INTERNATIONAL MONETARY FUND

IMF Country Report No. 18/307

MEXICO

November 2018

2018 ARTICLE IV CONSULTATION—PRESS RELEASE; STAFF REPORT; AND STAFF STATEMENT

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 2018 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 5, 2018 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 5, 2018, following discussions that ended on September 21, 2018, 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, 2018.
- An **Informational Annex** prepared by the IMF staff.
- A **Staff Statement** updating information on recent developments.

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

Selected Issues

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

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November 8, 2018

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IMF Executive Board Concludes 2018 Article IV Consultation with Mexico

On November 5, 2018, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation [1] with Mexico.

The Mexican economy has continued to exhibit resilience in the face of a complex environment. Output has grown at a moderate pace while inflation declined, although it remains above the central bank's target. The flexible exchange rate has continued to be a key shock absorber. Fiscal consolidation is on track, monetary policy has maintained a tight stance, while financial supervision and regulation remain strong.

Growth is expected to accelerate modestly in the near term, reaching 2.1 percent in 2018 and 2.3 percent in 2019. Private consumption remains the main driver of activity, supported by manufacturing exports. Private investment strengthened somewhat in recent quarters but continues to be held back by uncertainty, including, until recently, about Mexico's future trade relationship with the United States. Headline inflation has declined notably over the past year but has most recently accelerated somewhat to 5.0 percent in September amid rising energy prices. Core inflation has returned to within the confidence band.

The authorities continued to adhere to their fiscal consolidation path and further tightened monetary policy. The 2018 public sector borrowing requirement target of 2.5 percent of GDP is projected to be met. Better-than-projected revenue performance in part reflecting improvements in tax compliance is expected to be broadly offset by higher-than-budgeted non-programmable expenditures. Public debt is projected to continue to decline to around 53 percent of GDP from 54.3 percent in 2017, thanks to a primary surplus of 1.3 percent of GDP. The central bank further tightened monetary policy, increasing its policy rate in three steps from 7 percent to 7.75 percent between December 2017 and June 2018 amid upward inflation surprises and an uncertain external and domestic environment.

Mexico's external position remains broadly consistent with medium-term fundamentals and desirable policy settings. Staff projects a broadly unchanged current account deficit from last

[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.

year and a slight widening over the medium term. Foreign exchange reserves are adequate according to a range of indicators, while the FCL continues to provide an effective complement in reducing risks. However, the strong presence of foreign investors leaves Mexico exposed to greater risk in terms of capital flows reversal and increased risk premia.

Executive Board Assessment[2]

Executive Directors noted that Mexico's very strong policies and policy frameworks, along with important structural reforms, have underpinned its resilience to a complex external environment. They noted that Mexico's external position remains strong and welcomed the conclusion of the new trade agreement with Canada and the United States. Looking forward, Directors viewed the global economic environment as challenging, and underscored the need for continued sound economic management and perseverance with the structural reform agenda to boost growth, improve living standards, and reduce poverty and inequality.

Directors commended the authorities for adhering to their fiscal consolidation plan and welcomed the commitment to fiscal discipline and to put the public debt to GDP ratio on a downward trajectory. Strengthening the fiscal framework by setting up a non partisan, adequately financed fiscal council with a formal mandate to independently evaluate policy would add credibility to the administration's plans. Directors highlighted the need to boost non oil tax revenue and cautioned against the introduction of tax exemptions or reduced rates which could create distortions and erode the tax base. They saw scope for boosting VAT and fuel excise revenues and strengthening tax administration. Directors also recommended restraint in current spending and improvements in spending efficiency to create room for much needed infrastructure investment and other priorities. They underscored that a strengthening of Pemex's financial situation was a prerequisite to contemplating new investments in refining.

Directors considered the current monetary policy stance appropriate. Going forward, they encouraged the Banco de México to remain prudent, vigilant and guided by data developments. The policy rate could be gradually reduced once inflation is firmly on a downward path, expectations remain well anchored, and uncertainty recedes. Directors commended the central bank for improving its communication strategy. They emphasized that the flexible exchange rate should remain the key shock absorber for the Mexican economy.

Directors noted that the financial sector remains resilient and supported continued close monitoring. They welcomed the authorities' efforts to increase financial deepening and inclusion and to regulate the rapidly evolving Fintech industry. Directors noted the positive role of development bank lending in promoting financial inclusion. They encouraged the authorities to close remaining gaps in the regulatory framework to enhance the effectiveness of supervision, and to strengthen the resolution and crisis management framework. Further enhancing the AML/CFT framework also remains a priority.

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

Directors emphasized the need to rekindle the structural reform agenda to boost growth and reduce poverty and inequality. They urged the authorities to fully implement the National Anti Corruption System. Directors called for a continuation of the energy sector reform and private participation in the oil and gas sector to bring in necessary investment and boost production and growth. They noted that better enforcement of labor market regulations, the introduction of unemployment insurance, improvements in the defined contribution pension system, and a strengthening of the social safety net would encourage formal employment and help reduce poverty and inequality.

Mexico: Selected Economic, Financial Indicators 1/

	2014	2015	2016	2017	2018 2/
	(Annual percentage changes, unless otherwise indicated)				
National accounts and prices					
Real GDP	2.8	3.3	2.9	2.0	2.1
GDP per capita in U.S. dollars 3/	10,981	9,674	8,815	9,319	9,843
Gross domestic investment (in percent of GDP)	21.9	23.3	23.7	23.1	23.1
Gross domestic savings (in percent of GDP)	20.0	20.7	21.5	21.4	21.4
Consumer price index (end of period)	4.1	2.1	3.4	6.8	4.4
External sector					
Exports, f.o.b.	4.4	-4.1	-1.7	9.5	9.6
Imports, f.o.b.	4.9	-1.2	-2.1	8.6	9.6
External current account balance (in percent of GDP)	-1.9	-2.6	-2.2	-1.7	-1.7
Gross international reserves (in billions of U.S. dollars)	195.7	177.6	178.0	175.4	178.0
Outstanding external debt (in percent of GDP)	32.5	35.7	38.5	38.1	38.5
Nonfinancial public sector (in percent of GDP)					
Government Revenue	23.4	23.5	24.6	24.8	23.5
Government Expenditure	28.0	27.5	27.4	25.9	26.0
Augmented overall balance	-4.5	-4.0	-2.8	-1.1	-2.5
Money and credit					
Bank credit to the non-financial private sector	6.1	15.6	17.7	13.0	14.0
Broad money	12.2	12.3	12.5	11.1	9.6

Sources: Mexico authorities; and Fund staff estimates and projections.

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.

INTERNATIONAL MONETARY FUND

MEXICO

STAFF REPORT FOR THE 2018 ARTICLE IV CONSULTATION

October 19, 2018

KEY ISSUES

Context: A new political landscape is shaping up in Mexico following the July elections. President-elect López Obrador has promised to reduce corruption and crime, and boost social spending and public investment, while maintaining fiscal prudence. The incoming administration will inherit an economy with very strong fundamentals and policy frameworks that has exhibited resilience in the face of a complex external environment. But Mexico still confronts significant challenges—namely to strengthen growth while reducing poverty and inequality—and has yet to win the fight against corruption and crime. At the same time, uncertainty associated with the global economic environment and the policies of the incoming administration persists. Prospects hinge on the steadfast implementation of structural reforms while ensuring continued macroeconomic stability.

Outlook and Risks: Output growth is projected to accelerate modestly to 2.1 and 2.3 percent in 2018 and 2019, respectively, and to then gradually converge to just under 3 percent over the medium term as uncertainty subsides and the economy reaps the full benefits of the implemented structural reforms. Inflation is expected to converge toward the Bank of Mexico's 3-percent target in the second half of 2019. The main risks to the outlook include weaker-than-projected global growth, renewed volatility in global financial markets, and global trade-related uncertainty. The main domestic risks pertain to uncertainty about the prioritization of the incoming administration's fiscal plans in light of constrained fiscal space, and the continuation of energy and other reforms, as well as whether oil production would decline further, and perceived corruption and the rule of law continue to worsen.

Macroeconomic policies: It would be important to ensure that policies and policy frameworks remain very strong. Amid plans to raise public investment and social spending, fiscal consolidation is critical to keep public finances on a sound footing and the public debt ratio on a downward trajectory, thus also safeguarding market confidence. Increasing non-oil tax revenue, including by closing the large tax compliance gap, further strengthening the fiscal framework, and improving the efficiency of public spending, while also enhancing fiscal policy progressivity would further boost the long-term credibility of fiscal policy and build stronger fiscal buffers. The authorities should stand ready to gradually ease monetary policy if inflation declines as projected and as long as inflation expectations remain well-anchored.

Continued clear central bank communication would guide market expectations. On the structural front, fully implementing recent reforms and re-invigorating the reform agenda with emphasis on strengthening the rule of law, fighting corruption, and reducing informality would help boost potential output and foster inclusiveness.

Advice from previous Article IV Consultations: Consistent with past Fund advice, the current administration adhered to its fiscal commitment to a 2.5-percent-of-GDP overall fiscal balance in 2016–17 and is on track to meet the target this year, which would lead to a reduction in the public debt ratio. VAT compliance has been improving over the past few years, and the implementation of PEMEX's multi-year business plan is proceeding broadly as announced. As recommended in the 2017 Article IV consultation, the central bank made several important improvements to its communication strategy. As for structural reforms, the energy sector reform has continued, but, at the request of the incoming administration, new auctions of oil fields have been postponed until February 2019 to allow for a review of existing contracts. The implementation of key elements of the National Anticorruption System, which became operational in July 2017, has stalled.

Approved By
Robert Rennhack (WHD) and Tamim Bayoumi (SPR)

Discussions were held in Mexico City during September 10–21, 2018. The mission comprised Costas Christou (head), Jorge Alvarez, Frederic Lambert and Christian Saborowski (WHD), Richard Berkhout (LEG), Julia Bersch (SPR), Hui Miao (MCM), and Florian Misch (FAD). Robert Rennhack (WHD) joined the concluding meetings.
Mr. Hurtado and Ms. Arevalo Arroyo (OEDCE) also participated. The mission met with Bank of Mexico Governor Diaz de Leon, Secretary of Finance and Public Credit Gonzalez Anaya, Economy Secretary Guajardo, other senior officials, members of the transition team, and representatives of the business community, other IFIs, and academics. Juan Pablo Cuesta and Patricia Delgado (WHD) contributed to the preparation of this report.

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POLICYMAKING IN A NEW POLITICAL LANDSCAPE

1. **A new political landscape is shaping up in Mexico following the July elections.** Mr. López Obrador campaigned on the promise to reduce corruption and crime, and boost social spending and public investment, while maintaining fiscal prudence. He and his Morena party scored a landslide win, winning the presidency, a congressional majority, and several gubernatorial posts, including in Mexico City. In a strong show of female political representation, the new congress includes almost 50 percent women.

2. **A smooth transition is underway.** The new administration will take office on December 1 and a transition team has been named—as stipulated by the constitution—to ensure an orderly transition process. Discussions are already under way between the current administration and the transition team, including on the preparation of the 2019 budget, which needs to be submitted to congress by the incoming administration by December 15.

3. **The incoming administration will inherit a stable economy underpinned by very strong policies and policy frameworks,** which, along with important structural reforms, have helped Mexico navigate a complex external environment. Output has been expanding, albeit at a moderate pace, unemployment is low, and real wages are beginning to grow. Fiscal consolidation over the past two years, albeit at the cost of sharp cuts in capital spending, has helped to reverse the increasing trend in the public debt-to-GDP ratio and put it on a downward trajectory. Monetary policy maintains a cautious stance, and the flexible exchange rate is playing a key role in helping the economy adjust to external shocks.

4. **At the same time, however, the incoming administration will need to address important challenges facing Mexico.** The public debt ratio needs to be put on a permanent downward trajectory and fiscal space is constrained by large tax compliance gaps and spending inefficiencies amid large infrastructure needs and long-term demographic pressures. While structural reforms as part of the *Pacto por Mexico* are showing signs of success, living standards have not risen as much as previously anticipated, and poverty and inequality remain high. Moreover, perceived corruption has worsened and violent crime is at record highs.

5. **Canada, Mexico and the United States have reached a new trilateral trade agreement (USMCA)**. This opens the way for the three countries to sign an updated trade pact at the end of November, with the final agreement needing ratification by the respective congresses. The agreement alleviates uncertainty for Mexico and includes some welcome modernizations of the current trade agreement, particularly in the areas of services, e-commerce, and data transparency. However, it also includes more stringent rules of origin requirements and a provision that could discourage USMCA members from negotiating free-trade agreements with non-market countries, which will make trade more restrictive and could limit opportunities for further trade diversification.

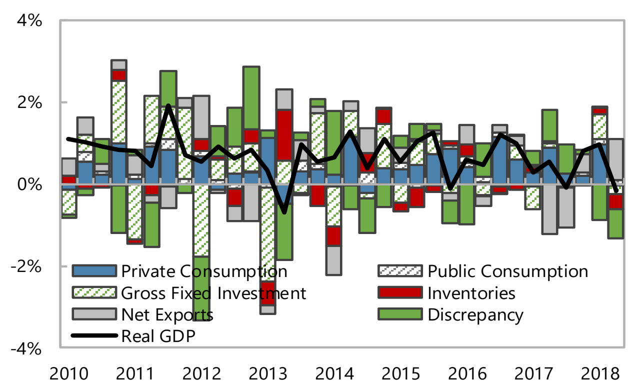
6. **The incoming administration's platform promises to address these challenges, but some policy pronouncements raise concerns.** Mr. López Obrador has highlighted his commitment to central bank independence, fiscal prudence, and respect of private property rights. His team has

also endorsed the new trilateral trade agreement with the United States and Canada. Financial markets welcomed these developments, with the peso and other Mexican asset prices staging a post-election rally. At the same time, the incoming administration has announced its intention to undertake ambitious infrastructure projects (e.g., constructing a new refinery) and social programs (e.g., doubling of old-age pensions and programs to support youth), while committing to not increase taxes. Nevertheless, they have committed to fiscal discipline and to reduce the public debt ratio. Moreover, uncertainty surrounds the future of the energy reform, the future direction of Pemex, and the fate of the construction of a new airport. Thus, policy uncertainty will likely persist until approval of the 2019 budget and the announcement of the incoming administration's medium-term priorities.

RECENT DEVELOPMENTS

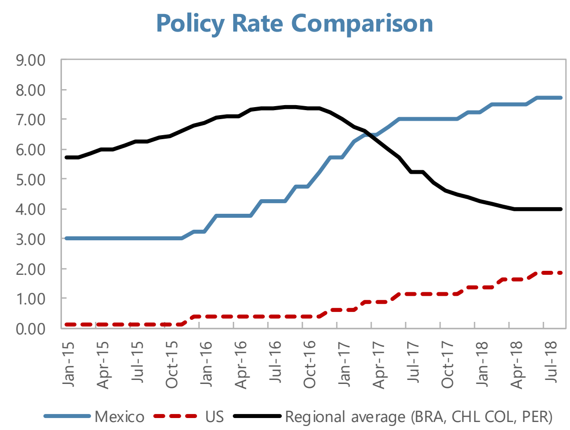
7. Growth has remained resilient while inflation declined. Uncertainty surrounding the elections and Mexico's future trade relationship with the United States kept output growth flat at 2.0 percent y-o-y in 2018:H1. Economic activity has been supported by private consumption and, more recently, net exports. Private investment has remained anemic, although it strengthened somewhat compared to 2017. On the supply side, the solid performance of the service and manufacturing sectors offset the contraction in mining. Construction activity has rebounded recently following several quarters of negative contributions to growth. The unemployment rate has remained at record lows of around 3.3 percent as real wage growth has rebounded (Figure 3). Core inflation has declined to 3.7 percent (y-o-y) in September 2018 amid a tight monetary policy stance. Headline inflation has also declined notably over the past year but has reversed its downward trend in recent months, accelerating from 4.5 percent in June to 5.0 percent in September amid rising energy prices.

