



MEXICO

2020 ARTICLE IV CONSULTATION—PRESS RELEASE AND STAFF REPORT

November 2020

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 2020 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 November 2, 2020 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 November 2, 2020, following discussions that ended on October 1, 2020, 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 19, 2020.
- An **Informational Annex** prepared by the IMF staff.

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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Washington, D.C.



IMF Executive Board Concludes 2020 Article IV Consultation with Mexico

FOR IMMEDIATE RELEASE

Washington, DC – November 04, 2020: On November 2, 2020, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation¹ with Mexico.

Mexico has been hit hard by COVID-19. Official statistics indicate that over 85,000 lives have been lost. About 12 million workers lost their jobs, many of whom came from the informal sector, out of which around 4 million have not returned to the workforce. The share of the population in working poverty jumped from 36 to 48 percent, as of June.

Output is expected to decline by 9 percent in 2020, the steepest contraction since the Great Depression. It is expected to recover modestly going forward. Although inflation has edged up on account of exchange rate passthrough and supply disruptions, it is projected to decline gradually as domestic demand remains suppressed by labor market dislocation, wealth effects, and concerns about the path of the pandemic.

The authorities responded to the pandemic by increasing health spending and supporting households and firms. They provided loans, reallocated some expenditure items, front-loaded spending for social pension payments to the elderly and disabled, and accelerated procurement processes and VAT refunds, among other actions. The authorities also implemented tax policy measures and introduced tax administration measures to increase tax collections. Monetary policy started easing last year and accelerated following the pandemic for cuts totaling 400 basis points, reducing the policy rate to 4.25 percent. The central bank also expanded several facilities, with access up to 3.3 percent of GDP, to support market functioning and credit provision. The flexible exchange rate has facilitated absorption of shocks. Comfortable international reserves, access to the U.S. Federal Reserve swap line, and the IMF's Flexible Credit Line have bolstered the ability to withstand external stress.

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. The 2020 Article IV Consultation with Mexico was held virtually.

Executive Board Assessment²

Executive Directors generally agreed with the thrust of the staff appraisal. They commended the authorities for taking timely action to mitigate the impact of the pandemic on peoples' health and the economy, and for maintaining very strong policies and institutional policy frameworks. They noted that the economic recovery is expected to be gradual and that, against the backdrop of considerable risks and uncertainty over the evolution of the pandemic, the large social and economic costs are likely to persist. Directors emphasized the importance of limiting the damage from the pandemic, promoting a robust recovery, and pursuing strong, durable, and inclusive growth. Continued close engagement and dialogue between the authorities and staff on policy options will be important.

Most Directors recommended a further temporary, well-communicated, and targeted near-term fiscal support, with due consideration of the country's circumstances and safeguarding medium-term fiscal sustainability. A few of these Directors cautioned that limited fiscal support could lead to greater pressure on public finances through a deeper economic contraction. A few other Directors, however, saw the authorities' stance as prudent, given the uncertain path of the pandemic. Directors generally saw the need for announcement of a credible medium-term tax reform—to be implemented once the recovery is underway—to bolster the space for providing near-term support, close fiscal gaps, lower public debt, and finance needed investment and social spending. A number of Directors suggested that the tax reform plans should be announced once a firm recovery is in place.

Directors welcomed the authorities' recent steps to improve tax administration. They recommended broadening the tax base, raising subnational taxes, and reducing VAT gaps while strengthening social safety nets. They also welcomed the authorities' pension reform proposal, while urging them to consider complementary measures to mitigate labor market informality. Directors emphasized further reprioritizing public spending to promote inclusive growth by strengthening social protection and increasing public investment. They urged the authorities to revisit Pemex's business strategy and further reform its governance.

Directors considered that the actions of the central bank have supported the functioning of financial markets and the economy. They noted that the flexible exchange rate has facilitated the absorption of shocks, while comfortable international reserves, access to the U.S. Federal Reserve swap line, and the Fund's Flexible Credit Line have bolstered the ability to withstand external stress. A number of Directors considered that there may be scope for further monetary policy support, while safeguarding financial stability. Many other Directors, however, supported a more cautious approach, given increased inflation and the potential tradeoffs. Directors recommended continued close monitoring of risks in the banking sector and upholding minimum regulatory and supervisory standards while using the inherent flexibility of the framework.

Directors emphasized that steadfast implementation of structural reforms is key to delivering lasting improvements in investment and productivity and to reaping the benefits of the USMCA trade agreement. They urged the authorities to forcefully tackle labor market informality, advance governance and AML/CFT efforts, enhance public investment efficiency, improve access to credit, and leverage private involvement in the energy sector. Directors also encouraged consideration of a nationwide unemployment benefits system.

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>.

Mexico: Selected Economic, Financial Indicators 1/
(2016-2020)

	2016	2017	2018	2019	2020 2/
	(Annual percentage changes, unless otherwise indicated)				
National accounts and prices					
Real GDP	2.6	2.1	2.2	-0.1	-9.0
GDP per capita in U.S. dollars 3/	8,789	9,343	9,753	10,024	8,141
Gross domestic investment (in percent of GDP)	23.6	22.9	22.7	21.1	19.3
Gross domestic savings (in percent of GDP)	21.4	21.1	20.7	20.7	20.5
Consumer price index (end of period)	3.4	6.8	4.8	2.8	3.7
External sector					
Exports, f.o.b.	-1.7	9.5	10.1	2.2	-12.9
Imports, f.o.b.	-2.1	8.6	10.4	-1.9	-14.3
External current account balance (in percent of GDP)	-2.3	-1.8	-2.1	-0.3	1.2
Gross international reserves (in billions of U.S. dollars)	178.0	175.4	176.4	183.0	190.4
Outstanding external debt (in percent of GDP)	38.3	37.7	36.6	36.6	45.5
Nonfinancial public sector (in percent of GDP)					
Government Revenue	24.6	24.6	23.5	23.8	24.3
Government Expenditure	27.4	25.7	25.7	26.2	30.1
Augmented overall balance	-2.8	-1.1	-2.2	-2.3	-5.8
Money and credit					
Financial system credit to the non-financial private sector	16.5	10.8	8.8	3.0	-1.4
Broad money (M2a)	12.3	11.2	5.3	6.8	8.3

Source:

1/ Methodological differences mean that the figures in this table may differ from those published by the authorities.

2/ Staff projections.

3/ IMF staff estimates.



MEXICO

STAFF REPORT FOR THE 2020 ARTICLE IV CONSULTATION

October 19, 2020

KEY ISSUES

Context. Covid-19 has exacted a tragic human, social, and economic toll on Mexico. Over 85,000 lives were lost; unofficial estimates are notably higher. Of 12 million workers that lost their jobs, most of whom came from the informal sector with a limited safety net, over 4 million remain out of the workforce. The working poverty rate jumped to 48 percent. After a historic drop in output, there has been a trade-led bounce in manufacturing. But domestic demand is weak, as is services activity that employs most of the workforce. Staff projects the economy to shrink by 9 percent this year, followed by a gradual recovery. It could take years for employment and incomes to return to pre-crisis levels, compounding the long-standing challenge of achieving strong and inclusive growth.

Policies. The macroeconomic policy response has been very conservative. The flexible exchange rate has facilitated an absorption of shocks, and monetary policy has been eased gradually. But motivated by a desire to contain fiscal risks, the overall fiscal response has been muted relative to peers, with some increase in health and social spending; this stance risks a deeper downturn and a weaker recovery. The external and banking sector fundamentals are broadly sound. Elevated uncertainty over structural policies weighed on investment before Covid-19 and could further strain growth.

Recommendations. In staff's view, Mexico would benefit from a comprehensive package of policies to limit the damage from the pandemic, promote a robust recovery, and achieve strong, durable, and inclusive growth over the medium term:

- *Fiscal policy.* Enhance near-term support by 2½-3½ percent of GDP (relative to pre-pandemic policy settings) for healthcare, households, firms, and investment. Announce credible medium-term tax reforms to finance high quality non-oil public investment, enhance social protection, close fiscal gaps, and lower public debt.
- *Monetary and financial sector policy.* Consider lowering the policy rate further, which is high relative to post-global financial crisis lows, despite growth being the weakest in decades and a very sizable output gap. Monitor carefully the health of banks, especially smaller ones; continue to uphold regulatory and supervisory standards.
- *Structural reforms.* To boost investment and reap the gains from USMCA, steadfastly implement reforms to tackle informality, improve governance, enhance public investment efficiency, and leverage private involvement in the energy sector.

Approved By
Krishna Srinivasan
(WHD) and Delia
Velculescu (SPR)

Discussions were held virtually during September 21–October 1, 2020. The mission comprised Rishi Goyal (head), Swarnali Ahmed Hannan, Kevin Wiseman (WHD), Carolina Claver (LEG), Dimitris Drakopoulos (MCM), Mehdi Raissi (FAD), and Misa Takebe (SPR). Krishna Srinivasan (WHD) joined the concluding meetings. Alfonso Guerra and Andrea Arevalo Arroyo (OED) also participated. The mission met with Bank of Mexico Governor Díaz de León, Finance Secretary Herrera, Labor Secretary Alcalde, other senior officials, and private sector representatives. Balazs Csonto (formerly SPR) provided inputs, and Juan Pablo Cuesta and Javier Ochoa (WHD) helped prepare the report.

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CONTEXT

1. Mexico has been hit hard by Covid-19. Registered fatalities exceed 85,000 so far, among the highest globally. Amid low testing, relatively low health budget allocations, and less stringent lockdowns than in some Latin American peers, fatalities could be notably higher, based on excess death statistics (Figures 1 and 2). Accompanying the pandemic has been a large economic shock. In the second quarter, output fell by about 19 percent over the same quarter in 2019, among the worst declines in the G20, alongside record dislocations in the labor market. Staff projects the economy to contract by 9 percent in 2020, the most severe contraction in Mexico since the Great Depression.

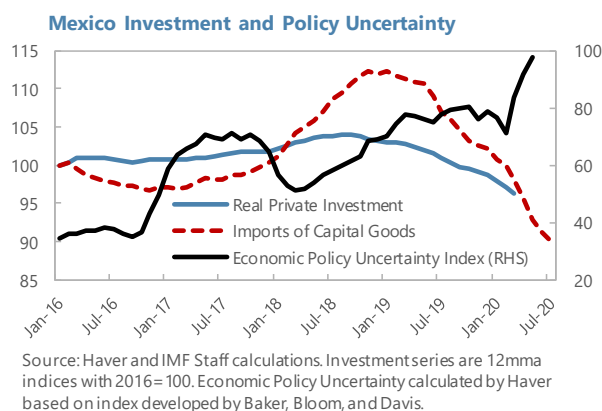
2. The gains in income and employment of the past decade are being set back, and the burden is falling disproportionately on the poor and vulnerable. The pandemic has exacerbated Mexico's weak growth situation. Mexico entered the year in recession and with falling investment, against a broader backdrop of real per capita GDP growth below 1 percent per year over the past few decades. At end-2020, real per capita GDP is estimated at pre-global financial crisis levels. Pre-pandemic, around 36 percent of the population were in working poverty, and a further 35 percent were vulnerable to income shocks or social deprivation. Now, with large numbers of workers having left the workforce or becoming underemployed or unemployed—mostly in the informal sector with no safety net—poverty has spiked, with the working poverty rate rising to 48 percent.

3. The large social and economic costs are expected to persist. It is uncertain how the pandemic will evolve—whether and when an effective vaccine may be widely available or infections may surge again, and concomitant changes in peoples' behavior, risk tolerance and patterns of working and consuming. If the wide availability of a cheap and effective vaccine will take time, social and economic costs will persist and be compounded by scarring effects. It took nearly 8 years after the global financial crisis for unemployment and poverty rates in Mexico to return to pre-crisis levels, even as real GDP recovered relatively quickly. The additional challenge this time is that—under current policy settings—staff and most analysts project GDP to take several years to recover. As a result, not only is growth projected to be weak, public debt is projected to remain elevated.

4. Against this backdrop, the imperative is for policies to limit the damage from the pandemic, promote a robust recovery, and pursue strong, durable, and inclusive growth. Building on Mexico's very strong macroeconomic policy framework and broadly sound external and financial sector fundamentals, the authorities are urged to implement a package of near-term fiscal and monetary support, credible plans to anchor fiscal sustainability over the medium term, and structural reforms to boost investment and potential growth. Mexico's experience shows that, notwithstanding very strong macroeconomic policies and policy frameworks in recent years that have anchored stability amid adverse shocks, strong, sustained and inclusive growth has proven elusive. Raising incomes requires turning around low productivity growth that has been Mexico's overarching and long-standing economic weakness. Raising growth would facilitate job creation, poverty alleviation, and debt reduction. In turn, it requires sustained implementation as well as broadening of high-quality reforms to, among others, extend the rule of law, improve the business climate, and tackle labor market informality (Annex I).

COVID-19: DEVELOPMENTS AND RESPONSES

5. Mexico entered 2020 in a mild recession. Real GDP shrank by 0.1 percent in 2019, led by declines in investment and government consumption. Weakness in investment reflected rising policy uncertainty against the backdrop of key reform reversals over the past 1½ years.¹ Weakness in government consumption reflected under-execution of budgeted expenditure (given lower oil revenues). Monetary policy rates were hiked to 8.25 percent by mid-2019 to anchor inflation expectations, after which they were lowered gradually through 25 basis point cuts to 7 percent before the pandemic struck. Relatively high rates against a benign international backdrop led to the buildup of significant carry trades. The 2019 external position was assessed to be broadly in line with medium-term fundamentals and desirable policies (Annex II).



6. Several adverse shocks hit in March-April. Heightened global risk aversion fueled capital flight, unwinding of carry trades, and sharp currency depreciation. Sudden stops in economic activity in trading partners and an oil price collapse led to a collapse in exports. There was a surge in Covid-19 infections domestically, with a policy response informed initially by the H1N1 outbreak of 2009 and by experiences of lockdowns in Asia and Europe. The result was a historic contraction in GDP by 19 percent (y/y) in Q2, driven by large declines in consumption and investment, owing to closures of workplaces and disruptions of supply chains.

7. The economy bottomed out in May and there are signs of a two-speed recovery. Very large policy support in major advanced economies led to a quick normalization of dollar funding markets and the start of their recovery. Notwithstanding rising infections, Mexico re-opened its auto sector, which is deeply integrated into the North American supply chain and which is recovering. However, domestic demand is weak. Mobility indicators through September were 10-40 percent below pre-pandemic levels. International flights were 60 percent below normal. Point-of-sale volumes from credit and debit cards were down 5 percent; the effect on the vulnerable is likely worse as card users are disproportionately better off. Mexican state-level data indicate that, controlling for the outbreak, export-exposed states performed comparatively better, although tourist-exposed states experienced sharp economic declines (Annex V).

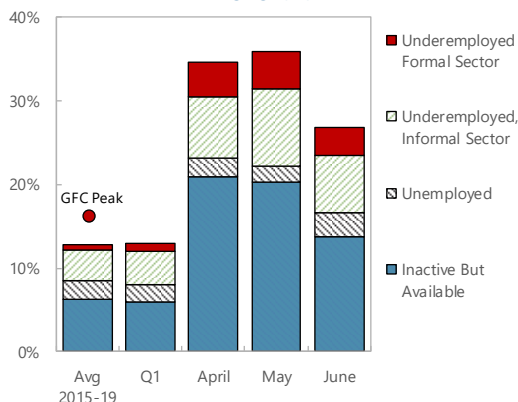
8. Many workers remain out of the labor market, unemployed, or underemployed. Over 20 percent of workers fell out of the workforce in April and an additional 10 percent became

¹ The 2019 current account improved to a very small deficit, given weak investment and imports as well as strong exports that were partly due to trade diversion from U.S.-China tensions.

underemployed.² Formal employment declined by 14 percent while informal employment declined by about 30 percent. By June about half of informal jobs lost were recouped. But formal jobs witnessed only a small recovery. The unemployment rate has risen to 5 percent, below the post-global financial crisis peak of about 6 percent. However, with the inactive and underemployed populations still well above their historical range, unemployment is likely to increase notably.

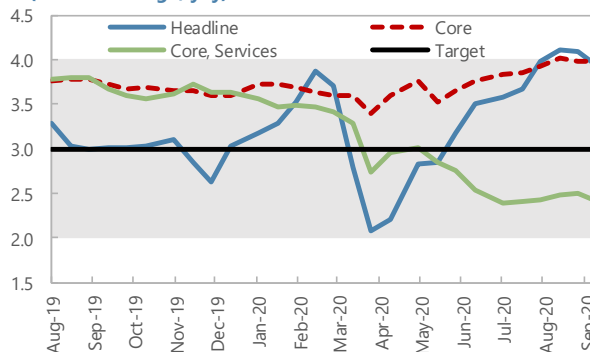
Vulnerable Workers

(cumulative share of working age population)



Source: INEGI ENOE and ETOE, IMF Staff calculations

Inflation and Components
(Percent Change, yoy)



Source: INEGI and IMF Staff Calculations.

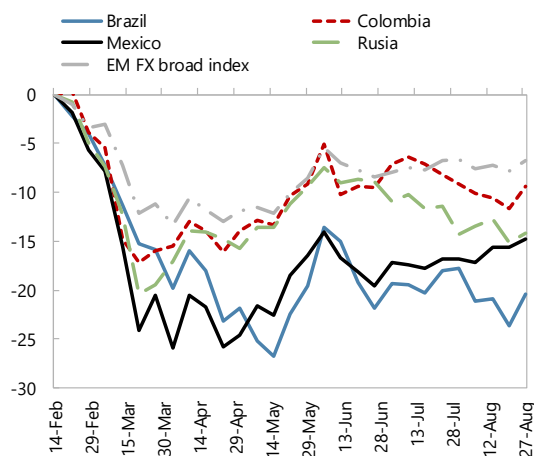
9. Although merchandise goods inflation has picked up, underlying inflationary pressure is weak. Annual headline inflation was slightly over 4 percent through August, above the central bank’s target of 3 percent. Elevated merchandise goods inflation owing to exchange rate passthrough and possible supply shocks resulted in core inflation near 4 percent as well, but services inflation that better reflect emerging demand pressures remain below 2.5 percent.

10. Amid capital outflows, the external accounts continue to demonstrate resilience.

Exports and imports slumped by about 30 percent over the second quarter, with a stronger subsequent recovery in manufacturing exports. Remittances increased by 26 percent y/y in pesos in the first seven months of 2020, reflecting resilient U.S. dollar flows as well as a weaker peso.

Foreigners reduced their share of peso sovereign holdings through August to the lowest levels since 2011, which were absorbed by domestic banks and funds. Gross international reserves were \$200 billion in early-October, up from \$183 billion at end-2019, representing 130 percent and 117 percent of the Assessing Reserve Adequacy metric, respectively. This increase is due mostly to the government’s debt management operations and valuation changes. A 6-month swap line was established and renewed with the U.S. Federal Reserve for \$60 billion, of which about 10 percent was tapped initially to help normalize

US Dollar FX valuations since Feb 2020

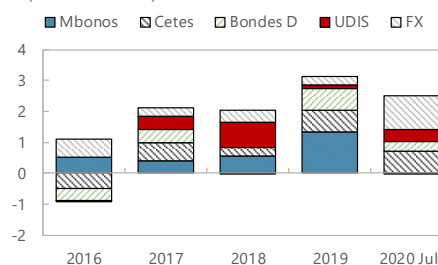


² These changes may partially reflect a change in measurement methodology as the employment survey moved to telephone-only in April 2020 on account of the pandemic.

dollar funding markets. Mexico also has access to the IMF's Flexible Credit Line for over \$60 billion (500 percent of quota).

11. In response to waning external flows, the authorities shortened the maturity and limited the issuance of local currency sovereign debt. The net issuance of medium- to long-term fixed rate bonds (Mbonos) was subdued until Q3 2020; the authorities are planning to increase issuance in Q4. Given the high share of foreign ownership (about ½ of the total) and lack of external inflows, this reduction in supply helped contain the term premia increases at the long end of the curve. Instead, the authorities increased external issuance sizes and are utilizing resources from various stabilization or trust funds. In September 2020, Mexico became the first country to issue a sustainable sovereign bond linked to the UN Sustainable Development Goals for €750 million.

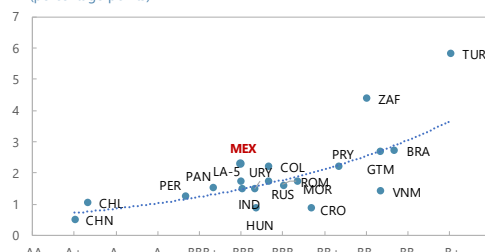
Net Issuance by Instruments
(Percent of GDP)



Source: Banco de Mexico.

12. The sovereign's rating was downgraded but it maintains comfortable market access. All three rating agencies downgraded the sovereign by one notch to an average equivalent of BBB. However, spreads are trading closer to lower-rated issuers as markets appear to be anticipating more negative rating actions. Nonetheless, sovereign dollar borrowing costs declined to historic lows of around 3.5 percent, reflecting monetary action in major advanced economies. The national oil company, Pemex, lost its investment-grade status, becoming the world's largest "fallen angel" and its ability to access external bond markets has been impaired so far in 2020.

EM USD Sovereign Spreads and Credit Risk Ratings
(percentage points)



Source: Bloomberg.

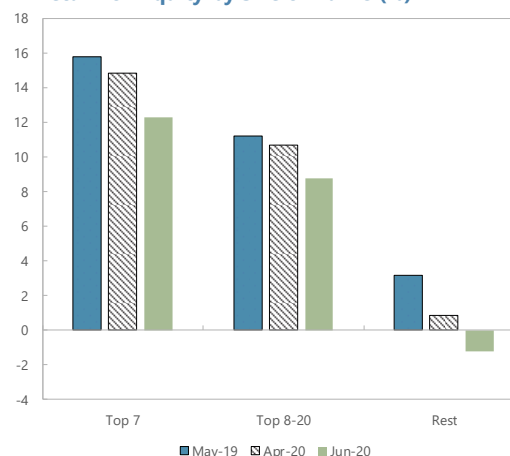
Note: Credit ratings are calculated as the average rating across Fitch, Moody's, and S&P. Spreads correspond to the Bloomberg Barclays EM Sovereign Index. LA-5 is the average of Brazil, Chile, Colombia, Mexico, and Peru. Data as of October 7, 2020.

13. Corporates drew on bank credit lines as local bond issuances are relatively expensive. Drawing down of credit lines ran its course in April; since then, commercial bank credit to non-financial corporates has fallen at an annualized rate of 15 percent also affected by exchange rate developments. Local corporate bond market conditions were very weak in Q2 but gained strength thereafter with long-term issuance in the primary market at 64 percent of the pace in 2019 as of Q3. Internationally, large investment-grade corporates have maintained comfortable market access. Access by non-investment grade corporates has been more subdued but funding costs are returning to pre-pandemic levels.

14. The banking sector has been broadly resilient so far, but profitability has declined. The sector is concentrated in a few large and mostly international banks, with sizable capital buffers, greater exposures to large corporates and sovereign-related entities, and low nonperforming loans (NPLs). Concentrations to SME and consumer loans, which are relatively more sensitive to a deterioration in the economic outlook, are higher in smaller and medium-sized banks. At end-July, the sector's Tier 1 capital ratio was 14.2 percent and the return on equity declined to 11.9 percent, the lowest since 2009, with profitability problems becoming more evident in smaller banks.

Profitability was also affected by sharp increases in provisioning to 169 percent, a new high. Loan renegotiations until August have been subdued with only 17 percent of system loans—the lowest among regional peers—making use of the regulator’s special accounting criteria announced in March 2020. The expiry of these initial measures is not expected to have a large impact on reported NPLs that remain low at 2.1 percent. In September 2020, the regulator (CNBV) announced several new measures to facilitate new loan restructurings, with easing in capital and loan loss provisioning. A small bank, Banco Ahorro Famsa (0.4 percent of total system assets), is being liquidated, owing to its exposure to a large related party that was particularly affected by the pandemic.

Return on Equity by Size of Banks (%)



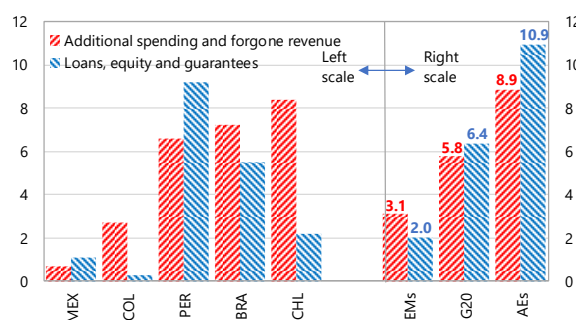
15. The central bank cut interest rates and launched new facilities to support market functioning. While the easing cycle commenced prior to the Covid-19 outbreak, the central bank accelerated rate cuts thereafter, including two unscheduled cuts early in the outbreak that signaled their readiness to confront deteriorating conditions. The easing since mid-2019 has been 400 basis points and, since March, 275 basis points, bringing the policy rate to 4.25 percent. The central bank expanded or established several facilities to support market functioning and credit provision, with access up to 3.3 percent of GDP. Use has been limited, however. For the market functioning facilities, this partly reflects the concurrent improvement in market conditions. For the credit provision facilities, commercial banks have had limited appetite for lending to SMEs absent more guarantees (e.g., via development banks), and there were delays in making one facility available.

Central Bank: Take Up of New and Expanded Facilities (Billions of Mexican pesos)			
	Envelope	Disbursed	Percent Accessed
Liquidity Support			
Reduction of the Monetary Regulation Deposit	50	50	100
Temporary securities swap window	100	N/A	N/A
Government securities term repurchase window	100	100	100
Swap of government securities	100	15	15
Corporate Securities Repurchase Facility	100	10	10
Credit Support			
Provision of resources to banking institutions to channel credit to micro and SMEs and individuals affected by the pandemic	250	8	3
Collateralized financing facility for commercial banks with corporate loans to finance micro and SMEs	100	N/A	N/A
Total	800	183	23
Total (percent GDP)	3.3	0.8	22.8

Source: Banco de Mexico, data as of early-September 2020.

16. The fiscal response has been muted and an outlier compared to G20 and regional peers. The authorities responded to the pandemic by increasing health spending and direct budget support to households and firms by 0.7 percent of GDP. This compares with 3.1 percent of GDP support on average in EMs. They provided below-the-line support through loans, reallocated some expenditure items, front-loaded spending for social pension payments to the elderly and the disabled, and accelerated procurement processes and VAT refunds, among other actions. Beyond the Covid-19 response, they implemented tax policy measures (e.g., for digital services) and introduced tax administration measures (e.g., abolishing the right to offset excess tax credits against other taxes, strengthening sanctions against tax fraud, and focusing strategically on large taxpayers). Tax collections in the first half of 2020 were better-than-expected at 7.2 percent of GDP.

Fiscal Measures in Response to the COVID-19 Pandemic
(Percent of GDP)



Sources: National Authorities and IMF Staff estimates.
Note: Data are as of June 12, 2020. Weighted by GDP in PPP-adjusted current US dollars for country groups. Revenue and spending measures exclude deferred taxes and advance payments. See Fiscal Monitor Database of COVID-19 Measures for details.

Mexico: Key Fiscal Measures in Response to COVID-19

Main measures	Amount (percent of 2020 GDP)
Total	1.7
Measures with budget impact	0.7
Support for households	0.0
<i>of which</i>	
Unemployment subsidy for 3 months to workers that hold a mortgage with the Housing Institute (MXN 7.3bn)	0.0
Support for businesses	0.2
<i>of which</i>	
Loans with optional repayment to SMEs that maintain employees on payroll, self-employed, and domestic workers	0.1
Loans with optional repayment to family businesses previously registered in the Welfare Census	0.1
Supporting the health system	0.2
Others (additional social spending)	0.2
Below-the-line measures	1.1
Institute for Social Security and Services (ISSSTE) loans to state workers	0.2
Personal loans by the Institute of the National Fund for the Consumption of Workers (Fonacot) (MXN 3bn)	0.0
Loans by development banks, particularly to SMEs	0.9

Source: Ministry of Finance and Public Credit (Mexico) and IMF Fiscal Monitor Database of Fiscal Measures.

17. The USMCA trade agreement went into effect in July 2020, but domestic policy uncertainty remains elevated. USMCA alleviates trade uncertainty and positions Mexico to potentially benefit from on-shoring of supply chains to North America (Annex IX). However, the government has also continued to reverse energy reforms and raise impediments to some large private investment projects. At the last Article IV, such actions included cancellation of energy auctions and a new airport project and renegotiation of pipeline contracts. More recent decisions have included—without broad consultation—efforts to change the framework for purchasing power by the state-owned electrical utility CFE from electricity generators (favoring public brown energy providers over private green ones) and imposing barriers to entry on new renewable energy

providers. They also forced the cancellation of a large private brewery project through a plebiscite. These actions have raised policy uncertainty and risk weakening the recovery and limiting the gains from USMCA.

OUTLOOK AND RISKS

18. The outlook is weak and subject to significant uncertainty. The path of the pandemic, the availability of effective treatments, and the associated impacts on economic activity, among others, are inherently difficult to predict. Consistent with the October 2020 WEO, staff assumes that social distancing will persist into 2021, but will then fade as vaccine coverage expands and therapies improve, with the acute phase of the pandemic over by end-2022. Consequently, economic activity in contact-intensive sectors, such as in services, will suffer. On the other hand, manufacturing—especially autos—should rebound faster, in line with trading partners such as the U.S. and benefiting from their policy support and re-opening. Exacerbating the overall recovery are potential scarring effects from the profound dislocations in the labor market (Annex VI). These effects will suppress potential output and demand over the medium term. Much depends on policy support, particularly in a context of high labor market informality and poverty.

19. Staff projects an output contraction of 9 percent this year and a modest recovery thereafter. The contraction is driven by falling consumption and investment, while the recovery is driven by external demand and an assumed gradual re-opening of sectors that leads to slowly improving domestic demand. Growth for 2021 is forecast at 3½ percent, partly reflecting the carryover from the rebound in the second half of 2020. Over the medium term, growth is close to the potential rate of about 2 percent, somewhat below previous estimates (see below). On these projections, output will return to pre-crisis levels by 2024, while per capita incomes will remain below pre-pandemic levels for a decade.

Real GDP Growth Forecast (in percent)		
	2020	2021
Ministry of Finance	-8.0	4.6
Central Bank 1/	-8.8,-11.3,-12.8	5.6, 2.8, 1.3
Consensus	-9.8	3.3
IMF Staff	-9.0	3.5

1/ Range of results across three illustrative scenarios.

20. With domestic demand expected to lag the return in output capacity, inflation is set to weaken gradually. Much of the contraction in the first half of 2020 was due to supply constraints from the pandemic response. These supply constraints are loosening as the economy re-opens, but demand remains suppressed by labor market dislocation, wealth effects and concerns about the path of the pandemic, opening a persistent output gap. This would inhibit the reintegration of displaced workers—about 2/3rds of the workforce is in services—and contribute to disinflationary pressures. Reflecting the compression and slow recovery of domestic demand, the external current account is projected to increase to a modest surplus in 2020 and decline gradually over the medium term. Potential output by 2025 is projected about 9 percent below pre-pandemic projections, reflecting likely labor market scarring, diminished long-run growth, and foregone investment.

21. The 2020 fiscal deficit (public sector borrowing requirement or PSBR) is projected to widen to 5.8 percent of GDP. Compared to the authorities' revised target of 4.7 percent of GDP, staff's higher PSBR projection reflects more prudent nominal growth, oil production, and tax efficiency assumptions. The government is benefiting from its oil hedge and drawing down its revenue stabilization and trust funds. Public debt is projected to rise to 65 percent of GDP in 2020.

22. Risks around the baseline are large and to the downside. Downside risks include new waves of Covid-19 infections that necessitate renewed lockdown measures (Annex III). Other or related risks include renewed supply chain disruptions, weakness in external demand, a fall in the oil price, a rise in global risk aversion, a further weakening in institutions, and a loss of sovereign investment grade status after nearly two decades. On the upside, a swift medical breakthrough on an effective vaccine or therapy, or advanced economy buoyancy benefiting from large policy interventions, could boost confidence and exports.

23. Authorities' views. The authorities highlighted the very significant uncertainty owing to the pandemic. They noted that the most recent economic data point to potential upsides to staff's projections, while broadly agreeing with the characterization of risks. They considered that the recent decline in contagion cases and deaths, and the gradual re-opening of sectors and regions underway, would facilitate the recovery. They expected further reductions in the population's share in working poverty given the labor market's recovery.

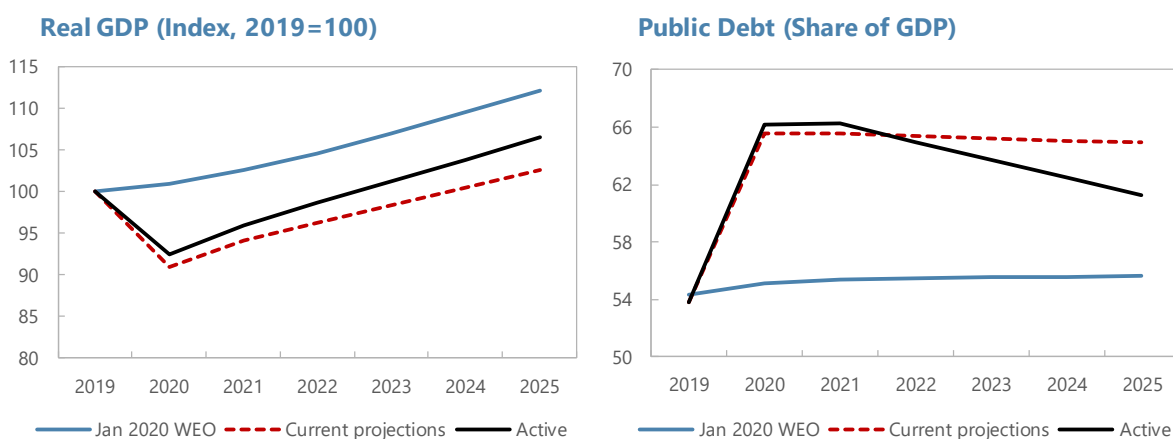
POLICY DISCUSSIONS

24. Confronted with an unprecedented shock, Mexico faces the challenges of preserving lives and livelihoods, safeguarding medium-term sustainability, and boosting potential growth. The key near-term imperative is to deploy adequate resources to save lives, preserve livelihoods, and mitigate scarring effects. Even in an optimistic scenario where the pandemic is brought under control swiftly, such support would help guard against recurrence and secure the macroeconomic recovery. It needs to be accomplished in a manner that preserves fiscal and financial stability over the medium term, so as not to impose excessive burdens later and hinder the recovery and growth. Ideally, these plans would dovetail seamlessly with addressing long-standing concerns of low productivity growth, also allowing Mexico to harness fully the benefits of USMCA. At the very least, they should "do no harm" to exacerbate such concerns and impede the recovery.

