in line with the risk-based approach mandated by the international standards. As part of its risk-based supervisory priorities, the CNBV should put greater emphasis on the risk of misuse of legal entities to conceal payment of bribes and cross-border transactions relating to possible corruption proceeds. The authorities should pursue parallel money laundering, corruption, and related organized crimes investigations and prosecutions including when corruption is committed abroad, and cases of non-compliance should be subject to effective sanctions mechanisms. The available international exchange mechanisms should be utilized to a greater extent in detecting and investigating foreign bribery.

[8] For the 2018 Mutual Evaluation Report of Mexico adopted by the FATF and the subsequent 2021, 2022, and 2023 Follow-Up Reports see https://www.fatf-gafi.org/en/countries/detail/Mexico.html.

[9] See FATF Follow-Up Report from May 2023 available at https://www.fatf-gafi.org/en/countries/detail/Mexico.html.