Contributions to Growth
(Q/Q percent growth, SAAR)



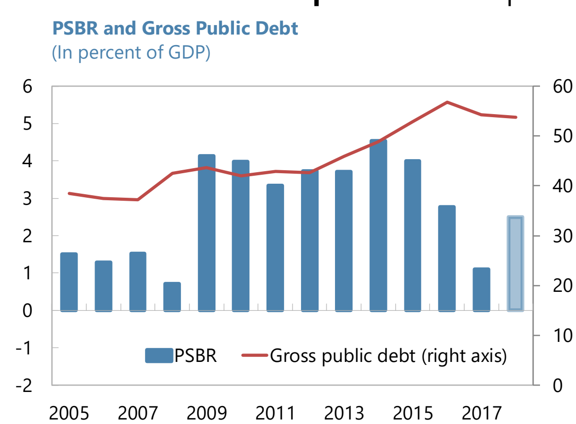
8. The current account deficit has remained broadly unchanged. It reached 1.1 percent of GDP in the first half of 2018, broadly unchanged relative to the same period in 2017 and compared to 1.7 percent in 2017 (full year) amid continued strong manufacturing exports and remittances, and despite a further weakening in the oil trade balance (Figure 4). The non-oil trade balance has been in surplus since the second half of 2016. FDI inflows have remained broadly stable.

9. Asset prices have remained resilient to elevated levels of uncertainty. The peso weakened in the run-up to the elections but strengthened substantially subsequently. However, volatility remained high in the face of turmoil in other EMs. In this context, sovereign CDS and bond spreads have risen somewhat over the past year, but much less than in other EMs. The resilience of financial markets reflects Mexico's very strong domestic fundamentals and policies, but also the currently very high profitability of the Mexican peso carry-trade amid a large interest rate differential with other EM currencies. Moody's upgraded the sovereign credit outlook to stable in April 2018, while Fitch and S&P have both kept Mexico's rating at BBB+ with a stable outlook.



10. The financial sector continues to weather the uncertain domestic and international environment well. The banking sector remains well capitalized and highly profitable (Table 5). As of July 2018, the sector's Tier-1 capital ratio stood at 14.0 percent and the return on equity at 20.7 percent, while the NPL ratio remained at near record low of 2.1 percent. Banks' results were helped by robust economic growth and the increase in the net income margin associated with the hikes in the policy rate. Commercial bank credit to the non-financial corporate sector strengthened by 10 percent (y-o-y) in real terms in August despite higher borrowing costs, while consumer credit growth slowed down to just above 1 percent. Household leverage remains low, with very limited FX lending and a household credit-to-GDP ratio of 16.1 percent compared to 39.8 percent on average for other emerging economies.

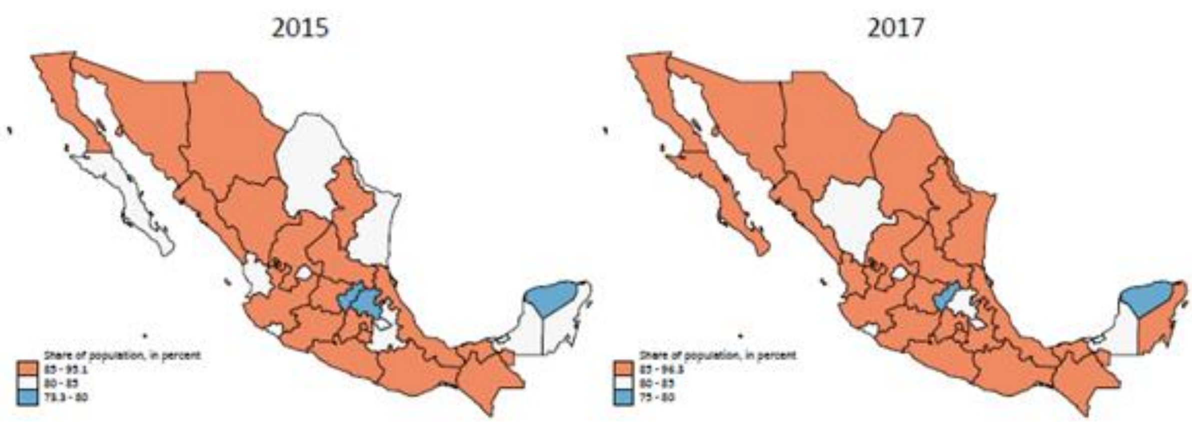
11. The government continued to adhere to its fiscal consolidation plan. The 2018 public sector borrowing requirement (PSBR) target of 2.5 percent of GDP is expected to be met. Better-than-projected revenue performance in part reflecting improvements in tax compliance is expected to be offset by higher-than-budgeted non-programmable expenditures, in particular transfers of last year's excess revenues to states. Public debt is projected to continue to decline to around 53 percent of GDP from 54.3 percent in 2017, thanks to a primary surplus of 1.3 percent.



12. The central bank further tightened the monetary policy stance. The Bank of Mexico (Banxico) increased its policy rate by 25 bps in December 2017, and February and June 2018, to 7.75 percent amid some upward inflation surprises and an uncertain external and domestic environment. This tight monetary policy stance has successfully brought core inflation back inside the confidence band around Banxico's 3-percent inflation target. Medium-run inflation expectations remain well anchored, although somewhat above the target at about 3.5 percent.

13. The implementation of the structural reform agenda continues although little progress was made in implementing the National Anti-Corruption System (NACS). Oil exploration auctions have progressed, with the first private company to begin oil production in 2019, the gas network has continued to expand, and auctions for investments in electricity generation have been successful. The liberalization of gasoline prices was completed in November 2017, but the government keeps adjusting the excise tax to smooth the pass-through from international oil prices to domestic prices. The Federal Economic Competition Commission (COFECE) has continued to build its profile in addressing anti-competitive practices and strengthening competition. Moreover, efforts to diversify trading partners are progressing, with Mexico and the EU having reached an "agreement in principle" to update their 18-year-old free trade agreement. Mexico also became the first country to ratify the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) which could enter into force as early as in the coming months. However, little progress has been made on the implementation of the NACS, including on the need to appoint an operationally independent anti-corruption prosecutor, and the perception of corruption continues to worsen. Finally, plans to strengthen the collateral registry and set up specialized bankruptcy courts to expedite the insolvency resolution process and boost commercial bank lending have yet to be implemented.

Share of the Population of Each State considering that Corruption in that State is Frequent



Sources: INEGI; and staff calculations.

OUTLOOK AND RISKS

14. Uncertainty surrounding the global economic environment and the policy stance of the incoming administration will weigh on the near-term outlook. Staff's baseline scenario is predicated on the assumption that, while uncertainty related to the trade relations with the United States has declined, uncertainty stemming from global trade tensions will continue in the months ahead. Moreover, although details of the 2019 budget are not yet available, staff's scenario incorporates some of the incoming administration's broad policy intentions, including adherence to the current administration's fiscal path, as they were communicated to staff by the transition team. The scenario is also predicated on the assumption that Banxico will maintain a tight stance until at least mid-2019 and that global financial conditions will continue tightening.

Mexico: Key Macroeconomic Indicators, 2014-2023

					Projections					
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Real GDP growth (percent)	2.8	3.3	2.9	2.0	2.1	2.3	2.6	2.9	2.9	2.9
Inflation (period average, percent)	4.0	2.7	2.8	6.0	4.8	3.6	3.0	3.0	3.0	3.0
General government overall balance (Net lending/borrowing)	-4.5	-4.0	-2.8	-1.1	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5
General government gross debt	48.9	52.8	56.8	54.3	53.1	53.2	53.4	53.4	53.4	53.4
Current account	-1.9	-2.6	-2.2	-1.7	-1.7	-1.8	-1.9	-1.9	-1.9	-1.9
Net international reserves (in billions of U.S. dollars)	193.2	176.7	176.5	172.8	175.3	176.9	183.4	189.9	196.5	203.0

Sources: Bank of Mexico, Ministry of Finance and Public Credit, and Fund staff estimates.

15. Growth is thus expected to accelerate modestly in the near term and inflation is projected to start falling. Growth will continue to be supported by private consumption and a small contribution from net exports while investment will remain weak, particularly in the export-oriented manufacturing sector.[1] As uncertainty is being resolved and the economy reaps the full benefits of the continued implementation of structural reforms, growth would gradually converge to just under 3 percent over the medium term with private consumption and investment as the main drivers; structural reforms are estimated to have a transitory impact on growth that persists through the projection horizon.

16. The current administration shared the mission's views on the short-term outlook, but was more optimistic regarding medium-term growth, as long as the implementation of the structural reforms is preserved. As for headline inflation, there was agreement that its recent increasing trend would reverse in the coming months and re-enter a downward path as tight monetary conditions continue to take effect. Headline inflation is thus projected to converge toward the central bank's target in the second half of 2019. The incoming administration shared the view that solid public finances, macroeconomic stability and an independent monetary policy are the pillars of the resilience of the Mexican economy in the face of a complex external environment and key ingredients to achieving sustainable economic growth. Moreover, the transition team pointed to investment as the main factor to trigger economic growth and is committed to promoting policies to boost private investment, while complementing these with structural adjustments in the annual budget aimed at increasing both the quality and level of public investment.

17. Despite tight monetary conditions well into next year, credit growth will remain healthy. Amid a slow economic recovery and with interest rates projected to decline only gradually, credit growth would decline somewhat but still remain healthy at above 10 percent over the medium term, reflecting trend financial deepening. Credit quality is projected to remain strong but could decline in the case of fallout from more risky bank lending practices (e.g., associated with SME lending), a global financial tightening or a decline in global growth or cross-border trade.

18. Mexico's external position remains broadly consistent with medium-term fundamentals and desirable policy settings (Annex II). Staff projects an unchanged current

[1] Annex IV evaluates staff forecast errors for GDP growth and inflation.

account deficit from last year and a slight widening over the medium term. At these levels, it is broadly in line with medium-term fundamentals and desirable policy settings. At end-September 2018, the peso was 2.7 percent stronger in real effective terms relative to its 2017 average. In staff's assessment, the peso is currently broadly in line with the level suggested by fundamentals. The net international investment position would improve modestly to about minus 45 percent of GDP over the medium term. Foreign exchange reserves are adequate according to a range of indicators, while the FCL continues to provide an effective complement in reducing risks. External financing needs would be broadly unchanged in 2018-19, as lower public-sector amortization is offset by higher private-sector amortization. However, the strong presence of foreign investors continues to leave Mexico exposed to significant risks in terms of capital flows reversal and increased risk premia.

19. There was agreement that the balance of risks is tilted to the downside (Annex I). Both sides considered that a fall in global growth or an exacerbation of trade tensions among major economies would hamper Mexico's growth prospects due to its deep integration into global markets. Mexico is also exposed to the risk of renewed volatility in global financial markets and a sharp pull-back of capital from emerging markets. In this regard, the current administration also highlighted the risk associated with a faster-than-expected tightening by the U.S. Federal Reserve. Following the USMCA agreement, trade risks have been notably reduced and domestic risks have taken on a relatively larger role. Medium-term growth could be lower should the energy and other reforms falter. A continued fall in PEMEX's oil production or a deviation from its business plan would put strains on Mexico's fiscal position. A deterioration in corruption and the rule of law could adversely affect confidence and investment prospects. On the other hand, perseverance with structural reforms would provide upside risks to growth over the medium term.

ENSURING MACRO STABILITY AND EMBARKING ON A NEW WAVE OF STRUCTURAL REFORMS

A. Fiscal Policy: Create Fiscal Space to Accommodate Infrastructure Needs and Enhance Progressivity

20. There was agreement with the current and incoming administrations that fiscal policy should continue to be geared toward putting the public debt ratio on a firm downward trajectory. The current administration is preparing a draft 2019 budget targeting a 2½ percent of GDP PSBR. Keeping the PSBR at that level over the medium term would stabilize gross debt below 54 percent of GDP. However, this debt trajectory is contingent on growth converging toward its potential of around 3 percent (Annex III), and a steady path for interest rates. Staff noted that a slightly more ambitious medium-term fiscal target would help reduce risks to fiscal sustainability, and expand fiscal space to deal with large infrastructure needs and long-term demographics-related spending pressures. Calibrating fiscal policy toward increasing its progressivity would also be important.

21. While welcoming the incoming administration's strong commitment to fiscal prudence, staff noted that this should be clearly demonstrated in the 2019 budget and

medium-term fiscal plan. The transition team assured staff that their fiscal plan will be consistent with reducing the public debt-to-GDP ratio from the current level. In their view, achieving this target would entail a primary surplus of 0.5-1.0 percent of GDP. For 2019, they would not deviate from the current administration's target of 2½ percent of GDP. Staff noted that, on account of a debt-stabilizing primary surplus of 0.8 percent of GDP[2], putting public debt on a downward trajectory would require aiming for a primary surplus of very close to 1 percent of GDP.

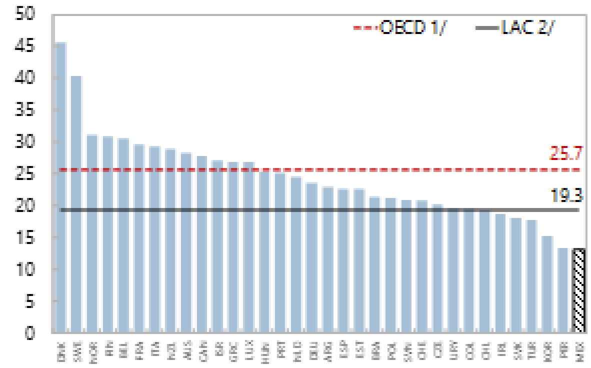
22. The transition team was not in a position to share detailed 2019 budget plans at this early stage but emphasized the incoming administration's commitment to meeting the deficit target, with a primary surplus as the main anchor. It expects revenues to be in line with the projections published last March and does not foresee any change to the current tax policy, except for a reduction in VAT and CIT rates in the border region with the United States as was promised in the electoral campaign. Efforts to strengthen the tax collection process will continue. New social and infrastructure initiatives would be financed by a consolidation of existing programs, efficiency gains in payroll management and public procurement, and savings in other current spending. To this end, the transition team emphasized that their overarching objective was to not exceed the fiscal deficit target and to reduce public debt below the current level.

23. Staff highlighted the need to boost non-oil tax revenues. Recent tax revenue gains have been impressive, but Mexico's revenue performance significantly lags that of regional and international peers. Mexico has the lowest tax revenue-to-GDP ratio in the OECD and among the lowest among LATAM countries, while VAT efficiency is particularly low (Annex V). Mexico is also exposed to potential revenue losses triggered by the recent US tax reform. While urging the incoming administration not to introduce new exemptions or reduced tax rates that would create distortions and erode the tax base, staff emphasized the need to increase non-oil tax revenue, including by broadening the tax base and improving tax administration. Consideration should be given to the following:

[2] The 0.8-percent of GDP debt-stabilizing primary balance assumes that key variables remain at their 2023 level. Lower growth projections in earlier years imply a higher debt-stabilizing primary surplus.

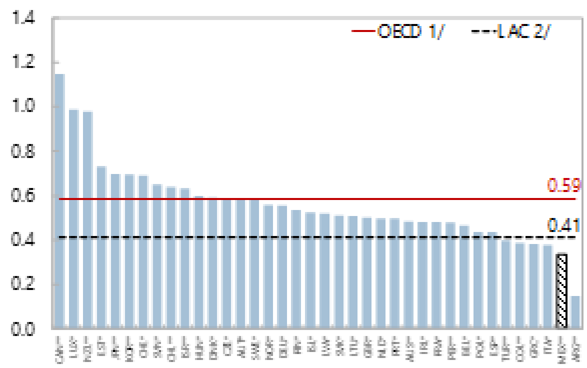
- Taxing all goods at the standard 16 percent VAT rate would increase **VAT revenue** by at least 1 percent of GDP, while improvements in compliance would further boost collections. Staff also recommended eliminating the right of taxpayers to offset their excess VAT credits against other taxes.
- Abolishing the current practice of fuel price smoothing by reducing the fuel excise would help to stabilize **excise revenues** and promote efficient fuel usage.
- Limiting exemptions for **personal income taxation** would increase revenues as well as the tax's progressivity. A reform of capital income taxation and the introduction of inheritance taxation would enhance the progressivity of the tax system and help reduce income inequality.
- A reform of the **property tax**, leading to an increase in tax collection at the sub-national level, would allow for a reduction in the central government's transfers to states and municipalities, which would in turn encourage fiscal responsibility and efficiency.
- Improvements in **tax administration** in line with FAD TA recommendations should encompass the adoption of a comprehensive strategy to address, among other, VAT non-compliance while addressing the lack of high-coverage audit process for VAT returns.