25. These inter-related challenges call for a comprehensive response. Mexico has some fiscal space and enjoys comfortable market access (Annex IV). Temporary and targeted near-term fiscal support of 2½–3½ percent of GDP (relative to pre-pandemic settings) would alleviate current distress and limit potential scarring. This support should be phased out after one year and replaced with a stimulus comprising a permanent increase in public investment and social spending to support the recovery. Credible medium-term tax reforms should seek to finance further increases in spending in these areas, close gaps, and lower debt. Further near-term monetary accommodation, against the backdrop of well-anchored inflation expectations, would help support the recovery. Such policies should enable the authorities to increase near-term support while safeguarding market

access, limiting notably the likelihood of worse outcomes over the medium term, and alleviating concerns of a credit crunch. They could also help deal with potential negative distributional consequences, e.g., of temporarily higher inflation, through targeted support to households. Structural reforms would amplify the growth payoffs and improve inclusion, against the backdrop of sizable informality and when combined with measures to improve governance as well as macroeconomic policy support given cyclically weak conditions ([October 2019 WEO, Chapter 3](#)). They would help speed up the recovery as improved investor sentiment, reduced credit contraction, and easier hiring conditions help businesses grow, limiting scarring with minimal up-front costs.

26. Such a response would yield important benefits over current policy settings. Even abstracting from the growth benefits of structural reforms, implementation of the above-mentioned macroeconomic policy package—comprising temporary fiscal support in the near term, growth-friendly and inclusive adjustments from 2022, monetary accommodation, and higher public investment efficiency—could raise real GDP by about 4 percent by 2025 and debt would decline firmly (¶132). Coupled with steadfast implementation of structural reforms, these reforms could generate further and very significant growth and debt reduction benefits.



Note: Active scenario adds the following to current projections: model-simulation results from staff's proposed fiscal package minus support measures announced by the authorities in response to Covid-19. Source: IMF WP/20/215.

A. Fiscal Policy: Mexico Needs a “Twist” in its Response to Covid-19

27. The draft 2021 budget continues the authorities’ conservative fiscal policies to limit debt issuance. Real spending is estimated to increase by 0.1 percent relative to 2020, with priority given to health, previously identified social programs (including pensions), and public investment projects (e.g., an oil refinery, airport, and train). The budget forecasts the deficit (PSBR) to improve from 4.7 percent of GDP in 2020 to 3.4 percent of GDP in 2021, and public debt to stabilize in 2021 and decline marginally thereafter. Medium-term deficit targets were relaxed by 0.2 percent of GDP in each year to about 2½ percent of GDP.

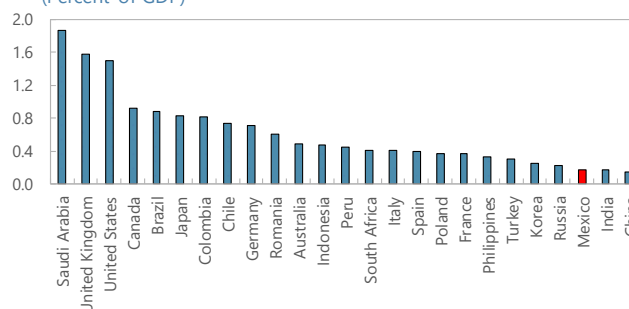
28. In staff’s view, temporary near-term fiscal support of 2½–3½ percent of GDP could help better combat the pandemic and its effects (text table below). This support—which includes the authorities’ spending measures of 0.7 percent of GDP (¶116)—should finance higher health

Estimated Costs of Key Recommended Measures		
Measures	Assumptions	Estimated cost (percent of GDP)
Total		2.6-3.5
Healthcare		0.6-1.5
Accommodate additional health spending	Based on Dudine et. al. (2020) that combines a simple Susceptible-Infectious-Recovered (SIR) epidemiological model and assumptions about pre-pandemic spare capacity, cost of providing care and of increasing capacity in the health sector	0.6-1.5
Support to households by... ...expanding existing social safety nets		1.2
To readily eligible beneficiaries	Offer benefits to those who were eligible but did not receive any social assistance in 2019	0.6
To people at risk of poverty	3-month support of 2036 pesos per month (average of poverty lines) for people at risk of extreme poverty, as estimated by CONEVAL	0.3
To informal workers in hard-hit sectors	3-month support of 2036 pesos per month to informal workers in construction, trade, and services sectors using sector-specific lockdown assumptions	0.3
Support to firms		0.4
Wage subsidies	6-month support of 2036 pesos per month to IMSS-insured workers of formal firms in construction, trade, and services sectors using sector-specific lockdown assumptions	0.4
Boost public investment	Increase good-quality public investment to support a fraction of private investment lost because of COVID-19	0.4

spending, lifelines to vulnerable households and viable firms, and public investment (IMF WP/20/215). As a general principle, such support would be most effective if emergency lifelines were timely, temporary and targeted to those people and firms most affected, including in the informal sector, and delivered via existing social protection schemes. They should also be progressive, cost-effective, and embedded in medium-term budget frameworks (April 2020 Fiscal Monitor). Considering the persistence of the pandemic and its deep economic downdrafts, emergency lifelines have a role to play for longer even as lockdowns are gradually lifted under uncertainty. They could be deployed by triggering the escape clauses in the Fiscal Responsibility Law, which have been used repeatedly in recent years (see Annex IV of the 2019 Article IV staff report). The structural current spending rule would also allow for some additional expenditure.³

- **Health spending.** Boosting spending can help improve health outcomes:
 - Mexico's pre-pandemic health capacity was lower than its peers, evident from its lower health expenditure and indicators such as the number of beds and physicians;
 - the increase in health

Health Spending due to COVID-19
(Percent of GDP)



Source: Compiled by IMF Fiscal Monitor (2020).

³ Out of the 14 years that the fiscal rules framework has been in place, full compliance was observed in 5 years.

spending by 0.2 percent of GDP is lower than G20 and regional peers' average of 0.6 percent of GDP; (iii) the pandemic is still spreading, testing is very low, while case fatality rates are very high; and (iv) co-morbidity factors are high because of elevated incidence of obesity and diabetes, among others. Considering these factors and using the framework of [IMF WP/20/145](#) that accounts for the number of people requiring hospitalization, the cost of healthcare, and need for greater health system capacity, staff estimates that health spending should be increased by ½–1½ percent of GDP (relative to pre-pandemic levels). This range reflects the inherent uncertainties in this exercise, and the precise amount should be determined based on more specific calibration of need and absorptive capacity. If meanwhile new cases and hospital occupancy rates decline durably, health resources would need to focus on the next phase of the pandemic, including securing materials for a vaccine rollout.⁴

- **Households.** Social safety net programs in Mexico have significant gaps in terms of coverage of lower income households ([IMF WP/20/215](#)). Moreover, informal workers—comprising 55–60 percent of the workforce—have no formal ties to social safety nets and have limited access to the banking system (financial inclusion is low). The coverage of social safety nets can be increased by temporarily relaxing eligibility criteria of existing programs, including individuals that are likely to fall into poverty (they are currently excluded), and extending the safety net to informal workers in hard-hit sectors. People in need can largely be identified using existing databases (e.g., the social census and the comprehensive social information system or SISI)⁵ and the national voter ID database (for informal workers). The one-year cost of increased coverage is estimated at 1.2 percent of GDP, based on supporting eligible beneficiaries, people at risk of poverty, and informal workers of hard-hit sectors. In addition, other income and liquidity support measures—aimed at formal workers—could be provided in the form of deferred social security contributions and tax payments, deferred and/or reduced mortgages,⁶ consumer loans, utility bill payments, and government-funded sick and family leave.
- **Businesses.** Micro loans with optional repayment, totaling up to 0.2 percent of GDP, have been made available to SMEs that maintain employees on payroll, the self-employed and workers, as well as family businesses previously registered in the Welfare Census. Development banks may also provide loans totaling up to 0.9 percent of GDP, particularly to SMEs. Consideration could be given to providing liquidity support (tax and social security contribution deferrals, accelerated VAT refunds and possibly some social transfers) and cost-reduction assistance (lower social security contributions, forgivable loans, wage subsidies) to viable firms, particularly SMEs. Wage

⁴ The cost of prevention and treatment would depend on country-specific factors such as demography, geography, spare capacity and preparedness of the existing health infrastructure, effectiveness of non-pharmaceutical mitigation measures, specific factor costs, and the stage of the outbreak (see [Managing the Impacts of the Coronavirus: Guidance on Health Spending Priorities](#)).

⁵ The authorities conducted a social census covering about 20 million households out of a total of 30 million households to improve targeting of social protection programs. The Sistema de Información Social Integral (SISI) collects data from social programs across all levels of government.

⁶ The National Housing Fund for Workers (Infonavit) has provided payment extensions and unemployment insurance to workers that hold a mortgage with them. It has also announced payment extensions to SMEs.

subsidies to formal workers of hard-hit sectors such as services, trade and construction, covering six months of payments, would amount to about 0.4 percent of GDP.

- **Public investment.** The authorities allocated 0.2 percent of GDP to social spending including public works, security and education in response to Covid-19. This could be increased to 0.4 percent of GDP, including investing in maintenance and restarting good projects that were delayed, to recuperate a fraction of the private investment lost.

29. A credible announcement is needed of fiscal structural measures to close gaps, reduce public debt, and create room for public investment and targeted transfers to the vulnerable.

In staff's view, the authorities' medium-term deficit targets (PSBR) would stabilize gross public debt around 65 percent of GDP (10 percentage points above pre-pandemic levels). However, absent additional measures, there is a fiscal gap of 1¼–2 percent of GDP during 2021–25, based on staff's more prudent assumptions of nominal GDP growth, oil production, and tax administration gains. In a scenario in which these fiscal gaps persist, public debt could increase to 73 percent of GDP by 2025 (Annex IV). A more pointed concern is of disruptive expenditure cuts to narrow the gaps, which could undermine the quality of public services. Staff is also concerned about the low levels of non-Pemex capital spending in the authorities' plans; these could additionally be crowded out by large priority projects and the likely need for continued Pemex support. Credibly announcing pro-growth and inclusive measures to close the gaps and lower debt over the medium term would not only underpin debt sustainability but also create more space for needed support in the near term.⁷

30. In that regard, early announcement of a comprehensive tax reform to be implemented over the medium term is essential.

Notwithstanding a tax reform in 2014 to replace falling oil revenues, Mexico's non-oil revenue collections are nearly 6 percent of GDP below Latin American peers and about ½ those of the OECD average. With sizable gaps in VAT and personal income tax collections, staff considers that policy and administrative actions to improve VAT performance, rationalize inefficient and regressive income tax expenditures, widen the top personal income tax bracket, and reform the property and vehicle registration taxes would reduce distortions, enhance efficiencies, promote inclusion, and raise revenues by 3–4 percent of GDP.

- **Value Added Taxes (VAT).** Fundamental reforms to reduce policy and compliance gaps could increase revenues by at least 2 percent of GDP. First, policy reforms to eliminate domestic zero-rate items, except for a few key foodstuffs, and curtail exemptions could boost revenues by more than 1 percent of GDP. Corresponding strengthening of social safety nets could help address any distributional concerns. Second, consideration should be given to tackling evasion by improving the tax agency's organizational structure, simplifying the small taxpayer regime, moving toward a high-coverage audit process for VAT returns, increasing the use of electronic means, and further strengthening sanctions against tax fraud. Third, not renewing the border tax

⁷ One-off profit transfers from the central bank to the government, which could be sizable when assessed in 2021Q1 on account of peso revaluation of international reserves, would not obviate the need for a high-quality medium-term tax reform. Any such future transfers should be used in full to reduce net public debt.

regime, a temporary special regime for 2019-20, would limit distortions of the base (foregone revenues are estimated at 0.3 percent of GDP, including from corporate income taxes).

- **Income taxes.** Mexico's personal income tax collections lag in international comparison owing to high informality and inequality, with a large low-wage sector that pays very little tax. While raising rates can add (limited) revenues, the priority should be to broaden the base. Exclusions are sizable, such as income on personal business activities and independent services; they should be brought into the tax net. Apart from withholdings on wages and salaries, personal income tax revenues are negligible. Tax expenditures are also sizable at slightly below 1 percent of GDP, of which the authorities consider that at least ½ percent of GDP are inefficient or regressive and could be rationalized. The threshold for the top personal income tax bracket, which was increased by 5 percentage points as part of the 2014 tax reform, should be lowered. These reforms could yield up to ¾ percent of GDP.
- **Subnational taxes.** Property tax collections in Mexico are currently 1½ percent of GDP below Latin American averages. Raising these collections would be efficient and progressive; it requires creating an agency at the federal level to update the cadaster and coordinating policies at the subnational level to avoid fragmentation. Closing the gap in collections vis-à-vis peers could take time but, at a minimum, the aim could be to collect at least ¾ percent of GDP. Redesigning the local vehicle tax by simplification and stricter enforcement would allow for a reduction in transfers to states and municipalities.
- **Gasoline excise tax.** The current formula guarantees cumulative retail fuel price growth below CPI inflation since November 30, 2018. This policy disproportionately benefits richer households and should be reconsidered, which could also provide some additional revenues. Moreover, in a low oil price environment, there is scope to increase gasoline excises.

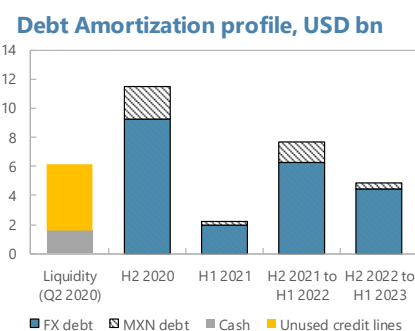
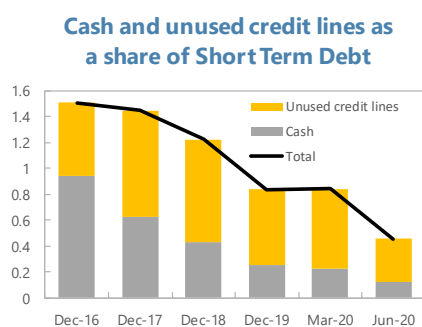
31. Measures are also needed on the spending side to make fiscal policy more growth friendly and inclusive in the medium term. Over the years, fiscal discipline has been enforced by cutting programmable spending significantly. Spending has shifted away from investment and, based on functions of government, out of health, education, housing and community services. There is limited scope for further significant cuts in these areas without also severely undermining the quality of service provision. Spending has instead shifted toward pensions and social safety nets. There is therefore a need to rebalance spending toward essential services and high-quality public investment, and to reform pensions and social safety nets.

- **Social protection.** Medium-term reforms are needed to strengthen the safety net and social insurance programs, with due attention to their governance and transparency: (i) Mexico lacks a nationwide unemployment benefits system, which limits the countercyclical role of fiscal policy. As such a system exists in Mexico City, consideration should be given to adapting that system to the whole country. (ii) There is relatively large leakage of benefits to higher-income groups ([IMF WP/20/215](#)). This calls for improved targeting (and strengthening progressive income taxes). (iii) There are overlaps and gaps in coverage across the very large number of schemes at different levels of government. Coverage should be expanded in a cost-effective manner and

duplications decreased by matching different databases of beneficiaries to create a single registry and strengthening administrative capacity. Instruments that reach individuals most in need, including in the informal sector, could also be considered, such as mobile money, in-kind transfers for education and health, and community-based methods to identify those in need.

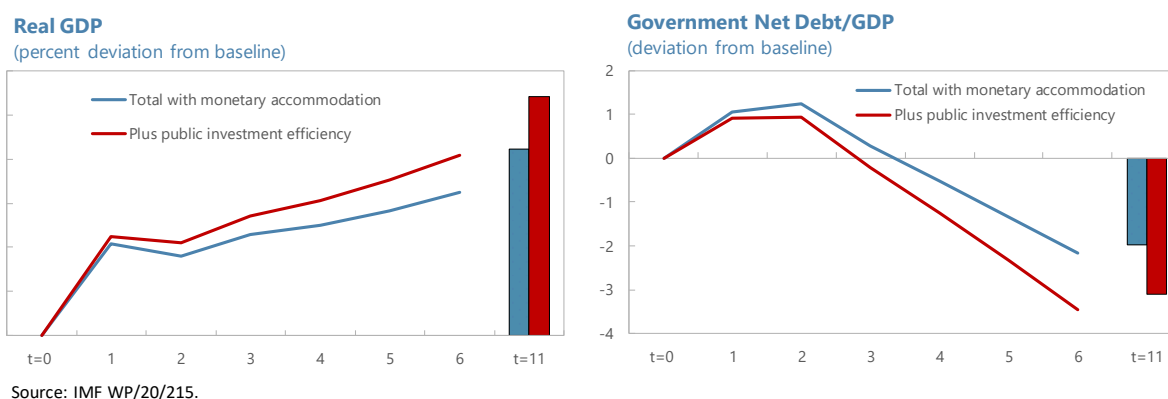
- Pension system.** Mexico's pension system, which covers those who have worked and contributed in the formal sector for about 25 years, has very low replacement rates (26 percent for a full career average earner) and limited coverage, given high informality and the fact that many workers move between formal and informal arrangements during their career.
 - Proposed reform.* The government has proposed a reform to raise replacement rates by about 40 percent by notably increasing contributions from private employers (from 5.15 percent to 13.875 percent over 8 years); contributions from employees and the state remain broadly unchanged. Coverage would be broadened by lowering the required period of contributions to about 15 years, which will be increased over time to 20 years. The minimum guaranteed pension could be increased by 1/3rd to about US\$2,300 per year. Moreover, fees for pension fund managers could be capped.
 - Recommendations.* If approved, the reform can improve pension adequacy and eligibility. However, higher employer contributions could deter formal job creation. Considering that many workers move between formal and informal arrangements during their careers, complementary measures are needed to tackle informality and increase contribution densities, including reducing the contribution rate to the housing fund (Infonavit), increasing the contribution period required for a full pension in the old public-sector defined benefit scheme, and raising the age limit to get a full pension in the public sector.
- Public investment.** At about 1½ percent of GDP, non-Pemex capital spending was very low in 2019. Mexico needs greater physical and human public investment to improve productivity, meet the Sustainable Development Goal in healthcare (½ percent of GDP in investment), and enhance inclusion. This requires reforming Pemex (see below) and improving public investment efficiency. The latter includes enhancing coordination between the center and states, emphasizing effective national and sector strategies to guide project planning, and strengthening multi-year budgeting (see the [2019 Public Investment Management Assessment](#)).

- Pemex.** Pemex's business strategy continues to burden the budget and, absent changes, risks crowding out resources for essential spending. It prioritizes raising oil production and refining throughput but entails ever widening operational losses. It is advisable to focus



production only in profitable fields, sell non-core assets, curb plans to increase refining output at a loss, and postpone new refinery plans until it is profitable to do so. Upfront action would reduce fiscal strains and lower refinancing risks. Partnering with private firms will help increase efficiency, including by leveraging specialized expertise and managing investment costs. Given Pemex’s high financing needs, the authorities could consider fiscal support operations that ease liquidity strains and funding costs for Pemex, conditional on changes in the business strategy that prioritize financial objectives and additional initiatives to reform governance (Annex VII).

32. A comprehensive package—comprising near-term fiscal support and medium-term tax and spending reforms as above—would substantially raise output and lower public debt. This package includes one-off emergency lifelines during the pandemic of 2½ percent of GDP in the first year that is replaced with a stimulus of 2 percent of GDP over the following two years to support growth and inclusion. It also includes a 2 percent of GDP permanent increase in taxes in the second year (to close fiscal gaps), rising further in the third year and combined with spending efficiencies to finance permanently higher public investment and needed social spending. Illustrative simulations of this package using the IMF’s GIMF model⁸ suggest that output could increase by 3–4 percent over the medium term and over 5 percent in the long term. After an initial small increase in public debt associated with the near-term support package, public debt would decline by 2–3 percent over the medium term. Raising investment efficiency would bolster these effects. These effects are large, considering they relate just to fiscal reforms.



33. Authorities’ views. The authorities emphasized their commitment above all to an effective health response to the pandemic. This would also allow the safe reopening of activity and support the recovery. Given the projected increase in the public debt-to-GDP ratio, the relatively high borrowing costs and prevailing uncertainty over the path of the pandemic, they stressed the need to “keep the powder dry” in the event of a recurrence of outbreaks and related adverse economic shocks and not to burden future generations. They highlighted the programs put in place to

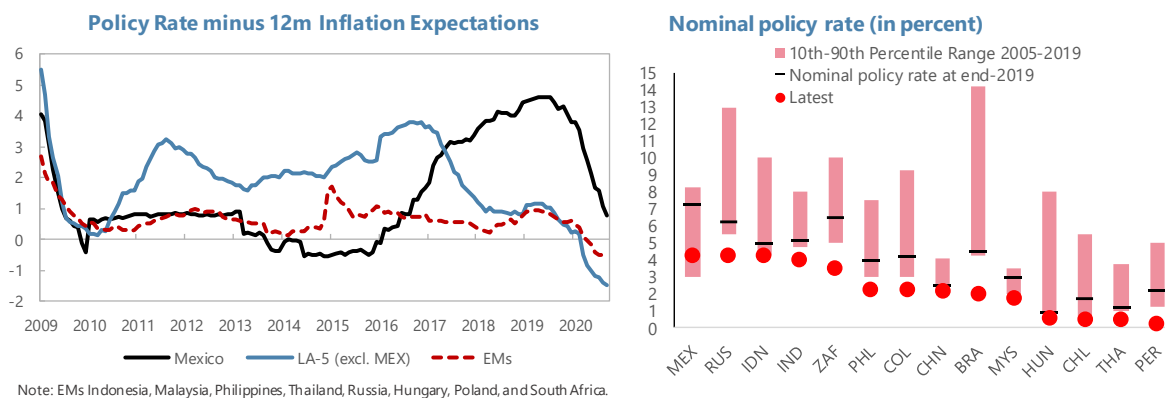
⁸ IMF’s Global Integrated Monetary and Fiscal (GIMF) model is a multi-country structural dynamic general equilibrium model featuring Mexico, among others. It links the behavior of households, firms, and government sector within and across countries, and is particularly suitable for fiscal policy analysis. As investors anticipate implementation of the package, the sovereign risk premium is assumed to fall immediately by 50 basis points below the baseline.

mitigate the economic impact on the most vulnerable households, workers and firms, and to provide liquidity to the financial sector. They remarked that their fiscal response balances out short- and long-term goals, and that sound cross-country evidence about the effect of fiscal impulses on relevant outcomes during the current economic episode, as well as about their optimal size, would be helpful. They highlighted legal constraints in issuing debt, which can only be used for public investment, monetary and debt management operations, and emergencies. In a complex political environment, they did not consider changes to the constitution to be feasible. They intend to safeguard social spending and priority public investment projects, seek spending efficiencies, and combat tax evasion, which has already yielded benefits. They agreed on the need to increase tax collections over the medium term, focused on enhancing collection efficiency. They noted that the temporary border tax regime had beneficial economic effects despite forgone revenues. They considered their efforts at reprioritizing public spending to support growth and inclusion, including through their move earlier in the current administration to unconditional cash transfers and a focus on the most vulnerable. On pension reforms, they stressed that their proposed changes will have minimal fiscal cost in the near term and limited impact on informality, given its design features for low income individuals. They agreed that complementary reforms would be required to tackle informality holistically. Regarding Pemex, they noted that the company is profitable but faces a high tax burden and high debt. They highlighted that they have taken steps to address these two problems by lowering the profit-sharing duty and increasing capital transfers.

B. Monetary and Exchange Rate Policies

34. Faced with difficult tradeoffs in a complex environment, the central bank has cut the policy rate significantly and supported financial market functioning. It has sought to balance support for the economy with anchoring inflation and safeguarding external financial stability. The freely floating peso has facilitated absorption of shocks, with only marginal use of non-deliverable forwards, against the backdrop of a broadly well-hedged corporate sector. Exchange rate flexibility should be maintained to continue facilitating absorption to shocks, with foreign exchange intervention limited to instances of disorderly market conditions.

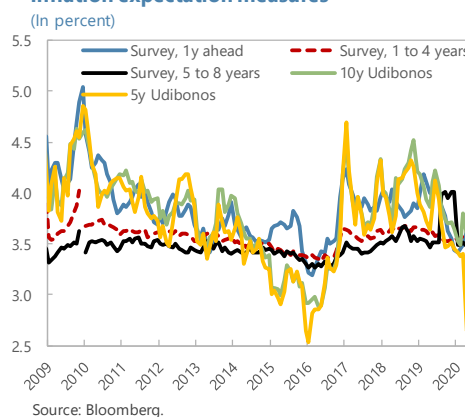
35. Staff considers the monetary stance to be modestly accommodative, with further room to ease. Pre-pandemic, the central bank [estimated](#) the real neutral rate to be in the range of 1.8 and 3.4 percent. The ex-ante real policy rate, based on 1-year ahead inflation expectations that remain well anchored, is below the lower bound of this range. Nonetheless, the real neutral rate is likely to have declined in the pandemic. For instance, the October 2020 GFSR estimated that U.S. monetary easing—prior to the recent shift in U.S. monetary policy announced at the Jackson Hole conference—has lowered long-term bond yields in EMs by 30-60 basis points. The policy rate moreover remains above the trough in rates reached in the previous easing cycle, despite growth being the weakest in decades and with a very sizable output gap that is projected to persist. The policy rate is also high in both real and nominal terms relative to most large EMs, whose rates are at or below their historic lows and several of whom have pursued additional monetary stimulus through asset purchase programs.



36. With 1-year ahead inflation expectations well anchored, consideration could be given to further easing while also safeguarding financial stability. A lower real cost of borrowing would help alleviate debt servicing pressures among weaker borrowers, possibly boost investment, and increase the marginal attractiveness of the credit facilities of the central bank. Eighty percent of non-financial corporate credit is floating rate: about 85 percent for large corporates and over 65 percent for SMEs. But in considering further reductions in the policy rate, the central bank will need to successfully navigate challenging tradeoffs.

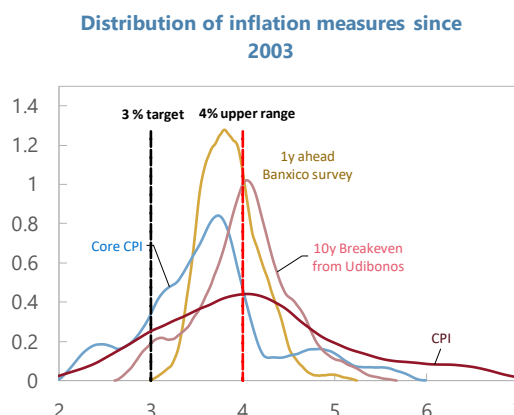
- One difficult balancing act is that inflation has edged up recently on account of price pressures in merchandise goods. However, these pressures largely reflect passthrough from peso depreciation earlier this year, temporary Covid-19 related supply shocks, and idiosyncratic weather shocks weighing on raw and processed food inflation. They are thus expected to be transitory. The weakness in demand (1120) and low inflation in services are expected to offset these transitory effects over time. This is further supported by well-anchored 1-year ahead and medium-term inflation expectations.
- Another difficult balancing act concerns capital outflow and peso depreciation risks related to Mexico's deep and liquid local currency markets, against the backdrop of the sudden stop in March-April and still unsettled global conditions. Acknowledging these concerns, it is worth noting that, since the Covid-19 shock, outflows in local currency bond markets have been driven largely by external factors, particularly global risk aversion, while issuance and inflows in hard currency debt are at or near historical records, owing to the perceived creditworthiness of the sovereign and large corporates. Concerns could also be alleviated if staff's recommendations above for fiscal policy and Pemex are implemented, lowering risk premia. Staff's analysis of policy rate setting, which includes U.S. policies and credit spreads, also suggests room to further lower rates (Annex VIII).

Inflation expectation measures



37. An independent review of the monetary policy framework could be considered.

Although inflation levels and volatility have declined notably following the introduction of inflation targeting, actual inflation and inflation expectations have remained closer to the upper range of the target. Following nearly two decades of inflation targeting and in view of the potential changes in the strategies of major central banks, an independent review could explore inflation determinants, inflation measures, and the policy toolkit. The review could also consider the role of financial stability, capital flow dynamics, expanding financial inclusion, and sustainable employment in pursuing the main objective of low and stable inflation within its existing legal framework.



38. Consideration could be given to enhancing the attractiveness of the central bank's financing facilities. The facilities aimed to improve the functioning of financial markets and channel credit to MSMEs (¶15). The market-functioning facilities have seen limited use against the backdrop of improving liquidity conditions; they have contributed to extending the maturity of government repo operations. The MSME-credit facilities, however, have seen limited use⁹, despite significant stress in several sectors impacted by Covid-19 and an ongoing contraction in credit. In staff's view, development banks could provide larger MSME guarantees to support an increase in lending volumes. This will require additional support from the government and a greater tolerance for risk taking. There is scope also to reduce funding costs that are linked to the policy rate, relax collateral requirements, and encourage banks to engage with potential recipients more vigorously.

39. Authorities' views. The authorities emphasized that they have eased monetary policy significantly over the past year, thereby leaving less margin for future maneuver. They noted that headline and core inflation have increased sharply over the last few months and are around 100 basis points above the 3 percent inflation target. This contrasts with the negative inflation gap prevailing in most G20 countries. Uncertainty is high and significant risks prevail. Global financial conditions remain unsettled, particularly those that are relevant drivers of risk appetite for EM assets. The authorities consider it important to foster an orderly adjustment of interest rates along the yield curve, containing risk premia at longer tenors, which they see as particularly relevant for domestic financing conditions. In addition to cyclical considerations, they also considered that monetary policy needs to be mindful of the different factors that influence capital flows and investors' confidence. They see this as particularly relevant for Mexico given that the peso is fully convertible and widely traded in global markets and non-resident investors play a key role in the local government debt market. They underscored the benefits of their cautious approach in providing essential support and predictability to markets. They viewed the liquidity and credit facilities as having provided an important backstop to banks, which, although not currently needed by most, provides protection against downside risks and has had a material and signaling impact on

⁹ One of two SME facilities announced in April was not available for use until late September, given technical delays.

markets. They also noted that recent monetary policy framework reviews have taken place in the context of AEs facing the challenges of being at the effective lower bound and of inflation expectations being persistently below their targets. These factors are not present in many EMs, including Mexico.

C. Financial Sector Policies

40. Close monitoring of risks in the banking sector remains crucial. The authorities' stress tests¹⁰ revealed that most banks—except for some that represent a small share of total assets—remain above regulatory capital requirements. Although initial conditions such as current NPL levels and coverage ratios rank favorably compared to peers, banks' allowances for loan losses (as a percent of total loans) rank low. According to the authorities, corporate loans affected by Covid-19 are estimated at nearly 40 percent of the banking portfolio; as a percent of capital, however, they are more significant in smaller banks. The same applies to riskier consumer loans. Downside risks are further accentuated by the limited fiscal support to the private sector. The banking system is also subject to significant concentration risks; most banks are exposed to a small set of large corporates, in some cases through their supply chain (e.g., Pemex). The liquidation of Banco Ahorro Famsa demonstrated the difficulty of assessing the creditworthiness of banks with large related party exposure, a common feature of several smaller banks.

41. The authorities should continue upholding minimum regulatory and supervisory standards, while using flexibility within the framework to cope with challenges. Loan restructuring regulations should preserve the quality and level of bank capital and ensure appropriate reclassification of distressed loans and recognition of losses. It is important that, while capital buffers are to be used in times of stress, capital requirements are not diluted, and that borrowers are not disincentivized to resume loan repayments in favor of more favorable restructuring terms. Continued vigilance is thus needed, including among smaller banks.

42. Given the still considerable uncertainty related to the outlook, limiting capital distributions is prudent. Up until Q2 2020, banks respected the regulator's recommendation to voluntarily limit the distribution of dividend payouts, share buybacks, bonus payments, and the like. However, some banks have indicated their intention to resume such payments going forward. Given the prevailing uncertainty, the authorities should consider actions to preserve banks' capital resources (e.g., suspending capital distribution) until the economy is clearly recovering, which could also allow banks to support the economy with healthy credit provision.

43. Closing key regulatory and supervisory gaps would boost financial resilience. Outstanding recommendations from the 2016 FSAP of relevance to the current situation include: (i) increasing the operational independence, budget autonomy, and legal protection of the banking and securities supervisor; (ii) enhancing the definition of "common risk" and "related party" in the

¹⁰ The central bank used six sets of three-year stress scenarios. Three of the scenarios were motivated by the current pandemic and three were historic. The most severe scenario remains the 1995 crisis, which had a smaller GDP decline compared to staff projections but higher unemployment and more severe exchange rate depreciation.

area of bank exposures; (iii) improving the resolution regime for financial holding companies and strengthening the authorities' power to request pre-emptive actions (e.g., regarding issuing loss absorbing capacity instruments); and (iv) ensuring adequate access to funding for deposit insurance (Institute for the Protection of Bank Savings, IPAB), with consideration given to transferring legacy debt to the government to free up resources.

44. Authorities' views. The authorities highlighted the strength and stability of the financial sector, the implementation of the Basel III framework, and their close monitoring of potential risks, including restructured loans. They are looking at additional initiatives to preserve capital resources, if needed. The implementation of several regulatory measures, e.g., the Net Stable Funding Ratio and Total Loss Absorbing Capacity requirements, has been delayed until financial and economic conditions improve. For the short run, the authorities (CNBV and the central bank) are working on a consensual final proposal for the complete implementation of the large exposures in international standards in line with the Basel III framework.