Total Tax Revenue
(As percent of GDP, 2017)



Sources: IMF World Economic Outlook
1/ OECD unweighted average excluding Iceland, Japan, Lithuania, Latvia, Mexico, United States , and United Kingdom
2/ LAC unweighted average including Argentina, Brazil, Chile, Colombia, Peru, and Uruguay

VAT C-efficiency
(Latest year available)



Sources: OECD, Eurostat, World Economic Outlook, FAD Tax Policy Rates Database; and, IMF Staff calcluations
1/ OECD unweighted average excluding Mexico and United States
2/ LAC unweighted average including Argentina, Chile, Colombia, and Peru
3/ Asterisks denotes data last year availability: (*) 2015, (**) 2016 and (***) 2017
4/ VAT C-Efficency defined as VAT Revenue/(Total Final Consumption net of VAT Revenue * VAT Rate)

24. The current administration argued that the 2013 tax reform increased tax revenues by five percentage points of GDP and therefore considered that additional measures to raise non-oil tax revenue were not strictly necessary. However, they have been working on a review of the tax system that illustrates the benefits of strengthening, among other, the efficiency of VAT collection. The incoming administration re-iterated that they would not make changes to the tax system during the first couple of years except for the cut in the VAT and CIT at the border region, but they would instead focus on increasing tax collection and closing channels of tax evasion. They also argued that the unification of VAT rates would increase inequality even if accompanied by targeted transfers to the poor.

25. Stronger non-oil tax revenues along with restraint in current spending would provide space for much-needed infrastructure spending and other priorities. The incoming administration has pledged to introduce new social benefits and announced ambitious investment plans. The transition team assured staff that associated fiscal costs would be fully offset by savings from fighting corruption and rationalizing other current spending. Staff discussed the new administration's spending priorities and supported higher infrastructure investment, which had been compressed in recent years, but only in the context of an overall sustainable fiscal position and a comprehensive infrastructure plan that includes an assessment of the management process of public investment and identifies priority projects. Moreover:

- Stricter standards and more transparency in the use of temporary personnel, along with the consistent application of merit-based recruitment and the establishment of a centralized payroll system could help contain the **wage bill**. However, maintaining pay competitiveness for civil servants in management positions will be important to reduce corruption incentives and ensure staff quality.
- More careful audits of payrolls to identify ghost workers and curb absenteeism, along with a rebalancing of spending towards investment in equipment and facilities will help increase the efficiency of **education spending**. Persevering with reforming the education system is crucial to improve teaching quality.
- **Social programs** can be consolidated and better targeted, but before any changes are made, a rigorous evaluation of current programs to assess their effectiveness should be conducted, while plans to introduce new ones should be put on hold. Implementing a single database for beneficiaries would help to eliminate benefit overlaps.
- Gradually increasing the contribution rate for the defined-contribution **pension system**, in particular for private sector workers, would improve pension adequacy, while shortening the required contributory period to qualify for a pension would encourage pension contributions and formal employment (Box 1). Any reform should be carefully designed to balance the additional budgetary cost that may result from more workers qualifying for a minimum contributory pension and the potentially reduced spending for old-age social assistance. Federal and local non-contributory pension pillars should be consolidated. Finally, there is scope for reducing management fees of pension funds which exceed one percent of assets under management.
- Investments in the **health sector** should target rural and impoverished areas with often deficient access to health services. Improving the portability of health insurance and building an information infrastructure compatible across sub-systems would allow for better continuity of care, improve health outcomes, and eliminate beneficiary duplication between insurance schemes.
- Reforming **public procurement**, by considering centralization of the process across the public sector and adopting a digital platform can yield further savings, while reducing the risks of corruption and bid rigging.

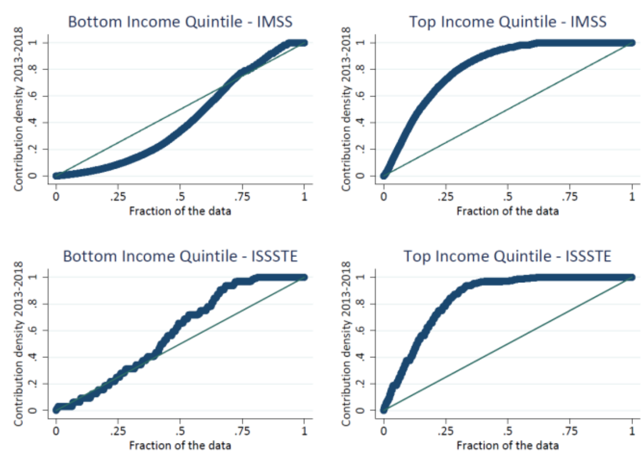
26. The incoming administration estimated that there was scope for consolidating social programs and is working on plans to centralize public procurements. It noted that congress had already approved a law reducing the wages of top civil servants, although this would deliver only small savings, and plans were under way to consolidate various government agencies. To this end, it saw significant scope for savings in current spending. Moreover, over the medium term, the incoming administration saw scope to incentivize local governments to strengthen their own revenue collections.

27. Further improvements of Pemex's financial situation are a prerequisite before new investments in refining can be contemplated. The recent energy reform not only broke Pemex's monopoly but also increased its autonomy and strengthened its financial position to permit private sector investments in its assets and operations. Operations and credit quality have since improved, mainly due to a drastic reduction in capital spending. However, Pemex debt remains elevated and output has continued to drop, reflecting mounting investment needs. Staff thus urged perseverance with the energy sector reform and Pemex's multi-year business plan and continued improvement in the company's financial health. Joint ventures with the private sector remain the best way to increase production in both mature and new fields and ensure the company's long-term financial soundness. Plans to build a new refinery should be put on hold until a comprehensive technical and financial feasibility analysis is completed and should be carefully weighed against other priorities.

Box 1. Mexico's Defined-Contribution Pension System

Mexico switched from a defined-benefit (DB) to a defined-contribution (DC) pension system in 1997 for private sector workers (Social Security Law of 1995) and in 2007 for public sector workers. Aimed at reducing the liabilities of the DB system, the new system is mostly self-funded, except for a minimum pension for individuals meeting the minimum contribution period requirement. However, the reform allowed transitional workers to choose to receive pension benefits determined by the old DB formula or the accumulated savings in the DC system, postponing the reduction in fiscal pension expenditures and creating extreme inequities between transitional workers and new participants in the DC system. Based on observed contribution densities, a very large number of workers may not qualify for a pension under the new DC system rules and conditional replacement rates are significantly lower than in the old DB system.

Contribution Densities by Income Quintile for IMSS and ISSSTE affiliates



Note: Average contribution densities over 2013-2018 for individuals aged between 30 and 64 in 2018.
Source: IMF staff calculations.

Based on observed contribution densities, it is estimated that about 64 percent of workers in the private sector and 27 percent of workers in the public sector will not contribute long enough to receive a pension. Less than half the individuals affiliated with IMSS contribute in a given year. That share is higher for public sector workers, with 82 percent of ISSSTE-affiliates contributing in a given year. On average, private sector workers contribute about 19 weeks per year over their working life, which corresponds to a contribution density of 37 percent. For public sector workers, the contribution density is about 76 percent, or 39.5 weeks per year. Contribution densities however vary significantly by income, making it harder for low-income workers to qualify for a pension. About 60 percent of IMSS affiliates in the bottom income quintile have contribution densities below 50 percent and less than 5 percent have contributed every working day over the last 6 years.

Conditional on receiving a pension, projected replacement rates vary between 40.0 and 47.8 percent for private and public-sector workers. Conditional replacement rates are higher for men than for women and for public sector workers than for private sector workers, essentially reflecting differences in contribution densities. The existence of minimum pensions implies higher conditional replacement rates for lower wages. The average conditional replacement rate reaches 66 percent for public sector workers in the first wage quintile and falls to 35.3 percent for workers in the top wage quintile. A similar decrease in conditional replacement rates across income quintiles is observed for private sector workers.

Replacement Rates, Conditional on Receiving a Pension (in percent of pre-retirement wages)

IMSS		ISSSTE	
Men	Women	Men	Women
40.5	40.0	47.8	43.7

Wage quantiles (average wage over 2013-2018)	IMSS	ISSSTE
1	61.5	66.0
2	40.2	46.4
3	35.6	42.6
4	33.8	37.0
5	30.5	35.3

Source: IMF staff calculations.

Box 1. Mexico's Defined-Contribution Pension System (concluded)

Main Parameters of Mexico's Defined-Contribution System

	Private sector	Public sector
Creation date	1997	2007
Institute in charge	Mexican Institute of Social Security (IMSS)	Institute for Security and Social Services for State Workers (ISSSTE)
Retirement age	65	65
Minimum contribution period	1250 weeks (about 24 years)	25 years (1300 weeks)
Contribution rate	6.5 percent Employer: 5.150 percent Worker: 1.125 percent Government: 0.225 percent Social quota: variable, depending on the wage level below 15 minimum wages.	11.3 percent Employer: 5.175 percent Worker: 6.125 percent Social quota: fixed for all wages below 10 minimum wages
Minimum guaranteed pension (June 2018)	3,051 pesos per month, indexed every year to the CPI	4,756 pesos per month, indexed every year to the CPI
Retirement benefit options	Life annuity Programmed withdrawals	Life annuity Programmed withdrawals

28. **Strengthening the fiscal framework would support the incoming administration's commitment to fiscal responsibility**. Staff advocated the creation of a non-partisan, adequately-resourced fiscal council with a formal mandate to provide an independent evaluation of fiscal policy. It would also be desirable to have a tighter link between the desired level of public debt and PSBR targets, and to limit the exceptional circumstances clauses to cases of large output and oil price shocks. One-off profit transfers from Banxico to the budget should be used entirely to reduce the PSBR and public debt. Finally, staff suggested to follow up on the recommendations of the Fiscal Transparency Evaluation report (Box 2). The current administration re-iterated their view that the government had already demonstrated their credibility by consistently delivering on its fiscal commitments and disputed the need for additional external scrutiny given the large number of banks, agencies, and other institutions already analyzing Mexico's public finances. The incoming administration noted that a strengthening of the fiscal framework was among their priorities, and although they were open to different ways to achieve this, they would also consider strengthening the governance, capacity, and scope of the Centre for Public Finance Studies of Congress, while ensuring that it is non-partisan in its assessment.

Box 2. Fiscal Transparency Evaluation (FTE)

The IMF recently concluded an assessment of Mexico's fiscal transparency practices against the Fiscal Transparency Code. Mexico scores relatively well when compared to other Latin American countries and emerging market economies that have undergone a similar assessment. The following recommendations aim at enhancing fiscal transparency practices.

- Consolidate the general government and the public sector in the fiscal reports to enhance the usefulness of the reports for fiscal analysis and policy making.
- Improve the coverage of stocks and flows in fiscal reports, by including missing assets, liabilities, and fiscal flows which will allow the reports to provide an accurate view of the overall financial position.
- Publish fiscal statistics by economic and functional classifications compliant with international standards.
- Strengthen the medium-term fiscal framework and the medium-term budget framework to enhance the government's ability to plan public expenditure over the medium term.
- Strengthen mechanisms for the independent validation of the government's macroeconomic and fiscal forecasts, and compliance with fiscal targets/rules.
- Strengthen macroeconomic risks analysis, with alternative macroeconomic scenarios and other specific risks, to better inform fiscal policy making.
- Prepare and publish a summary report quantifying and disclosing the main specific fiscal risks, and a strategy to manage them.
- Establish a comprehensive framework for the financial governance and oversight of non-financial public corporations.
- Strengthen oversight and reporting on activities under PEMEX's entitlements.
- Publish the benchmark portfolio that operationalizes the FMP's investment guidelines after issuance by the FMP's Technical Committee, and the risk management policy to limit deviations from benchmarks.

Mexico: Summary Assessment Against Fiscal Transparency Code

I. Fiscal Reporting	II. Fiscal Forecasting & Budgeting	III. Fiscal Risk Analysis & Management	IV. Natural Resource Management
1.1. Coverage of Institutions	1.1. Budget Unity	1.1. Macroeconomic Risks	1.1. Legal Framework
1.2. Coverage of Stocks	1.2. Macroeconomic Forecasts	1.2. Specific Fiscal Risks	1.2. Fiscal Regime
1.3. Coverage of Flows	1.3. Medium-term Budget Framework	1.3. Long-term Fiscal Sustainability Analysis	2.1. Allocation of Rights
1.4. Coverage of Tax Expenditures	1.4. Investment Projects	2.1. Budgetary Contingencies	2.2. Disclosure of Holdings
2.1. Frequency of In-Year Reporting	2.1. Fiscal Legislation	2.2. Asset and Liability Management	2.3. Assessment & Collection of Revenue
2.2. Timeliness of Annual Financial Statements	2.2. Timeliness of Budget Documents	2.3. Guarantees	2.4. Audit & Verification of Revenue
3.1. Classification	3.1. Fiscal Policy Objectives	2.4. Public-Private Partnerships	3.1 Reporting on Domestic Payments
3.2. Internal Consistency	3.2. Performance Information	2.5. Financial Sector Exposure	3.2. Reporting on Worldwide Payments
3.3. Historical Revisions	3.3. Public Participation	2.6. Natural Resources	3.3. Operational, Social & Env'tal Reporting
4.1. Statistical Integrity	4.1. Independent Evaluation	2.7. Environmental Risks	4.1. Budgeting of Resource Revenue
4.2. External Audit	4.2. Supplementary Budget	3.1. Sub-national Governments	4.2. Resource Fund Operations & Oversight
4.3. Comparability of Fiscal Data	4.3 Forecast Reconciliation	3.2. Public Corporations	4.3. Resource Fund Investment Strategy

LEGEND	LEVEL OF PRACTICE				
	Not Met	Basic	Good	Advanced	Not Applicable

B. Monetary and Exchange Rate Policies: Continue to Strive for Stability

29. The current monetary policy stance is adequate but there is scope to gradually ease policy. Monetary conditions are projected to progressively tighten as inflation declines (with an ex-ante real policy rate of over 4.6 percent by end-2018). A negative output gap will help keep inflation on track to converge toward the 3-percent target in the second half of 2019. In this connection, staff recommended a gradual reduction in the policy rate once inflation is again firmly on a downward path, expectations remain well anchored, and uncertainty recedes, which could well be the case as soon as in early 2019. Central bank officials highlighted that recent upside inflation surprises, mainly in some energy products, have led to significant surges in non-core inflation, which has delayed the convergence of headline inflation to its target, and that core inflation has continued on a downward path in line with Banxico's forecasts. They considered that the monetary policy stance has been determined to bring inflation back to target within the timeframe in which monetary policy operates but emphasized a complex risk environment and the need to remain vigilant to calibrate monetary policy in a timely and robust manner so that inflation converges to its target and medium- and long-term inflation expectations remain well anchored and achieve such target. They noted that the decision to maintain a tight stance over the past year had succeeded in bringing inflation down and preserving Banxico's credibility, amid bouts of uncertainty.

30. Staff welcomed recent improvements in central bank communication and suggested further enhancements. Last May, Banxico announced significant improvements to its communication strategy, including: (i) identification of the vote of each Board member in the minutes of monetary policy decisions; (ii) simultaneous publication of the monetary policy communiqué in Spanish and English; (iii) release of complete transcripts of monetary policy meetings after three years; and (iv) publication of all public speeches and presentations by Board members. Staff noted that communication should continue to focus on exchange rate movements and U.S. interest rate policies only to the extent these have an important bearing on the path of inflation, and efforts should continue to keep the minutes of monetary policy meetings concise. Central bank officials highlighted the recent improvements in their communication strategy. They noted that the potential exchange rate pass-through to prices, the relative monetary stance to the U.S., and the degree of slack in the Mexican economy remained important factors for monetary policy.

31. There was agreement that exchange rate flexibility should remain the key shock absorber for the Mexican economy. Over the past year, and in the face of significant market pressures, Banxico allowed the exchange rate to adjust flexibly and refrained from any intervention since the last of the pre-announced auctions of non-deliverable forward (NDF) contracts in December 2017. The outstanding contracts (notional amount of $5.5 billion) have since been rolled over. The authorities noted that the exchange rate has served well as a shock absorber to external developments and that they would continue to make sure that the adjustment takes place in an orderly manner and with no contamination to the economy's price formation process. Staff and the authorities agreed that intervention should be limited to instances of disorderly market conditions, and not to lean against the wind. There was also agreement that NDFs provide a useful additional instrument to spot intervention given Mexico's liquid derivatives markets. Moreover, staff and the authorities agreed that foreign currency reserves were adequate at the current juncture, with the FCL providing an important buffer. While increasingly deep and liquid financial markets could lessen the frequency of disorderly market conditions and the need to intervene (alongside declining balance sheet vulnerabilities), further reserve accumulation could still be called for going forward.

C. Macro-Financial Policies: Remain Vigilant and Strengthen the Regulatory Framework

32. There was agreement that although the financial sector remains resilient to various risks, close monitoring should continue. Recent stress tests of the banking sector conducted by the regulators have confirmed the sector's resilience: except for a few very small banks, all banks could absorb a substantial deterioration in credit quality and higher funding cost. Moreover, staff's stress tests of the top 50 largest corporations suggest that debt-at-risk would remain manageable even under GFC-like severe shocks, including shocks to the exchange rate and earnings (Box 3). The authorities considered that the financial sector's substantial buffers, given strong levels of capital and loan-loss provisions, have made the sector resilient under an uncertain economic environment. Going forward, they expected overall quality to remain strong.

33. Staff highlighted that efforts to increase financial deepening and inclusion should continue. At 39.1 percent of GDP in 2017 the ratio of total credit to the non-financial private sector has increased by 7.1 percentage points since 2012 but remains low by international standards. In this context, staff welcomed the issuance of regulation based on the new FinTech legislation (Annex VI). It also highlighted that pushing ahead with earlier plans to improve the collateral registry and install specialized bankruptcy courts is crucial to expedite the insolvency resolution process and boost commercial bank lending. Making progress with the National Strategy for Financial Inclusion (NSFI) will be important to allow for better access to finance to underserved parts of the population. The authorities agreed with the need to boost financial deepening and inclusion and noted that credit volumes as well as pension and insurance assets had continued to grow in recent years. They also highlighted that their NSFI was a first step to improve financial inclusion by focusing on financial education and consumer protection.

34. In this context, staff noted that the role of development bank lending should be limited to underserved markets. Lending to sectors adequately served by commercial banks would unnecessarily commit scarce public resources and would run the risk of crowding out the commercial banking sector. Staff advised against setting quantitative lending targets and instead supported changes in development banks' incentive structures to encourage lending to sectors lacking access to market financing. The board composition and selection of CEOs of development banks should be aligned with international best practices. The incoming administration noted that they expected development banks to play an important role in infrastructure finance and they would consider consolidating a few development banks to improve efficiency.

35. Staff reiterated that financial sector resilience could be enhanced by closing gaps in the governance of the regulatory framework. In line with the recommendations of the 2016

FSAP, staff urged the authorities to increase the operational independence, budget autonomy, and legal protection of the banking and securities supervisor, and to, subsequently, integrate all

Box 3. Corporate Stress Tests

Staff conducted a sensitivity analysis of the 50 largest corporations to gauge their vulnerability to a combination of exchange rate, earnings, and interest rate shocks. Collectively, the market capitalization and debt of these companies amounts to 33 percent of GDP and 30 percent of total corporate debt, respectively.

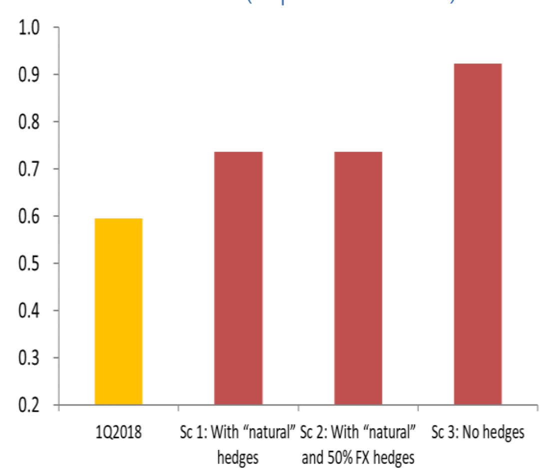
Shocks

- An increase in borrowing costs by 200 basis points or 30 percent from median borrowing cost in 2016, similar to the increase during the Global Financial Crisis (GFC), to take into account the risk of sharp spikes in credit spreads during times of heightened global uncertainties and market dislocation.
- A peso depreciation of 30 percent against the U.S. dollar, similar to the depreciation during the first six months of the start of the GFC.
- Earnings shocks of one standard deviation for each firm, assuming a 30 percent decline in global trade considering the heightened trade war risks.[1]

Hedges

- "Natural" hedges from exports in foreign currencies are proxied by the ratio of foreign currency revenues to total revenues for each firm (average of 34 percent in 2018:Q1).
- Financial hedges on exchange rate risk were derived based on a simple assumption that 50 percent of FX debt interest expense is hedged through derivatives. This takes into consideration the availability and effectiveness of the hedges.[2] In the sample of 50 firms, the average share of foreign currency debt to total debt is 54 percent.

Debt-at-Risk (in percent of GDP)



The results show that large nonfinancial corporations are resilient, and spillovers to the banking sector are low. Debt-at-risk, defined as debts with interest coverage ratio (ICR) below 1, could increase from 0.6 percent of GDP to 0.6-0.9 percent of GDP, depending on hedges.

a. Five companies (with natural and financial hedges) and five companies (with natural hedge only) could fall short of meeting debt service (ICR below 1). Their debts account for 0.7 percent of GDP (1.6 percent of total corporate debt).

b. In a worst-case scenario of no exchange rate hedges, six companies will have ICR below 1. Their debts account for 0.9 percent of GDP (2.0 percent of total corporate debt).

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[1] Based on regression estimate on the impact of a decline in world trade on median earnings of global corporations.

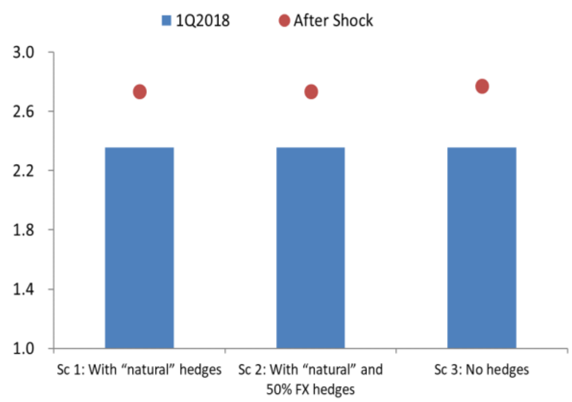
[2] While FX hedging instruments and markets are more developed than during the late-1990 crises, some of these instruments remain complex: e.g., some currency hedges would terminate when the exchange rate depreciates beyond a certain threshold, thus rendering the hedge worthless. Moreover, firms are exposed to liquidity and rollover risks when these contracts expire.

Box 3. Corporate Stress Tests (concluded)

Banks have adequate buffers to absorb losses. Although a full default of these debt-at-risk could lead to an increase in gross NPL ratio by 0.33-0.36 percentage points, the banking sector is well capitalized, and provisioning levels are adequate.

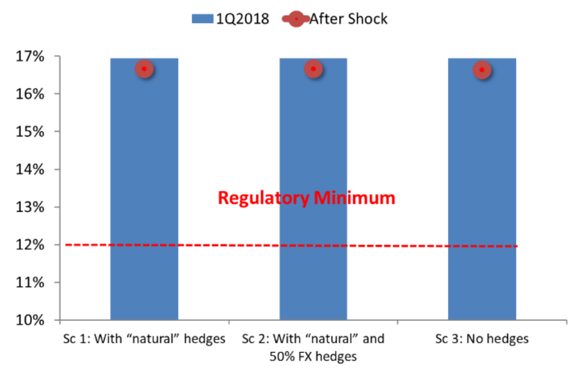
Banking Sector Gross NPL ratio and Loss Absorbing Buffers

(a) Gross NPL ratio 1/
(In percent of total loans)



1/ Assuming no recovery.

(b) Loss Absorbing Buffers 2/
(In percent of risk-weighted assets)



2/ Computed as Tier 1 Capital+Loan Loss Reserves-Stock of NPL, all divided by Risk-wieghted assets.

prudential supervision functions under one prudential authority. The supervisory power of that authority should be extended to cover financial holding companies. Staff also noted that maintaining competitive compensation will help improve supervision quality. The current and the incoming administrations believe that the current institutional set up and governance structure of regulators provides sufficient safeguards to preserve the effectiveness of supervision and do not see the need to merge different regulators to one prudential regulator.

36. **Staff also noted that the resolution and crisis management framework needed strengthening**. Staff recommended that the bank resolution regime should cover financial holding companies to ensure supervisors can adequately manage the true risks of the group and have the power to require banks to improve their resolvability. Moreover, a formal contingency plan for dealing with a systemic crisis should be developed, and a process should be put in place to carry out a systemic crisis simulation exercise involving foreign shareholders. The current administration considered that the resolution framework had been strengthened since the legal reform to the bank resolution framework was enacted in 2014. They felt that an ex-ante simulation exercise to coordinate the resolution process with foreign regulators could be contemplated but would require significant resources and careful planning.

D. Macro-Structural Policies: A New Wave of Reforms to Move to a Higher Income Status, and Reduce Poverty and Inequality

37. There is a need to re-kindle the recent structural reform agenda to raise potential growth. The *Pacto por México* succeeded at breaking state monopolies and promoting competition in network industries. It also aimed at addressing labor market, education, and governance shortcomings. However, a major growth acceleration is not yet in sight; and much remains to be done to boost potential growth, and reduce poverty and income inequality. The projected medium-term potential growth is predicated on continuation of the structural reform effort.[3] Priority should be given to reforms targeting governance, security, the rule of law, and informality. Staff's analysis suggests that these are important factors in explaining Mexico's meager productivity growth, both through the misallocation channel and by limiting firm investment and growth.[4] It is encouraging that these areas are among the incoming administration's top priorities. The current and the incoming administrations agreed with the need to press ahead with the structural reform agenda to boost productivity and raise living standards. They agreed with staff's analysis in that governance, security, the rule of law and labor informality are at the core of Mexico's structural challenges. The current administration highlighted the important transformations since enacting the *Pacto por México*.

38. Governance. Staff welcomed the incoming administration's emphasis on fighting against corruption and urged it to focus on the existing anti-corruption reforms that are pending implementation (Box 6 of the 2017 Article IV report) and the policy recommendations of the recent IMF-led AML/CFT assessment. Specifically, for the next fiscal year:

- **There is a need to increase the effectiveness of Prosecution Authority (PGR)**. To this end, competent authorities such as the Financial Intelligence Unit (FIU), the Banking and Securities Commission (CNBV) and the Secretariat of Public Administration (SFP) should annually conclude interagency performance agreements regarding the number and types of corruption and money laundering case files that PGR will receive and successfully process.
- **The current administration agreed that the use of shell companies is a major method to hide corrupt assets and launder money, and argued that corrective actions to address the issue had been implemented with mixed results**. Staff urged the authorities to adopt a three-prong strategy that aims to ensure that up-to-date domestic and foreign basic and beneficial ownership information is soon available with company registers in Mexico, with Mexican banks and notaries, and with the companies themselves. Consideration could be given to the use of new technologies (e.g., distributed ledger technology) and to publicly accessible registries to achieve transparency of beneficial ownership.

[3] Chapter 1 of the 2017 SIP argues that initial growth projections may have been optimistic, mainly because they underestimated the time it takes for reforms to impact the economy and did not anticipate the stronger-than-anticipated decline in oil production.

[4] See Chapter 2 of the 2017 SIP and Chapter 2 of the accompanying 2018 SIP.

- **It would be important to proceed with the constitutional reforms that are still awaiting implementation**, including the appointment of an operationally independent anti-corruption prosecutor (in line with international conventions and best practices), the appointments of judges to fill the new anti-corruption chambers at administrative courts, and the creation and implementation of the National Digital Platform (NDP), to provide access to important data, such as on procurement.

Incidence of Corruption in Interactions with the Federal, State and Municipal Governments according to Authorities' Statistics (INEGI)

Regions	Prevalence of corruption in administrative procedures[1]	Prevalence of corruption in relations with the federal government[1,2]	Prevalence of corruption in relations with state governments[1,3]	Prevalence of corruption in relations with municipal governments[1,4]
Mexico (all states)	**14.6**	**1.4**	**21.0**	**14.9**
Central states[5]	16.6	2.2	23.2	13.9
North-Eastern states[6]	13.2	0.7	19.8	15.3
North-Western states[7]	14.6	0.6	21.1	18.5
Western states[8]	12.6	0.7	18.4	15.5
South-Eastern states[9]	13.1	1.8	18.7	12.1

Note: Geographical regions defined by the National Commission for Public Security.
[1] Computed as the ratio of victims of corruption in administrative procedures to total population aged 18 and above in urban areas and having been in touch with the administration, in percent.
[2] Administrative relations involving the federal government include: electricity payment, tax reports and payments, medical treatments (planned or
[3] Administrative relations involving state administrations include: vehicle registration and tax payment, civil registrar, building permits, judicial
[4] Administrative relations involving municipal governments include: drinking water provision, property tax payment, municipal services, building
[5] Includes Mexico City, Guerrero, Hidalgo, Estado de México, Morelos, Puebla, and Tlaxcala.
[6] Includes Coahuila de Zaragoza, Durango, Nuevo León, San Luis Potosí , and Tamaulipas
[7] Includes Baja California, Baja California Sur, Chihuahua, Sinaloa, and Sonora.
[8] Includes Aguascalientes, Colima, Guanajuato, Jalisco, Michoacán de Ocampo, Nayarit, Querétaro, and Zacatecas.
[9] Includes Campeche, Chiapas, Oaxaca, Quintana Roo, Tabasco, Veracruz de Ignacio de la Llave, and Yucatán.
Source: INEGI. *Encuesta Nacional de Calidad e Impacto Gubernamental* , 2017.

- **Staff also advised swift implementation of the recommendations of the AML/CFT assessment** (Box 4), which will also benefit anti-corruption efforts and improve security and the rule of law.

- **The current administration cautioned against the idea of "systemic" corruption**. They emphasized that the current administration was the first one to prosecute governors for acts of corruption, which might have increased the perception of corruption.

39. Security and the rule of law. Violent crime is bound to reach a record in 2018 with 15,973 homicides recorded in the first half of the year, the highest level since comparable records began being kept in 1997 (Box 5). Other crimes including oil theft are also at record levels, with significant economic costs. Enhancing the efficiency and quality of law enforcement and judicial institutions would be critical to improve security and strengthen the rule of law.

40. Competition. Mexico has made progress in strengthening competition and lifting product market regulations, but considerable scope for improvement remains. Further efforts would help eliminate privileges benefiting few and lead to a price reduction that would benefit many, particularly low-income, households. Removing barriers to trade in services, especially in the transportation and logistics sectors, would support manufacturing and Mexico's integration into global value chains. Staff urged the current and the incoming administrations to ensure continued autonomy and adequate funding of the COFECE and the Federal Telecommunications Institute. Consideration should be given to consulting their expertise on matters of anti-competitive practices in the context of product market regulations and public procurement.