D. Structural Reforms

45. The authorities' strategy to boost potential growth has several elements. The USMCA agreement sharply reduces trade-related uncertainty and positions Mexico to benefit from potential 'on-shoring' of supply chains to North America. The government continues to pursue a policy of energy self-sufficiency, overturning the 2014 energy reform that promoted private investment and re-focusing on the state-owned Pemex (¶131, Annex VII) and electrical utility CFE (¶117). It is emphasizing the fight against corruption, highlighting possible past malfeasance and implementing austerity. It is seeking to safeguard priority public investment projects (¶129) and continuing to raise minimum wages—by a further 20 percent at the start of 2020—to boost the spending power of lower-income households. It announced in early October a series of investment projects in conjunction with the private sector that could amount to 1¼ percent of GDP in the coming years.

46. In staff's view, delivering lasting improvements in productivity—that durably boost investment and the recovery—requires tackling long-standing impediments. Structural impediments to growth include pervasive informality, limited access to financial services, entry barriers that limit competition, and crime (see [IMF WP/18/112](#), [IMF WP/19/87](#), and [IMF WP/19/257](#)). They hinder the allocation of resources from low productivity firms and sectors to higher productive ones, constrain investment and growth of productive firms, and depress human capital formation. The government's strong mandate provides an opportunity to make decisive progress.

47. This suggests the need to modify and broaden the authorities' strategy.

- *As a general matter*, steadfast implementation of reforms is indispensable to overcoming long-standing impediments. Where past reforms are overturned, they should be replaced with measures of equal or better quality. Improving transparency and engagement with the private sector will reduce policy uncertainty and stimulate investment.

- *More specifically*, reaping the benefits of USMCA will require improving the business climate and reducing informality (Annex IX). A successful energy strategy will require resources for significant investments in oil production and improving the electricity grid. The latter includes efficiently integrating large volumes of variable electricity supply coming from new renewable sources. Given the investment needs and specialized expertise required, promoting the involvement of the private sector is advisable (e.g., through risk-sharing arrangements and restarting energy auctions). Enhancing the independence and quality of regulation would support competition, as would removing barriers to trade in services (e.g., in transportation and logistics). Fostering financial inclusion, including by leveraging novel instruments to deliver social assistance (T131), would enhance welfare and offset ongoing credit contraction. Consideration could also be given to reviewing the bankruptcy framework; timely modifications can facilitate efficient resource reallocation from the current shock and financial inclusion by strengthening incentives for risk averse investors and banks to extend credit.

48. A determined and comprehensive approach to tackling labor market informality is recommended. Progress toward reducing informality has been limited, falling just 3 percentage points over the past decade to about 56 percent at the eve of the Covid-19 shock. While informal employment has traditionally recovered quite quickly after shocks, it remains to be seen how swiftly will demand recover in sectors such as services, trade, and construction, where informality is more pervasive. In addition, policies that increase social security contributions (T131), taxes (T130), and non-contributory benefits (T128, 31) could have the unintended effect of hindering formalization. These highlight the value of a comprehensive approach, such as lowering hiring and firing restrictions, reducing costs of formalizing a business, and making future increases in minimum wages gradual and aligned with labor productivity growth. Other complementary measures include establishing a more efficient labor dispute resolution mechanism, improving enforcement of worker rights, and establishing an unemployment insurance scheme (financed at least in part by non-labor taxes).

49. Strengthening governance, transparency, anti-money laundering and countering the financing of terrorism (AML/CFT) and anti-corruption initiatives are essential. While progress is underway, the authorities are encouraged to focus on effective implementation, within a strong and well-articulated preventive and enforcement framework.

- *Anti-corruption.* Recent reforms include the appointment of an independent specialized anti-corruption prosecutor, preparation of legal amendments to introduce comprehensive criminal liability of legal persons, and enhanced transparency requirements for public officials. Swift implementation is needed, including of the recently adopted National Anticorruption Policy, as well as broadening the initiatives at a state level, coordinating effectively across agencies at the federal and state level, clearly allocating responsibilities, providing adequate resources and filling positions, and promoting enhanced monitoring to ensure accountability. Efforts should continue in terms of investigation, prosecution and confiscation where progress is still low.
- *AML/CFT.* The authorities continue to enhance the preventive and supervisory regime with a risk-based focus, and increase the financial disseminations reported by the Financial Intelligence Unit to prosecution. An update to the ML/TF National Risk Assessment was adopted recently.

The authorities need to follow-up on recommended legislative changes from the 2018 Fund-led AML/CFT assessment, including in the area of transparency of legal persons to ensure that accurate, verified, and up-to-date basic and beneficial ownership information is available. A draft AML/CFT Law aimed at addressing existing gaps is pending in the Senate.

50. Authorities' views. The authorities agreed on the need to reduce informality, tackle corruption, and promote investment. They view the promotion of Pemex and key public investment projects as both a key to long-run energy independence and growth and a short-term stimulus to provide jobs in hard-hit regions. They noted that contract cancellations were renegotiated amicably. On tackling informality, their efforts are aimed at stepping up enforcement and introducing greater flexibility in the types of workers that can contribute to social security. They noted that fostering financial inclusion is one of their growth pillars; they are emphasizing digital banking and fintech in urban areas and increasing access to the youth, lower-income households, and the most vulnerable segments of the population, including through provision of subsidies. They agreed with the need to focus on the implementation of the anti-corruption and AML/CFT frameworks and ensure timely adoption of pending legal reforms. They also noted the need to adopt additional reforms aimed at enhancing the overall performance of law enforcement (e.g., broaden some competencies of the specialized anti-corruption prosecutor and increase the range of sanctions).

STAFF APPRAISAL

51. Covid-19 has exacted a tragic toll on Mexico. Fatalities are among the highest in the world, several million people remain out of work, and the share of the working poor in the population spiked. Growth in 2020 is one of the weakest among G20 EMs. With a modest recovery forecast, it could take several years for employment, income, and poverty to return to pre-pandemic levels. Mexico's long-standing challenge of low growth thus appears set to worsen, while the burden is being borne disproportionately by the poor and the vulnerable.

52. The macroeconomic policy response has been very conservative. The very muted fiscal response risks weakening growth, including over the long run. Monetary policy has been eased gradually. The flexible exchange rate has facilitated the absorption of shocks, while comfortable international reserves, access to the U.S. Federal Reserve swap line, and the IMF's Flexible Credit Line have bolstered the ability to withstand external stress. Structural reform reversals that weighed on investment before the pandemic could further weaken the recovery and limit the potential gains of the USMCA agreement.

53. The priority should be to limit the damage from the pandemic, promote a robust recovery, and pursue strong, durable, and inclusive growth. The authorities are encouraged to implement a comprehensive package, building on very strong macroeconomic policies and institutional policy frameworks, a relatively sound financial sector, and an external position that is broadly in line with medium-term fundamentals and desirable policies. This package should comprise near-term fiscal and monetary support to alleviate current distress and limit the damage from the pandemic; credible medium-term plans to anchor fiscal sustainability, increase space for

providing near-term support, and generate resources for public investment and social spending; and steadfast implementation of structural reforms to boost investment and growth.

54. Larger near-term fiscal support would support the recovery and reduce poverty.

Mexico has some fiscal space and enjoys comfortable market access that could be used for temporary support of 2½–3½ percent of GDP, by triggering the escape clauses in the Fiscal Responsibility Law. The support could be used for enhancing health care services and increasing the coverage of the social safety net to include eligible individuals that are not receiving any benefits, people who are likely to fall into poverty owing to the pandemic, and informal workers in hard-hit sectors. It could also help provide liquidity support (e.g., tax and social security contribution deferrals) and cost-reduction assistance (e.g., wage subsidies) to viable firms.

55. Announcing a credible medium-term tax reform—to be implemented once the recovery is well in hand—is imperative for helping close fiscal gaps, lower public debt, and finance public investment and social spending. A well-designed tax reform could raise revenues by 3–4 percent of GDP by: broadening the personal income tax base and reducing the threshold of the top tax bracket to make the system more progressive; raising subnational property and vehicle registration taxes; reconsidering the policy of retail gasoline price growth below inflation, which is regressive; and reducing VAT gaps while strengthening social safety nets to mitigate distributional concerns. Recent steps to improve the tax administration are welcome; consideration could be given to improving the tax agency’s organizational structure, moving toward a high-coverage audit process for VAT returns, further increasing the use of electronic means, and strengthening sanctions against tax fraud. Allowing the border tax regime to expire would limit distortions of the tax base and raise collections.

56. A reprioritization of public spending would promote inclusive growth. Medium-term reforms to durably strengthen social protection include introducing a nation-wide unemployment benefits system and strengthening social safety nets by increasing coverage in a cost-effective way while reducing overlaps, duplications, and leakages. The government’s proposed reform can improve the adequacy and eligibility of the pension system; however, considering that many workers move frequently between formal and informal arrangements during their career, complementary reforms are strongly advisable to tackle informality and increase contribution densities. Higher public investment would contribute to improving productivity and inclusion.

57. Pemex’s business strategy is crowding out resources for essential spending and should be revisited. Given its widening losses, it is advisable to focus production only in profitable fields, sell non-core assets, curb plans to increase refining output at a loss, and postpone new refinery plans until it is profitable to do so. Partnering with private firms would supply needed capital and know-how. Conditional on changes to the business strategy and governance, consideration could be given to fiscal support that eases Pemex’s high financing needs.

58. With 1-year ahead inflation expectations well anchored, consideration could be given to cutting monetary policy rates further. The recent edge-up in inflation largely reflects transitory factors that should give way to sustained downward demand pressures. Lower rates would provide

further relief to the economy, against the backdrop of a sizable shortfall in output. The central bank will need to successfully navigate challenging tradeoffs, including maintaining external financial stability.

59. Close monitoring of risks in the banking sector is crucial. Continuing to uphold minimum regulatory and supervisory standards and using the inherent flexibility of the framework to cope with challenges is important. Loan restructuring regulations should ensure reclassification of distressed loans and recognition of losses. Given the still considerable uncertainty over the outlook, limiting capital distribution (e.g., suspending dividends) would be prudent until the economy is clearly recovering. Closing regulatory and supervisory gaps in line with the 2016 FSAP recommendations would help boost financial resilience.

60. Boosting investment and delivering lasting improvements in productivity requires steadfast implementation of reforms. Consideration should be given to a comprehensive approach to tackling informality. Encouraging private sector participation in the energy sector would help finance urgent needs in investment and expertise. Enhancing regulator independence along with ensuring quality and removing barriers to trade in services would support competition. Promoting financial inclusion would improve welfare and help offset ongoing credit contraction. Focusing on swift and effective implementation of anti-corruption measures and enacting pending legislation of the AML/CFT framework would support governance.

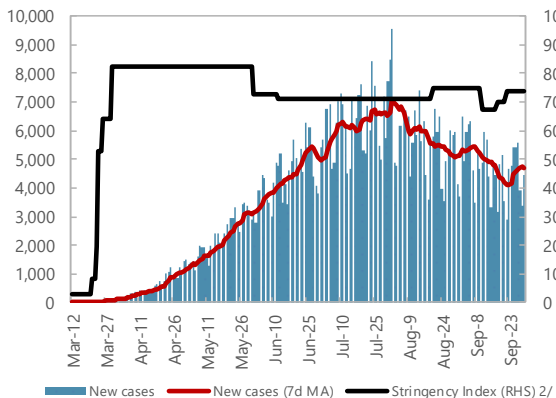
61. It is proposed that the next Article IV consultation with Mexico take place on the standard 12-month cycle.

Figure 1. Mexico: High Frequency Indicators

Confirmed Covid-19 cases have begun to decline with periods of retrenchment...

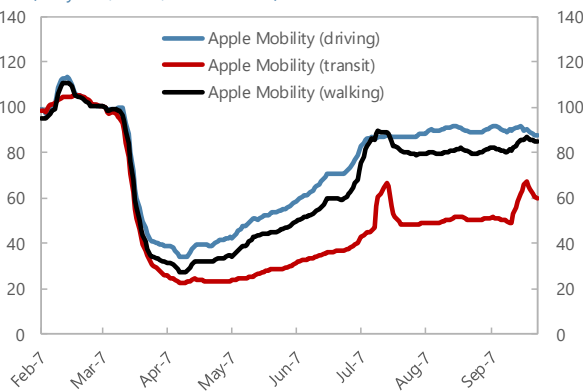
...as individual mobility remains depressed.

Covid-19 Case Growth and Policy Response Stringency 1/



Individual Mobility

(7day MA, Index, Mar. 8 = 100)

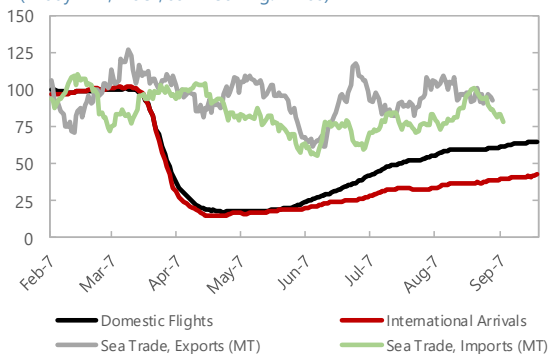


Flight traffic remains substantially suppressed, while sea-based imports reflect depressed demand.

Card-based purchases have recovered slowly on average but lag in contact-intensive sectors.

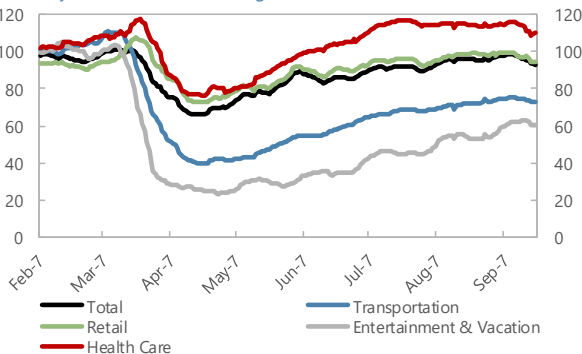
Trade and Transit

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



Card Transaction Volumes

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

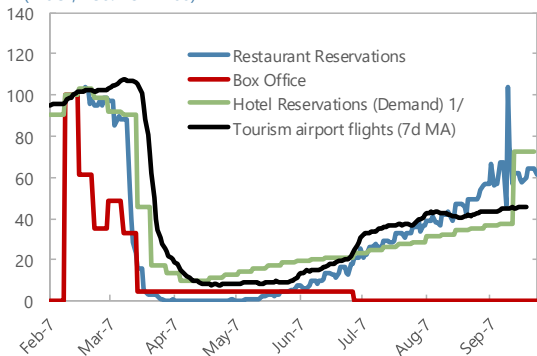


High-contact services are recovering in some industries but are still low.

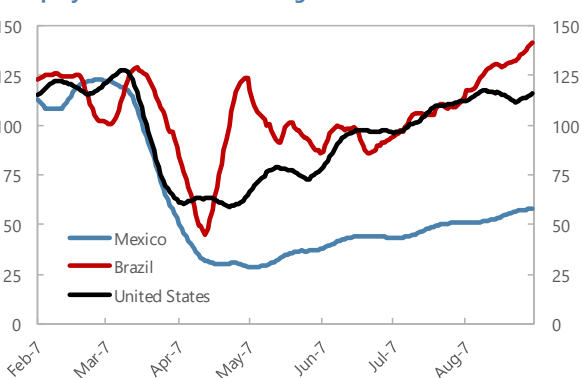
New job posting reflect continued uncertain demand prospects unlike other large countries in the hemisphere.

Highly Exposed Industries

(Index, Feb. 18 = 100)



Employment: New Job Postings Index

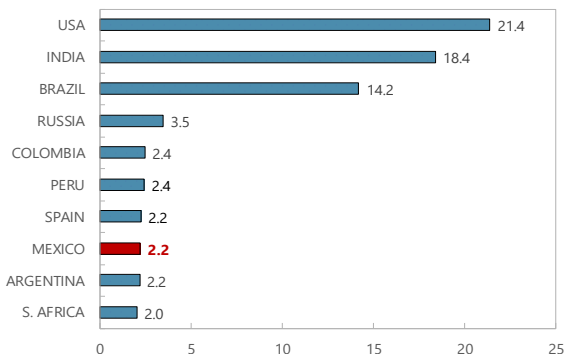


Sources: National authorities, Oxford University, Apple Mobility, UN Comtrade, Haver Analytics, Bloomberg, STR Hotel Data, Open Table, INDEED. 1/ Data from STR, LLC. Republication or other re-use of this data without the express written permission of STR is strictly prohibited. 2/ Oxford University Stringency index of the health policy response. The Stringency index collects publicly available information on policies such as school closures, travel bans, etc, and records them on a scale from 0 to 100 (100 = more stringent).

Figure 2. Mexico: Covid-19 Indicators 1/

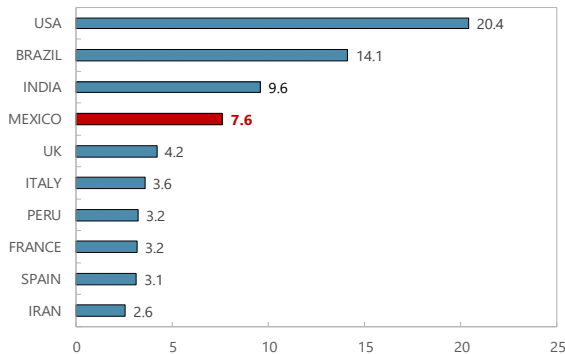
Mexico has one of the highest number of cases in the world

Covid-19 Cases
(As Percent of World Total)



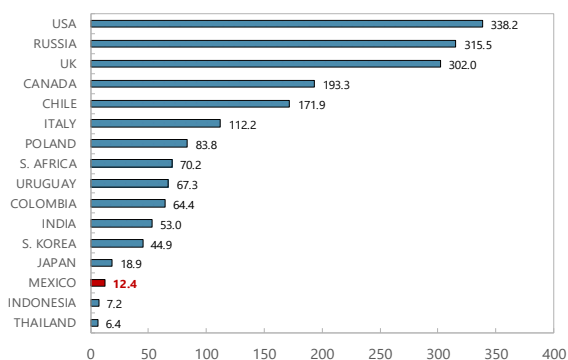
The COVID-19 death toll is the fourth-largest in the world

Covid-19 Deaths
(As Percent of World Total)



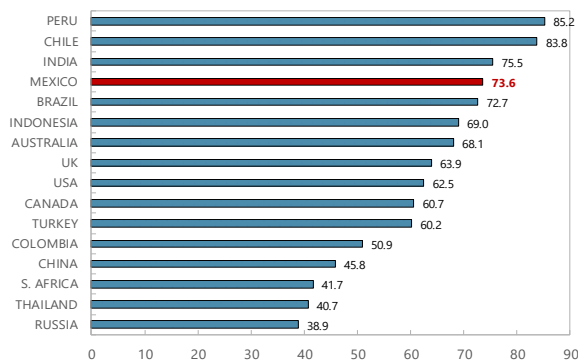
Despite high number of cases, Mexico significantly lags in testing

Covid-19 Tests
(Per Thousand Persons)



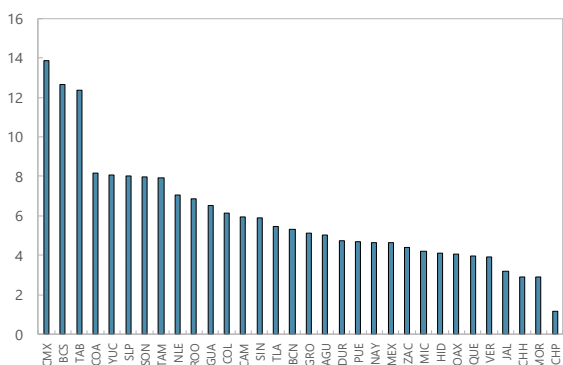
The stringency index in Mexico is more relaxed than Chile and Peru, but stricter than many other emerging markets

Stringency Index 2/



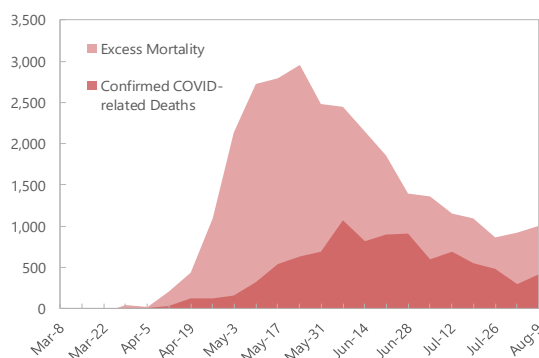
Though all states are affected, cases have been concentrated in few states ranging from 13.9 to 1.1 persons per thousand

Covid-19 Cumulative Cases Across States
(Per Thousand Persons)



Excess mortality in Mexico City (and other states) suggests most cases are being missed due to low testing rates

COVID-related Mortality, Mexico City
(Weekly deaths)



Sources: National Authorities, Johns Hopkins University, Our World in Data, Oxford University, IHME, Laurianne Despegel and Mario Romero Zavala via The Economist; and, IMF Staff estimates.

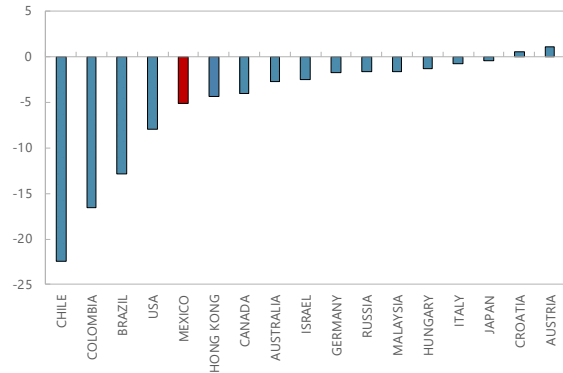
1/ Data as of September 30, 2020.

2/ Oxford University Stringency index of the health policy response. The Stringency index collects publicly available information on policies such as school closures, travel bans, etc, and records them on a scale from 0 to 100 (100 = more stringent).

Figure 3. Mexico: Regional and International Economic Activity During Covid-19

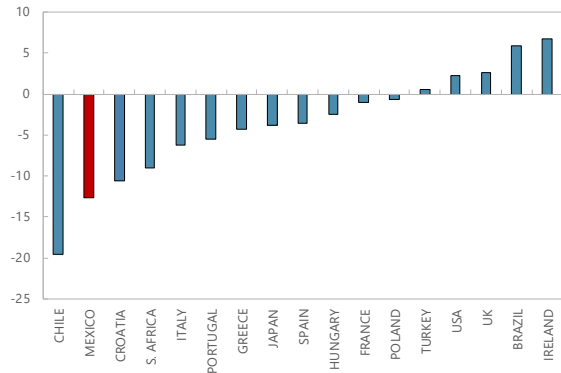
The hit in economic activity in Mexico is high from a cross-country perspective

Employment Levels
(Percent Change, Jul/Jan 2020)



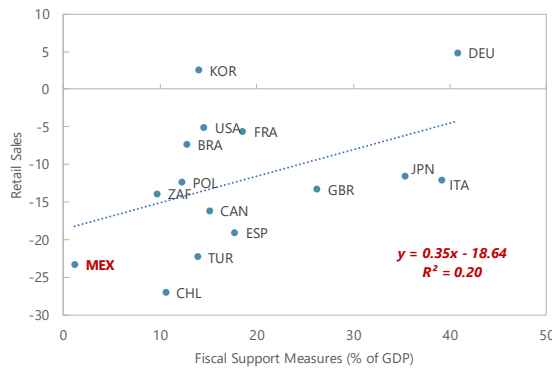
Retail sales in Mexico have dropped by 13 percent since January 2020

Retail Sales Index
(Percent Change, Jul/Jan 2020)



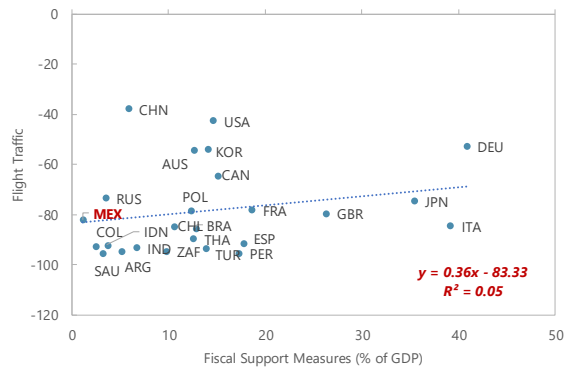
Countries with higher fiscal support generally had higher economic activity...

Fiscal Support Measures
(vs Retail Sales, Percent Change, May/Jan 2020)



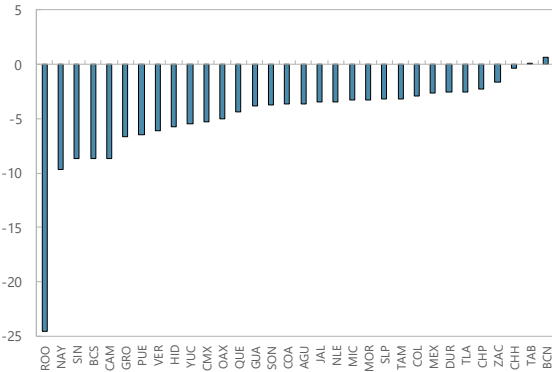
...and though not shown the results hold for the latest data through July/August

Fiscal Support Measures
(vs Flight Traffic, Percent Change, May/Jan 2020)



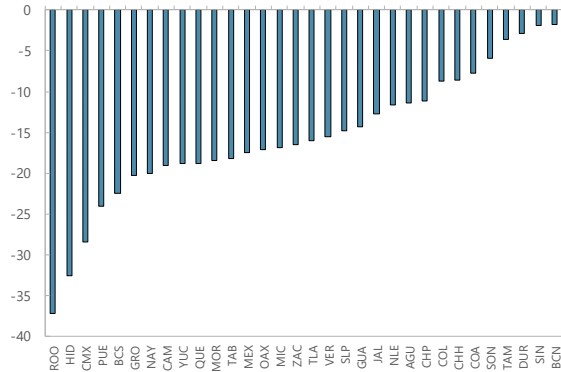
The drop in employment in Mexico has been across most of the states

Insured Employees
(Percent Change, Aug/Jan 2020)



The drop in retail sales has ranged from -37 percent (Quintana Roo) to -2 percent (Baja California)

Retail Sales Index Across States
(Percent Change, Jun/Jan 2020)



Sources: National Authorities, Flightradar24, Haver Analytics, and IMF Staff estimates.

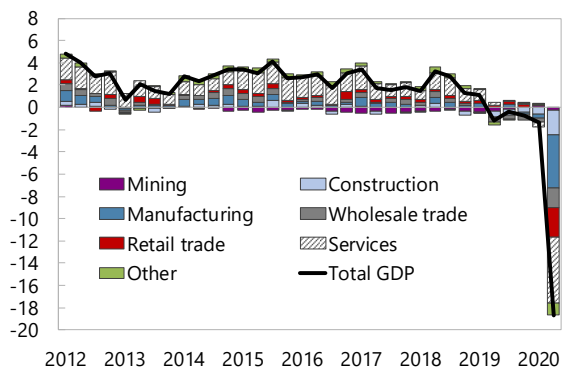
Figure 4. Mexico: Real Sector

Growth declined across the board in Q2 led by manufacturing.

Exports contracted dramatically on top of weakening in 2019.

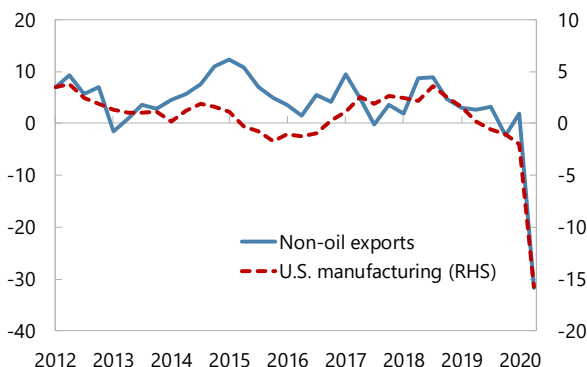
Supply Contributions to Growth

(In percent, NSA)



Real Export Growth

(Y/Y growth, NSA)

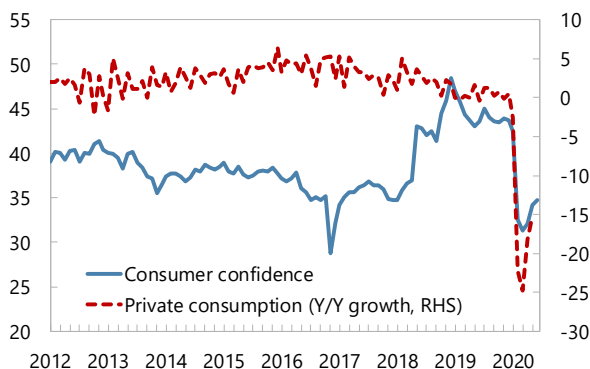


Private consumption points to lingering demand shortfalls...

... while job losses have been deep with formal jobs recovering slowly.

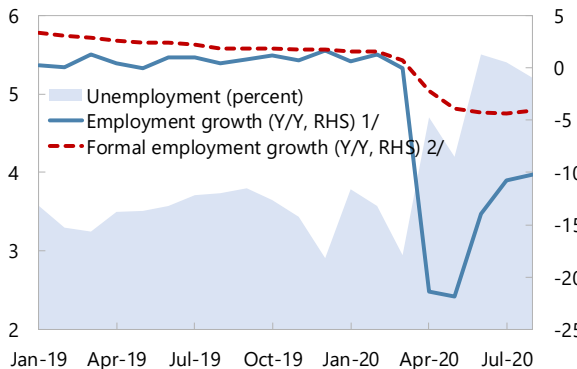
Consumption

(Index, NSA)



Employment

(NSA)

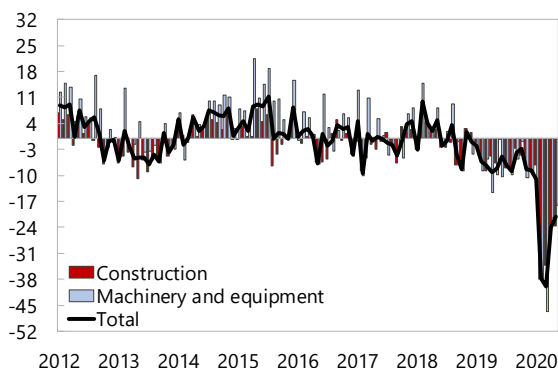


Gross fixed capital formation has fallen sharply...

... along with business confidence.

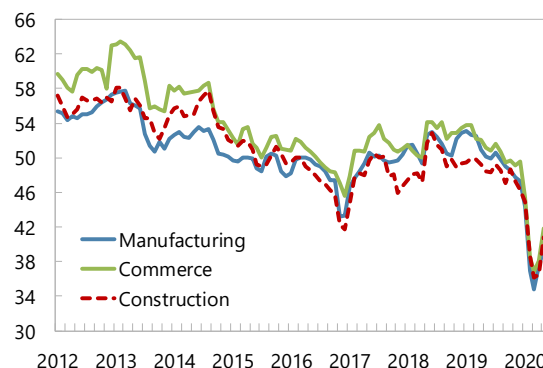
Gross Fixed Capital Formation

(Y/Y growth, NSA)



Business Confidence by Sector

(Index)



Sources: National Authorities, Haver Analytics; and, IMF Staff estimates.

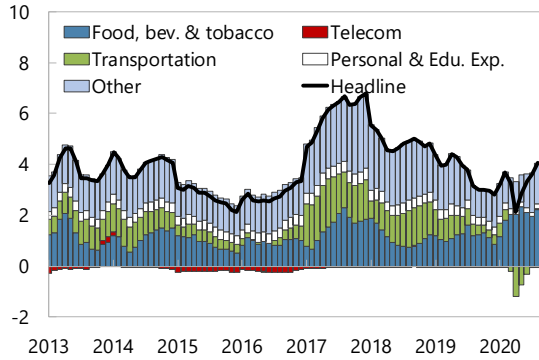
1/ Employment growth is calculated as the growth in employment as a share of the economically active population.

2/ Formal employment growth is calculated as the growth in the number of IMSS-reporting employees, which does not capture self-employed formal workers.

Figure 5. Mexico: Prices and Inflation

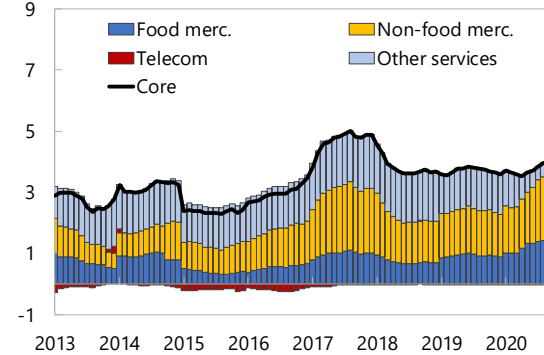
Headline inflation has been volatile given gyrations in energy and raw food prices...

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



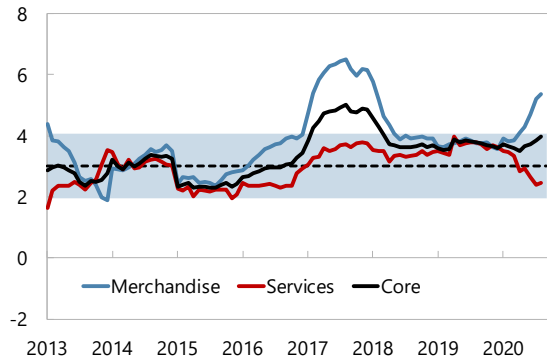
Core inflation is edging towards the upper end of the target band...

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



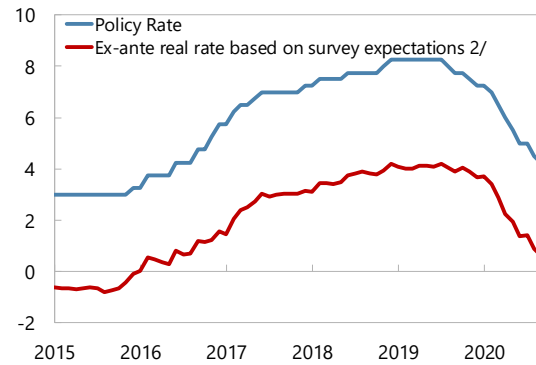
...as buoyant merchandise prices offset easing services contributions.