Box 4. AML/CFT Assessment

IMF recently concluded a detailed assessment of the effectiveness of Mexico's AML/CFT system. Mexico has a mature AML/CFT regime, with a well-developed legal and institutional framework; however, it faces significant money laundering risks and challenges that negatively impact on the effectiveness of the system in key areas. This box summarizes the key findings from the assessment report.

The report assesses the effectiveness of Mexico's AML/CFT framework and Mexico's technical compliance.

Regarding effectiveness, Mexico substantially meets 4 of the 11 immediate outcomes, with the remaining being either of moderate or low effectiveness. Technical compliance is somewhat better; Mexico is compliant or largely compliant with 24 of the FATF Recommendations, while 16 Recommendations are either partially or non-compliant.

The following are key findings, including the risks to which Mexico is exposed, and the strengths and weaknesses of its system, along with the report's main recommendations:

- According to Mexico's National Risk Assessment, the amount of proceeds generated by predicate crimes is high, with the main predicates for money laundering being drugs and human trafficking, corruption and tax evasion.
- Typical ML methods include the use of shell and front companies, purchase of real estate and other high value goods, and cash smuggling, all facilitated by the high use of cash and relative large informal economy.
- Most authorities have a good risk understanding, but relevant mitigation measures are insufficiently comprehensive, have not been prioritized, and have not resulted in a corresponding resource allocation.
- The financial sector and certain non-financial businesses and professions (DNFBPs) have an uneven risk understanding, especially regarding corruption and the misuse of legal persons. There are serious concerns regarding the identification of beneficial owners across all sectors.
- The Financial Intelligence Unit is producing good financial intelligence, but the volume of financial intelligence is insufficient. In turn, law enforcement and the prosecution are not prioritizing money laundering or parallel financial investigations, and law enforcement effectiveness is undermined by corruption.
- The report recommends fundamental changes to the use of financial intelligence in investigations, prosecution and confiscation measures to prioritize the investigation of money laundering. This includes additional investigative resources to focus on AML/CFT and predicate crimes, the introduction of specialized teams for money laundering and corruption, the use of parallel financial investigations and a focus on confiscation.
- The report also recommends fundamental reforms to preventive measures for the financial sector and DNFBPs, and to the supervision of these sectors (including the penalties available to supervisors).

Box 4. AML/CFT Assessment (concluded)

Ratings Key

Level of effectiveness	Immediate Outcomes	**High**	**Substantial**	**Moderate**	**Low**
Technical compliance	Recommendations	**Compliant**	**Largely compliant**	**Partially compliant**	**Non-compliant**

Effectiveness – 11 Immediate Outcomes

IO.1 Risk, policy and coordination	**IO.2** International cooperation	**IO.3** Supervision	**IO.4** Preventive measures	**IO.5** Legal persons and arrangements	**IO.6** Financial intelligence
IO.7 ML investigation & prosecution	**IO.8** Confiscation	**IO.9** TF investigation & prosecution	**IO.10** TF preventive measures & financial sanctions	**IO.11** PF financial sanctions	

Technical Compliance – 40 Recommendations

R.1 Assessing risk & applying risk based approach	R.2 National cooperation and coordination	R.3 Money laundering offence	R.4 Confiscation & provisional measures	R.5 Terrorist financing offence	R.6 Targeted financial sanctions for terrorism
R.7 Targeted financial sanctions for proliferation	R.8 NPOs	R.9 Financial institution secrecy laws	R.10 Customer due diligence	R.11 Record keeping	R.12 Politically exposed persons
R.13 Correspondent banking	R.14 Money or value transfer services	R.15 New technologies	R.16 Wire transfers	R.17 Reliance on third parties	R.18 Internal controls and foreign branches and subsidiaries
R.19 Higher risk countries	R.20 Reporting of suspicious transactions	R.21 Tipping off and confidentiality	R.22 DNFBPs: Customer due diligence	R.23 DNFBPs: Other measures	R.24 Transparency & BO of legal persons
R.25 Transparency & BO of legal arrangements	R.26 Regulation and supervision of financial institutions	R.27 Powers of supervision	R.28 Regulation and supervision of DNFBPs	R.29 Financial intelligence unit	R.30 Responsibilities of law enforcement and investigative authorities
R.31 Powers of law enforcement and investigative authorities	R.32 Cash couriers	R.33 Statistics	R.34 Guidance and feedback	R.35 Sanctions	R.36 International instruments
R.37 Mutual legal assistance	R.38 Mutual legal assistance: freezing and confiscation	R.39 Extradition	R.40 Other forms of international cooperation		

Box 5. Crime and Economic Activity

The incidence of violent crimes has risen substantially in recent years. The direct costs associated with offenses against firms and protection against such offenses alone are estimated at some 0.7 percent of GDP. Not included in this figure are scores of firms, especially SMEs, that have chosen to reduce operations and investments into firm growth due to their exposure to crime. Finally, record-high oil theft has been very costly.

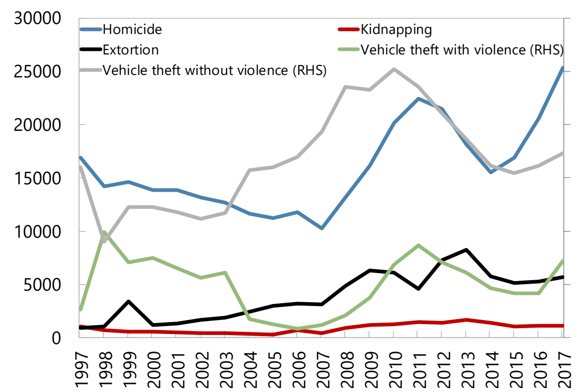
Mexico experienced its most murderous year on record in 2017. There were 25,339 homicides last year, a 50 percent jump from 2015 and the highest number since the government began tracking the data. With a murder rate of 21 per 100,000 persons in 2017, Mexico compares unfavorably to peers. The recent uptick in violent crimes has frequently been linked to the increasing violence between drug cartels. The authorities have obtained drones and geolocation technology from the U.S. government to fight drug trafficking.

Incidences of theft have also been on the rise. Cases of vehicle theft increased by 18 percent since 2015. Theft of cargo trucks rose from 5,400 cases in 2015 to 10,230 in 2017 (see Industrial Chamber Confederation of Mexico (CONCAMIN) and National Chamber of Freight (CANACAR)).

The uptick in crime is hindering activity and investment particularly for small firms. According to the 2016 Encuesta Nacional de Victimización de Empresas, more than a third of firms had fallen victim to at least one criminal offense in 2015. Firms report that expenditures for security measures and direct losses from acts of crime alone accounted for 0.7 percent of GDP in 2015. In addition, firms, especially smaller ones, limited operations and canceled investments.

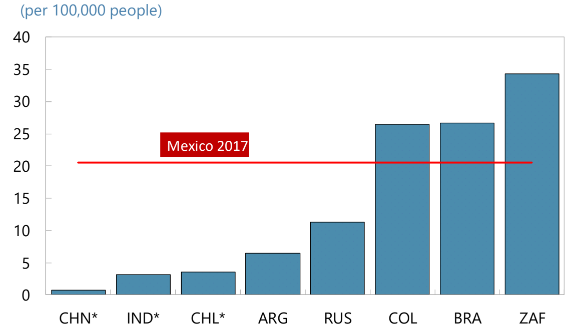
Pemex is also suffering from record levels of oil theft and violent crime. Oil theft is costing the company $1.6 billion per year (0.15 percent of GDP), according to its own reporting. Gangs and organized-crime groups are the main perpetrators of fuel theft, but local residents have been known to tap pipelines for fuel to use or resell. PEMEX has been using satellite technology to monitor trucks involved in oil theft. Furthermore, violent crime has not only held back Pemex's operations but has also deterred private firms and will be a major challenge for future auctions.

Mexico: Crime Evolution, 1997-2017
(Number of crimes by type, annual)



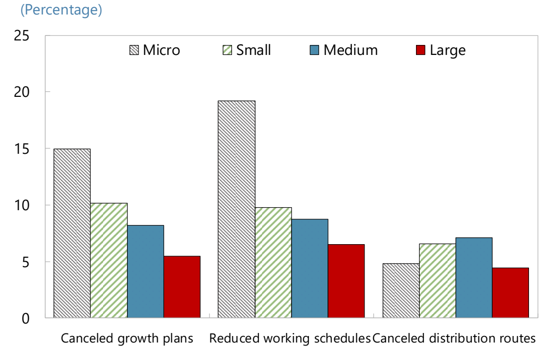
Sources: National authorities

Murder Rates 2015
(per 100,000 people)



Sources: World Development Indicators
* 2014 latest data available

Crime consequences by firm size
(Percentage)



Sources: Encuesta Nacional de Victimización de Empresas (ENVE), 2016

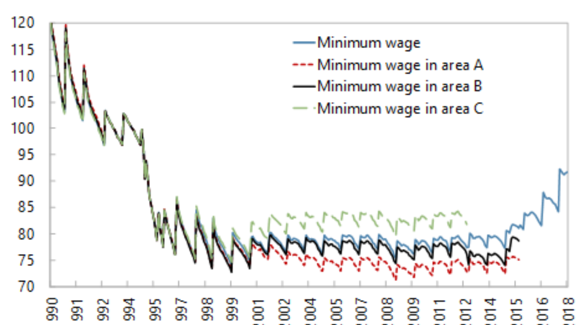
41. Energy reform. It would be important to continue with the ongoing energy sector reform and foster private sector participation in the generation, transmission, and distribution of oil, gas, and electricity. To this end, any review of already awarded contracts should be completed as soon as possible, and future auctions should continue. Private participation in the oil sector seems necessary to bring sizeable and much-needed investment and technological know-how, and would allow re-establishing Mexico as a net oil exporter.

42. Labor market informality. Despite a slight decline over the past decade, labor market informality remains stubbornly high.[5] Formal firms that employ salaried workers face social insurance contributions, minimum wage requirements, taxes, and sizable hiring/firing costs. These barriers create an incentive system that provides an implicit subsidy to small unproductive firms with informal employees. Increases in non-contributory benefits to informal workers along with higher income taxes on salaried workers have widened this incentive gap. It would be important to aim at a further reduction in informality, including through better enforcement, and replacing firing and hiring restrictions with an unemployment insurance scheme. Following a detailed impact analysis and after looking into other country experiences, consideration could be given to an eventual transition towards a social insurance system covering both salaried and non-salaried workers, and replacing funding from wage-based taxes paid solely by formal salaried workers with other revenue sources.

43. Gender gaps. Although there have been significant gains in female labor force participation (FLFP) and pay equality, significant gaps remain. Staff's analysis (Box 6) shows that, with a remaining 34 percent gap in the FLFP rate relative to that of men, there is ample room for improvement. Lowering participation barriers for mothers remains a priority as gender participation gaps increase substantially during child-bearing years and women with more children participate substantially less in the market economy.

44. Minimum wage. The minimum wage fell sharply in real terms in the early 1990s but has started to rise in the past three years. While increases in the minimum wage could help reduce inequality, staff recommended that any future adjustments be very gradual to avoid discouraging formal employment. Ideally, any changes to the minimum wage policy should be accompanied by measures that reduce barriers to formalization. The authorities highlighted the importance of weighing the short-term gains of substantial increases in the minimum wage for the benefited workers against the longer-term consequences on the potential displacement of labor toward informality and on the rest of the wage structure.

Real minimum wages
(index, 1994= 100)



Sources: Banxico; and staff calculations.

[5] See Chapter 1 of the accompanying SIP.

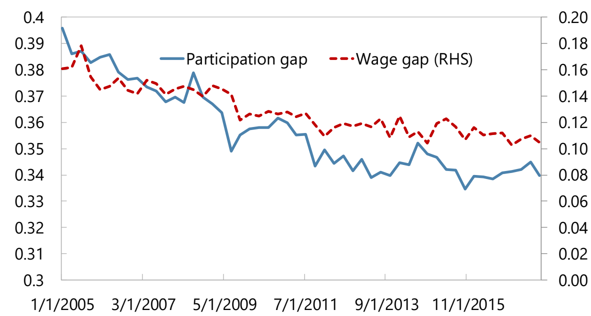
Box 6. Female Labor Force Participation

Although there have been significant gains in female labor force participation (FLFP) and pay equality, significant gaps remain. FLFP increased from 41 to 43 percent since 2005 while the gender wage gap decreased by a third. Nonetheless, with a remaining 34 percent gap in the FLFP rate relative to that of men, there is ample room for further improvement.

Women remain heavily underrepresented in several sectors of the economy. While there is roughly equal numbers of men and women in services,[1] men outnumber women in all other sectors of the economy. In fact, all gains in employment equality have come from the services sector, with agriculture and manufacturing exhibiting stagnant or worsening gender gaps in employment. Moreover, female-to-male ratios are lowest in the formal private sector, as most women work in the informal economy.

Better policies for childcare could help strengthen female labor force participation. Participation gaps are lowest when women enter the labor market and increase during child-bearing years. Even accounting for age and demographic differences, women who have more children tend to work less. Although these relationships have weakened over time, there is substantial need for policies that help close the significant remaining gaps. Child care and maternity/ paternity benefits, which remain well below OECD peers, could be improved to boost inclusion in all sectors of the economy.

Gender Gaps

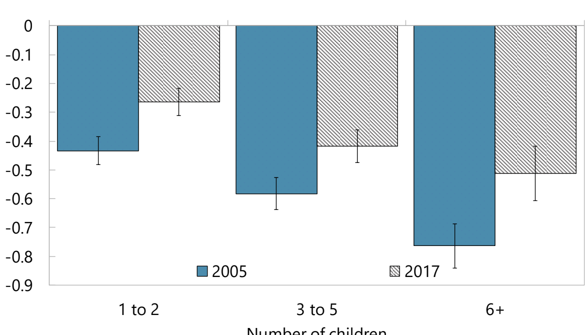


Sources: ENOE; and staff calculations.
Note: Participation gap is difference between labor force participation rates between men and women. Wage gap (in log points) accounts for differences in gender, education and sector of employment.

Women in the economy
(Women to men employment ratio, by sector and firm type)

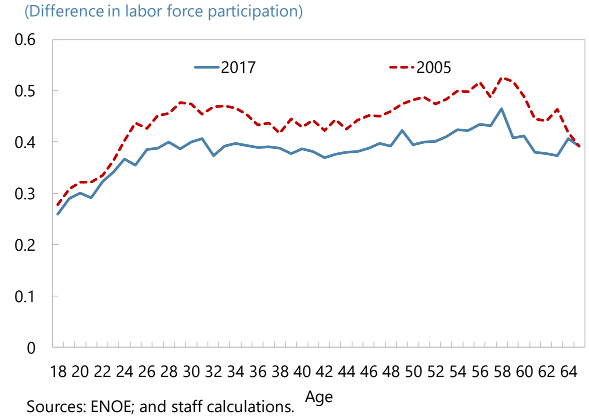
Sources: ENOE; and staff calculations.

Children and female labor force participation



Sources: ENOE; and staff calculations.
Note: Coefficiets from probit regression model of labor force participation with demographic controls.

Participation gap over the life-cycle
(Difference in labor force participation)

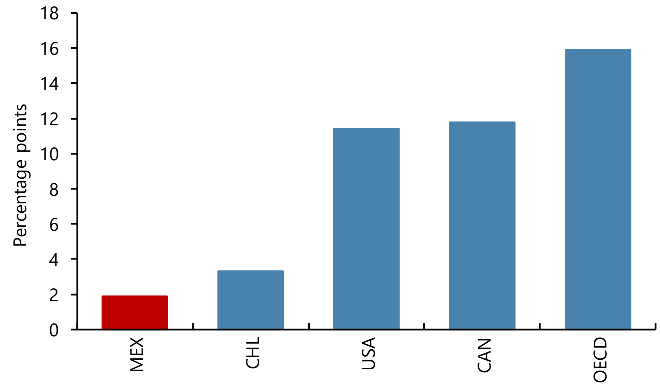


Sources: ENOE; and staff calculations.

[1] There are great inequities in participation within service sectors: e.g., women outnumber men 10 to 1 in domestic work, while being significantly underrepresented in formal services.

45. Poverty and inequality. Mexico's inequality has only slightly declined over the last decade and remains high compared to peers. While conditional cash transfer programs (e.g., *Prospera)* are very effective at reducing inequality, other programs disproportionately benefit individuals at the top rather than at the bottom of the income distribution, and the redistributive role of fiscal policy is weaker in Mexico than in other OECD countries.[6] Staff thus emphasized that there is scope for consolidating and better targeting social programs. Expanding the old-age safety net would alleviate old-age poverty but might reduce incentives to formal employment and affiliation with the defined-contribution pension system.

Gini reduction effect of taxes and transfers
(Circa 2010-2015, in percent)



Source: OECD.

E. Safeguards Procedures

46. Staff has completed the safeguards procedures for Mexico's 2017 FCL arrangement. EY México (the external auditor) issued an unqualified audit opinion on Banco de México's 2016 financial statements. Staff reviewed the 2016 audit results and discussed these with EY México. Staff also noted the timely publication of the FY2016 financial statements. Banco de México's Law was amended to strengthen the Audit Committee's composition by including a majority of independent members. Since its reconstitution, the committee now meets regularly with the external auditors. No significant issues emerged from the conduct of the safeguards procedures. The FY 2017 financial statements have also recently been published.

STAFF APPRAISAL

47. Very strong policies and policy frameworks have helped Mexico navigate a complex external environment. Fiscal policy has been successful in stemming the rise in the public debt ratio in the past two years, monetary policy maintains a cautious stance, and financial supervision and regulation are strong. The flexible exchange rate is playing a key role in helping the economy adjust to external shocks. Mexico's external position is broadly in line with macroeconomic fundamentals and desirable policy settings. The program of structural reforms has continued.

48. However, growth remains low, poverty and inequality high, and the perception of corruption and crime continue to worsen. Owing to prolonged uncertainty about the global environment and future policies in Mexico, GDP growth is projected to accelerate modestly in the near term and converge to just below 3 percent over the medium term. However, these rates are insufficient to fill the income gap with more advanced OECD countries. Moreover, the worsening

[6] See Chapter 3 of the accompanying SIP.

perception of corruption and security situation are hamstringing potential growth and preventing a faster reduction in poverty and inequality. It is encouraging that the incoming administration has vowed to address these and other challenges facing Mexico.

49. The incoming administration's commitment to fiscal discipline is welcome and needs to be accompanied by a strengthened fiscal framework. Public debt has risen since 2012 and exceeds 54 percent of GDP, while the fiscal consolidation effort of the past two years implied sharp cuts in public investment. To this end, the intention of the incoming administration to not exceed the fiscal deficit target and to reduce public debt below the current level is welcome. This will require keeping the deficit below 2½ percent of GDP over the medium term, corresponding to a primary surplus very close to 1 percent of GDP. Enhancements to the fiscal framework would add credibility to the new administration's fiscal plans. The creation of a non-partisan, adequately-resourced fiscal council with a formal mandate to provide an independent evaluation of fiscal policy would improve accountability and strengthen the fiscal policy debate.

50. Undertaking a comprehensive tax reform to boost non-oil tax revenue together with restraint in current spending would bolster space for much-needed investment. Improvements in tax administration to address tax evasion, the unification of VAT rates accompanied by targeted transfers to the poor population, and a reduction in personal income tax exemptions and reform of capital income taxation, have the potential to significantly increase tax revenue collection and enhance the progressivity of the tax system. An increase in property tax collection at the sub-national level would allow for a reduction in the central government's transfers to local governments and encourage fiscal responsibility. Ending the current practice of excise cuts to smooth fuel prices would shield the budget from reductions in excise revenues and promote efficient fuel usage. At the same time, it is important not to introduce exemptions or reduced tax rates that would create distortions and erode the tax base. Improving payroll management and public procurement systems, consolidating and better targeting of social programs, and improving the defined-contribution pension system would generate savings to finance more investment in education, health, and infrastructure.

51. The current monetary policy stance is adequate, while there is scope to gradually ease policy. A tight monetary policy stance has been successful in reducing inflation, which is on track to revert to the 3-percent target in the second half of 2019. Going forward, in the context of a moderately negative output gap, the policy rate could be gradually reduced as long as inflation declines as projected, inflation expectations remain well-anchored, and uncertainty recedes. Continued clear central bank communication remains crucial to guide market expectations.

52. Continued vigilance is needed to ensure financial stability. Strong capital buffers and adequate loss-provisioning support the resilience of the banking sector to market, liquidity, and credit risks. A healthy banking system will support the authorities' efforts to promote financial deepening and inclusion, through the gradual implementation of the national strategy for financial inclusion. While development banks can play a crucial role in lending to markets not adequately served by commercial banks, quantitative lending targets should be avoided.

53. Reforms of the regulatory framework would help further enhance financial sector resilience. Increasing the operational independence, budget autonomy, and legal protection of the banking and securities supervisor, and extending its authority to financial holding companies would close some of the gaps identified by the 2016 FSAP. The resolution and crisis management framework needs strengthening.

54. Perseverance with structural reforms is central to boost growth and reduce poverty and inequality. The continuation of the energy sector reform and private sector participation in the gas and oil sectors are crucial to bring in much-needed investment and increase oil production and growth. Pemex's autonomy should be preserved, and its financial strengthening continue. Better enforcement of labor market regulations, the introduction of unemployment insurance, improvements in the defined-contribution pension system, and a strengthening of social safety nets would encourage formal employment and contribute to a reduction in poverty and inequality.

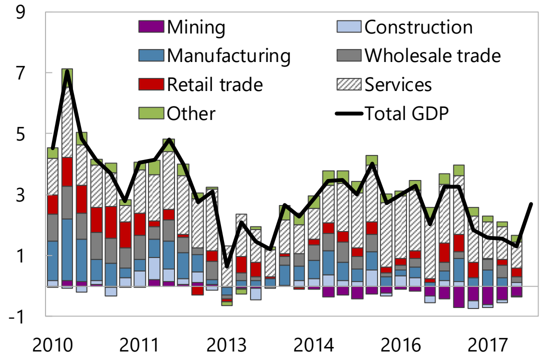
55. The prompt implementation of all the requirements of the 2014 National Anticorruption System is crucial to address corruption issues and improve governance. Enhancing the effectiveness and quality of law enforcement and prosecution would be critical to improve security and strengthen the rule of law. Addressing the shortcomings identified in the AML/CFT assessments is another priority.

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

Figure 1. Mexico: Real Sector

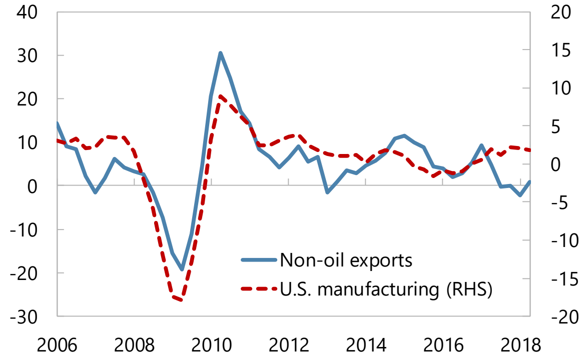
Growth has been supported by strong services and some growth in manufacturing amid falling oil production.

Supply Contributions to Growth
(In percent, NSA)



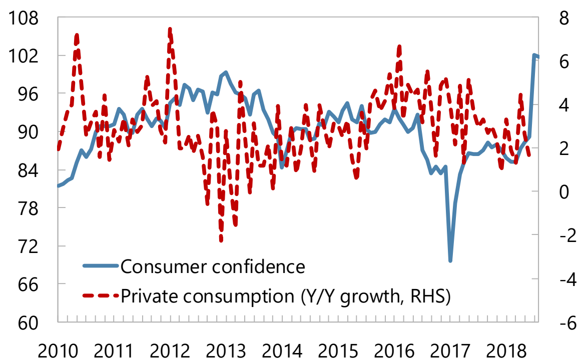
Non-oil exports slowed down in 2017 but are starting to rebound.

Real Export Growth
(Y/Y growth, NSA)



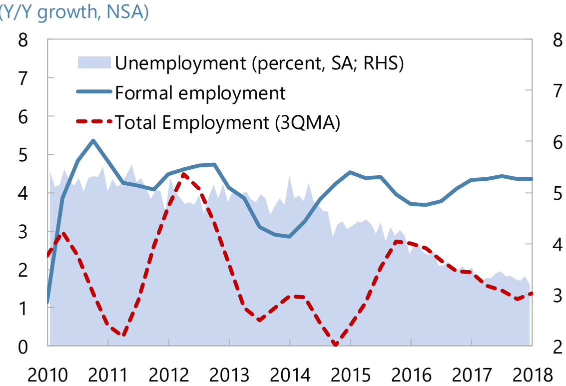
Private consumption continues to grow as sentiment stabilized,...

Consumption
(Index, Jan. 2003 = 100, NSA)



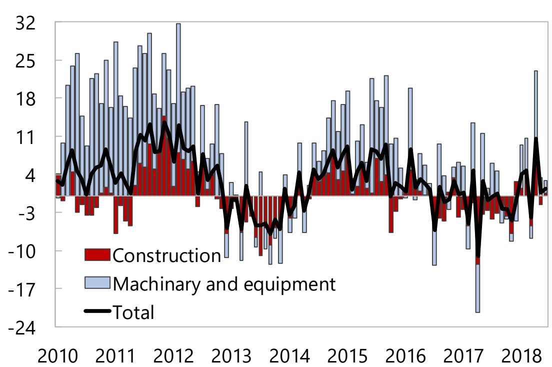
... supported by strong job creation, particularly in the formal sector.

Employment
(Y/Y growth, NSA)



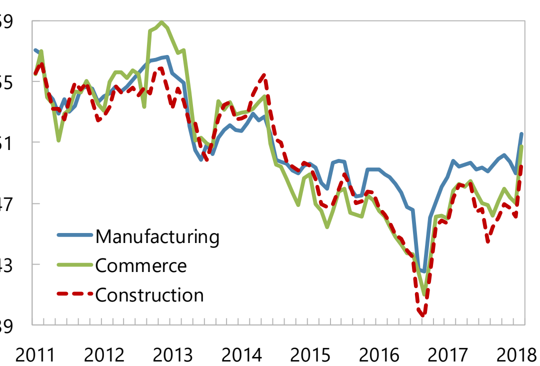
Gross fixed capital formation has generally remained weak but improved somewhat in recent quarters...

Gross Fixed Capital Formation
(Y/Y growth, NSA)



... as business confidence has begun to strengthen from very low levels after a multi-year decline.

Business Confidence by Sector
(Index)

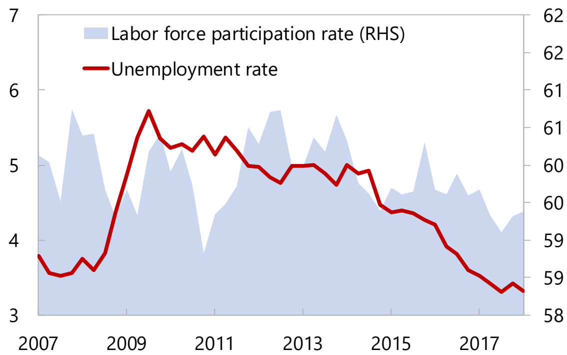


Sources: National Authorities, Haver Analytics; and, IMF Staff estimates.

Figure 2. Mexico: Labor Market

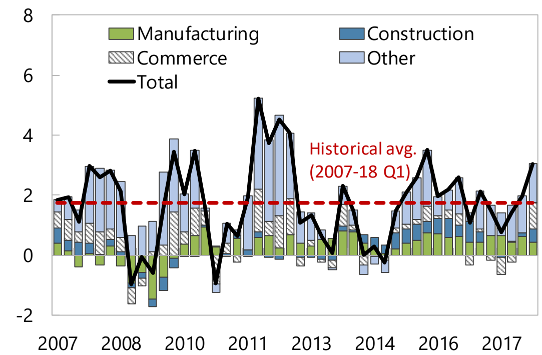
The unemployment rate has continued to decline, falling to the lowest level in a decade

Unemployment Rate
(In percent, SA)



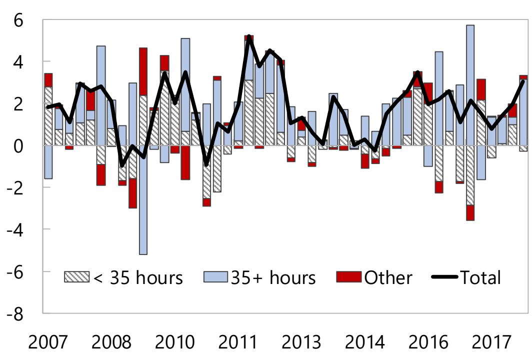
Job creation now hovers around the historical average…

Contributions to Employment Growth
(Y/Y percent growth)



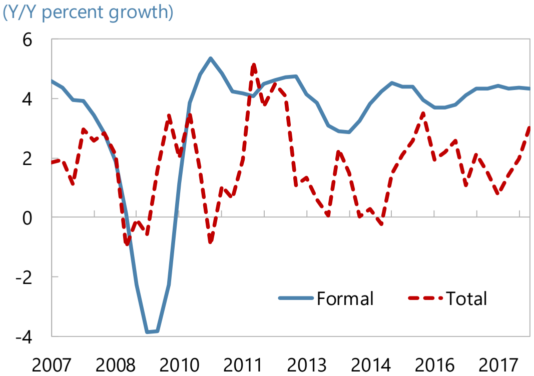
… with robust creation of full-time jobs…

Contributions to Employment Growth
(Y/Y percent growth)



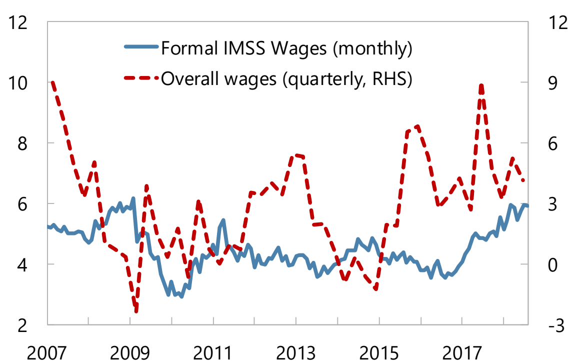
… and of formal employment.

Total and Formal Employment
(Y/Y percent growth)



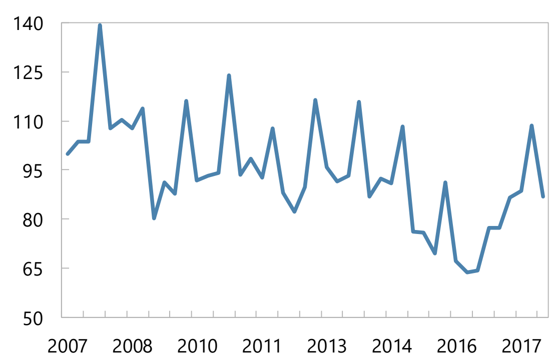
Nominal wage growth is picking up …

Average Nominal Wages
(Y/Y growth)



… and the ULC based REER has begun to recover from low levels.

Unit Labor Cost Real Effective Exchange Rate
(Index, Mar. 2007=100)

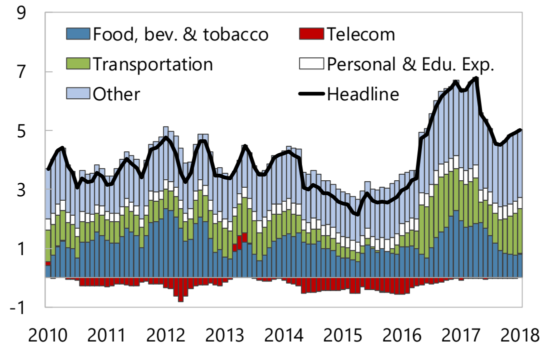


Sources: National Authorities, Haver Analytics; and, IMF Staff estimates.