Inflation
(Y/Y percent growth)



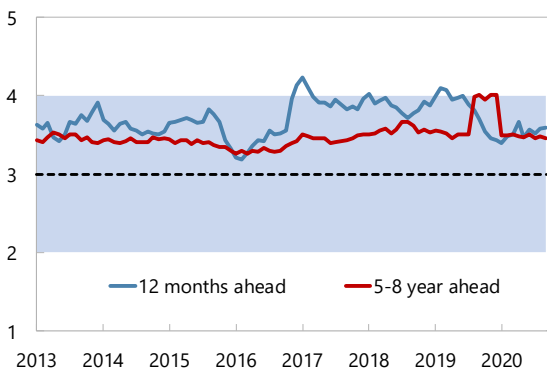
The policy rate has eased considerably but remains higher than the bottom of the previous cycle...

Policy Rates
(In percent)



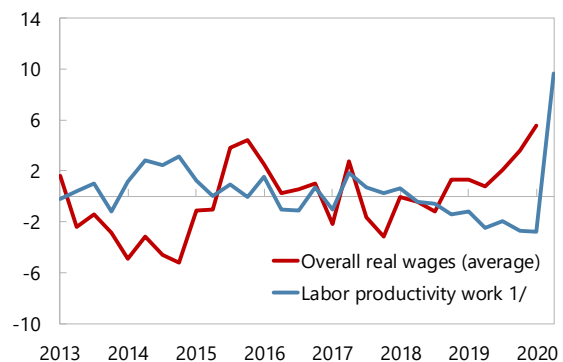
...as medium-term expectations have barely responded to cuts.

Survey-based Inflation Expectations
(In percent)



Real wage growth reflects minimum wage hikes and composition effects of recent layoffs.

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



Sources: National Authorities, Haver Analytics; and, IMF Staff estimates.

1/ Based on hours worked.

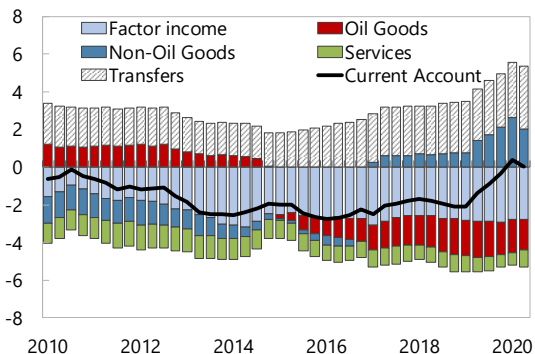
2/ Calculation using the average inflation expectation for the next 12 months (NSA, %). Source: Banco de Mexico. Survey on the Expectations of Private Sector Economists.

Figure 6. Mexico: External Sector

The current account balance turned into a surplus...

Current Account Balance

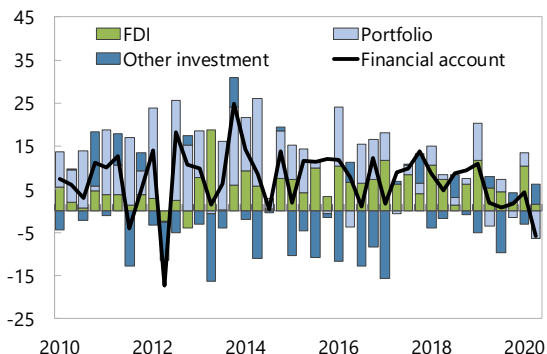
(Cumulative last 4 quarters, in percent of GDP)



Capital outflows have remained contained despite a period of elevated uncertainty...

Net Capital Flows

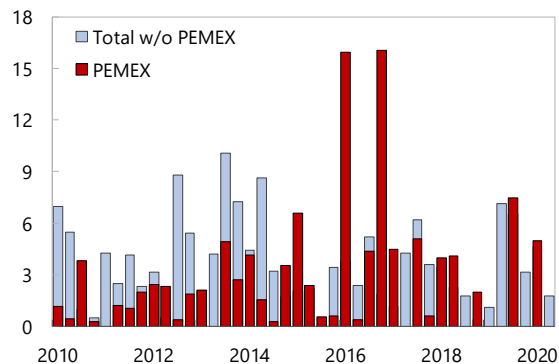
(USD, billions)



Corporate bond issuance has moderated.

Corporate Bond Issuance: Foreign Placements

(USD, billions)

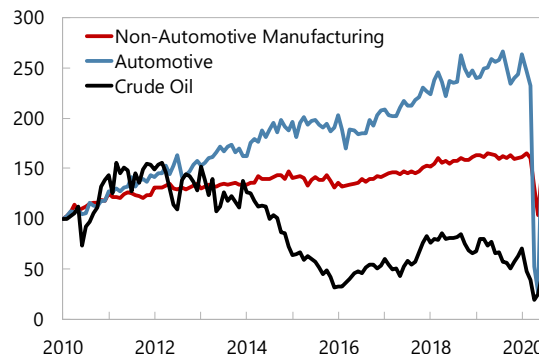


Sources: National Authorities, Haver Analytics; and, IMF Staff estimates.

...helped by the depreciation of the peso and a boom in automotive exports.

Value of Exports

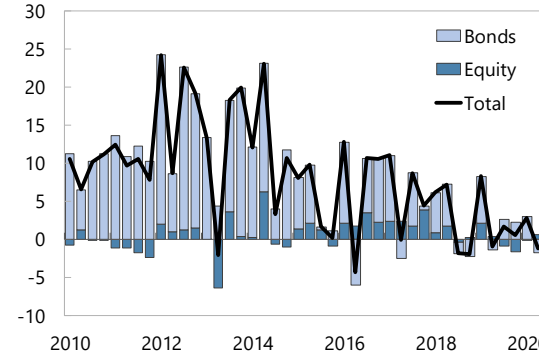
(Index, Jan. 2010 = 100, SA)



...with equities holding out somewhat better than bonds.

Gross Portfolio Inflows

(USD, billions)



International reserves have remained stable, with only marginal interventions (in D-NDFs) during the COVID pandemic.

Sources of Reserve Accumulation

(USD, billions)

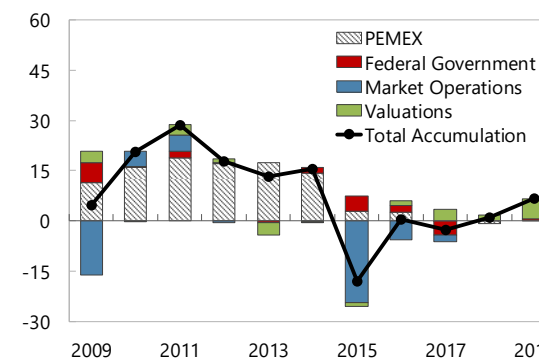
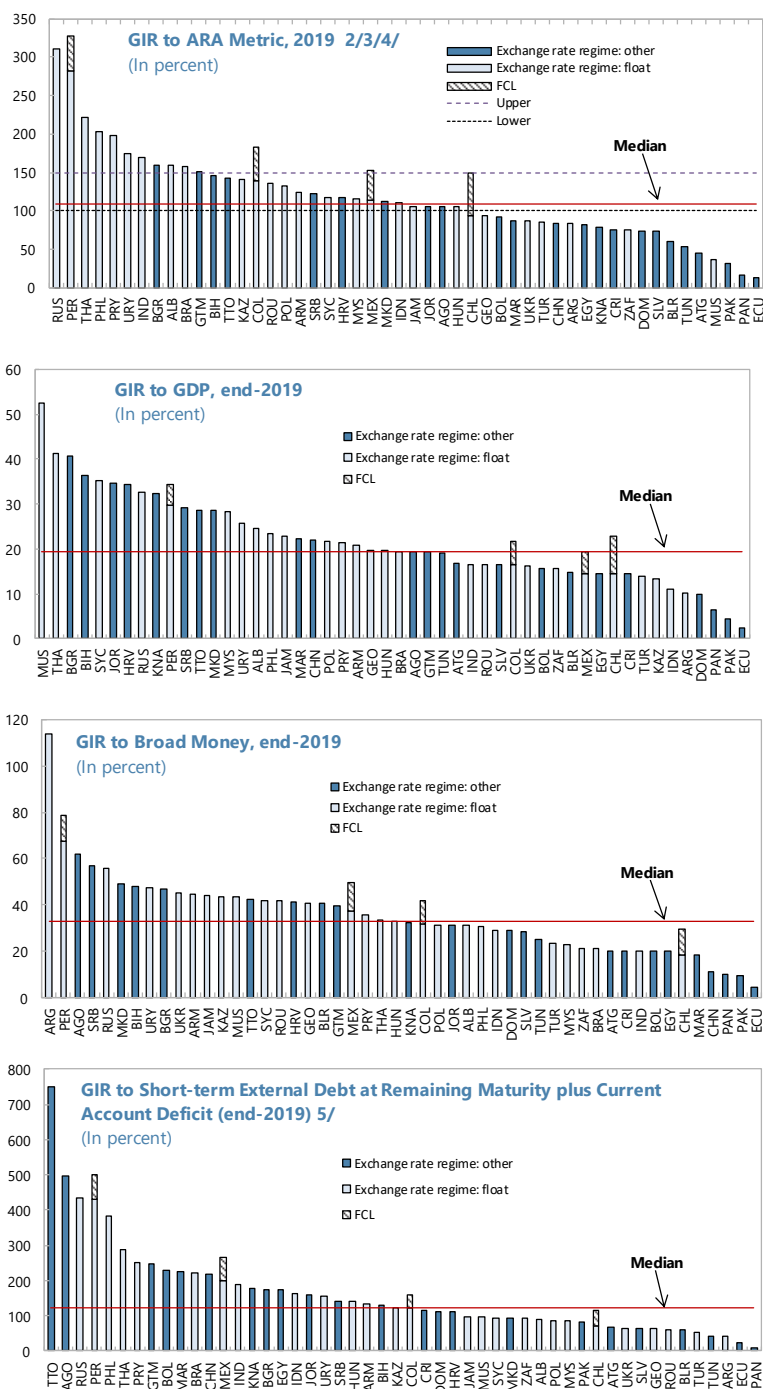


Figure 7. Mexico: Reserve Coverage and FCLs in an International Perspective 1/



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.

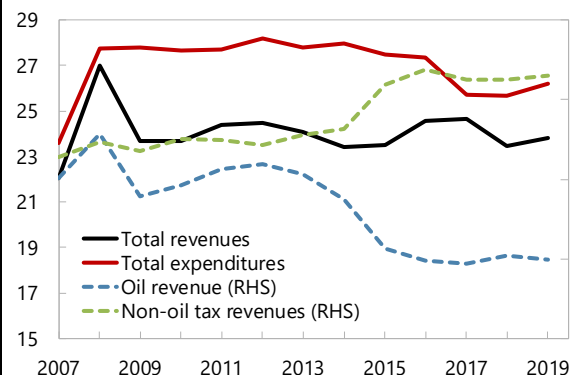
5/ The current account balance is set to zero if it is in surplus.

Figure 8. Mexico: Fiscal Sector

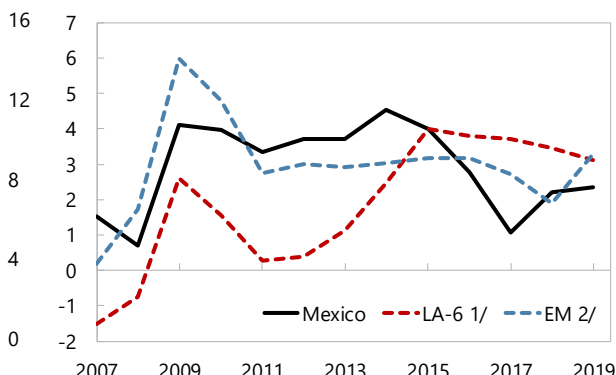
Both revenues and expenditures increased in 2019...

...resulting in a slight increase in overall public sector deficit

Public Sector Revenues and expenditures
(In percent of GDP)

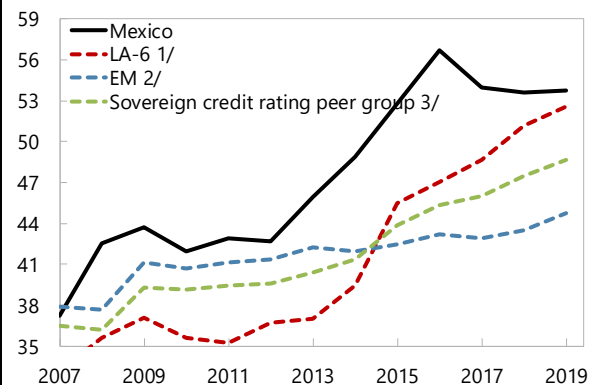


Overall Public Sector Deficit
(In percent of GDP)



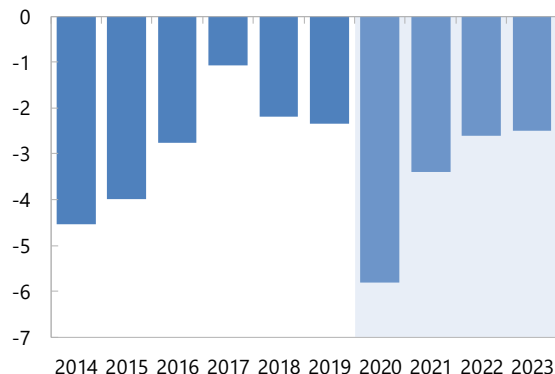
Public debt remained higher than peer groups in 2019

Gross Public Sector Debt
(In percent of GDP)



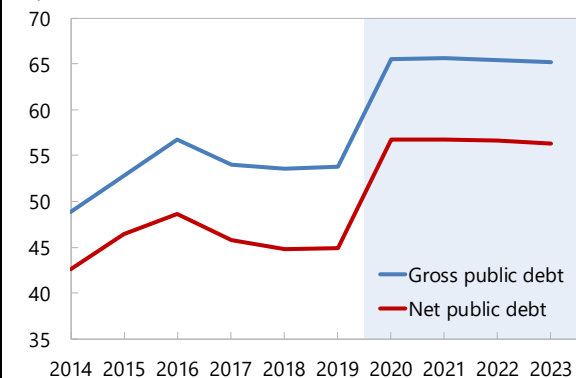
The fiscal balance is projected to widen in 2020 following the sharp growth decline owing to COVID-19

Fiscal Balance
(In percent of GDP)



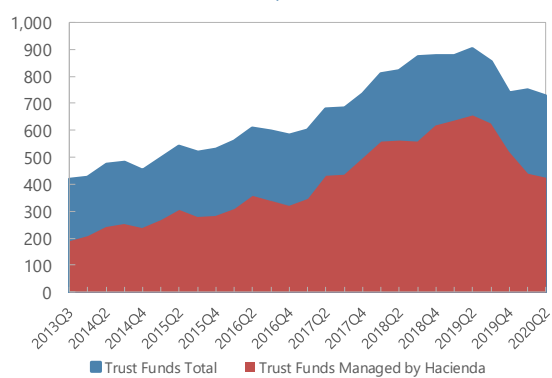
Public debt is expected to rise by about 12 percent of GDP in 2020, due to the GDP decline and peso depreciation

Public Sector Debt Path
(In percent of GDP)



The authorities are utilizing resources from various trust funds

Trust Funds Managed by Secretaría de Hacienda
(As of June 2020, in billions of pesos)



Sources: National authorities, World Economic Outlook, Fitch Ratings; and, Fund staff estimates.

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.

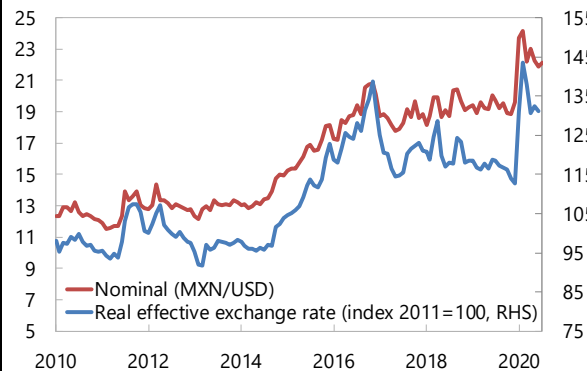
3/ Fitch sovereign credit rating peer group includes Brazil, Chile, Colombia, India, Poland, Russia, South Africa, Thailand, and Turkey.

Figure 9. Mexico: Financial Markets

The peso has stabilized since April at a higher level.

Exchange Rate

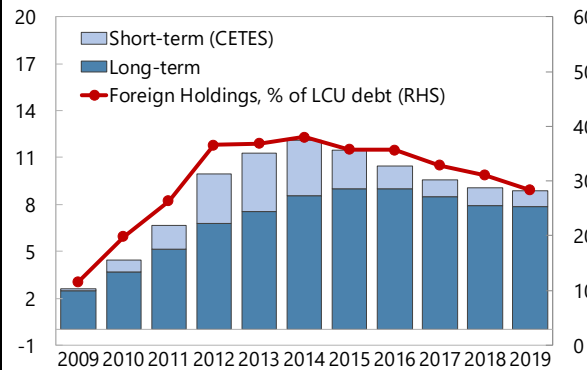
(As of September, 2020)



The share of foreign holdings in local currency sovereign debt declined over the past 6 years.

Sovereign Debt Holdings in Local Currency

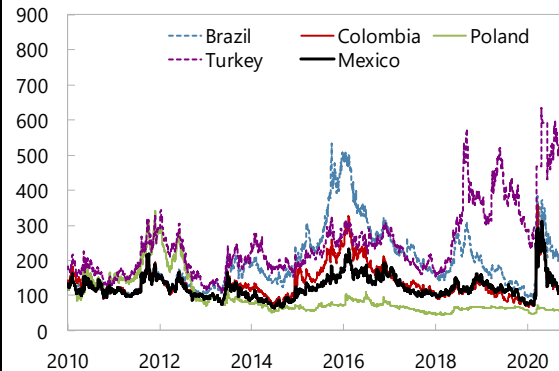
(In percent of GDP; as of December, 2019)



Credit spreads on sovereign dollar-denominated debt spiked but have eased since April...

Sovereign Risk Spreads

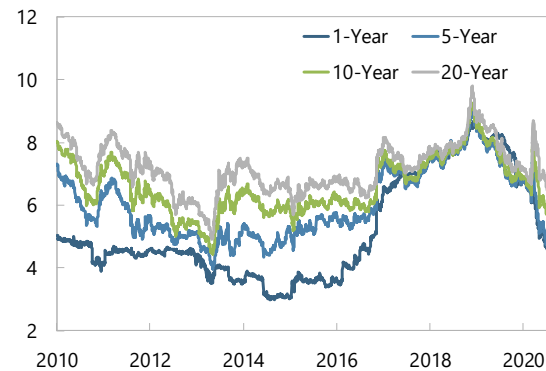
(5Y CDS spread, in basis points; as of October 01, 2020)



Government bond yields in local currency have continued to decline on CB easing with a steeper yield curve.

Local Government Bonds Yields

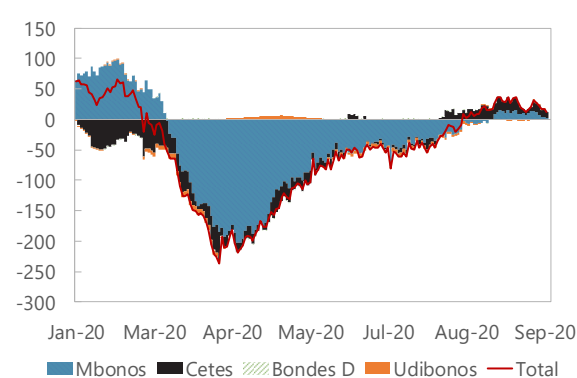
(In percent; as of October, 2020)



After record outflows from local currency debt in Q2 2020, inflows started to return in August.

Foreign Inflows in Local Currency Debt

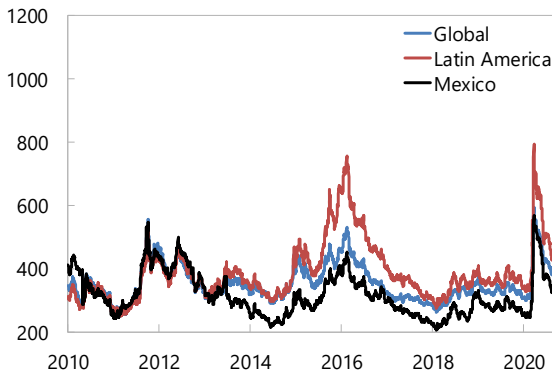
(30 day Moving Sum, MXN bn)



...with a similar pattern for corporate debt.

Corporate Risk Spread

(CEMBI spread, in basis points; as of October 01, 2020)

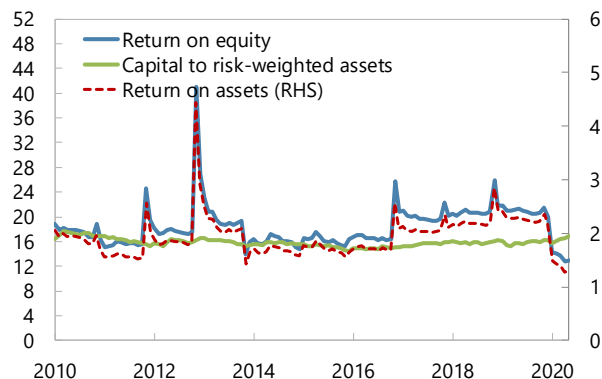


Sources: Bloomberg, Haver Analytics; and, National authorities.

Figure 10. Mexico: Banking System

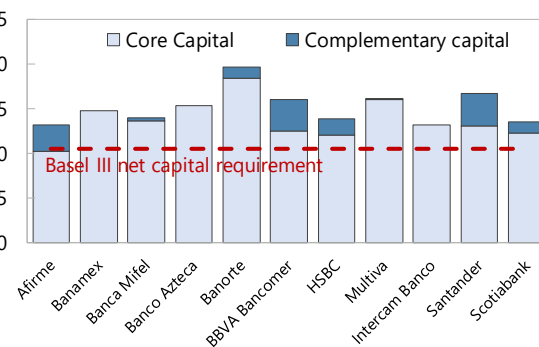
The banking sector entered 2020 profitable...

Commercial and Development Banking Sector
(In percent; as of August, 2020)



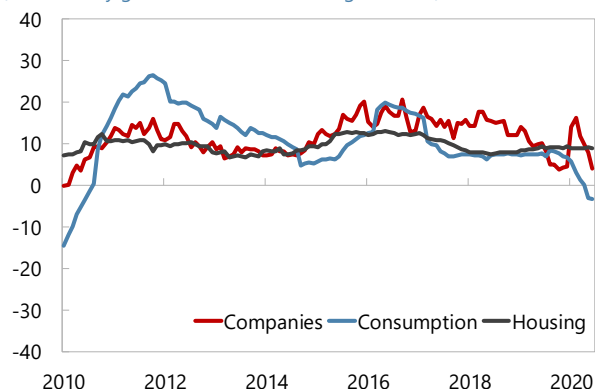
...and remains well capitalized.

Capital to Risk-Weighted Assets
(In percent; as of June, 2020)



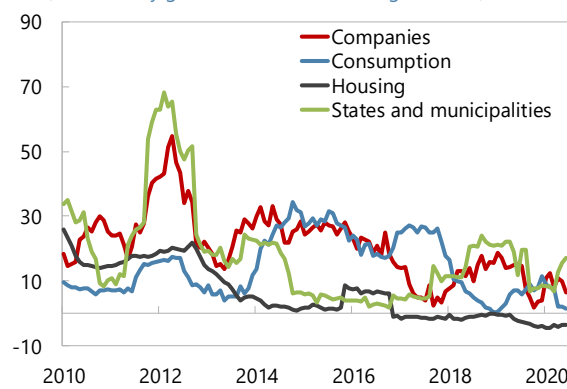
Credit is contracting after the drawdown of credit lines...

Commercial Bank Credit Growth by Sector
(Y/Y monthly growth, nominal; as of August, 2020)



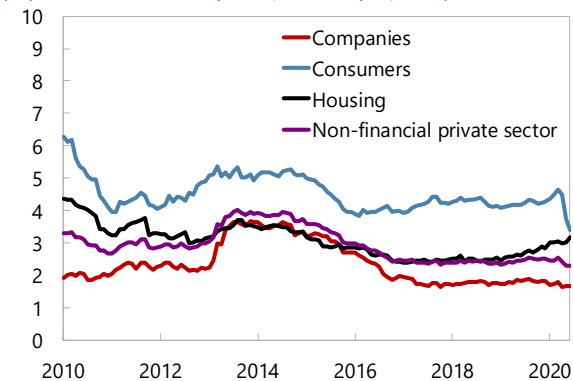
...while development bank credit growth continues a long decline.

Development Bank Credit Growth by Sector
(Y/Y monthly growth, nominal; as of August, 2020)



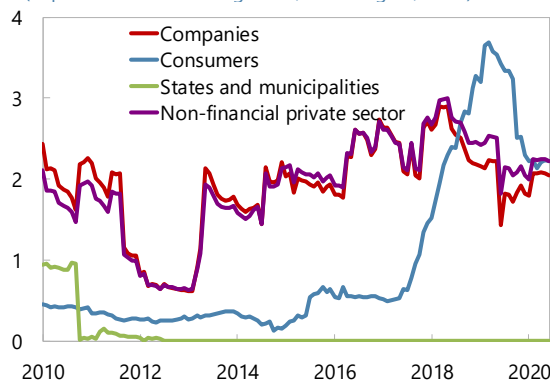
Non-performing loans at commercial banks...

Total Commercial Bank NPLs
(In percent of outstanding loans; as of August, 2020)



...and development banks remain low.

Total Development Bank NPLs
(In percent of outstanding loans; as of August, 2020)

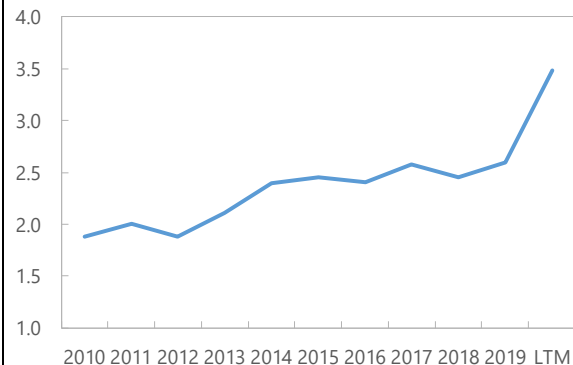


Sources: Bloomberg, Haver Analytics, National authorities; and, IMF staff estimates.

Figure 11. Mexico: Nonfinancial Corporate Sector 1/

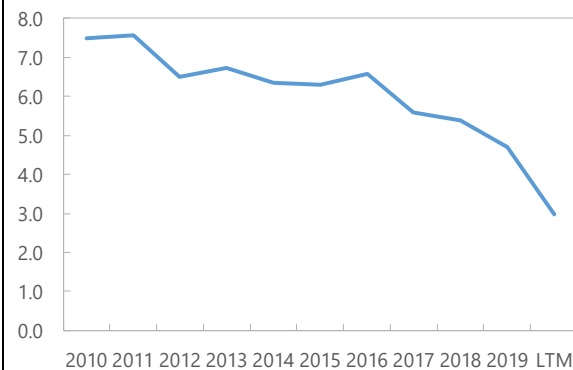
Nonfinancial corporate leverage rose sharply in Q2 2020...

Total Debt to Total EBITDA
(In percent, median)



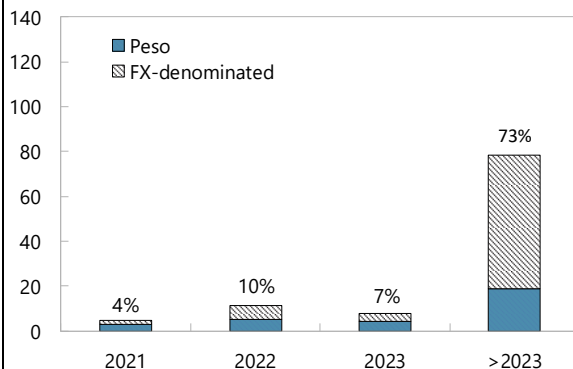
Debt servicing capacity has deteriorated but from high levels...

Interest Coverage Ratio
(Earnings in multiples of Interest Expense, median)



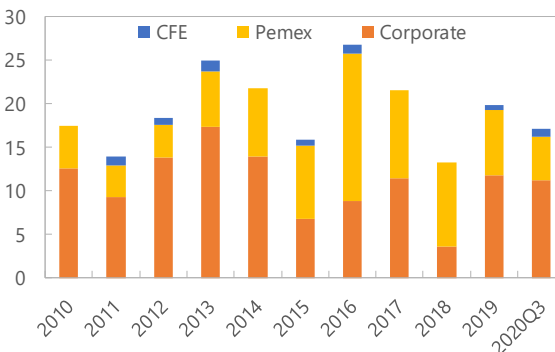
The maturity structure of borrowing was largely at longer maturities...

Nonfinancial Corporate Bond Maturity Profile
(In US\$ billion)



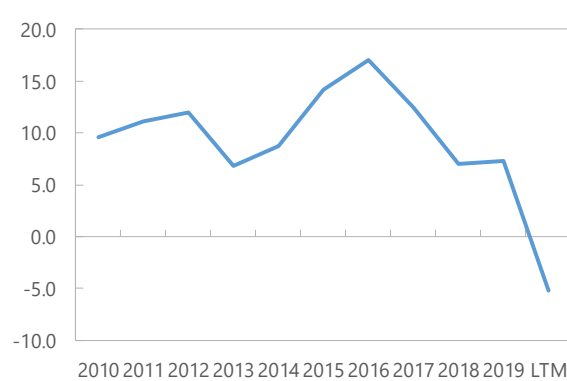
...while bond issuance and market access has been strong.

Hard Currency Issuance 1/
(In US\$ billion)



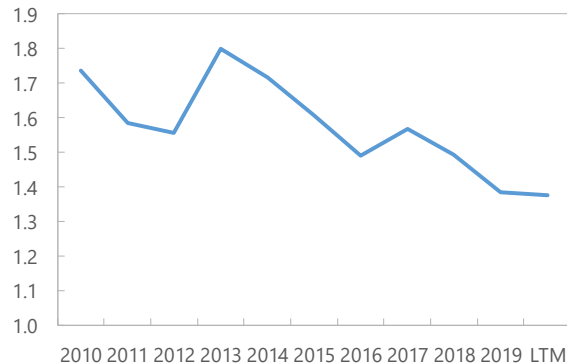
...while profitability has been coming down prior to COVID-19

EBITDA Growth
(year-on-year percent change, median)



...and corporate liquidity remains strong.

Current ratio: Current Assets to Current Liabilities
(Multiples, median)

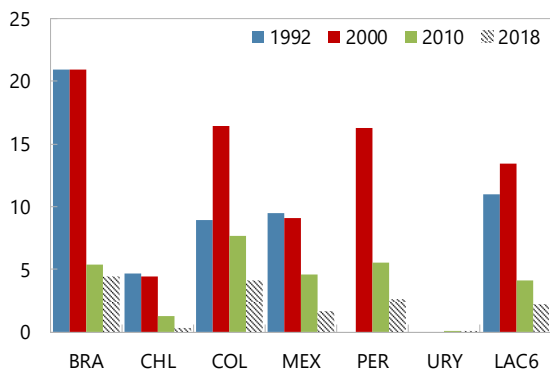


Sources: Bloomberg, Haver Analytics, National authorities; and, IMF staff estimates.
1/ Totals exclude any hard currency issuance in local law
LTM= Last 12 months, Q2 2020 data

Figure 12. Mexico: Social Indicators

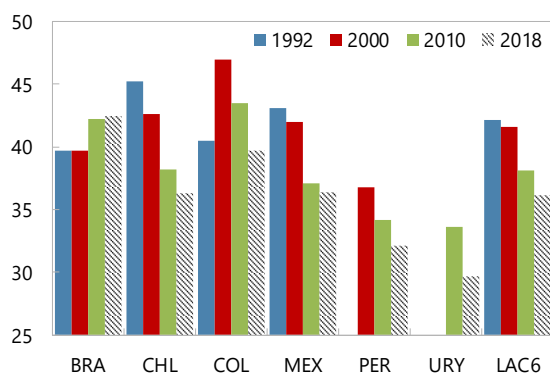
Extreme poverty has declined over the past 25 years.

Poverty Headcount Ratio at \$1.90
(2011 PPP, % of population)



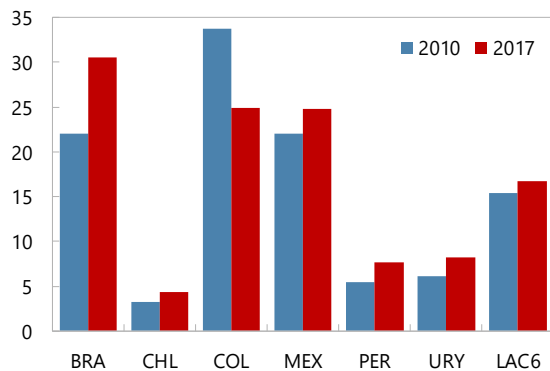
Income inequality is slightly below the regional average.

Income Share Held by Highest 10%



The homicide rate remains high.

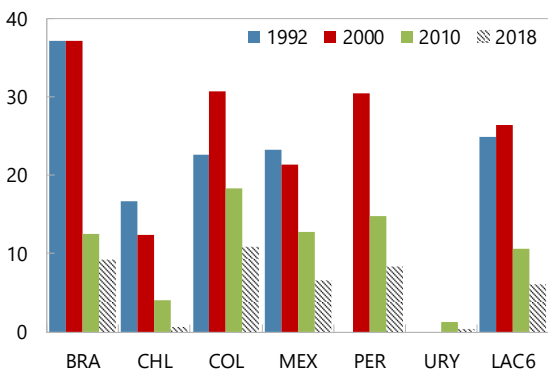
Intentional Homicides
(Per 100,000 people)



Sources: World Development Indicators.