Figure 3. Mexico: Prices and Inflation

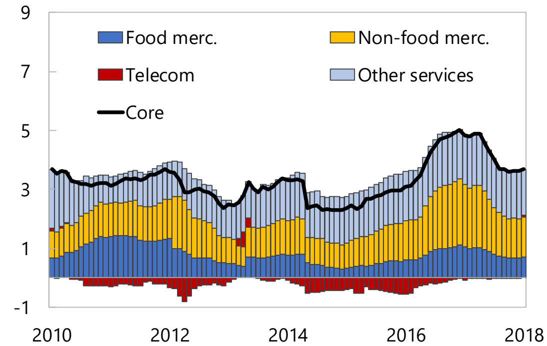
Headline inflation is coming down after increasing largerly on account of increases in food and domestic fuel prices ...

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



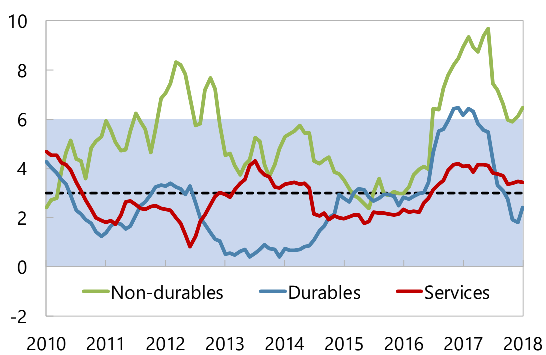
... while core components are already close to the target.

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



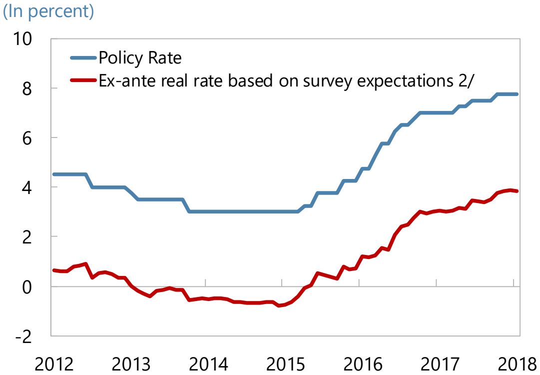
While services and durables inflation are close to or even below target, non-durables inflation is still at around 6 percent.

Inflation
(Y/Y percent growth)



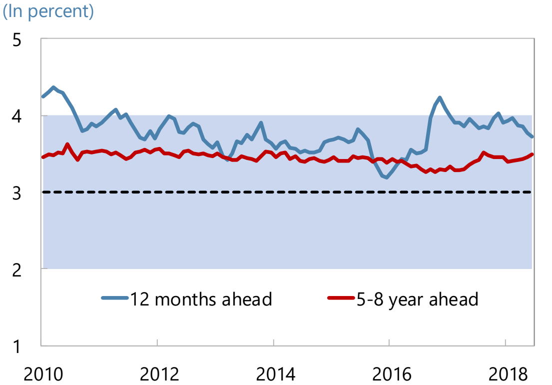
Policy rate hikes have helped contain second-round effects from externded episodes of exchange rate depreciation...

Policy Rates
(In percent)



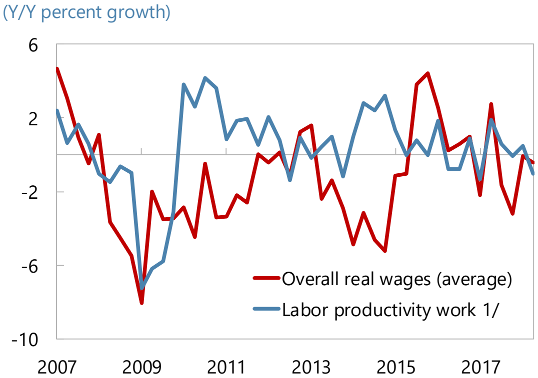
...keeping medium-term inflation expectations anchored within the target band.

Survey-based Inflation Expectations
(In percent)



Real wage growth has rebounded despite still high inflation.

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

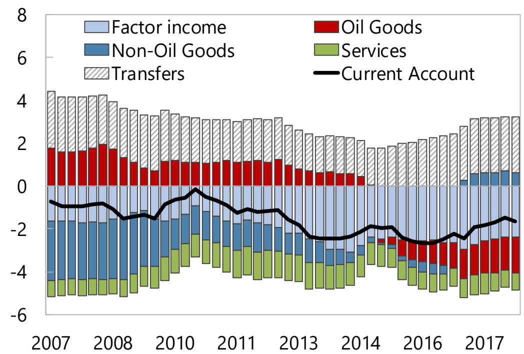


Sources: National Authorities, Haver Analytics; and, IMF Staff estimates.
1/ Based on hours worked.
2/ Calculation using the average inflation expectation for the next 12 months (NSA, %). Source: Banco de Mexico. Survey on the Expectations of Private Sector Economists.

Figure 4. Mexico: External Sector

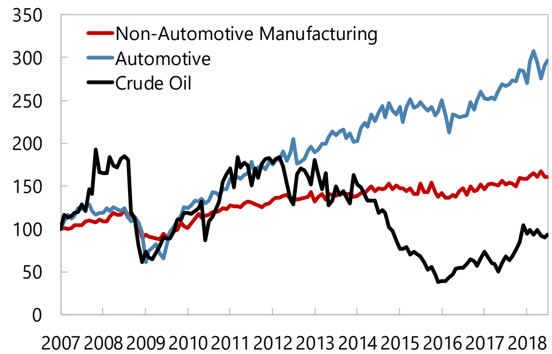
The current account deficit has declined ...

Current Account Balance
(Cumulative last 4 quarters, in percent of GDP)



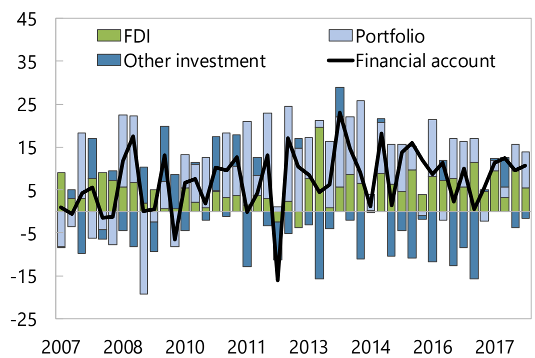
...helped by the depreciation of the peso and a boom in automotive exports.

Value of Exports
(Index, Jan. 2007 = 100, SA)



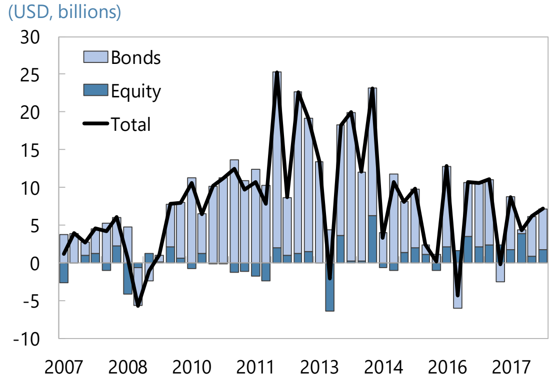
Outflows have remained contained despite a period of elevated uncertainty.

Net Capital Flows
(USD, billions)



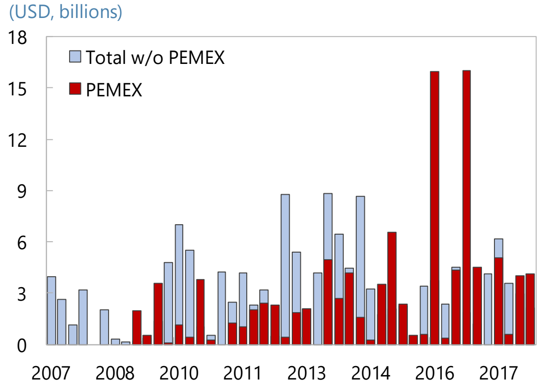
Both equity and debt portfolio flows have remained in positive territory.

Gross Portfolio Inflows
(USD, billions)



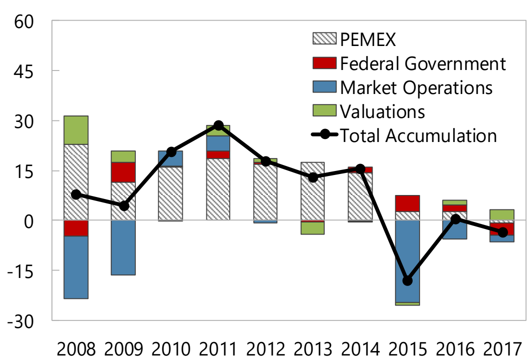
Corporate bond issuance has moderated.

Corporate Bond Issuance: Foreign Placements 1/
(USD, billions)



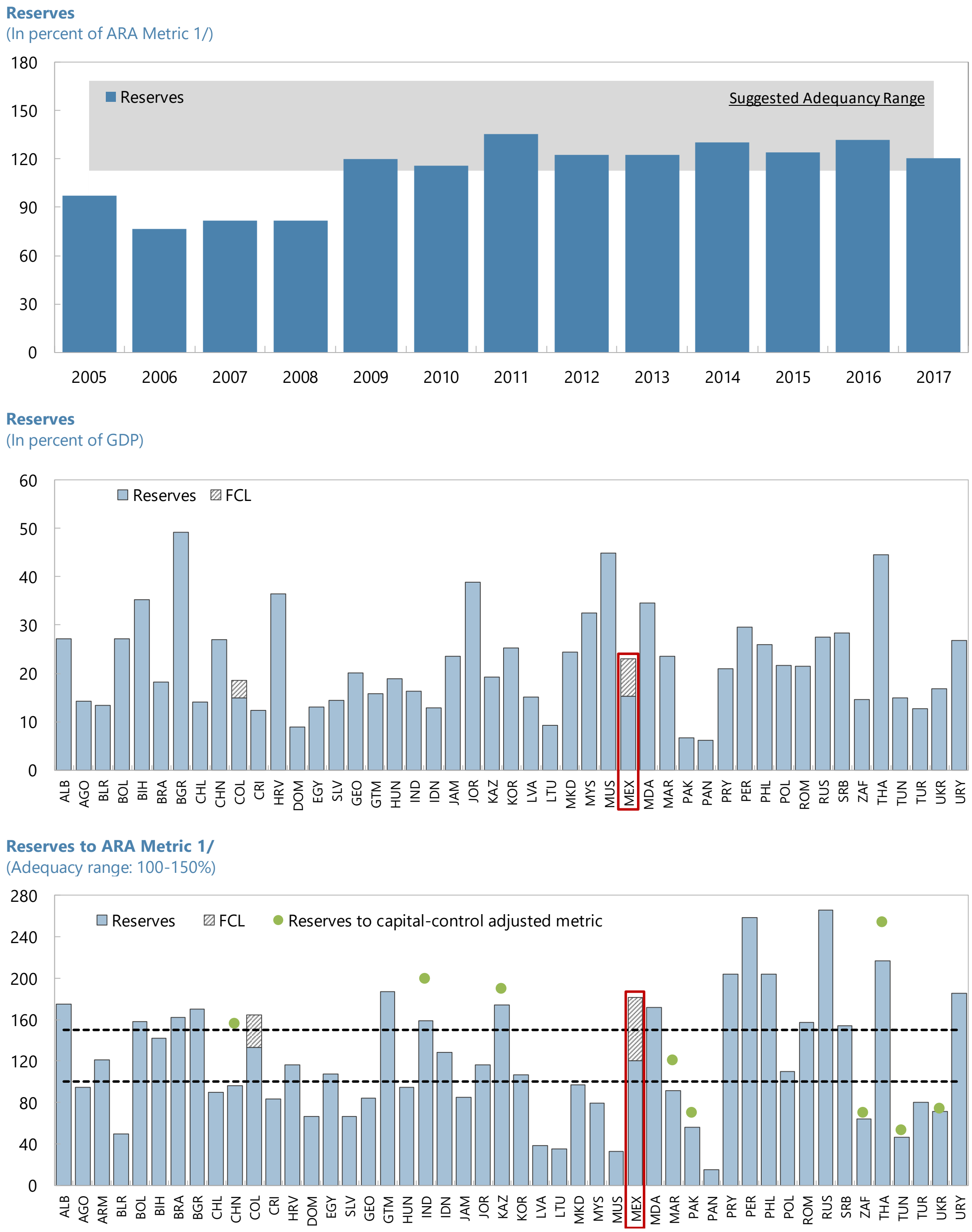
Reserves have stabilized amid only one discretionary spot intervention in early 2017.

Sources of Reserve Accumulation 1/
(USD, billions)



Sources: National Authorities, Haver Analytics; and, IMF Staff estimates.
1/ Data through December, 2017.

Figure 5. Mexico: Reserve Coverage in an International Perspective, 2017 1/

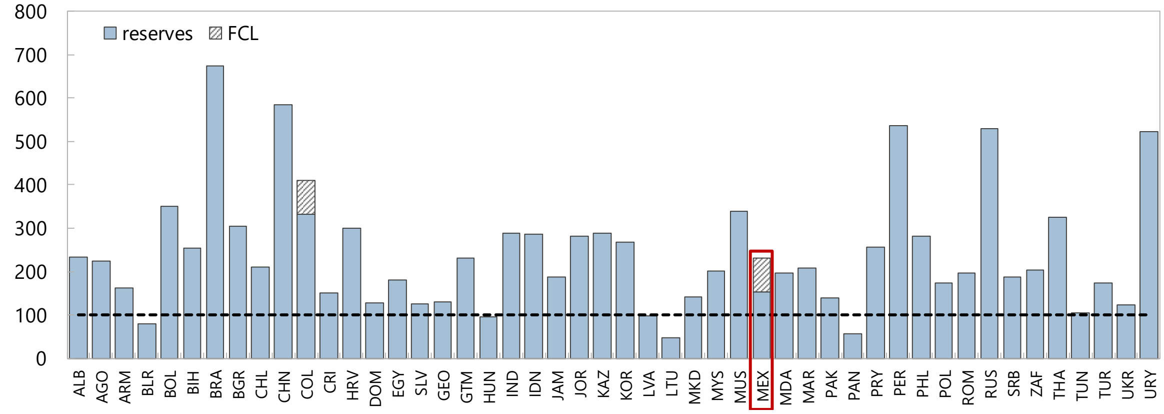


Sources: World Economic Outlook, Balance of Payments Statistics Database; and, IMF staff estimates

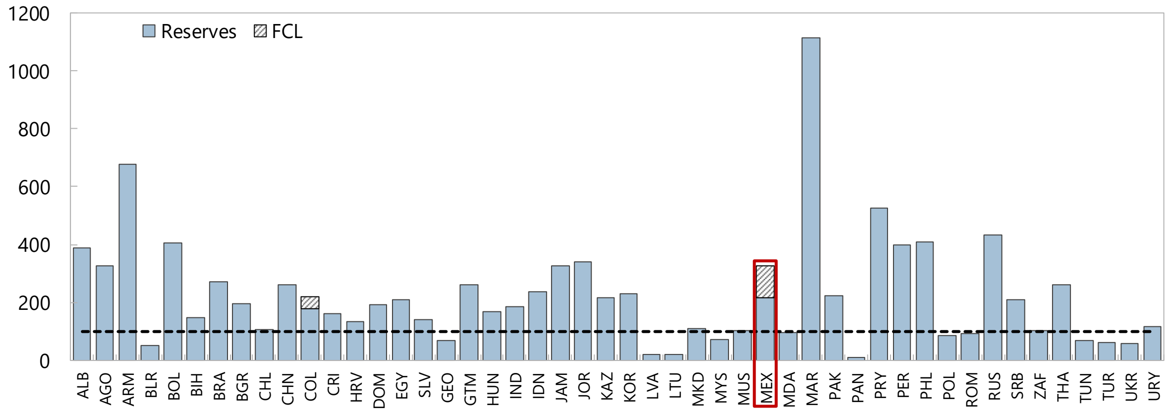
1/ The assessing reserve adequacy (ARA) metric for emerging markets comprises four components reflecting potential balance of payment drains: (i) export income, (ii) broad money, (iii) short-term debt, and (iv) other liabilities. The weight for each component is based on the 10th percentile of observed outflows from emerging markets during exchange market pressure episodes, distinguishing between fixed and flexible exchange rate regimes.