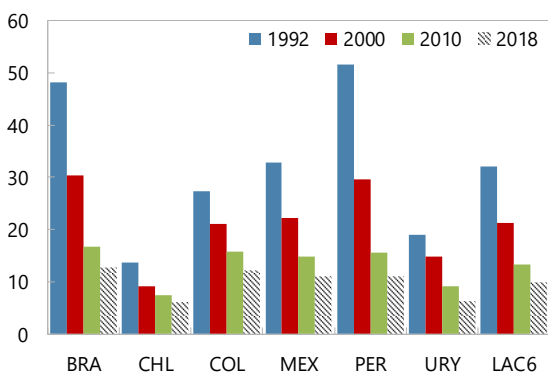
Still, poverty in Mexico remains higher than the LAC6 average.

Poverty Headcount Ratio at \$3.20
(2011 PPP, % of population)



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

Infant Mortality Rate
(per 1,000 live births)



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

Share of Youth not in Education, Employment or Training
(Total, % of youth population)

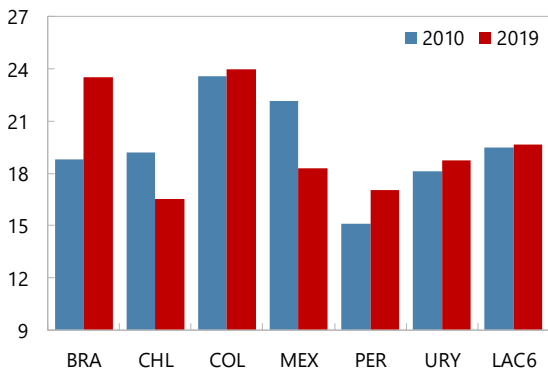


Table 1. Mexico: Selected Economic, Financial, and Social Indicators

I. Social and Demographic Indicators						
GDP per capita (U.S. dollars, 2019)	10,024		Poverty headcount ratio (% of population, 2018) 1/			41.9
Population (millions, 2019)	127		Income share of highest 20 perc. / lowest 20 perc. (2018)			9.7
Life expectancy at birth (years, 2019)	75.1		Adult literacy rate (2018)			95.4
Infant mortality rate (per thousand, 2019)	13.1		Gross primary education enrollment rate (2017) 2/			105.8
II. Economic Indicators						
	2016	2017	2018	2019	Proj.	
					2020	2021
(Annual percentage change, unless otherwise indicated)						
National accounts (in real terms)						
GDP	2.6	2.1	2.2	-0.1	-9.0	3.5
Consumption	3.5	2.8	2.6	0.3	-10.3	4.0
Private	3.7	3.2	2.5	0.6	-12.4	5.3
Public	2.6	0.7	2.9	-1.3	1.6	-2.1
Investment	0.5	-1.2	0.5	-5.7	-20.3	10.6
Fixed	0.8	-1.2	0.9	-4.6	-20.6	9.6
Private	1.2	0.9	1.3	-3.4	-22.0	13.4
Public	-0.8	-11.9	-1.3	-11.9	-12.0	-11.0
Inventories 3/	-0.1	0.0	-0.1	-0.2	0.0	0.2
Exports of goods and services	3.6	4.2	6.0	1.5	-10.2	13.6
Imports of goods and services	2.9	6.4	6.4	-0.7	-15.8	21.0
GDP per capita	1.5	1.0	1.1	-1.0	-9.9	2.6
External sector						
External current account balance (in percent of GDP)	-2.3	-1.8	-2.1	-0.3	1.2	-0.1
Exports of goods, f.o.b. 4/	-1.7	9.5	10.1	2.2	-12.9	19.4
Export volume	2.5	3.8	6.3	1.2	-9.2	13.9
Imports of goods, f.o.b. 4/	-2.1	8.6	10.4	-1.9	-14.3	20.8
Import volume	2.9	6.1	6.3	-0.8	-14.8	21.1
Net capital inflows (in percent of GDP)	-3.0	-2.5	-2.6	-1.4	0.5	-0.2
Terms of trade (improvement +)	0.7	3.0	-0.4	2.2	-4.7	5.0
Gross international reserves (in billions of U.S. dollars)	178.0	175.4	176.4	183.0	190.4	192.1
Exchange rates						
Real effective exchange rate (CPI based, IFS) (average, appreciation +)	-12.9	2.3	0.1	3.3	...	...
Nominal exchange rate (MXN/USD) (end of period, appreciation +)	-20.5	4.6	0.5	4.3	...	...
Employment and inflation						
Consumer prices (end-of-period)	3.4	6.8	4.8	2.8	3.7	2.9
Core consumer prices (end-of-period)	3.4	4.9	3.7	3.6	3.6	2.9
Formal sector employment, IMSS-insured workers (average)	3.8	4.4	4.1	2.3	...	...
National unemployment rate (annual average)	3.9	3.4	3.3	3.5	5.2	5.8
Unit labor costs: manufacturing (real terms, average)	5.1	2.2	3.2	4.4	...	...
Money and credit						
Financial system credit to non-financial private sector 5/	16.5	10.8	8.8	3.0	-1.4	6.1
Broad money	12.3	11.2	5.3	6.8	8.3	6.4
Public sector finances (in percent of GDP) 6/						
General government revenue	24.6	24.6	23.5	23.8	24.3	22.9
General government expenditure	27.4	25.7	25.7	26.2	30.1	26.3
Overall fiscal balance	-2.8	-1.1	-2.2	-2.3	-5.8	-3.4
Gross public sector debt	56.7	54.0	53.6	53.7	65.5	65.6
Memorandum items						
Nominal GDP (billions of pesos)	20,129.1	21,934.2	23,523.2	24,443.0	22,718.4	24,210.5
Output gap (in percent of potential GDP)	0.5	0.4	0.8	-0.9	-5.7	-4.1

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

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

Table 2. Mexico: Statement of Operations of the Public Sector, Authorities' Presentation 1/
(In percent of GDP)

	2017	2018	2019	Proj.					
				2020	2021	2022	2023	2024	2025
Budgetary revenue, by type	22.6	21.7	22.2	22.4	21.3	21.3	21.0	21.1	21.2
Oil revenue	3.8	4.2	3.9	3.2	3.3	3.2	2.9	3.0	3.0
Non-oil tax revenue	13.0	13.0	13.2	13.4	13.6	13.7	13.7	13.7	13.8
Non-oil non-tax revenue 2/	5.8	4.6	5.1	5.8	4.4	4.4	4.4	4.4	4.4
Budgetary revenue, by entity	22.6	21.7	22.2	22.4	21.3	21.3	21.0	21.1	21.2
Federal government revenue	17.5	16.5	16.5	16.5	15.7	15.7	15.8	15.8	15.9
Tax revenue, of which:	13.0	13.0	13.2	13.4	13.6	13.7	13.7	13.7	13.8
Excises (including fuel)	1.7	1.5	1.9	1.9	2.1	2.1	2.1	2.0	2.0
Nontax revenue	4.5	3.4	3.3	3.1	2.0	2.0	2.1	2.1	2.1
Public enterprises	5.1	5.3	5.7	5.9	5.6	5.6	5.3	5.3	5.3
PEMEX	1.8	1.9	2.2	2.3	2.1	2.1	1.7	1.7	1.7
Other	3.3	3.4	3.5	3.6	3.5	3.5	3.6	3.6	3.6
Budgetary expenditure	23.6	23.8	23.9	26.4	24.2	23.4	23.0	23.1	23.1
Primary	21.2	21.1	21.1	23.2	22.5	22.2	22.0	22.2	22.4
Programmable	17.6	17.3	17.5	19.7	18.9	18.6	18.4	18.7	18.8
Current	14.0	14.2	14.4	16.1	15.5	15.6	15.7	16.0	16.2
Wages	5.2	5.2	5.0	5.8	5.7	5.7	5.7	5.7	5.7
Pensions 3/	3.2	3.4	3.6	4.3	4.4	4.6	4.8	5.1	5.3
Subsidies and transfers	2.9	2.7	2.9	3.3	3.1	3.1	3.1	3.1	3.0
Other	2.7	2.9	2.9	2.7	2.3	2.2	2.2	2.1	2.1
Capital	3.6	3.1	3.0	3.6	3.4	3.1	2.7	2.7	2.6
Physical capital	2.6	2.6	2.3	3.1	3.0	3.0	2.6	2.6	2.5
Financial capital 4/	1.0	0.4	0.7	0.5	0.4	0.1	0.1	0.1	0.1
Nonprogrammable	3.6	3.9	3.7	3.5	3.6	3.5	3.5	3.5	3.5
Of which: revenue sharing	3.5	3.6	3.6	3.4	3.5	3.4	3.4	3.4	3.4
Interest payments	2.4	2.6	2.7	3.2	2.8	2.7	2.8	2.7	2.7
Unspecified measures	0.0	0.0	0.0	0.0	-1.2	-1.5	-1.7	-1.8	-2.0
Traditional balance	-1.1	-2.1	-1.6	-4.0	-2.9	-2.1	-2.0	-2.0	-2.0
Adjustments to the traditional balance	0.0	-0.1	-0.7	-1.8	-0.5	-0.5	-0.5	-0.5	-0.5
Public Sector Borrowing Requirements	1.1	2.2	2.3	5.8	3.4	2.6	2.5	2.5	2.5
Memorandum items									
Structural current spending 5/	10.1	9.9	9.7						
Structural current spending real growth (y/y, in percent)	-6.6	-0.2	-1.8						

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. For 2018 and 2019, the numbers are presented as a percent of aggregated quarterly nominal GDP for consistency with the authorities' presentation, as published in 2021 General Economic Policy Guidelines.

2/ Includes Bank of Mexico's operating surplus transferred to the federal government for 1.5 percent of GDP in 2017.

3/ Includes social assistance benefits.

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

5/ The 2014 amendment to the FRL introduced a cap on the real growth rate of structural current spending set at 2.0 percent for 2015 and 2016, and equal to potential growth thereafter. Structural current spending is defined as total budgetary expenditure, excluding: (i) interest payments; (ii) non-programmable spending; (iii) cost of fuels for electricity generation; (iv) public sector pensions; (v) direct physical and financial investment of the federal government; and (vi) expenditure by state productive enterprises and their subsidiaries.

Table 3. Mexico: Statement of Operations of the Public Sector, GFSM 2014 Presentation 1/
(In percent of GDP)

	2017	2018	2019	Proj.					
				2020	2021	2022	2023	2024	2025
Revenue	24.6	23.5	23.8	24.3	22.9	23.1	22.8	22.9	22.9
Taxes	13.0	13.0	13.2	13.4	13.6	13.7	13.7	13.7	13.8
Taxes on income, profits and capital gains	7.1	7.1	7.0	7.3	7.3	7.4	7.4	7.5	7.5
Taxes on goods and services	5.4	5.4	5.8	5.6	5.8	5.8	5.8	5.8	5.8
Value added tax	3.7	3.9	3.9	3.6	3.7	3.7	3.7	3.7	3.7
Excises	1.7	1.5	1.9	1.9	2.1	2.1	2.1	2.0	2.0
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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Social contributions	2.1	2.1	2.2	2.3	2.2	2.2	2.3	2.3	2.3
Other revenue	9.5	8.3	8.4	8.7	7.0	7.1	6.9	6.9	6.9
Property income 2/	4.6	3.5	3.4	3.4	2.3	2.2	2.3	2.3	2.3
Other	5.0	4.8	5.0	5.3	4.7	4.9	4.6	4.6	4.6
Total expenditure	25.7	25.7	26.2	30.1	26.3	25.7	25.3	25.4	25.4
Expense	24.1	24.1	24.9	27.9	25.3	25.0	25.2	25.4	25.6
Compensation of employees	3.4	3.4	3.2	3.7	3.6	3.6	3.6	3.6	3.6
Purchases of goods and services	3.3	3.6	3.8	3.5	3.1	2.9	2.8	2.8	2.8
Interest 3/	4.0	4.1	4.2	4.3	4.0	3.8	3.7	3.7	3.7
Subsidies and transfers	1.7	1.8	2.0	2.8	2.5	2.5	2.6	2.6	2.6
o/w fuel subsidy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Grants 4/	8.3	8.2	8.0	7.8	7.9	7.8	7.8	7.8	7.8
Social benefits	3.2	3.4	3.6	4.3	4.4	4.6	4.8	5.1	5.3
Other expense	0.1	-0.4	0.1	1.5	-0.2	-0.3	-0.2	-0.2	-0.3
Net acquisition of nonfinancial assets 5/	1.6	1.6	1.3	2.2	2.2	2.2	1.8	1.8	1.8
Unspecified measures	0.0	0.0	0.0	0.0	-1.2	-1.5	-1.7	-1.8	-2.0
Gross Operating Balance	0.6	-0.6	-1.0	-3.6	-2.4	-1.9	-2.4	-2.5	-2.6
Overall Fiscal Balance (Net lending/borrowing)	-1.1	-2.2	-2.3	-5.8	-3.4	-2.6	-2.5	-2.5	-2.5
Primary net lending/borrowing	2.6	1.6	1.4	-2.0	0.2	0.8	0.7	0.7	0.8
Memorandum items									
Primary expenditure	21.7	21.5	22.0	25.8	22.3	21.8	21.6	21.7	21.8
Current expenditure	24.1	24.1	24.9	27.9	24.1	23.5	23.5	23.6	23.6
Structural fiscal balance	-2.7	-2.8	-2.7	-4.3	-2.5	-2.0	-2.1	-2.4	-2.6
Structural primary balance 6/	1.0	1.0	1.1	-0.4	1.1	1.4	1.1	0.8	0.7
Fiscal impulse 7/	-1.9	0.0	0.0	1.5	-1.5	-0.3	0.3	0.3	0.1
Gross public sector debt 8/	54.0	53.6	53.7	65.5	65.6	65.4	65.2	65.0	64.9
In domestic currency (percentage of total debt)	66.7	67.5	69.7	66.0	65.7	64.8	64.4	63.5	63.2
In foreign currency (percentage of total debt)	33.3	32.5	30.3	34.0	34.3	35.2	35.6	36.5	36.8
Net public sector debt 9/	45.7	44.9	44.8	56.7	56.8	56.6	56.3	56.2	56.1

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. For 2018 and 2019, the numbers are presented as a percent of aggregated quarterly nominal GDP for consistency with the authorities' presentation, as published in 2021 General Economic Policy Guidelines.

2/ Includes Bank of Mexico's operating surplus transferred to the federal government for 1.5 percent of GDP in 2017.

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

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

5/ 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.

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).

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)

	2017	2018	2019	Proj.					
				2020	2021	2022	2023	2024	2025
Current account	-20.5	-25.4	-4.4	13.0	-1.0	-10.5	-18.0	-22.4	-25.8
Merchandise goods trade balance	-11.0	-13.6	5.4	10.9	7.3	-3.1	-11.4	-16.4	-21.3
Exports, f.o.b. 2/	409.4	450.7	460.7	401.3	479.0	500.1	524.3	546.3	565.2
o/w Manufactures	364.3	397.3	410.8	375.1	395.9	429.7	442.8	465.3	486.9
o/w Petroleum and derivatives 1/	23.7	30.6	25.8	16.7	19.8	21.4	23.4	26.5	27.5
Imports, f.o.b. 2/	420.4	464.3	455.3	390.3	471.7	503.2	535.7	562.7	586.5
o/w Petroleum and derivatives 1/	42.0	53.8	47.2	33.5	43.2	44.7	46.2	47.9	49.0
Services, net	-9.8	-11.2	-8.3	-7.4	-12.2	-14.4	-15.7	-16.6	-17.4
Primary income, net	-29.9	-33.3	-37.0	-30.7	-31.1	-32.2	-33.5	-35.2	-36.1
Secondary income (mostly remittances), net	30.1	32.9	35.7	40.1	35.1	39.2	42.7	45.8	49.0
Capital Account, net	0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Financial Account (Net lending (+)/Net borrowing (-))	-34.2	-31.8	-15.0	12.9	-1.0	-10.6	-18.0	-22.5	-25.9
Foreign direct investment, net	-30.3	-25.4	-23.3	-14.5	-16.7	-18.8	-19.6	-20.6	-21.6
Net acquisition of financial assets	2.7	12.3	6.1	8.9	9.0	9.5	9.9	10.2	10.6
Net incurrence of liabilities	33.0	37.7	29.4	23.4	25.7	28.3	29.5	30.8	32.2
Portfolio investment, net	-10.2	-8.4	-6.0	-0.5	-12.5	-14.0	-14.4	-14.4	-14.4
Net acquisition of financial assets	13.8	1.1	3.6	9.0	4.0	2.5	2.0	2.0	2.0
Net incurrence of liabilities	24.0	9.5	9.6	9.5	16.5	16.5	16.4	16.4	16.4
Public Sector	5.8	10.7	3.2	7.5	11.0	11.0	10.9	10.9	10.9
o/w Local currency domestic-issued bonds	-0.3	0.1	1.3	-8.5	4.5	5.0	5.0	5.0	5.0
Private sector	18.3	-1.2	6.4	2.0	5.5	5.5	5.5	5.5	5.5
Securities issued abroad	7.9	-3.6	6.4	2.0	3.5	3.5	3.5	3.5	3.5
Equity	10.3	2.4	0.0	0.0	2.0	2.0	2.0	2.0	2.0
Pidiregas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial derivatives, net	3.1	0.4	1.6	0.0	0.0	0.0	0.0	0.0	0.0
Other investments, net	8.0	1.2	10.0	20.5	26.6	20.2	12.9	7.1	4.3
Net acquisition of financial assets	5.6	7.9	13.0	22.1	28.6	22.3	15.0	9.2	6.4
Net incurrence of liabilities	-2.4	6.7	2.9	1.6	2.1	2.1	2.1	2.1	2.1
Change in Reserves Assets	-4.8	0.5	2.6	7.4	1.6	2.0	3.1	5.3	5.8
Total change in gross reserves assets	-2.6	0.9	6.6	7.4	1.6	2.0	3.1	5.3	5.8
Valuation change	2.2	0.5	4.0	0.0	0.0	0.0	0.0	0.0	0.0
Errors and Omissions	-13.8	-6.3	-10.6	0.0	0.0	0.0	0.0	0.0	0.0
International Investment Position, net	-554.8	-587.1	-652.3	-639.3	-640.4	-650.9	-669.0	-691.4	-717.3
Memorandum items									
Hydrocarbons exports volume growth (in percent)	1.2	1.8	-0.2	8.3	13.6	5.2	6.7	11.1	3.8
Non-hydrocarbons exports volume growth (in percent)	3.9	6.5	1.2	-9.6	13.9	3.0	3.0	2.1	1.8
Hydrocarbons imports volume growth (in percent)	14.9	4.8	-2.1	-24.0	18.8	2.3	2.2	1.8	2.4
Non-hydrocarbons imports volume growth (in percent)	5.9	6.4	-0.8	-14.5	21.1	7.0	4.4	2.8	2.1
Crude oil export volume (in millions of bbl/day)	1.2	1.2	1.2	1.2	1.4	1.5	1.6	1.7	1.8
Gross international reserves (in billions of U.S. dollars)	175.4	176.4	183.0	190.4	192.1	194.0	197.1	202.4	208.2
Gross domestic product (in billions of U.S. dollars)	1,158.9	1,222.3	1,268.9	1,040.4	1,094.5	1,145.6	1,197.9	1,250.9	1,305.7

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.

Table 4b. Mexico: Summary Balance of Payments
(in percent of GDP)

	2017	2018	2019	Proj.					
				2020	2021	2022	2023	2024	2025
Current account	-1.8	-2.1	-0.3	1.2	-0.1	-0.9	-1.5	-1.8	-2.0
Merchandise goods trade balance	-0.9	-1.1	0.4	1.1	0.7	-0.3	-1.0	-1.3	-1.6
Exports, f.o.b. 2/	35.3	36.9	36.3	38.6	43.8	43.7	43.8	43.7	43.3
o/w Manufactures	31.4	32.5	32.4	36.1	36.2	37.5	37.0	37.2	37.3
o/w Petroleum and derivatives 1/	2.0	2.5	2.0	1.6	1.8	1.9	2.0	2.1	2.1
Imports, f.o.b. 2/	36.3	38.0	35.9	37.5	43.1	43.9	44.7	45.0	44.9
o/w Petroleum and derivatives 1/	3.6	4.4	3.7	3.2	3.9	3.9	3.9	3.8	3.8
Services, net	-0.8	-0.9	-0.7	-0.7	-1.1	-1.3	-1.3	-1.3	-1.3
Primary income, net	-2.6	-2.7	-2.9	-2.9	-2.8	-2.8	-2.8	-2.8	-2.8
Secondary income (mostly remittances), net	2.6	2.7	2.8	3.9	3.2	3.4	3.6	3.7	3.8
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 (-))	-2.9	-2.6	-1.2	1.2	-0.1	-0.9	-1.5	-1.8	-2.0
Foreign direct investment, net	-2.6	-2.1	-1.8	-1.4	-1.5	-1.6	-1.6	-1.6	-1.7
Net acquisition of financial assets	0.2	1.0	0.5	0.9	0.8	0.8	0.8	0.8	0.8
Net incurrence of liabilities	2.9	3.1	2.3	2.2	2.4	2.5	2.5	2.5	2.5
Portfolio investment, net	-0.9	-0.7	-0.5	0.0	-1.1	-1.2	-1.2	-1.1	-1.1
Net acquisition of financial assets	1.2	0.1	0.3	0.9	0.4	0.2	0.2	0.2	0.2
Net incurrence of liabilities	2.1	0.8	0.8	0.9	1.5	1.4	1.4	1.3	1.3
Public Sector	0.5	0.9	0.3	0.7	1.0	1.0	0.9	0.9	0.8
o/w Local currency domestic-issued bonds	0.0	0.0	0.1	-0.8	0.4	0.4	0.4	0.4	0.4
Private sector	1.6	-0.1	0.5	0.2	0.5	0.5	0.5	0.4	0.4
Securities issued abroad	0.7	-0.3	0.5	0.2	0.3	0.3	0.3	0.3	0.3
Equity	0.9	0.2	0.0	0.0	0.2	0.2	0.2	0.2	0.2
Pidiregas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial derivatives, net	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Other investments, net	0.7	0.1	0.8	2.0	2.4	1.8	1.1	0.6	0.3
Net acquisition of financial assets	0.5	0.6	1.0	2.1	2.6	1.9	1.3	0.7	0.5
Net incurrence of liabilities	-0.2	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Change in Reserves Assets	-0.4	0.0	0.2	0.7	0.1	0.2	0.3	0.4	0.4
Total change in gross reserves assets	-0.2	0.1	0.5	0.7	0.1	0.2	0.3	0.4	0.4
Valuation change	0.2	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Errors and Omissions	-1.2	-0.5	-0.8	0.0	0.0	0.0	0.0	0.0	0.0
International Investment Position, net	-47.9	-48.0	-51.4	-61.5	-58.5	-56.8	-55.8	-55.3	-54.9

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.

Table 5. Mexico: Financial Soundness Indicators
(In percent)

	2017	2018	2019	2020	Latest data available 1/
Capital Adequacy					
Regulatory capital to risk-weighted assets	15.6	15.9	16.0	16.5	June
Regulatory Tier 1 capital to risk-weighted assets	14.2	14.2	14.4	14.8	June
Capital to assets	10.4	10.7	11.0	9.7	June
Gross asset position in financial derivatives to capital	71.1	63.3	51.3	112.5	June
Gross liability position in financial derivatives to capital	76.0	63.9	52.6	118.7	June
Asset Quality					
Nonperforming loans to total gross loans	2.1	2.1	2.1	2.0	June
Provisions to Nonperforming loans	154.9	152.4	146.2	165.0	June
Earnings and Profitability					
Return on assets	2.0	2.2	2.2	1.3	June
Return on equity	19.6	20.9	20.5	12.8	June
Liquidity					
Liquid assets to short-term liabilities	42.2	42.3	40.8	45.3	June
Liquid assets to total assets	32.0	31.6	31.1	32.4	June
Customer deposits to total (noninterbank) loans	91.4	89.3	90.7	92.8	June
Trading income to total income	5.0	4.5	5.8	4.8	June

Sources: Financial Soundness Indicators.

1/ End of period.

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

	2017	2018	2019	2020	Latest data available
Financial market indicators					
Exchange rate (per U.S. dollar, period average)	18.9	19.2	19.3	21.8	Aug-20
(year-to-date percent change, + appreciation)	-1.4	-1.7	-0.1	-13.4	Aug-20
28-day treasury auction rate (percent; period average)	6.7	7.6	7.8	5.9	Aug-20
EMBIG Mexico spread (basis points; period average)	256	273	318	487	Sep-20
Sovereign 10-year local currency bond yield (period average)	7.2	7.9	7.6	6.4	Sep-20
Stock exchange index (period average, year on year percent change)	7.5	-3.8	-8.8	-10.0	Sep-20
Financial system					
Bank of Mexico net international reserves (US\$ billion)	172.8	174.8	180.9	188.3	Proj.
Financial system credit on non-financial private sector (year on year percent change) 1/	10.8	8.8	3.0	-1.4	Proj.
Nonperforming loans to total gross loans (deposit takers)	2.1	2.1	2.1	2.0	Jul-20
External vulnerability indicators					
Gross financing needs (billions of US\$) 2/	93.3	97.5	103.2	72.7	Proj.
Gross international reserves (end-year, billions of US\$) 3/	175.4	176.4	183.0	197.1	Jun-20
Change (billions of US\$)	-2.6	0.9	6.6	7.4	Jun-20
Months of imports of goods and services	4.6	4.2	4.4	5.4	Proj.
Months of imports plus interest payments	4.4	4.0	4.2	5.1	Proj.
Percent of broad money	41.1	39.1	36.3	40.8	Proj.
Percent of portfolio liabilities	35.2	36.5	35.1	35.9	Proj.
Percent of short-term debt (by residual maturity)	246.6	191.2	233.8	243.6	Proj.
Percent of ARA Metric 4/	121.9	118.1	116.8	124.3	Proj.
Percent of GDP	15.1	14.4	14.4	23.2	Jun-20
Gross total external debt (in percent of GDP)	37.7	36.6	36.6	45.5	Proj.
Of which: In local currency	9.3	8.9	9.0	10.1	Proj.
Of which: Public debt	25.6	25.0	24.6	30.8	Proj.
Of which: Private debt	12.1	11.5	11.9	14.7	Proj.
Financial sector	1.2	1.7	2.1		
Nonfinancial sector	10.9	9.8	9.9		
Gross total external debt (billions of US\$)	436.6	446.8	463.8	473.3	Proj.
Of which: In local currency	107.2	108.5	114.0	105.5	Proj.
Of which: Public debt	296.6	306.0	312.4	320.0	Proj.
Of which: Private debt	140.0	140.8	151.4	153.3	Proj.
Financial sector	14.0	20.6	26.4		
Nonfinancial sector	126.0	120.1	125.0		
External debt service (in percent of GDP)	8.4	7.7	9.4	10.0	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. For 2009, includes the allocation of SDR 2.337 billion in the general allocation implemented on August 28, 2009, and another SDR 0.224 billion in the special allocation on September 9.

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: Baseline Medium-Term Projections

	2017	2018	2019	Proj.					
				2020	2021	2022	2023	2024	2025
National accounts (in real terms, contributions to growth) 1/									
GDP	2.1	2.2	-0.1	-9.0	3.5	2.3	2.2	2.1	2.1
Consumption	2.2	2.0	0.3	-8.2	3.2	2.3	1.8	1.8	1.8
Private	2.1	1.7	0.4	-8.4	3.4	2.2	1.5	1.5	1.5
Public	0.1	0.3	-0.2	0.2	-0.3	0.1	0.3	0.3	0.3
Investment	-0.3	0.1	-1.2	-4.0	1.8	1.4	0.9	0.5	0.4
Fixed	-0.2	0.2	-0.9	-4.0	1.6	1.4	0.9	0.5	0.4
Private	0.2	0.2	-0.6	-3.7	1.9	1.8	0.9	0.4	0.4
Public	-0.4	0.0	-0.3	-0.3	-0.3	-0.3	0.0	0.2	0.1
Inventories	0.0	-0.1	-0.3	0.0	0.2	0.0	0.0	0.0	0.0
Exports of goods and services	1.4	2.1	0.5	-3.8	5.0	1.2	1.3	1.0	0.8
Oil exports	0.1	0.1	-0.1	0.0	0.1	0.1	0.1	0.1	0.0
Non-oil exports	1.4	2.1	0.6	-3.8	4.8	1.2	1.2	0.9	0.7
Imports of goods and services	2.2	2.3	-0.3	-5.8	7.2	2.8	1.8	1.2	0.9
Oil imports	0.1	0.2	0.1	-0.5	0.2	0.0	0.0	0.0	0.0
Non-oil imports	2.1	2.1	-0.3	-5.4	7.0	2.7	1.8	1.2	0.9
Net exports	-0.7	-0.2	0.8	2.1	-2.2	-1.5	-0.5	-0.2	-0.1
Consumer prices									
End of period	6.8	4.8	2.8	3.7	2.9	3.0	3.0	3.0	3.0
Average	6.0	4.9	3.6	3.4	3.3	3.0	3.0	3.0	3.0
External sector									
Current account balance (in percent of GDP)	-1.8	-2.1	-0.3	1.2	-0.1	-0.9	-1.5	-1.8	-2.0
Non-hydrocarbon current account balance (in percent of GDP)	-0.2	-0.2	1.4	2.9	2.0	1.1	0.4	-0.1	-0.3
Exports of goods, f.o.b.	9.5	10.1	2.2	-12.9	19.4	4.4	4.8	4.2	3.5
Imports of goods, f.o.b.	8.6	10.4	-1.9	-14.3	20.8	6.7	6.5	5.0	4.2
Terms of trade (improvement +)	3.0	-0.4	2.2	-4.7	5.0	1.4	-0.4	-0.4	-0.5
Crude oil export price, Mexican mix (US\$/bbl)	46.4	61.7	56.1	32.9	36.0	37.0	37.9	38.7	38.7
Non-financial public sector									
Overall balance	-1.1	-2.2	-2.3	-5.8	-3.4	-2.6	-2.5	-2.5	-2.5
Primary balance	2.6	1.6	1.4	-2.0	0.2	0.8	0.7	0.7	0.8
Saving and investment 2/									
Gross domestic investment	22.9	22.7	21.1	19.3	20.5	21.4	21.6	21.4	21.1
Fixed investment	22.1	22.0	20.7	18.8	19.9	20.9	21.1	20.9	20.6
Public	3.1	3.0	2.6	2.9	2.5	2.0	2.0	2.0	2.0
Private	19.0	19.0	18.1	15.9	17.5	18.8	19.2	18.9	18.6
Gross domestic saving	21.1	20.7	20.7	20.5	20.4	20.4	20.1	19.6	19.1
Public	2.0	0.9	1.0	-2.9	-0.9	-0.6	-0.5	-0.5	-0.5
Private	19.1	19.7	19.7	23.4	21.3	21.0	20.7	20.0	19.5
Memorandum items									
Financial system credit to non-financial private sector	10.8	8.8	3.0	-1.4	6.1	6.9	7.7	8.0	8.0
Output gap (in percent of potential GDP)	0.4	0.8	-0.9	-5.7	-4.1	-2.8	-1.6	-0.4	0.0
Total population	1.1	1.0	1.0	1.0	0.9	0.9	0.9	0.8	0.8
Working-age population 3/	1.4	1.3	1.3	1.2	1.1	1.1	1.0	0.9	0.9

Sources: Bank of Mexico, National Institute of Statistics and Geography, Ministry of Finance and Public Credit, Bloomberg, and IMF staff projections.

1/ Contribution to growth. Excludes statistical discrepancy.

2/ Reported numbers may differ from authorities' due to rounding.

3/ Based on United Nations population projections.

Table 8. Mexico: Monetary Indicators 1/
(In billions of Pesos)

	2016	2017	2018	2019	Proj. 2020
Banco de México					
Net foreign assets	3,619	3,392	3,408	3,397	4,135
Net international reserves	3,682	3,457	3,471	3,457	4,208
Gross international reserves	3,683	3,458	3,472	3,457	4,208
Reserve liabilities	1	1	1	0	0
Other net foreign assets	-63	-65	-63	-60	-73
Net domestic assets	-2,198	-1,846	-1,734	-1,654	-2,247
Net domestic credit	-1,413	-1,627	-1,622	-1,706	-1,653
Net credit to non-financial public sector	-1,221	-1,516	-1,525	-1,640	-1,537
Credit to non-financial private sector	0	0	0	0	0
Net credit to financial corporations	-192	-112	-97	-66	-117
Net claims on other depository corporations	-192	-112	-97	-66	-117
Net claims on other financial corporations	0	0	0	0	0
Capital account	715	153	54	-113	530
Other items net	-70	-65	-59	-61	-64
Monetary base	1,420	1,546	1,674	1,742	1,888
Other Depository Corporations					
Net foreign assets	23	92	-32	-92	-99
Foreign assets	650	771	860	738	799
Foreign liabilities	627	679	893	830	899
Net domestic assets	7,079	7,794	8,225	8,935	10,093
Net credit to the public sector	2,854	3,071	3,190	3,750	4,523
Claims on non-financial public sector	3,272	3,526	3,688	4,214	4,958
in pesos	3,120	3,374	3,528	4,037	4,755
in FX	152	152	160	178	203
Liabilities to the nonfinancial public sector	418	455	499	464	435
Credit to the private sector	5,215	5,896	6,304	6,976	6,876
Local Currency	4,499	5,173	5,538	6,198	6,173
Foreign Currency	716	723	766	778	703
Net credit to the financial system	878	967	937	868	912
Other	-1,868	-2,140	-2,206	-2,659	-2,218
Liabilities to the private sector	7,102	7,886	8,192	8,843	9,993
Liquid liabilities	6,345	7,067	7,392	7,945	9,102
Local currency	5,780	6,373	6,775	7,369	8,583
Foreign currency	565	694	617	575	519
Non liquid liabilities	757	819	801	898	891
Local currency	730	786	765	861	857
Foreign currency	26	33	36	38	34
Total Banking System					
Net foreign assets	3,642	3,484	3,376	3,305	4,036
Net domestic assets	4,880	5,947	6,491	7,280	7,846
Liquid liabilities	7,766	8,613	9,066	9,687	10,990
Non-liquid liabilities	757	819	801	898	891
Memorandum items					
Monetary base (percent change)	14.4	8.8	8.3	4.1	8.3
Currency in circulation (percent change)	16.0	8.8	8.9	3.6	8.3
Broad money (percent change)	12.3	11.2	5.3	6.8	8.3
Bank credit to the non-financial private sector (growth rate)	17.7	13.0	6.9	10.7	-1.4
Bank credit to the non-financial private sector (as percent of GDP)	25.9	26.9	26.8	28.5	30.3

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.

Annex I. Progress Against IMF Recommendations

2019 Article IV Policy Advice	Actions Since 2019 Article IV	Next Steps
Fiscal Policy		
<p>Specify more ambitious fiscal targets to lower public debt. Increase non-oil tax revenues, strengthen revenue administration, rationalize tax expenditures, raise subnational taxes, make the tax system more progressive, enhance spending efficiency, and establish a fiscal council.</p> <p>Improve pension adequacy by increasing the contribution rate, raising the effective retirement age, and consolidating federal and local non-contributory pension pillars.</p>	<p>The outbreak of Covid-19 has led to a reprioritization. The government increased spending in 2020 by 0.7 percent of GDP and reallocated and frontloaded some items.</p> <p>The draft 2021 budget continues the tight policy settings aimed at limiting debt issuance. There are no medium-term tax reforms, and stabilization and trust funds buffers are expected to be drawn down.</p> <p>The government has proposed a pension reform to increase replacement rates through private employer contributions, broaden coverage, and raise the minimum guaranteed pension. Fund management fees could be capped.</p>	<p>Enhance near-term fiscal support by 2½-3½ percent of GDP to save lives, preserve livelihoods, and limit scarring.</p> <p>Announce credible medium-term tax reforms to finance quality non-oil public investment, enhance social protection, close fiscal gaps, and lower public debt.</p> <p>As higher employer pension contributions could deter formal job creation, complementary measures are needed to tackle informality and increase contribution densities, including reducing the contribution rate to the national housing fund, increasing the contribution period required for a full pension in the old public-sector defined benefit scheme, and raising the age limit to get a full pension in the public sector.</p>
<p>Revise Pemex's business plan to strengthen its financial position and reduce budget risks, sell non-core assets, reduce operating costs, and increase cooperation with private firms.</p>	<p>Given lower oil prices and ratings downgrade, production was cut slightly as was capital spending. The business plan continues to prioritize raising oil production and refining throughput. There has been limited private sector interest in service contracts.</p>	<p>Focus production on profitable fields, curb plans in the downstream sector, postpone new refinery plans until it is profitable to do so, and partner with private firms to leverage expertise, manage investment costs and increase efficiency.</p>
Monetary and Exchange Rate Policy		
<p>Ease monetary policy if inflation stays close to target and inflation expectations remain anchored.</p> <p>Maintain exchange rate flexibility as a key shock absorber. Limit FX intervention to incidences of disorderly market conditions.</p>	<p>The central bank cut the policy rate by 400 basis points since mid-2019 to 4.25 percent. It launched new financing and credit facilities after the Covid-19 outbreak for a total of up to 3.3 percent of GDP.</p> <p>The flexible exchange rate has facilitated absorption of shocks. FX intervention of US\$2 billion was conducted through local non-</p>	<p>Consider lowering the policy rate further to support the economy, while anchoring inflation expectations and safeguarding external financial stability. Refine credit facilities to enhance their attractiveness and support the economy.</p> <p>Continue maintaining exchange rate flexibility to facilitate shock absorption. Limit FX intervention to</p>

	deliverable forwards during peak market stress.	instances of disorderly market conditions.
Financial Sector Policies		
<p>Further enhance financial sector resilience by closing regulatory and supervisory gaps.</p> <p>Prioritize further boosting competition and inclusion.</p>	<p>Several regulatory initiatives related to Basel III implementation have been delayed given the pandemic and new crisis-related regulations have been issued.</p> <p>A new financial inclusion strategy was announced in March 2020.</p>	<p>Uphold minimum regulatory and supervisory standards, while using flexibility within the framework to cope with pandemic challenges.</p> <p>Closing key regulatory and supervisory gaps to boost financial resilience.</p>
Structural Policies		
<p>Re-invigorate the reform agenda with an emphasis on strengthening the rule of law, fighting corruption, and reducing labor market informality.</p> <p>Strengthen AML/CFT and implement the national anti-corruption system.</p> <p>Address informality by reducing entry costs for formal firms, strengthening enforcement, and replacing hiring and firing restrictions with an unemployment insurance scheme. Lower participation barriers for women.</p> <p>Remove constraints to trade in services.</p>	<p>On AML/CFT, the authorities have concluded and adopted a revised ML/TF National Risk Assessment and prepared draft legislation to improve the legal framework in line with the recommended actions from the 2018 Fund-led AML/CFT assessment. A draft law is pending approval in Congress.</p> <p>On anti-corruption, the authorities adopted enhanced transparency requirements for public official and adopted a National Anti-corruption Policy.</p>	<p>Take a comprehensive approach to tackling informality.</p> <p>Encourage private sector involvement in the energy sector.</p> <p>Enhance the independence and ensure the capacity of regulators to support competition and remove barriers to trade in services.</p> <p>Promote financial inclusion.</p> <p>Strengthen governance by focusing on swift and effective implementation of anti-corruption measures and enacting pending legislation of the AML/CFT framework.</p>

Annex II. External Sector Assessment

(Updated as of October 7, 2020)

<p>Overall Assessment: <i>The external position in 2019 was broadly in line with the level implied by medium-term fundamentals and desirable policies.</i> The current account (CA) balance is projected to improve significantly in 2020, on the back of a sharp decline in investments and imports, as well as a strong recovery in exports in the second half of 2020 and resilient remittances, reflecting the two-speed recovery underway. The assessment for 2020 remains subject to considerable uncertainty around the degree of the temporary nature of these factors and the impact of developments (notably, Covid-19 and oil prices).</p> <p>Potential Policy Responses: The focus should be on providing sufficient policy support in the near term in response to Covid-19 and committing to implement pro-growth and inclusive fiscal reforms as well as reinvigorate structural reforms over the medium term to improve competitiveness and the investment climate. The floating exchange rate should continue to serve as the main shock absorber, with foreign exchange interventions used to prevent disorderly market conditions. A dollar swap line with the U.S. Federal Reserve and the IMF Flexible Credit Line provide added buffers against global tail risks.</p>						
Foreign Asset and Liability Position and Trajectory	<p>Background. Mexico's NIIP is projected to remain broadly stable at around -55 percent of GDP over the medium term. Foreign assets mainly consist of direct investment (18 percent of GDP) and reserves (14 percent of GDP). Foreign liabilities are mostly FDI (50 percent of GDP) and portfolio investment (41 percent of GDP). Gross public external debt was 25 percent of GDP, of which about one-quarter was holdings of local currency government bonds.</p> <p>Assessment. Whereas the NIIP is sustainable, and the local currency denomination of a large share of foreign public liabilities reduces foreign exchange risks, the large gross foreign portfolio liabilities could be a source of vulnerability in case of global financial volatility. Exchange rate vulnerabilities are also moderate as most Mexican firms with FX debt have natural hedges and actively manage their FX exposures.</p>					
2019 (% GDP)	NIIP: -52.1	Gross Assets: 48.3	Res. Assets: 14.5	Gross Liab.: 100.4	Debt Liab.: 36.9	
Current Account	<p>Background. In 2019, the CA balance improved sharply to -0.3 percent of GDP from -2.1 percent in 2018, driven by an unexpected sharp contraction in investments and imports (from USMCA-related and policy uncertainty), strong exports (from trade diversion arising from U.S.-China trade tensions) and workers' remittances. Exports and imports of goods fell by 19 and 20 percent y/y, respectively, in the first half of 2020, reflecting the impact of Covid-19 both on demand and supply and the fall in oil prices, while remittances increased by 11 percent in U.S. dollar terms. The 2020 CA is expected to record a moderate surplus of 1.2 percent of GDP subject to a high degree of uncertainty against the backdrop of the collapse of oil prices and a decline in external and domestic demand from Covid-19 and its related containment measures. The surplus is expected to be supported by a strong recovery in exports benefiting from the stronger U.S. economy and resilient remittances. Over the medium term, the CA deficit is projected to widen towards around 2 percent of GDP, as a strengthening oil balance and resilient remittances are offset by some deterioration in the non-hydrocarbon CA, with the temporary impact of Covid-19 gradually dissipating. Remittances are projected to return to a trend increase, given the non-converging prospects for the U.S. and Mexican economies.</p> <p>Assessment. The EBA model estimates a cyclically adjusted CA norm of -2.2 percent of GDP in 2019. This implies a CA gap of 1.6 percent of GDP (range of 0.5 and 2.7 percent of GDP). The policy gap contribution is estimated at 1.1 percent of GDP, mainly driven by loose fiscal policy in the rest of the world and lower-than-desired spending on health. Given a staff adjustment of 0.7 percent of GDP to account for the unexpectedly sharp rise in the current account, which is expected to unwind, reflecting the decline in investment and imports in the context of trade-related and policy uncertainty in 2019, as well as the positive impact of trade diversion and remittances, staff assesses the CA gap at 0.9 percent of GDP (range of -0.2 and 2.0 percent of GDP).</p>					
2019 (% GDP)	Actual CA: -0.3	Cycl. Adj. CA: -0.6	EBA CA Norm: -2.2	EBA CA Gap: 1.6	Staff Adj.: 0.7	Staff CA Gap: 0.9
Real Exchange Rate	<p>Background. For most of 2019, the peso fluctuated within a relatively narrow range of 19-19.5 vis-à-vis the US\$. The average REER in 2019 was around 3 percent stronger than the 2018 average, mostly driven by a nominal appreciation. In July 2020, the REER was 13 percent weaker than the 2019 average, driven by a 13 percent NEER depreciation.</p> <p>Assessment. The EBA REER Level and Index models estimate an undervaluation of 3.5 and 15.5 percent, respectively, in 2019. Considering all estimates and the uncertainties around them, staff's overall assessment, based on the staff CA gap (applying an elasticity of 0.13), estimates Mexico's REER gap to be in the range of -15 to 1 percent, with a midpoint of -7 percent.</p>					
Capital and Financial Accounts: Flows and Policy Measures	<p>Background. In 2019, net FDI and portfolio debt flows decelerated but remained positive, while net equity flows were negative. In the first six months of 2020, the sovereign issued around US\$13 billion in FX bonds, exceeding its FX debt financing needs, while there was a decline of almost US\$15 billion in non-resident holdings of peso debt by early-September. Net FDI flows also declined by 30 percent, while net equity flows were negative in the first half.</p> <p>Assessment. The long maturity of sovereign debt and high share of local currency financing reduce the exposure of government finances to depreciation risks. The banking sector is well capitalized, liquid, and resilient. Nonfinancial corporate debt is low and foreign exchange risks are generally covered by natural and financial hedges. But the strong presence of foreign investors leaves Mexico exposed to capital flow reversals and risk premia increases. The authorities have refrained from capital flow management measures. Risks are also mitigated by prudent macro policies.</p>					
FX Intervention and Reserves Level	<p>Background. The central bank remains committed to a free-floating exchange rate, whereas discretionary intervention is used solely to prevent disorderly market conditions. At end-2019, FX reserves amounted to US\$183 bn (14.4 percent of GDP), up from US\$176 bn at end-2018. By early-October 2020, FX reserves increased to US\$200 bn, mostly owing to the federal government's debt management operations and valuation changes. In 2018 and 2019, no discretionary interventions occurred. In 2020, two NDF auctions were conducted, alongside further US\$ liquidity provision measures, in response to large external shocks.</p> <p>Assessment. At 117 percent of the Assessing Reserve Adequacy metric and 234 percent of short-term debt (at remaining maturity), the end-2019 level of foreign reserves remains adequate. Staff recommends that the authorities continue to maintain reserves at an adequate level over the medium term. Also, the US\$60 billion swap line with the Federal Reserve, established in March 2020, and the FCL arrangement provide additional buffers.</p>					

Annex III. Risk Assessment Matrix

Source of Risk	Relative Likelihood ¹	Impact ¹	Policy Response
<p>Unexpected shift in the Covid-19 pandemic.</p> <ul style="list-style-type: none"> ▪ Downside. The disease proves harder to eradicate, requiring more containment efforts and impacting economic activity directly and through persistent behavioral changes. ▪ Upside. Alternatively, recovery from the pandemic is faster than expected due to the discovery of an effective and widely available vaccine and/or a faster-than-expected behavioral adjustment to the virus that boosts confidence and economic activity. 	<p>High</p> <p>Low</p>	<p>High. Long run scarring especially in tourism and the informal sector raising poverty levels and regional inequality</p> <p>High. Upside for rapid reintegration of displaced and underemployed workers,</p>	<p>Expand fiscal support to reinforce social safety net; implement structural reforms to facilitate reallocation away from affected sectors; carefully monitor smaller banks for signs of stress.</p> <p>Maintain support until liquidity risks have dissipated and labor markets have improved.</p>
<p>Oversupply and volatility in the oil market. Supply increases following OPEC+ disagreements and lower demand keep energy prices close to historical lows, but uncertainty about possible production cuts and the pace of demand recovery lead to bouts of volatility.</p>	Medium	<p>Medium. Additional burden on fiscal revenues and on Pemex's financial outlook causing rises in Pemex and sovereign spreads, potentially affecting the sovereign rating.</p>	<p>Implement a package of reforms cutting loss-making business lines, refocusing on high-return investments, and partnering with private sector experts to realize full potential of public resources. Public support should be conditional on a credible improvement strategy. Maintain exchange rate flexibility to facilitate reallocation.</p>
<p>Accelerating de-globalization. Geopolitical competition and fraying consensus about the benefits of globalization lead to further fragmentation. Re-shoring and less trade reduce potential growth.</p>	High	<p>High. Impact depends on the nature of the shock, with a bipolar world potentially reinforcing economic connections in North America while protectionism within North America would very negatively affect Mexico's manufacturing base.</p>	<p>Reinforce potential benefits of North American re-shoring with complementary structural reforms to improve investor sentiment and improve policy dialogue with private sector to minimize policy uncertainty. If intra-continental stresses materialize, work to promote international cooperation, nurture alternative trade partnerships, and actively pursue counter-cyclical policy to blunt impact on the most vulnerable. Maintain exchange rate flexibility to facilitate reallocation.</p>
<p>Rise in Mexico-specific risk aversion. Sharp increase in capital outflows, depreciation, and a rise in spreads due to perceptions of deteriorating institutional quality or long-run outlook.</p>	Low	<p>High. Increased stress on the financial system and fiscal pressures.</p>	<p>Pair short-term policy support with credible, forward looking reform agenda to better anchor policy expectations and long-run growth outlook.</p>

¹ The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path (the scenario most likely to materialize in the view of IMF staff). The relative likelihood is the staff's subjective assessment of the risks surrounding the baseline ("low" indicates a probability below 10 percent, "medium" between 10 and 30 percent, and "high" between 30 and 50 percent). The RAM reflects staff views as of the time of discussions with the authorities. Non-mutually exclusive risks may interact and materialize jointly.

Annex IV. Debt Sustainability Analysis

Public Debt Sustainability

Mexico's public debt is expected to rise by about 12 percent of GDP in 2020, owing to a sharp contraction in GDP and peso depreciation. If the authorities meet their fiscal targets over the medium term, public debt should stabilize around 65 percent of GDP. Gross financing needs would remain sizable at 11½–15 percent of GDP. If, however, fiscal gaps are not closed and targets are missed, debt could rise to 73 percent of GDP in 2025. Risks to the debt projections include a slower-than-anticipated recovery and further financial support for Pemex. The long average maturity and favorable currency composition of the debt mitigate short-term financing risks arising from high foreign ownership.

1. The baseline projections:

- *Debt and gross financing needs (GFNs).* Gross debt levels are projected to remain broadly stable at around 65 percent of GDP over the medium term, while GFNs are projected to average around 12 percent of GDP. Both are significantly higher than at the last Article IV consultation.
- *Fiscal balances.* The public sector borrowing requirement (PSBR) is projected to reach 5.8 percent of GDP in 2020. The authorities are targeting a PSBR of 3.4 percent of GDP in 2021 and 2.5 percent over the medium term. Correspondingly, the primary balance is projected to increase from -2 percent of GDP in 2020 to 0.2 percent of GDP in 2021, and remaining at 0.8 percent of GDP in 2025. It is assumed that the authorities specify measures of around 1¼–2 percent of GDP in the medium term to underpin their fiscal targets.
- *Growth assumptions.* Past GDP growth projections generally exhibit modest errors, with the median forecast error in line with other EMs. There is no evidence of a systematic projection bias in the baseline assumption for growth that could undermine the DSA assessment. Staff projects an output contraction of 9.0 percent in 2020 and a modest recovery thereafter. Over the medium term, staff projects growth near the potential rate of about 2 percent.
- *Sovereign yields.* Yields increased in March 2020 as global financial conditions tightened and oil prices fell but have since stabilized. The 10-year local-currency bond yield was stable around 5.7 percent in mid-August. The sovereign or United Mexican States (UMS) spread, i.e., the difference between 10-year UMS and U.S. Treasury yields, remained elevated in March and April, peaking at 426 basis points. It has fallen since late April and is currently at 256 basis points (as of 1st October 2020). Given monetary easing by the Bank of Mexico, the effective nominal interest rate on sovereign debt is projected to decline from 7.8 percent in 2019 to 7.5 percent in 2020. In the medium term, it is expected to continue declining to around 6.0 percent in 2025.

2. Rollover and exchange rate risks: the long maturity structure of public debt reduces rollover risks, including for the large share of public debt held by non-residents. The real interest rate and exchange rate shocks have a moderate impact on the debt stock, given the gradual interest

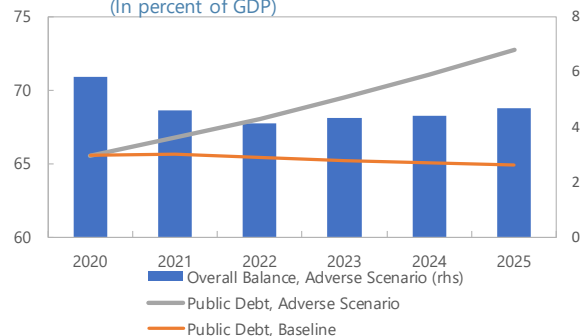
rate pass-through to the budget and the large share of debt denominated in local currency (around 66 percent).

3. Stochastic simulations: fan charts illustrate the possible evolution of public debt over the medium term and are based on symmetric and asymmetric distributions of risk. Under a symmetric distribution, there is a probability of around 70 percent that debt will remain below 70 percent of GDP over the medium term. If restrictions are imposed—i.e., an asymmetric scenario where it is assumed that there are no positive shocks to the primary balance—there is a probability of around 60 percent that the debt path will remain below 70 percent of GDP over the projection horizon.

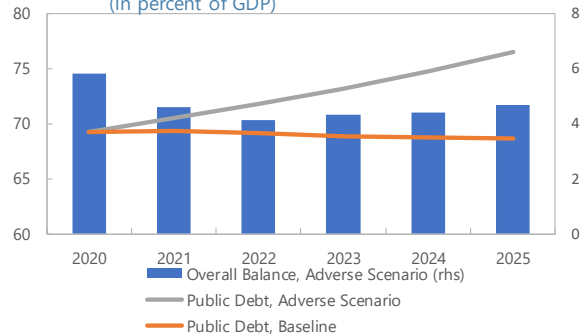
4. Stress tests:

- *Individual shocks.* The debt ratio would remain below the threshold 70 percent of GDP under all individual shock scenarios, with the impact on debt the highest for growth and exchange rate shocks. However, if fiscal gaps of 1¼–2 percent of GDP are not closed, debt will rise to 73 percent of GDP by 2025 (left-hand-side text chart below). If marketed Treasury securities held by the central bank for liquidity management purposes are added to debt statistics, debt would reach 69 percent of GDP under the baseline, without additional fiscal risks. But if fiscal gaps are not closed and marketed Treasury securities held by the central bank are added to the debt statistic, debt would rise to 76 percent of GDP by 2025 (right-hand-side text chart below).
- *Combined shock.* A combined shock incorporates the largest effect of individual shocks on all relevant variables (real GDP growth, inflation, primary balance, exchange rate and interest rate). Under this scenario, debt would increase to 76 percent of GDP by 2025. Gross financing needs would reach 14.4 percent of GDP in 2025.

Overall Balance and Debt without Marketed Securities: Baseline and Adverse Scenario
(In percent of GDP)



Overall Balance and Debt with Marketed Securities: Baseline and Adverse Scenario
(In percent of GDP)



5. Debt coverage: Treasury securities held by the central bank for liquidity management purposes are not included in general government debt. The central bank has been using T-bonds issued directly by the Treasury for liquidity management. At end 2019, a stock of about 4.4 percent of the GDP in T-bonds had been marketed (some 20 percent of GDP had not been marketed). The proceeds from the securities are held in a special government Monetary Regulation Deposit (MRD) that is ringfenced according to Art. 7 and 9 of Banco de México's Law. The government cannot

access the MRD before the bonds mature. As such, the government earns no financing benefit from the securities; it also incurs no direct cost given that the central bank remunerates the MRD with the exact payment terms as is case for the securities. In the authorities' official debt statistics, these securities are not considered general government (GG) debt while, in the Cuenta Pública, they are reported under a specific liability line item (but not under the debt heading).¹ Mexico received technical assistance in 2017 from the IMF's Statistics Department to bring the fiscal and debt statistics to international standards.

6. Net public debt: In their communication on public debt, the authorities focus on the concept of Historical Balance of the Public Sector Borrowing Requirements (HBPSBR), which is analogous to a net debt concept. Consistent with the present public debt stability analysis, staff estimates that net public debt (defined as gross debt minus public assets) would reach around 56 percent of GDP over the medium term.

External Debt Sustainability

After remaining broadly unchanged in 2019, external debt is expected to increase sharply in 2020 and decline gradually over the medium term. Risks are elevated but their potential impact is mitigated by several factors, such as the favorable maturity structure of sovereign and private external debt.

7. The baseline projections: gross external debt remained unchanged at 37 percent of GDP in 2019 from 2018. In the baseline, it is projected to increase to around 46 percent of GDP in 2020 driven by the decline in nominal GDP and peso depreciation vis-à-vis the U.S. dollar. Over the medium term, it is expected to decrease gradually towards 42 percent of GDP.

8. Risks and mitigating factors: the major downside risk is protracted pandemic-related stress that lowers growth, raises the country risk premium, and weakens the peso. Currency depreciation is a very significant risk; e.g., a 30 percent depreciation is estimated to raise external debt above 55 percent of GDP. However, several factors could mitigate the impact of shocks on external debt. Rollover risks for the public sector, which constitute around two-thirds of Mexico's external debt, are mitigated by a favorable maturity structure (around 85 percent of debt has maturity above one year), currency composition (around 1/4th of debt is denominated in peso), and prudent debt management by the government. Private sector external debt, concentrated in the non-financial corporate sector, is mostly medium and long term 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.

¹ The coverage of debt statistics in Mexico is limited to two of the required six debt instruments, namely, debt securities and loans.

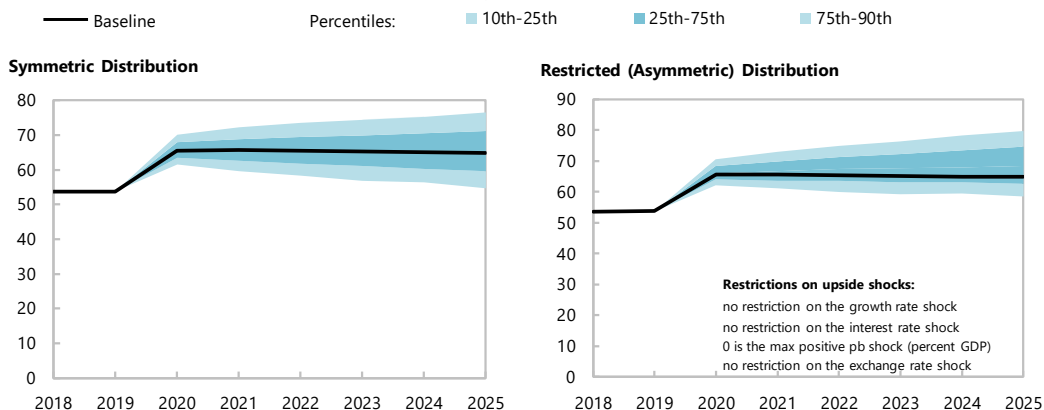
Annex IV. Figure 1. Mexico Public DSA Risk Assessment

Heat Map

Debt level ^{1/}	Real GDP Growth Shock	Primary Balance Shock	Real Interest Rate Shock	Exchange Rate Shock	Contingent Liability shock
Gross financing needs ^{2/}	Real GDP Growth Shock	Primary Balance Shock	Real Interest Rate Shock	Exchange Rate Shock	Contingent Liability Shock
Debt profile ^{3/}	Market Perception	External Financing Requirements	Change in the Share of Short-Term Debt	Public Debt Held by Non-Residents	Foreign Currency Debt

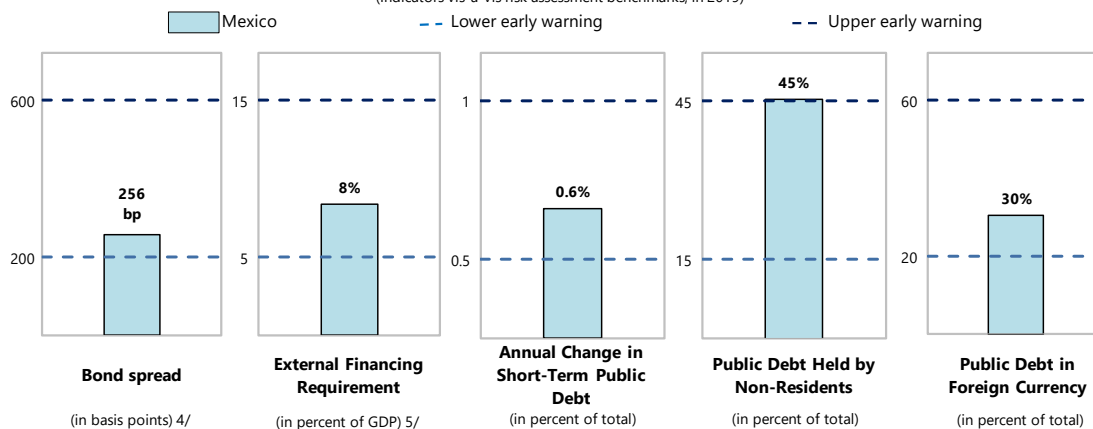
Evolution of Predictive Densities of Gross Nominal Public Debt

(in percent of GDP)



Debt Profile Vulnerabilities

(Indicators vis-à-vis risk assessment benchmarks, in 2019)



Source: IMF staff.

1/ The cell is highlighted in green if debt burden benchmark of 70% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

2/ The cell is highlighted in green if gross financing needs benchmark of 15% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

3/ The cell is highlighted in green if country value is less than the lower risk-assessment benchmark, red if country value exceeds the upper risk-assessment benchmark, yellow if country value is between the lower and upper risk-assessment benchmarks. If data are unavailable or indicator is not relevant, cell is white.

Lower and upper risk-assessment benchmarks are:

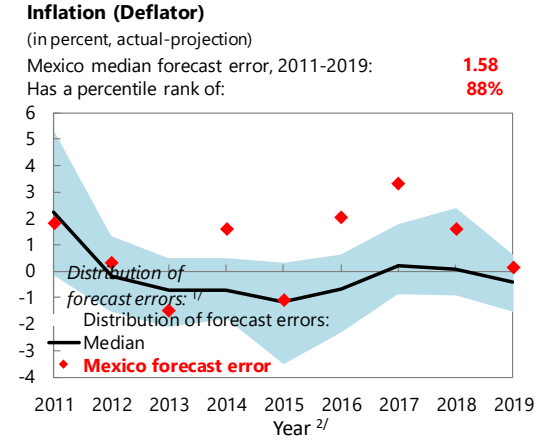
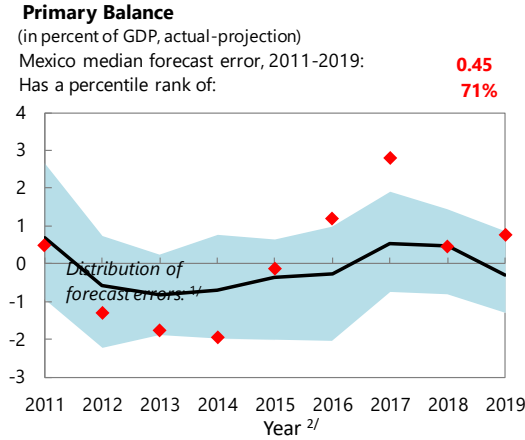
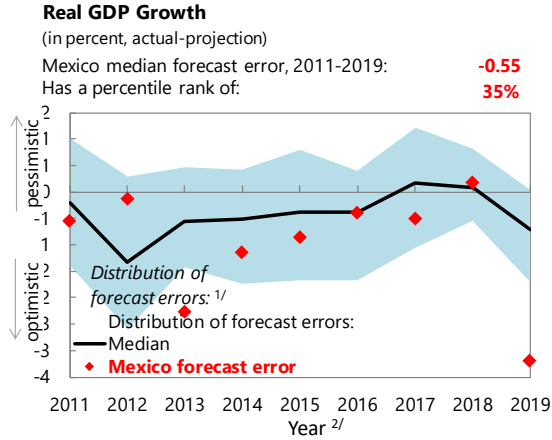
200 and 600 basis points for bond spreads; 5 and 15 percent of GDP for external financing requirement; 0.5 and 1 percent for change in the share of short-term debt; 15 and 45 percent for the public debt held by non-residents; and 20 and 60 percent for the share of foreign-currency denominated debt.

4/ Long-term bond spread over U.S. bonds, an average over the last 3 months, 03-Jul-20 through 01-Oct-20.

5/ External financing requirement is defined as the sum of current account deficit, amortization of medium and long-term total external debt, and short-term total external debt at the end of previous period.

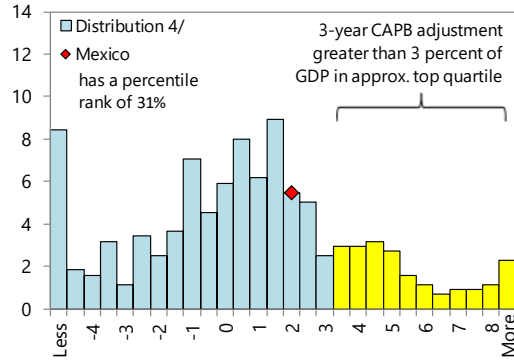
Annex IV. Figure 2. Mexico Public DSA - Realism of Baseline Assumptions

Forecast Track Record, versus all countries

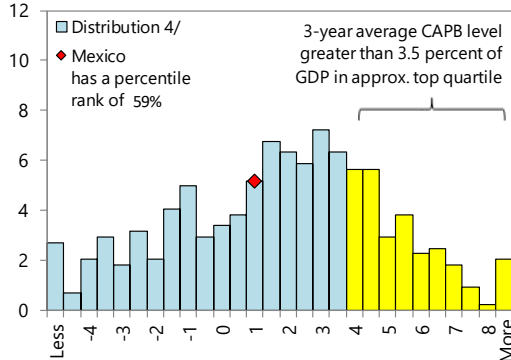


Assessing the Realism of Projected Fiscal Adjustment

3-Year Adjustment in Cyclically-Adjusted Primary Balance (CAPB)
(Percent of GDP)

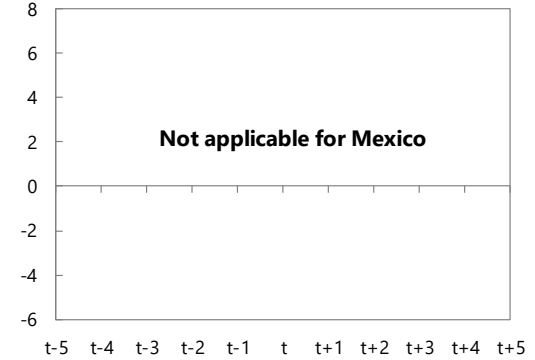


3-Year Average Level of Cyclically-Adjusted Primary Balance (CAPB)
(Percent of GDP)



Boom-Bust Analysis^{3/}

Real GDP growth
(in percent)
— Mexico



Source : IMF Staff.

1/ Plotted distribution includes all countries, percentile rank refers to all countries.

2/ Projections made in the spring WEO vintage of the preceding year.

3/ Not applicable for Mexico, as it meets neither the positive output gap criterion nor the private credit growth criterion.

4/ Data cover annual observations from 1990 to 2011 for advanced and emerging economies with debt greater than 60 percent of GDP. Percent of sample on vertical axis.

Annex IV. Figure 3. Mexico Public Sector Debt Sustainability Analysis (DSA) - Baseline Scenario

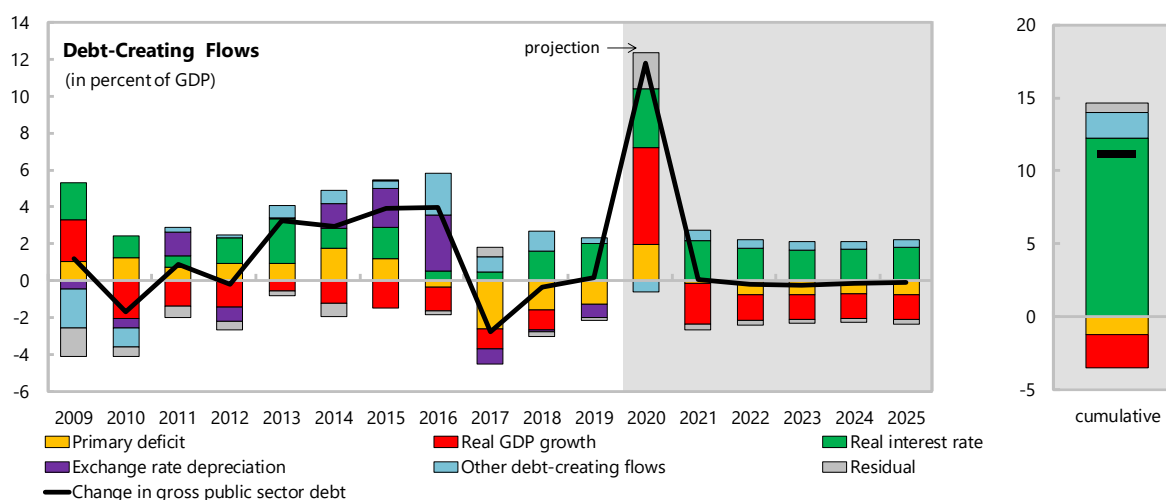
(in percent of GDP unless otherwise indicated)

Debt, Economic and Market Indicators ^{1/}

	Actual			Projections						As of October 01, 2020	
	2009-2017 ^{2/}	2018	2019	2020	2021	2022	2023	2024	2025	Sovereign Spreads	
Nominal gross public debt	47.7	53.6	53.7	65.5	65.6	65.4	65.2	65.0	64.9	UMS (bp) ^{3/}	256
Public gross financing needs	11.7	7.8	10.7	14.7	11.9	11.5	11.5	11.9	11.5	5Y CDS (bp)	145
Real GDP growth (in percent)	2.2	2.2	-0.1	-9.0	3.5	2.3	2.2	2.1	2.1	Ratings	Foreign Local
Inflation (GDP deflator, in percent)	4.4	4.9	4.0	2.2	2.9	3.2	3.2	3.1	3.0	Moody's	Baa1 Baa1
Nominal GDP growth (in percent)	6.6	7.2	3.9	-7.1	6.6	5.6	5.5	5.3	5.2	S&P's	BBB BBB+
Effective interest rate (in percent) ^{4/}	7.5	8.2	7.8	7.5	6.6	6.1	5.9	5.9	6.0	Fitch	BBB- BBB-

Contribution to Changes in Public Debt

	Actual			Projections						cumulative	debt-stabilizing primary balance ^{9/}
	2009-2017	2018	2019	2020	2021	2022	2023	2024	2025		
Change in gross public sector debt	1.3	-0.4	0.1	11.8	0.1	-0.2	-0.2	-0.1	-0.1	11.2	
Identified debt-creating flows	1.7	-0.1	0.3	9.8	0.4	0.1	0.0	0.1	0.1	10.5	
Primary deficit	0.5	-1.6	-1.3	2.0	-0.2	-0.8	-0.7	-0.7	-0.8	-1.2	0.9
Primary (noninterest) revenue and grants	23.7	23.1	23.6	23.9	22.5	22.7	22.5	22.6	22.6	136.8	
Primary (noninterest) expenditure	24.3	21.5	22.4	25.9	22.4	21.9	21.7	21.8	21.8	135.6	
Automatic debt dynamics ^{5/}	0.9	0.4	1.2	8.4	0.0	0.4	0.3	0.4	0.5	10.0	
Interest rate/growth differential ^{6/}	0.3	0.5	2.0	8.4	0.0	0.4	0.3	0.4	0.5	10.0	
Of which: real interest rate	1.3	1.6	2.0	3.2	2.2	1.8	1.6	1.7	1.8	12.3	
Of which: real GDP growth	-0.9	-1.1	0.0	5.2	-2.2	-1.4	-1.3	-1.3	-1.3	-2.3	
Exchange rate depreciation ^{7/}	0.6	-0.1	-0.8	...	...	...	...	...	...	...
Other identified debt-creating flows	0.2	1.1	0.3	-0.6	0.5	0.5	0.5	0.4	0.4	1.7	
Change in assets	0.2	1.1	0.3	-0.6	0.5	0.5	0.5	0.4	0.4	1.7	
Residual, including asset changes ^{8/}	-0.4	-0.3	-0.1	2.0	-0.3	-0.3	-0.3	-0.2	-0.3	0.7	



Source: IMF staff.

1/ Public sector is defined as the Central government, state-owned enterprises, public sector development banks, and social security funds. Excludes local governments.

2/ Based on available data.

3/ Long-term bond spread over U.S. bonds.

4/ Defined as interest payments divided by debt stock (excluding guarantees) at the end of previous year.

5/ Derived as $[(r - \pi(1+g) - g + ae(1+r))/(1+g+\pi+g\pi)]$ times previous period debt ratio, with r = interest rate; π = growth rate of GDP deflator; g = real GDP growth rate; a = share of foreign-currency denominated debt; and e = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).

6/ The real interest rate contribution is derived from the numerator in footnote 5 as $r - \pi(1+g)$ and the real growth contribution as $-g$.

7/ The exchange rate contribution is derived from the numerator in footnote 5 as $ae(1+r)$.

8/ Includes asset changes and interest revenues (if any). For projections, includes exchange rate changes during the projection period.

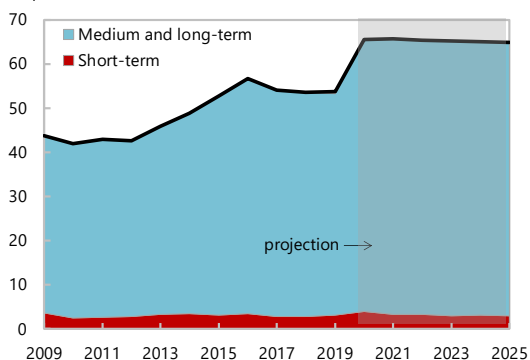
9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

Annex IV. Figure 4. Mexico Public DSA - Composition of Public Debt and Alternative Scenarios

Composition of Public Debt

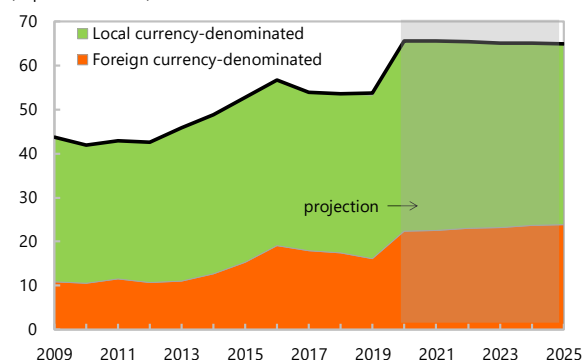
By Maturity

(in percent of GDP)



By Currency

(in percent of GDP)



Alternative Scenarios

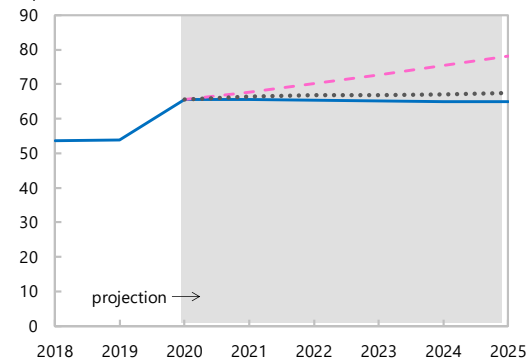
— Baseline

..... Historical

- - - Constant Primary Balance

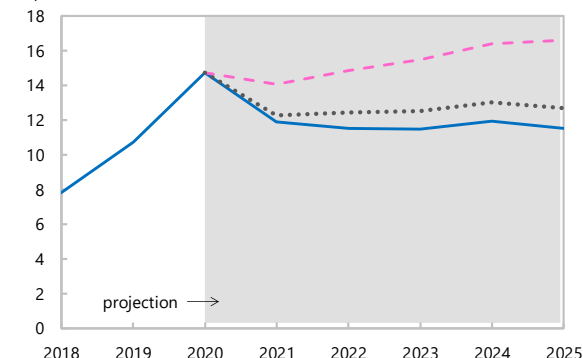
Gross Nominal Public Debt

(in percent of GDP)



Public Gross Financing Needs

(in percent of GDP)



Underlying Assumptions

(in percent)

Baseline Scenario	2020	2021	2022	2023	2024	2025
Real GDP growth	-9.0	3.5	2.3	2.2	2.1	2.1
Inflation	2.2	2.9	3.2	3.2	3.1	3.0
Primary Balance	-2.0	0.2	0.8	0.7	0.7	0.8
Effective interest rate	7.5	6.6	6.1	5.9	5.9	6.0

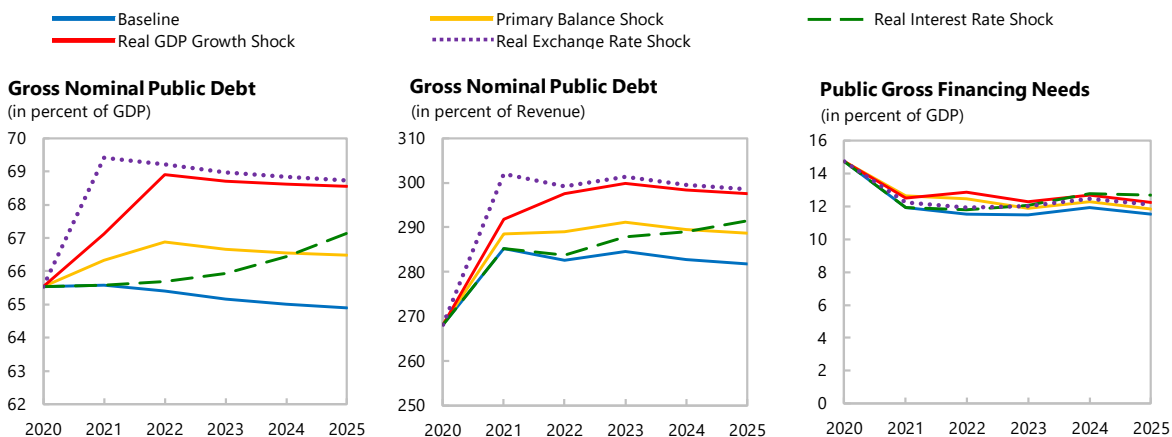
Constant Primary Balance Scenario	2020	2021	2022	2023	2024	2025
Real GDP growth	-9.0	3.5	2.3	2.2	2.1	2.1
Inflation	2.2	2.9	3.2	3.2	3.1	3.0
Primary Balance	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Effective interest rate	7.5	6.6	6.1	5.9	5.9	6.0

Historical Scenario	2020	2021	2022	2023	2024	2025
Real GDP growth	-9.0	2.7	2.7	2.7	2.7	2.7
Inflation	2.2	2.9	3.2	3.2	3.1	3.0
Primary Balance	-2.0	-0.1	-0.1	-0.1	-0.1	-0.1
Effective interest rate	7.5	6.6	6.0	5.8	5.7	5.8

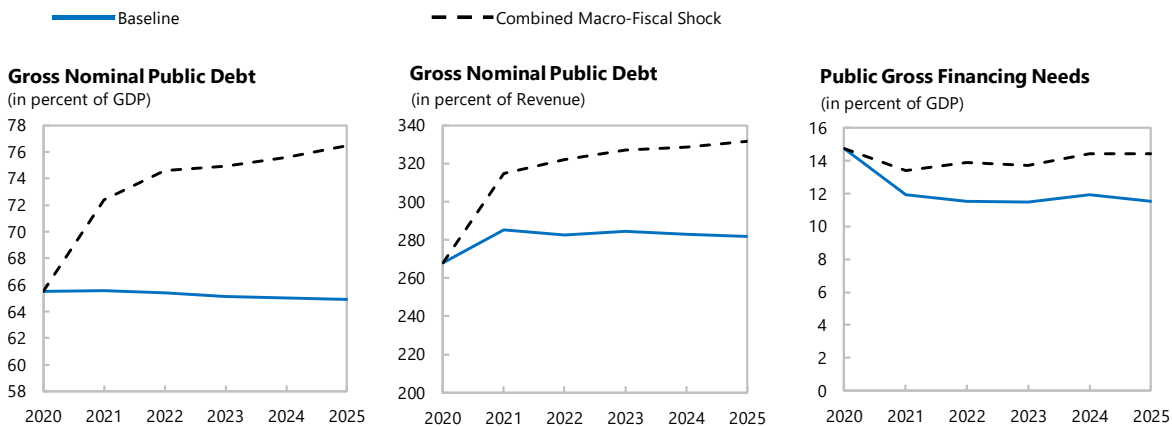
Source: IMF staff.

Annex IV. Figure 5. Mexico Public DSA - Stress Tests

Macro-Fiscal Stress Tests



Additional Stress Tests



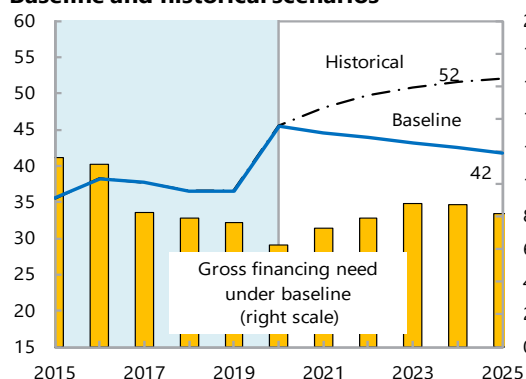
Underlying Assumptions (in percent)

	2020	2021	2022	2023	2024	2025
Primary Balance Shock						
Real GDP growth	-9.0	3.5	2.3	2.2	2.1	2.1
Inflation	2.2	2.9	3.2	3.2	3.1	3.0
Primary balance	-2.0	-0.6	0.0	0.7	0.7	0.8
Effective interest rate	7.5	6.6	6.1	6.0	5.9	6.0
Real Interest Rate Shock						
Real GDP growth	-9.0	3.5	2.3	2.2	2.1	2.1
Inflation	2.2	2.9	3.2	3.2	3.1	3.0
Primary balance	-2.0	0.2	0.8	0.7	0.7	0.8
Effective interest rate	7.5	6.6	6.6	6.7	6.9	7.3
Combined Shock						
Real GDP growth	-9.0	2.1	0.8	2.2	2.1	2.1
Inflation	2.2	2.6	2.9	3.2	3.1	3.0
Primary balance	-2.0	-0.6	0.0	0.7	0.7	0.8
Effective interest rate	7.5	6.9	6.5	6.6	6.9	7.2
Real GDP Growth Shock						
Real GDP growth	-9.0	2.1	0.8	2.2	2.1	2.1
Inflation	2.2	2.6	2.9	3.2	3.1	3.0
Primary balance	-2.0	-0.2	0.0	0.7	0.7	0.8
Effective interest rate	7.5	6.6	6.1	6.0	5.9	6.0
Real Exchange Rate Shock						
Real GDP growth	-9.0	3.5	2.3	2.2	2.1	2.1
Inflation	2.2	4.5	3.2	3.2	3.1	3.0
Primary balance	-2.0	0.2	0.8	0.7	0.7	0.8
Effective interest rate	7.5	6.9	6.0	5.9	5.8	5.9

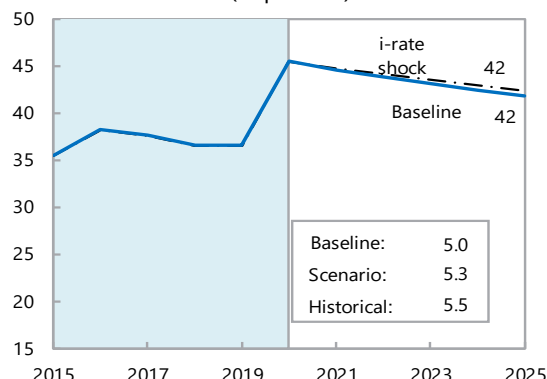
Source: IMF staff.

Annex IV. Figure 6. Mexico External Debt Sustainability: Bound Tests 1/ 2/
(External debt in percent of GDP)

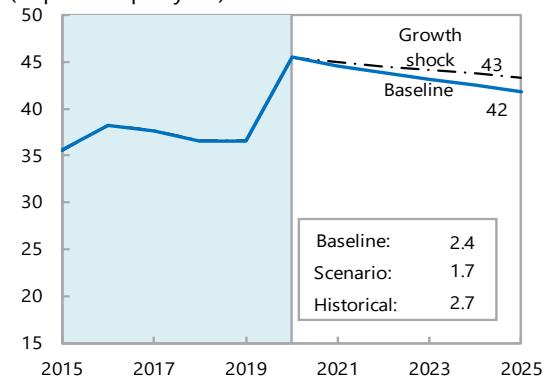
Baseline and historical scenarios



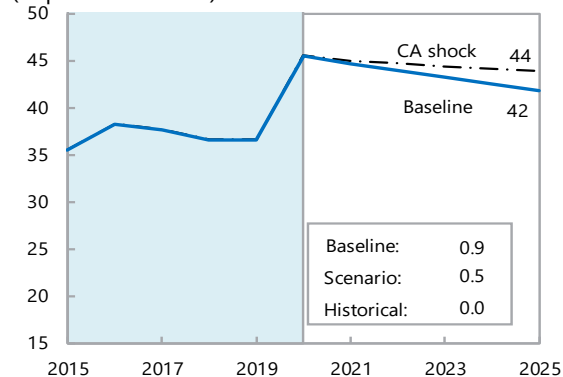
Interest rate shock (in percent)



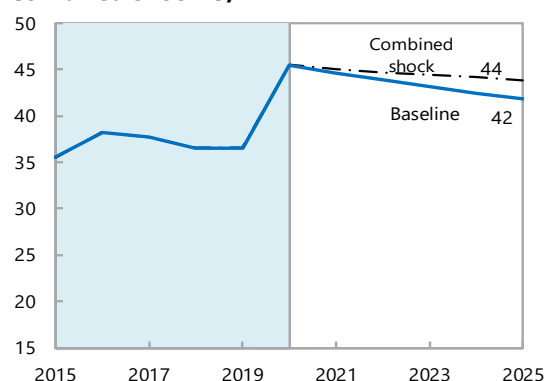
Growth shock (in percent per year)



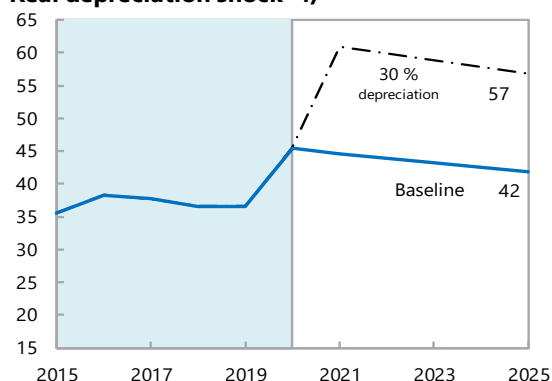
Non-interest current account shock (in percent of GDP)



Combined shock 3/



Real depreciation shock 4/



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 occurs in 2021.

Annex IV. Table 1. Mexico: External Debt Sustainability Framework
(In percent of GDP, unless otherwise indicated)

	Actual					Projections						Debt-stabilizing non-interest current account 6/ -2.6	
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025		
Baseline: External debt	35.5	38.3	37.7	36.6	36.6	45.5	44.6	43.9	43.2	42.5	41.8		
Change in external debt	3.1	2.7	-0.6	-1.1	0.0	8.9	-0.9	-0.7	-0.7	-0.7	-0.7		
Identified external debt-creating flows (4+8+9)	2.1	0.6	-4.0	-2.2	-3.5	0.4	-4.1	-2.9	-2.2	-1.9	-1.7		
Current account deficit, excluding interest payments	1.0	0.4	-0.1	0.2	-1.7	-3.7	-2.1	-1.2	-0.6	-0.3	0.0		
Deficit in balance of goods and services	-71.0	-75.9	-77.3	-80.6	-77.9	-81.5	-93.0	-93.9	-94.9	-95.1	-94.6		
Exports	34.5	37.0	37.7	39.3	38.8	40.9	46.3	46.2	46.3	46.2	45.8		
Imports	-36.5	-39.0	-39.5	-41.3	-39.1	-40.6	-46.7	-47.7	-48.6	-48.9	-48.8		
Net non-debt creating capital inflows (negative)	-2.5	-2.9	-3.0	-2.2	-2.5	-2.4	-2.7	-2.8	-2.8	-2.8	-2.8		
Automatic debt dynamics 1/	3.6	3.1	-0.9	-0.2	0.7	6.5	0.7	1.2	1.2	1.2	1.1		
Contribution from nominal interest rate	1.7	1.9	1.9	1.9	2.1	2.4	2.2	2.2	2.1	2.1	2.0		
Contribution from real GDP growth	-1.2	-1.0	-0.8	-0.8	0.0	4.0	-1.5	-1.0	-0.9	-0.9	-0.9		
Contribution from price and exchange rate changes 2/	3.1	2.3	-2.0	-1.3	-1.4	...	...	...	...	...	...
Residual, incl. change in gross foreign assets (2-3) 3/	1.1	2.1	3.4	1.1	3.5	8.6	3.2	2.1	1.5	1.2	1.0		
External debt-to-exports ratio (in percent)	103.1	103.5	99.8	93.1	94.1	111.2	96.4	95.0	93.2	91.9	91.2		
Gross external financing needs (in billions of US dollars) 4/	136.1	120.5	95.9	96.5	96.5	65.3	79.8	90.2	105.6	108.8	107.1		
in percent of GDP	11.6	11.2	8.3	7.9	7.6	10-Year	10-Year	6.3	7.3	7.9	8.8	8.7	8.2
Scenario with key variables at their historical averages 5/						45.5	48.0	49.7	50.8	51.6	52.1	-1.6	
Key Macroeconomic Assumptions Underlying Baseline						Historical Average	Standard Deviation						
Real GDP growth (in percent)	3.3	2.6	2.1	2.2	-0.1	2.7	1.4	-9.0	3.5	2.3	2.2	2.1	2.1
GDP deflator in US dollars (change in percent)	-13.7	-10.3	5.2	3.2	3.9	1.1	7.9	-9.9	1.6	2.4	2.3	2.3	2.2
Nominal external interest rate (in percent)	4.7	4.8	5.2	5.3	5.9	5.5	0.5	5.5	5.2	5.1	5.0	5.0	4.9
Growth of exports (US dollar terms, in percent)	-3.6	-1.3	9.8	9.8	2.6	7.6	9.3	-13.6	19.0	4.5	4.9	4.2	3.5
Growth of imports (US dollar terms, in percent)	-1.5	-1.8	8.9	10.2	-1.8	7.0	9.0	-14.9	21.1	6.9	6.5	5.0	4.2
Current account balance, excluding interest payments	-1.0	-0.4	0.1	-0.2	1.7	0.0	0.8	3.7	2.1	1.2	0.6	0.3	0.0
Net non-debt creating capital inflows	2.5	2.9	3.0	2.2	2.5	2.3	0.6	2.4	2.7	2.8	2.8	2.8	2.8

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; r = change in domestic GDP deflator in US dollar terms, 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.

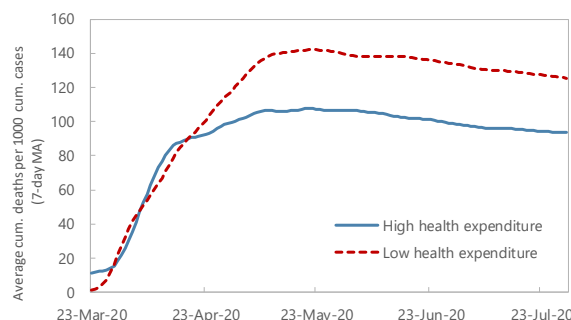
5/ The key variables include real GDP growth; nominal interest rate; dollar deflator growth; and both non-interest current account and non-debt inflows in percent of GDP.

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. A Mexican State-level Perspective on Covid-19 and its Economic Fallout¹

1. Mexican state-level data suggest that better health indicators are associated with better health outcomes. As elsewhere, higher cases and deaths in Mexico are associated with age, especially above 50 years, and pre-existing conditions (e.g., diabetes, obesity). Covid-19 containment measures were associated with lower new cases. But states with higher health indicators—larger health expenditure per capita or higher available beds or ICU per capita—experienced fewer deaths per capita and per cases, on average over time. This is confirmed in regression analyses on health expenditure per capita, controlling for income per capita, population density, containment measures, and testing.

Deaths per cases versus health expenditure per capita*

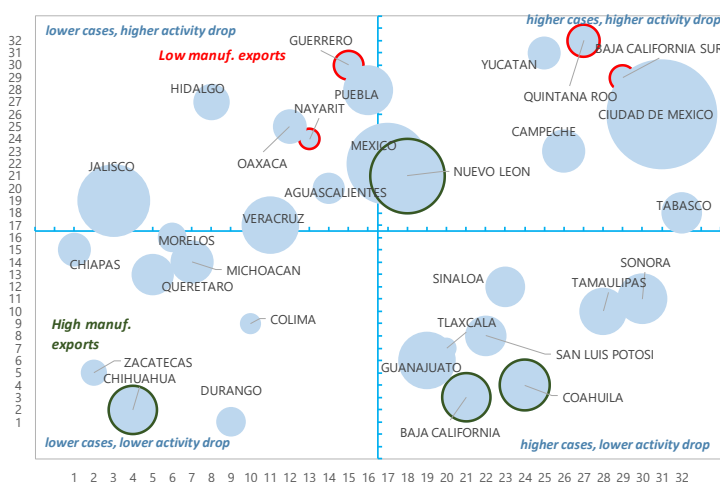


Source: National authorities and IMF staff calculations.

*High health expenditure refers to states with higher or equal to 50th percentile health expenditure per capita, while lower health expenditure is rest.

2. However, the economic fallout has been widespread, not localized to states with relatively more cases. While containment measures and lower mobility decreased economic activity across states, there is no firm relationship between cases and economic activity at the state level. The fall in activity was sharp across states, measured across a range of indicators, such as debit or credit card use, employment, retail sales, flight arrivals or departures, and the Google mobility index for workplaces and transit stations.

3. States with high manufacturing export-exposure experienced smaller output drops. A cross-section of states ranking their drops in economic activity versus their case incidence suggests that states with high manufacturing export-exposure had smaller output drops, while states with low manufacturing exports and high tourist exposures experienced larger drops. This is confirmed across a range of activity indicators for tourist exposures and for retail sales for export exposure in regression analyses, controlling for income per capita, population density,



Source: National authorities and IMF staff calculations. Data as of July 2020. Cases are in per capita terms. Economic activity includes the average of the percent change (July 2020-January 2020/earlier; 2020 March-April year-over-year changes for debit/credit flows) of the following variables: debit and credit card flows, IMSS employees and employers, retail sales, Google workplaces and transit stations.

¹ Prepared by Juan Pablo Cuesta Aguirre and Swarnali Ahmed Hannan (WHD), based on [IMF WP/20/214](https://www.imf.org/en/Publications/WP/Issues/2020/07/20/2020-07-20-214).

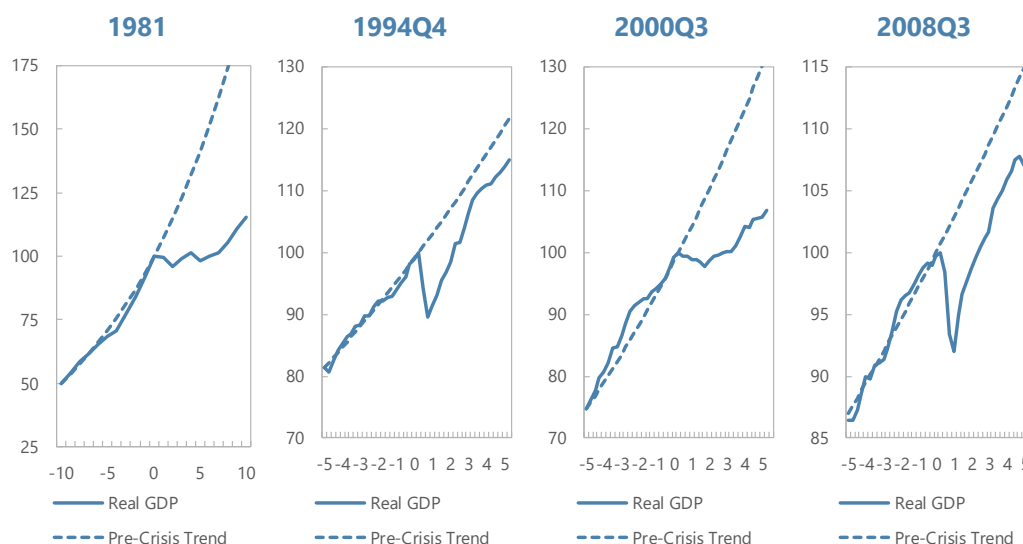
export/state GDP share, containment measures and cases. This suggests that export exposure acted as a cushion. It is likely because higher export-exposed states received more remittances and Mexico's exports in general fell less than other countries. While the auto sector was deemed essential and re-opened, the use of pre-June data in some cases (e.g., state-level retail sales, overall exports) indicates the result holds for the pre-opening period also.

4. While this analysis highlights associations not causation, it nonetheless suggests key policy implications. Investing in health capacity can help reduce case fatality, which is very high in Mexico. In the event of recurrence of disease, containment measures can be effective in reducing contagion. These are important for saving lives. Over the medium term, with domestic demand expected to continue lagging, consideration should be given to facilitating investment that promotes more and broader integration into global or North American value chains.

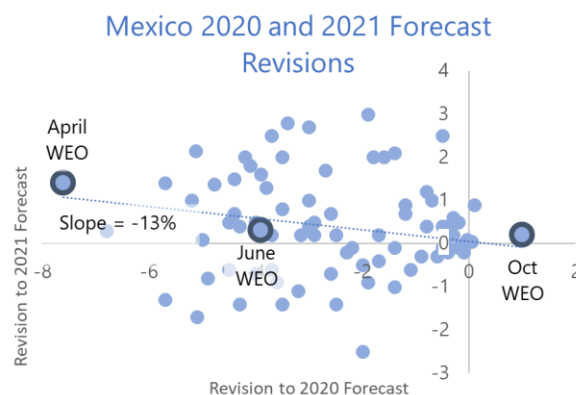
Annex VI. Scarring Risks from Covid-19¹

The unprecedented impact of the pandemic on the labor market suggests elevated scarring risks. Evidence from labor surveys provides a closer look at the key role of inactivity, informality, and underemployment. Risks from scarring can be limited by facilitating a rapid reabsorption of displaced workers into productive activities through greater near-term policy support.

1. Downturns in Mexico have typically left lasting scars. Of the recessions in 1982, 1995, 2001, and 2009, only the 1995 crisis saw output approach its pre-crisis trend, with NAFTA as an important tailwind. In the others, GDP did not return to pre-crisis trends, mirroring the finding in the recent literature (e.g., Cerra and Saxena [2008](#), [2020](#)).



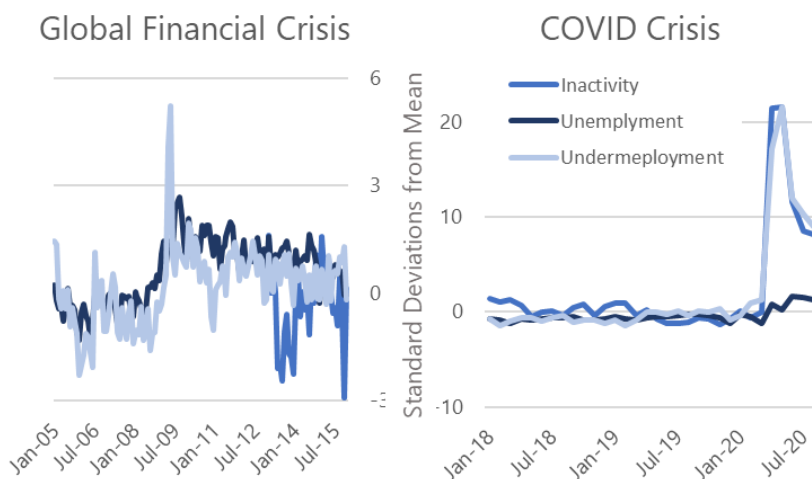
2. Recovery in growth may be somewhat stronger from the COVID downturn, but the initial decline is far deeper. Forecasters provide a unique insight into recovery expectations. When they revise down a growth forecast, they do not typically expect a subsequent recovery. In fact, they tend to *add* an additional decline in the following year about a quarter of the size of the initial downward revision ([Bluedorn and Leigh 2018](#)). The COVID downturn has been an exception. Forecasters have tended to anticipate more recovery growth in 2021 even as they revised down their 2020 forecasts, typically by about 12 percent of the downward revision. Mexico is a typical example (figure 2). Nevertheless, given the depth of the downturn, likely the largest annual contraction since the Great Depression, the bulk of the lost output is likely to be permanent.



Sources: Bloomberg and IMF Staff Calculations.
Data represents forecast revisions to previously recorded forecast between February and July for 33 forecasters, with the addition of the IMF Octobe WEO forecast.

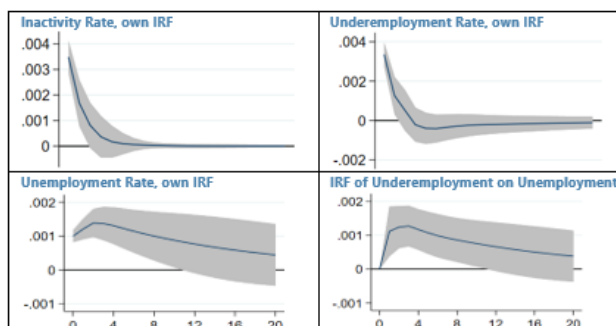
¹ Prepared by Kevin Wiseman (WHD).

3. In previous downturns, Mexican unemployment has taken a long time to recover, accompanied by permanent income losses. Academic work on scarring has often focused on labor markets where recessions can imply long unemployment spells and permanent income losses. In Mexico, for example, it took 8 years after the global financial crisis for unemployment to return to pre-crisis levels. Longer unemployment spells are associated with lower labor market attachment, poorer job prospects and output, and erosion of firm-specific and other types of human capital (Ruhm 1991, Yagan 2019). In Mexico’s employment survey, fully employed formal workers who become unemployed work an average of 13 fewer hours per week four quarters later and suffer a 30 percent loss of income (see discussion below).



4. This time, the scale of the labor market disruption is unprecedented, and the consequences are uncertain. The fraction of workers leaving the labor force or becoming underemployed is 20 standard deviations outside previous experience. Even with these series now half-way back to normal, the numbers lie far outside the range of historical data. Inactivity, in particular, has not been a meaningful margin of adjustment in past downturns, varying within a narrow 2 percent range through the global financial crisis and even the 1994 crisis. Further uncertainty arises from constraints on data collection due to the outbreak. Labor surveys switched to telephone-based in April before gradually resuming face-to-face interviews. Nonetheless, the continuity in the data in June, July, and August provides some comfort in the reliability of these numbers.

5. An analysis of past labor market dynamics yields insights into whether the newly dislocated workers can be reabsorbed quickly. A simple vector autoregression is estimated on the shares of inactive, unemployed, and underemployed populations as a percent of the working age population, with two lags and quarter dummies (see the impulse response functions or IRFs). The estimation suggests that increases in inactivity and underemployment tend to resolve quickly, returning to normal within four quarters. However, unemployment growth persists for years, while increases in unemployment cause large increases in underemployment that persist until unemployment returns to normal.



6. Labor surveys provide a more granular look at labor dynamics. Aggregated series can summarize overall dynamics but are constrained by the lengths of the series. The Mexican labor survey ENOE (and the telephone based COVID-era substitute ETOE) record the labor and income of about 5 million workers since 2005, most over 5 consecutive quarters. Workers in the survey can be categorized into seven groups — fully employed formal workers, underemployed formal workers, fully employed informal workers, underemployed informal workers, the unemployed, the inactive and unavailable for work, and the inactive but available. This last category is an understudied group highlighted by this data. Normally just 7 percent of the working age population, it ballooned to 20 percent in April and May likely reflecting the lockdown and fear of the pandemic. Understanding the behavior of these discouraged workers and other vulnerable members of the labor force is key to understanding the likely long-term damage from the crisis.

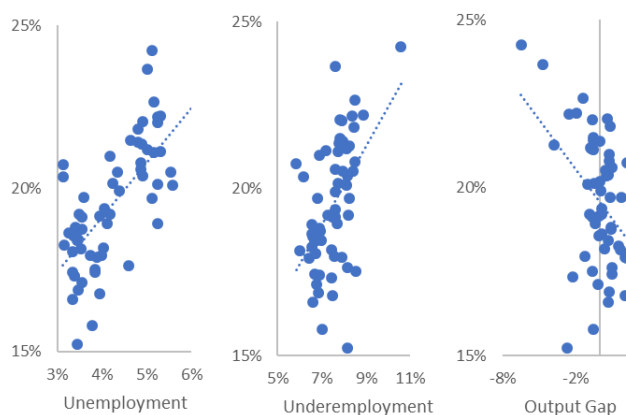
Average Transition Matrix 2005-2020

t \ t+1	Inactive, Unavailable	Inactive, Available	Unemployed	Underemployed, Informal	Underemployed, Formal	Fully Employed, Informal	Fully Employed, Formal
Inactive, Unavailable	72%	11%	2%	1%	0%	11%	2%
Inactive, Available	57%	20%	3%	2%	0%	14%	3%
Unemployed	20%	9%	20%	7%	1%	27%	17%
Underemployed, Informal	13%	4%	4%	15%	1%	55%	8%
Underemployed, Formal	4%	1%	3%	4%	9%	17%	62%
Fully Employed, Informal	13%	3%	2%	7%	1%	63%	11%
Fully Employed, Formal	3%	1%	2%	1%	2%	12%	79%

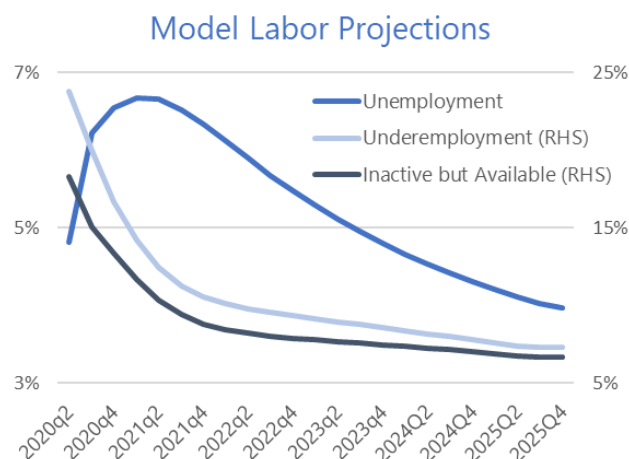
7. The Mexican labor market is highly dynamic, with informal employment being the key shock absorber. Only 20 percent of the unemployed remain unemployed one quarter later, while 37 percent of fully employed informal workers find themselves in another category. Even for fully employed formal workers, more than a fifth transit to another category each quarter. Constructing a transition matrix from these quarterly changes in employment conditions also highlights the important role of informal work in Mexican labor market dynamics. Fully employed informal work is the most common destination for most types of workers that are changing categories. The shock absorbing role of informal work may be impeded during the pandemic as informal work is common in contact-intensive sectors and has low teleworkability (REO, October 2020).

8. Labor dynamics deteriorate for workers during aggregate shocks. The risk of remaining unemployed one quarter ahead, the third entry on the diagonal of the transition matrix, changes meaningfully with economic and labor market conditions, rising from 17% to 23% as conditions deteriorate (figure 5) while the risk of falling into unemployment rises. The probability of moving from unemployment to informal work has held steady over the last 15 years, but the probability of moving to formal work fell by a quarter in 2009 and only regained its pre-GFC level in 2017.

Unemployment Persistence and Macro Conditions



9. A simulation exercise suggests that unemployment will peak in the first half of 2021 and recover slowly. A transition matrix for every consecutive pair of quarters is calculated and each of the matrix elements is regressed against the output gap and the unemployment and underemployment levels. Starting with existing conditions in 2020Q2, the projection estimates a transition matrix for the quarter, calculates the resulting shares of working age population in each category, and uses these numbers with staff’s quarterly output gap forecast to calculate the next transition matrix. Repeating this procedure through 2025, the estimation projects a peak unemployment rate of 6.7 percent in 2021 followed by a slow improvement only reaching 4 percent at the forecast horizon. This peak would be meaningfully higher than the 2019Q3 peak of 6.1 percent (not seasonally adjusted). Consistent with the VAR finding, both underemployment and inactivity return to historical averages quickly, largely recovering by the end of 2021. These results are subject a great deal of uncertainty given the unprecedented nature of the pandemic but are illustrative of the labor market risks in play.



10. Income losses could amount to 8 percent of earnings by 2021Q2. A large literature documents the long-term losses from losing a job in terms of income level and growth. Workers have difficulty finding jobs that match their skill sets and suffer a loss of firm-specific and sometimes sector-specific human capital. Table 2 reports the average change in income over the five quarters of the survey depending on employment category in the first and second quarter interviews. Fully employed formal workers who become unemployed earn 30 percent less in their last interview than they did in their first, even though 50 percent of the unemployed find a job the following quarter. Those transiting to inactive did even worse. Applying these changes to the transition matrix for workers from 2020Q1 to 2020Q2 (including those who transited into employment and see expected income gains) implies an 8 percent loss in income across the entire working age population. This finding emphasizes the importance of policy support to reduce the likelihood that they resort to strategies that are suboptimal for future growth, such as withdrawing children from school, accepting jobs below their skill levels, or selling productive assets.

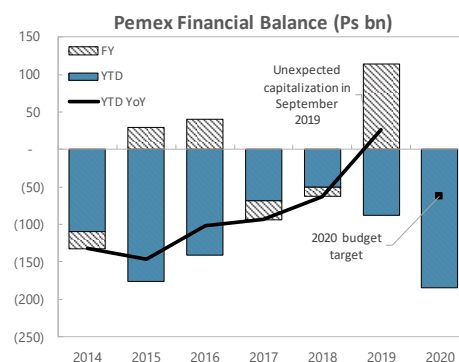
Average Income Loss 4Q Forward

t \ t+1		Inactive, Unavailable	Inactive, Available	Unemployed	Underemployed, Informal	Underemployed, Formal	Fully Employed, Informal	Fully Employed, Formal
Underemployed, Informal		-30%	-44%	-7%	3%	-5%	3%	7%
Underemployed, Formal		-43%	-35%	-38%	-5%	-16%	-12%	-14%
Fully Employed, Informal		-43%	-49%	-25%	-14%	1%	-10%	1%
Fully Employed, Formal		-50%	-51%	-34%	-20%	-12%	-17%	-6%

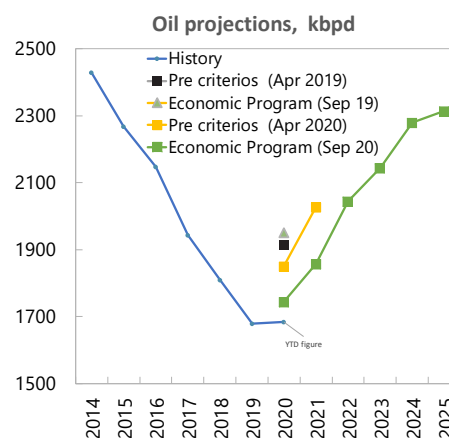
Annex VII. Pemex's Continuing Business Plan Challenges¹

Given lower oil prices and a downgrade to speculative grade, Pemex's business strategy needs urgent modification, lest it poses a continuing and costly drag on the fiscal accounts and growth. Governance and procurement reforms would also contribute to improving its financial health and competitiveness.

1. Despite misses in financial objectives and a more challenging operational outlook post-COVID 19, changes to Pemex's strategy have been limited. Budget execution until August 2020 remains off track relative to the company's annual financial objectives (text chart). Pemex will likely have to rely on additional budget support and/or find new sources of financing, given more limited market access. Additionally, unlike industry peers that have substantially adjusted production, refining and capex targets following COVID-19, Pemex changes to operational targets have been marginal and the 2019 business strategy has not been revised.



2. The 2021 budget has a more cautious but still optimistic outlook for production, while medium-term targets remain a major challenge. The authorities revised down their 2021 forecast substantially to 1.86 million barrels per day or mbpd (-9 percent vs. prior assumptions) but this would still require at least a 6 percent increase from 2020 levels. Medium-term figures are even more optimistic (a 31 percent increase to 2.28 mbpd by 2024), largely driven by private sector production that is expected to increase to ~10 percent of total (from around 3 percent as of August 2020). Even if private sector forecasts materialize, Pemex would still be required to achieve very large increases in its own portfolio for the targets to be met. In staff's view, Pemex would at best be able to stabilize its current production levels,² given that capex spending remains constrained and the bulk of existing production comes from just a few fields (the top 10 percent holds more than 80 percent of proven reserves) that in many cases have peaked and are on a declining trend.



3. The authorities' plans to attract much needed private sector involvement are likely to fall short. Given Pemex's over-indebted balance sheet, it could struggle to meet its goals without private sector expertise and sharing of investment costs. Increasing production will require additional investment in highly specialized technologies and success in developing smaller and

¹ Prepared by Dimitris Drakopoulos (MCM).

² [Private analysts](#) are pessimistic on Pemex's production with some expecting production to fall to 1.5-1.6 mbpd in 2024 and some as low as 1.13 mbpd.

more technically complex fields. The government's cancellation of all licensing rounds and farmouts risks leaving a large gap in production growth and fiscal revenues in the medium term, given the multi-year lag in developing new fields. The authorities' desire to rely on service contracts so far has not attracted private sector interest, given that these contracts are more attractive to service companies rather than oil operators interested in taking risks. Additionally, the authorities' actions so far in the energy sector (e.g., initiatives toward maintaining Pemex's and CFE's monopolies) may be contributing to reducing overall private sector interest in the Mexican energy sector.

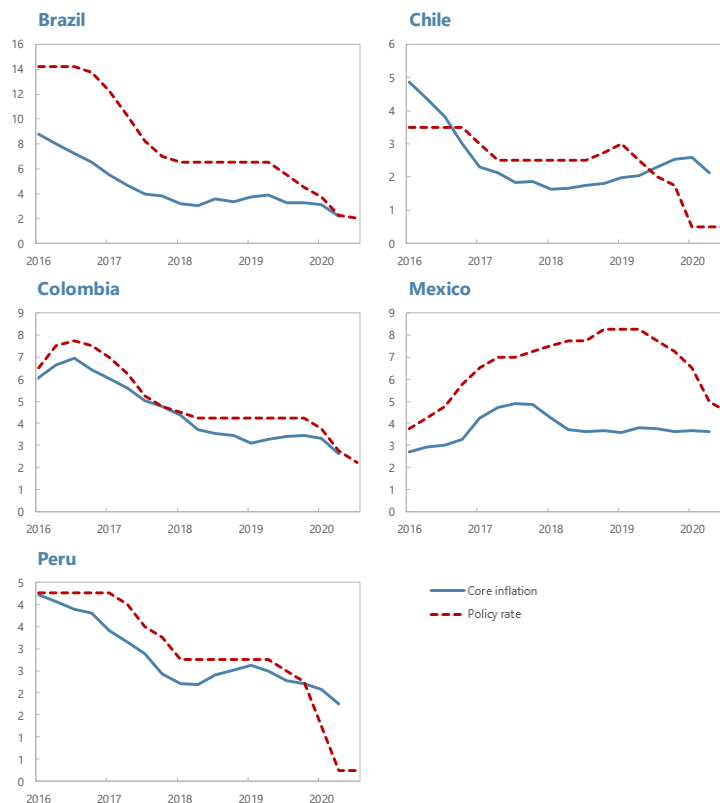
4. The current refining strategy also poses major execution risks. Lack of investment for preventive maintenance has led to recurrent shutdowns and low capacity utilization. With limited investment envisaged for maintenance, plans underway to build the large new Dos Bocas refinery that will subsume the bulk of downstream investment expenditure, and significant pressures in refining margins, the current refining strategy will likely augment financial losses further.

5. Risks to the budget are expected to remain high, amid thinning liquidity buffers and limited market access. Staff estimates free cash flow at about –1 percent of GDP in 2020. This will necessitate additional budget support to limit the increase in the net indebtedness of Pemex (financial support in the 2020 budget is about 0.6 percent of GDP, compared to 0.8 percent of GDP in 2019). Moreover, with short-term debt of around 1½ percent of GDP and liquidity buffers under ½ percent of GDP in mid-2020, Pemex may need additional fiscal support to refinance maturing debt if it is unable to rollover its debt. Pemex's ability to rely on large external issuances going forward has been impaired by the loss of investment grade status. Its 10-year USD yield is around 8 percent, after having peaked above 12 percent in April, but it remains over 250 basis points above pre-pandemic levels.

6. Given ongoing challenges in meeting financial objectives and past corruption scandals, consideration should be given to strengthen Pemex's governance and procurement processes. The procedure to nominate independent board members should be aligned with international best practice ([OECD, 2017](#)). The nomination procedure should be competitive, merit-based, and formalized (e.g., through a nominating committee and/or use of headhunting firms). The voting power of the independent board members should be enhanced. Cost reductions achieved through recent changes in procurement process should be benchmarked against savings achieved by competitors internationally and assessed over the life of the project. Further measures should be taken to enhance reporting and oversight on activity under PEMEX entitlements (see [2018 Fiscal Transparency Evaluation](#) for specific recommendations). Finally, financial oversight can be enhanced through the establishment of a single government unit pooling experts from different areas to identify, disclose, and mitigate fiscal risks ([IMF Fiscal Monitor April 2020](#)).

Annex VIII. External Financial Considerations and Monetary Policy Setting¹

1. Across major Latin American EMs, monetary policy rates were cut aggressively in recent months. In Chile and Peru, real rates are markedly negative. In Brazil and Colombia, real rates are near zero. Mexico's real rate is the outlier; the ex ante real rate (i.e., using well-anchored inflation expectations) is around 1 percent.



2. A key concern in Mexico is whether further rate cuts could lead to capital outflows and peso depreciation, given that the economy is very open to capital flows and has a highly liquid currency. It reflects the view that lower availability of external financing and higher uncertainty—or alternatively higher risk premia—may be putting upward pressure on the neutral interest rate.² The neutral rate is the policy rate consistent with output at potential and expected inflation at target.

3. To assess this concern empirically, a Taylor rule is estimated.

- The standard Taylor rule examines the effect of the output gap and expected deviations of inflation from target on the policy rate, given a neutral rate. The rule estimated previously by

¹ Prepared by Carlos Goncalves (WHD) and Dimitris Drakopoulos (MCM).

² It is worth noting that capital flow episodes across EMs since Covid-19 have largely been driven by global risk sentiment, not domestic policy rate settings (October 2020 GFSR).

staff ([Selected Issues Paper 2016, equation 1](#)) suggests a policy rate around 2¼–3¾ percent, for a range of the output gap of –10 to –5 percent. It suggests considerable room for easing further in the current environment, based on a historical representation of the central bank’s rate setting. (Note that the estimation was for the period 2006–16.)

- The modified estimation presented here to gauge the authorities’ concern proxies for the neutral rate with the shadow U.S. federal funds rate (to capture global monetary policy setting) and the sovereign credit default swap or CDS (to capture the country risk premium). All risk premia measures co-move very closely. Hence, the sovereign CDS in this specification encapsulates the notion that policy makers track credit risk. The estimation is based on data from 2002 to mid-2020.

4. The results show that Mexico reacts strongly to the proxy for external financial conditions (the explanatory power is 80 percent). So do Brazil and Colombia. All major Latin American central banks act strongly in the face of core inflation gaps—rates rise when gaps appear, more than offsetting the rise in core inflation. The result holds for different subsamples and broadly for different measures of risk as well as of global financial conditions (e.g., LIBOR).

FULL SAMPLE	Brazil	Chile	Colombia	Mexico	Peru
Inflation gap	4.62	3.37	1.33	2.1	1.61
Output gap	not sig	0.2	0.17	not sig	0.11
Composite term	1.38	0.12	0.36	0.75	0.16

1% in red, 5% in green and 10% in blue

5. Specifications that separately estimate the roles of global monetary policy setting and sovereign risk suggest that the former dominates. Notably, the sovereign CDS term by itself is insignificant, whereas the proxy for global monetary policy setting (e.g. the shadow U.S. federal funds rate) is strongly significant. This result holds across different types of specifications, including controlling for trends.

6. These estimations point to room for further easing, on balance, consistent with policymaking historically in Mexico that has kept inflation broadly well-anchored. The estimates shown in the table above imply some room for further cuts. At the same time, it should also be noted that these Taylor rule estimates do not assess optimal responses but rather consistency of the authorities’ responses over time. While Mexico’s estimated Taylor rule suggests room to cut, the estimated coefficients of other EMs would also suggest room in the current environment to further lower the policy rate.

Annex IX. Capitalizing on the US-Mexico-Canada Agreement (USMCA)¹

Implementation of the USMCA trade agreement positions Mexico to benefit from integration into North American and global supply chains, particularly if it undertakes complementary reforms to improve the business climate and raise productivity.

1. The experience with North American Free Trade Agreement (NAFTA) underscores the importance of complementary structural reforms to fully reap the benefits of free trade agreements:

- After Mexico joined NAFTA in 1994, it experienced unprecedented growth in intra-area trade and a surge in portfolio and foreign direct investment. The structure of external trade shifted from energy to manufacturing, especially autos, electronics, machinery, and industrial metals. Nonetheless, beyond an initial spurt in real GDP growth, the impact on productivity growth was small (e.g., [Easterly et al. 2003](#) and [De Hoyos 2013](#)).
- Staff's analytical work using firm-level data ([IMF WP/19/87](#)) demonstrated that growth in Mexican firms has been much smaller than those of U.S. firms—Mexican firms grow for 10-15 years and then stagnate at just about twice their initial size versus U.S. firms that grow over 7 times their initial size—although firms close to the U.S. border and in sectors related to the North American supply chain performed better. This work also showed that the benefits of NAFTA were restricted to early cohorts of firms in select sectors (e.g., transport).
- The limited growth dividend reflects long-standing structural impediments such as pervasive informality, crime, dominant firms in sectors (i.e., barriers to entry), and limited access to finance. Tackling them is key to reaping the benefits of free trade agreements (e.g., [IMF WP/04/59](#), [World Bank 2004](#), and [IMF WP/18/112](#)).

2. The USMCA represents significant continuity with NAFTA, and limited direct benefits are expected. A detailed general equilibrium trade model yields very modest effects of USMCA for Mexico ([IMF WP/19/73](#)). Tighter rules of origin in sectors such as autos and textiles raises production costs and reduces exports. These are largely offset by the growth of electrical equipment and machinery exports. The net result is essentially unchanged real GDP, albeit with marginally higher welfare associated with higher prices of auto exports. This analysis, however, abstracted from the prevalence of trade policy uncertainty in recent years. Incorporating that effect, the [U.S. International Trade Commission](#) finds that U.S. real GDP could increase by 0.35 percent, and by 1.21 percent if trade policy uncertainty were to be reduced even further.

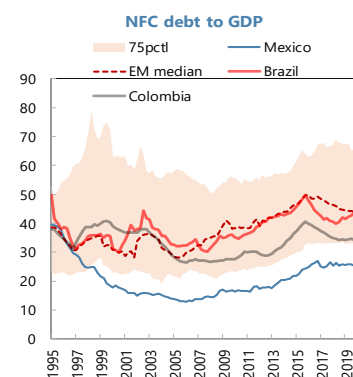
3. Reduction in trade policy uncertainty should underpin Mexico's investment, but further reductions in domestic policy uncertainty and a focus on productivity-enhancing

¹ Prepared by Swarnali Ahmed Hannan (WHD), Misa Takebe (SPR), and Kevin Wiseman (WHD).

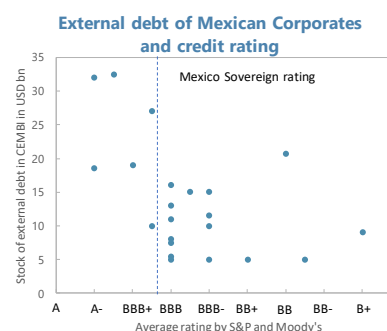
structural reforms remain critical. The empirical trade literature shows that trade policy uncertainty related to possible higher tariffs often delays or derails investment decisions and reduces activity. The implementation of USMCA should reduce uncertainty, although some level of trade disputes is likely to persist. [Caldara et al. 2020](#) find that trade policy uncertainty reduced U.S. investment by about 1.5 percent in 2018. Manufacturing firms, particularly in the trade- and global-value-chain-exposed east Asian economies, cut back equipment and machinery purchases in the face of elevated U.S.-China trade tensions ([IMF WEO October 2019](#)). While Mexico's exports were not as hurt from these tensions reflecting some trade diversion, the implication of lower trade policy uncertainty is potentially higher investment. However, as illustrated in the text figure in 15 above, policy uncertainty in Mexico remains high, adversely weighing on investment and imports. Uncertainty related to the economic recovery can also discourage FDI flows ([López Noria et al. 2018](#)). These point to the need for domestic policies to boost investor confidence, facilitate a robust recovery, and tackle impediments to productivity growth.

Annex X. Corporate Sector Health¹

1. Corporate leverage is low and concentrated in a few large entities. At 28 percent of GDP, corporate debt is among the lowest in EMs. The ten largest listed corporates owe 11 percent of GDP while other listed companies owe around 7 percent of GDP. Foreign currency denominated debt is among the highest in EMs. For the 50 largest private corporations, the debt weighted foreign currency share is close to 68 percent. But many firms have “natural” hedges from foreign currency revenues and derivatives. Foreign currency revenues account for 1/2 of total revenue weighed by outstanding debt.

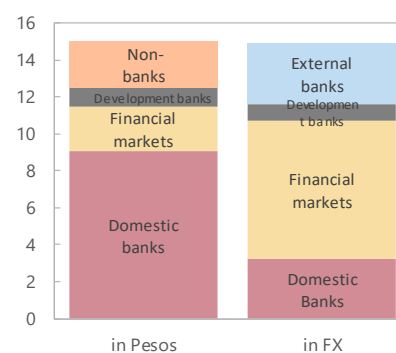


2. Although corporate profitability has weakened in 2020, systemic solvency concerns appear low. The heavy reliance on foreign currency revenues has buffered the earnings of several companies in the pandemic, e.g., in consumer goods, cement, and basic metals, offsetting some of the loss in domestic earnings. Additionally, geographic diversification and strong fundamentals allow several of the largest issuers to enjoy a higher rating than the sovereign, even after recent downgrades. The median interest coverage ratio has continued to decline but remains high while the share of debt with an interest coverage below EBITDA is low at around 5 percent. Solvency concerns are more evident in industries such as hospitality, airlines and commercial retail where bankruptcies have risen. But the exposures of the banking sector to these companies are low and they comprise a small share of overall corporate debt.²



3. External market access remains comfortable, but rollover risks are higher for corporates relying on domestic markets. The bulk of foreign currency debt is in the form of bonds where refinancing risks appear low. Foreign currency debt maturities are small in 2020-21 and many of the large issuers (except Pemex) enjoy market access at similar or lower spreads than the sovereign. Refinancing risks are higher for smaller corporates reliant on bank credit and local bond markets where activity has been subdued in 2020. The ability of companies facing temporary liquidity pressures to rollover bank debt remains crucial as more than a quarter of bank credit is short term. To this end, further provision of guarantees by development banks during the pandemic can help. Vigilance and prompt action are also needed regarding regulated

Sources of NFC debt % GDP



¹ Prepared by Dimitris Drakopoulos (MCM).

² Developments so far in 2020 are in line with past Article IV stress tests (2018, 2019) that found corporate balance sheets to be largely resilient to adverse shocks and low spillovers to the banking sector.

and non-regulated non-bank entities that provide some credit to corporates but face more unstable sources of funding and higher delinquency rates in their portfolios (e.g., owing to higher exposures to more vulnerable segments of the population).



MEXICO

STAFF REPORT FOR THE 2020 ARTICLE IV CONSULTATION— INFORMATIONAL ANNEX

October 14, 2020

Prepared By

The Western Hemisphere Department
(in consultation with other departments)

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FUND RELATIONS

(As of August 31, 2020)

The 2020 Article IV discussions were held in Mexico City during September 21–October 1. The mission comprised Rishi Goyal (head), Swarnali Ahmed Hannan, Kevin Wiseman (WHD), Carolina Claver (LEG), Dimitris Drakopoulos (MCM), Mehdi Raissi (FAD), and Misa Takebe (SPR). Krishna Srinivasan (WHD) joined the concluding meetings. Alfonso Guerra and Andrea Arevalo Arroyo (OED) also participated. The mission met with Bank of Mexico Governor Díaz de León, Finance Secretary Herrera, Labor Secretary Alcalde, other senior officials, and private sector representatives. Balazs Csonto (formerly SPR) provided inputs, and Juan Pablo Cuesta and Javier Ochoa (WHD) helped prepare the report.

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

Membership Status: Joined December 31, 1945

General Resources Account:	SDR Million	Percent of Quota
Quota	8,912.70	100.00
Fund holdings of currency	6,803.22	76.33
Reserve position in Fund	2,109.51	23.67
New Arrangement to Borrow	121.19	

SDR Department:	SDR Million	Percent of Allocation
Net cumulative allocation	2,851.20	100.00
Holdings	2,919.02	102.38

Outstanding Purchases and Loans: None

Latest Financial Arrangements:

Type	Arrangement Date	Expiration Date	Amount Approved (SDR Million)	Amount Drawn (SDR Million)
FCL	Nov. 22, 2019	Nov. 21, 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):

	2020	2021	Forthcoming 2022	2023	2024
Principal					
Charges / Interest	0.00	0.04	0.04	0.04	0.04
Total	0.00	0.04	0.04	0.04	0.04

Exchange Rate Arrangement: Mexico's de-jure and de-facto exchange rate arrangements are free-floating. Mexico 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, 2019. The staff report was published as IMF Country Report No. 19/336.

Technical Assistance

Year	Dept.	Purpose
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
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
2012	FAD	Tax Regimes for PEMEX

Resident Representative: None

RELATIONS WITH THE WORLD BANK

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

STATISTICAL ISSUES

I. Assessment of Data Adequacy for Surveillance
<p>General: Data provision is adequate for surveillance.</p>
<p>National accounts: The national accounts statistics generally follow the recommendations of the <i>System of National Accounts, 2008 (2008 SNA)</i>. Source data and statistical techniques are sound and most statistical outputs sufficiently portray reality. A broad range of source data are available, with economic censuses every five years and a vast program of monthly and annual surveys. For most surveys, scientific sampling techniques are used. Nonetheless, most samples exclude a random sample of small enterprises. Some statistical techniques need enhancement. For example, taxes and subsidies on products at constant prices are estimated by applying the GDP growth rate, a deviation from best practice.</p> <p>The 2014 data ROSC reassessment found that national accounts statistics are generally of a high quality, adequate to conduct effective surveillance and adequately meet users' needs. Since 2010, Mexico has made significant improvements on the methodological and dissemination aspects of data quality. Nevertheless, areas for further improvement and refinement exist, in particular, on the resources devoted to collecting state and local government source data and seasonally-adjusted data, explaining data revisions, and on compiling data on changes in inventories and on the volume of taxes on products.</p> <p>INEGI publishes annual and quarterly GDP statistics and sectoral accounts and balance sheets.</p>
<p>Prices: The concepts and definitions for both the CPI and PPI meet international standards. The PPI is based on 2012 weights and covers about 80 percent of Mexican production. It excludes trade and some services.</p>
<p>Government finance statistics: The authorities compile fiscal statistics following national concepts, definitions, and classifications that make international comparison difficult. These fiscal statistics are comprehensive and timely, except for the subnational sector. Moreover, pension liabilities are partially reported, while government securities are only reported at face value. The new government accounting law mandates accounting standards that follow international standards for all levels of government, and that consider the information needs of international organizations and national accounts. A full adoption of uniform accounting standards at the sub-national level will be crucial to obtain a precise measure of public fixed investment in national accounts, among others.</p> <p>The authorities have reported GFS time series data for 2008 to 2019 to the IMF's annual GFS database. The official debt statistics do not include the stock of T-bonds issued to Banxico for liquidity management purposes. Furthermore, the accounting practices adopted by the federal government and Banxico differ. Finally, the authorities should consider reporting the HBPSBR debt statistics in gross terms for international comparisons.</p>

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, which is published on a monthly basis in International Financial Statistics.

Financial sector surveillance: Mexico is reporting Financial Soundness Indicators (FSIs) for Deposit Takers and other financial corporations on a monthly basis, as well as five additional encouraged indicators regarding household debt service, market liquidity, and residential real estate markets. No FSIs are reported on the non-financial corporations sector. Mexico reports data on some key series and indicators to 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) of the U.N. Sustainable Development Goals.

External sector statistics (ESS): The quality of ESS has improved. In 2017, Banco de Mexico migrated balance of payment and international investment statistics to the *sixth edition of the Balance of Payments and International Investment Position Manual (BPM6)* and adopted a structure consistent with *BPM6* in national publications. The authorities strengthened their data collection and compilation system for foreign direct investment, financial derivatives, bank accounts used in foreign exchange operations, capital account, financial intermediation services indirectly measured, and private sector debt. Recent improvements include better coverage of nonbank financial intermediaries. There are ongoing efforts to compile manufacturing services on physical inputs own by others, and to improve the coverage and level of detail of capital account transactions and nonfinancial private sector transactions and positions.

II. Data Standards and Quality

Mexico observes the Special Data Dissemination Standards (SDDS) and its metadata are posted on the Dissemination Standards Bulletin Board (DSBB). In a number of cases, the periodicity and timeliness of disseminated data exceed SDDS requirements.

A data ROSC update was completed on June 24, 2015 and was published as IMF Country Report No. 15/176.

Mexico: Table of Common Indicators Required for Surveillance								
As of October 13, 2020								
		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. 2020	Oct. 2020	D	D	D		
International Reserve Assets and Reserve Liabilities of the Monetary Authorities ¹		Oct. 2020	Oct. 2020	W	W	W		
Reserve/Base Money		Oct. 2020	Oct. 2020	D	D	D	LO, O, O, LO	LO, O, O, O, O
Broad Money		Aug. 2020	Sep. 2020	M	M	M		
Central Bank Balance Sheet		Oct. 2020	Oct. 2020	W	W	W		
Consolidated Balance Sheet of the Banking System		Aug. 2020	Sep. 2020	M	M	M		
Interest Rates ²		Oct. 2020	Oct. 2020	D	D	D		
Consumer Price Index		Sep. 2020	Oct. 2020	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		Aug. 2020	Sep. 2020	M	M	M	LO, LNO, LNO, O	O, O, O, O, O
Revenue, Expenditure, Balance and Composition of Financing ³ –Central Government		Aug. 2020	Sep. 2020	M	M	M		
Stocks of Central Government and Central Government-Guaranteed Debt ⁵		Aug. 2020	Sep. 2020	M	NA	M		

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

Mexico: Table of Common Indicators Required for Surveillance (concluded)								
External Current Account Balance		Q2 2020	Aug. 2020	Q	Q	Q	LO, LO, LNO, LO	LO, O, O, O, LO
Exports and Imports of Goods and Services		Aug. 2020	Sep. 2020	M	M	M		
GDP/GNP		Q2 2020	Aug. 2020	Q	Q	Q	O, O, O, LO	LO, O, LO, LO, O
Gross External Debt		Q1 2020	Jun. 2020	Q	Q	Q		
International Investment Position ⁶		Q1 2020	Jun. 2020	Q	Q	Q		
<p>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.</p> <p>² Both market-based and officially determined, including discount rates, money market rates, rates on treasury bills, notes, and bonds.</p> <p>³ Foreign, domestic bank, and domestic nonbank financing.</p> <p>⁴ The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.</p> <p>⁵ Including currency and maturity composition.</p> <p>⁶ Includes external gross financial asset and liability positions vis-à-vis nonresidents.</p> <p>⁷ Daily (D); Weekly (W); Monthly (M); Quarterly (Q); Annually (A); Irregular (I); Not Available (NA).</p> <p>⁸ Reflects the assessment provided in the data ROSC completed on July 2014, except consumer prices which is based on the ROSC completed on 2012. 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).</p> <p>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.</p>								