Figure 5. Mexico: Reserve Coverage in an International Perspective, 2017 (concluded)

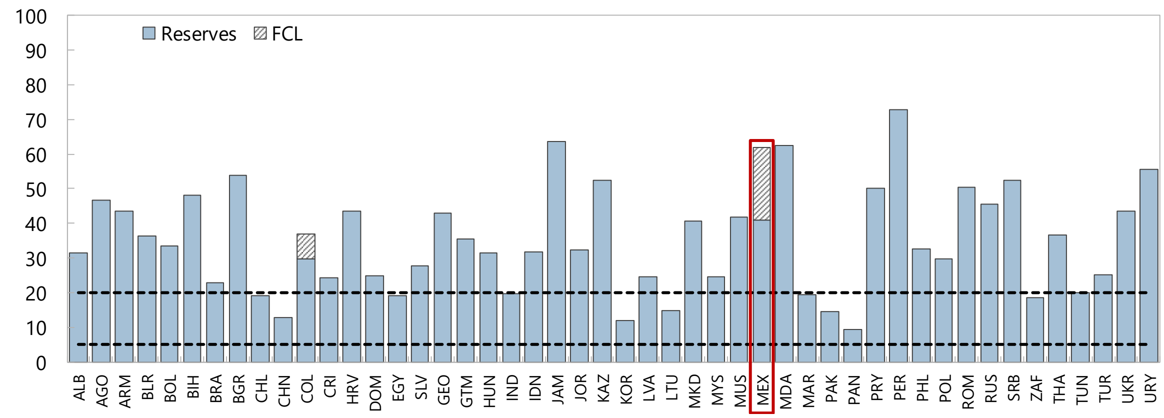
Reserves to 3M Imports
(Adequacy range: > 100%)



Reserves to Short-Term Debt
(Adequacy range: >100%)



Reserves to Broad Money
(Adequacy range: 5-20%)

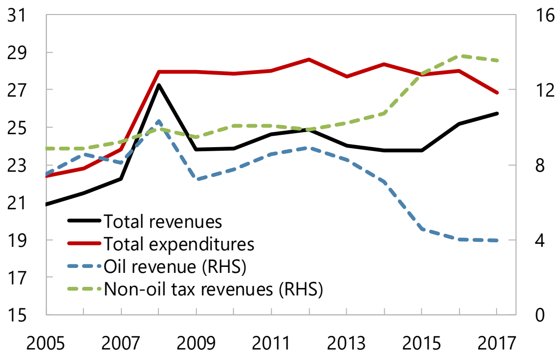


Sources: World Economic Outlook, Balance of Payments Statistics Database; and, IMF staff estimates.

Figure 6. Mexico: Fiscal Sector

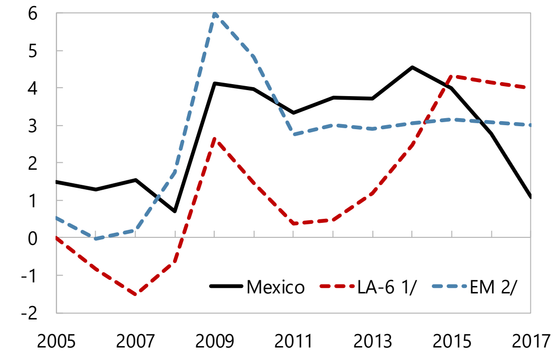
The 2013 tax reform and lower oil production have reduced fiscal dependence on oil…

Public Sector Revenues and expenditures
(In percent of GDP)



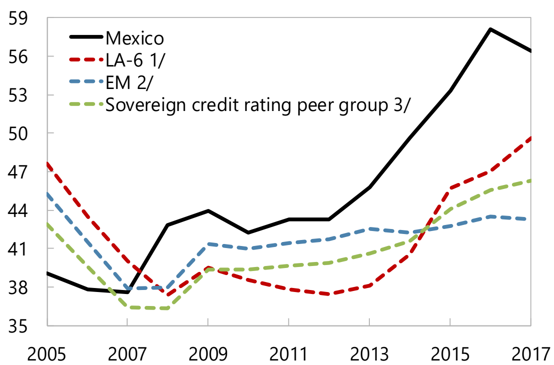
…and narrowed the public sector deficit, together with declining expenditure.

Overall Public Sector Deficit
(In percent of GDP)



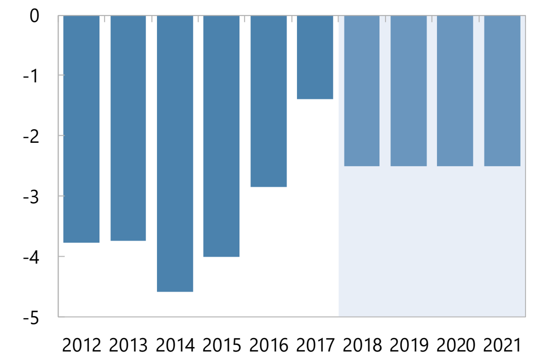
However, public debt has continued to increase in recent years.

Gross Public Sector Debt
(In percent of GDP)



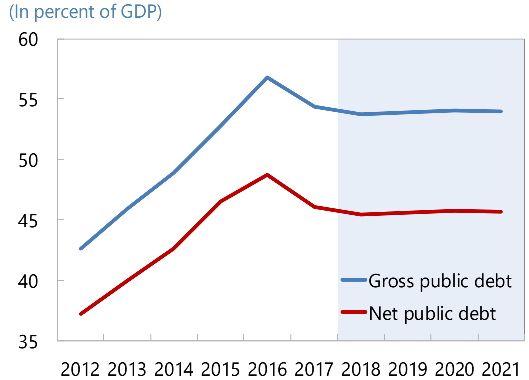
Stabilizing the PSBR at 2.5 percent of GDP…

Fiscal Balance
(In percent of GDP)



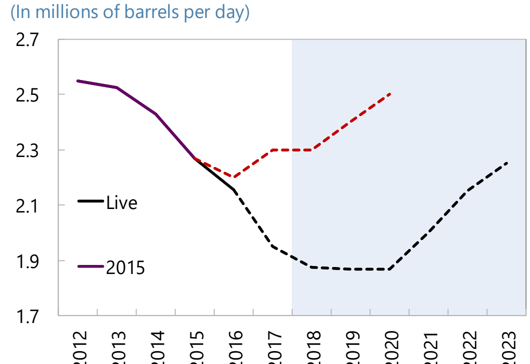
…would stabilize the debt-to-GDP ratio.

Public Sector Debt Path
(In percent of GDP)



Further declines in oil production, however, remain an important fiscal risk.

Oil Production Forecast Vintages
(In millions of barrels per day)

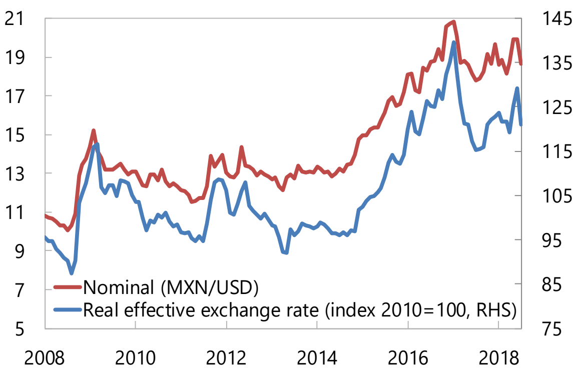


Sources: National authorities, World Economic Outlook, Fitch Ratings; and, Fund staff estimates.
1/ LA-6 excluding Mexico is comprised of Brazil, Chile, Colombia, Peru, and Uruguay.
2/ EM comparator group is comprised of India, Indonesia, Poland, Russia, Thailand, and Turkey.
3/ Fitch sovereign credit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

Figure 7. Financial Sector

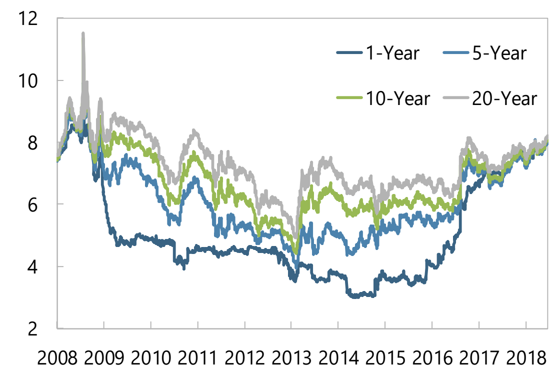
After falling in late 2016/early 2017, the peso appreciated somewhat but remained volatile.

Exchange Rate
(As of September, 2018)



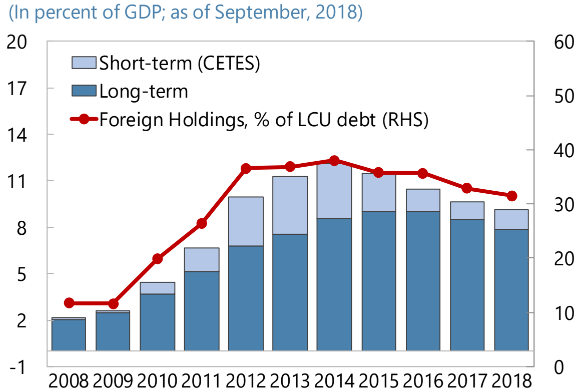
Long-term and government bond yields in local currency have edged up …

Local Government Bonds Yields
(In percent; as of September 21, 2018)



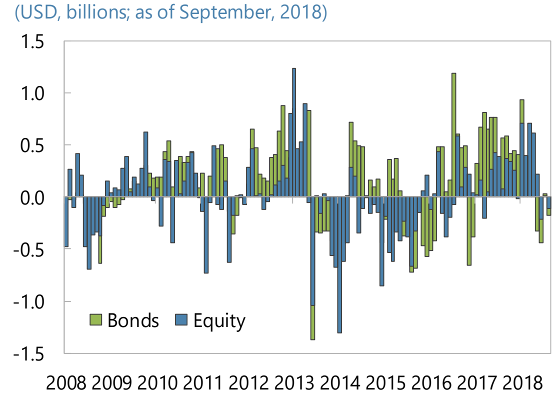
…with the share of foreign holdings in local-currency sovereign debt falling only modestly.

Sovereign Debt Holdings in Local Currency
(In percent of GDP; as of September, 2018)



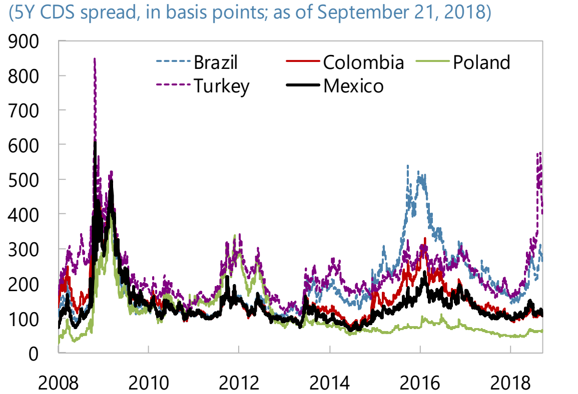
ETF and mutual fund flows have weakened in recent months amid regional and domestic uncertainty but outflows remained contained.

ETFs and Mutual Fund Flows
(USD, billions; as of September, 2018)



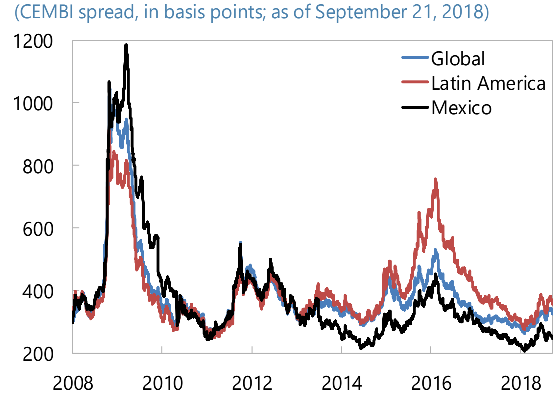
Risk credit spreads on sovereign dollar-denominated debt…

Sovereign Risk Spreads
(5Y CDS spread, in basis points; as of September 21, 2018)



…and on corporate debt have remained stable.

Corporate Risk Spread
(CEMBI spread, in basis points; as of September 21, 2018)

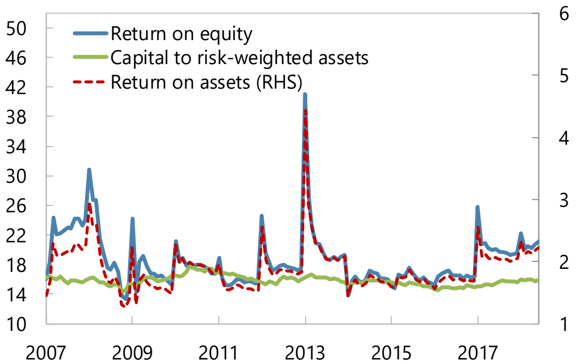


Sources: Bloomberg, Haver Analytics; and, National authorities.

Figure 8. Mexico: Banking Sector

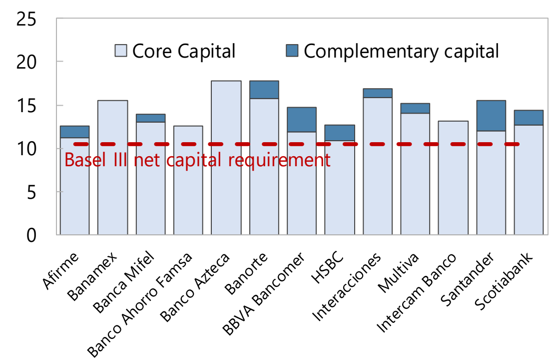
The banking sector remains profitable…

Commercial and Development Banking Sector
(In percent; as of July, 2018)



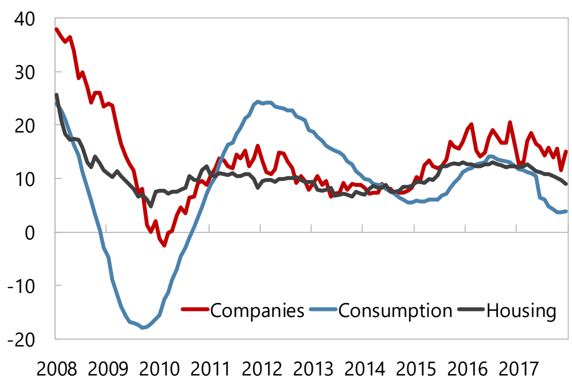
… and well capitalized.

Capital to Risk-Weighted Assets
(In percent; as of June, 2018)



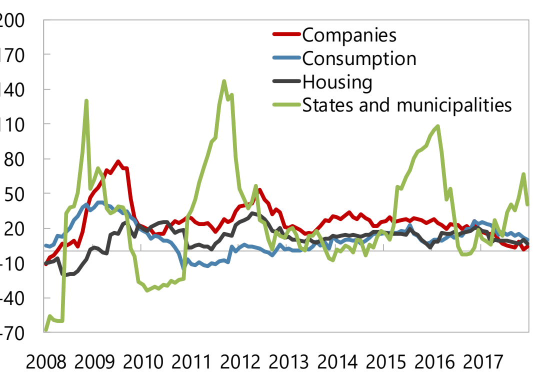
After picking up in late, commercial bank credit growth has moderated…

Commercial Bank Credit Growth by Sector
(Y/Y monthly growth, nominal; as of December, 2017)



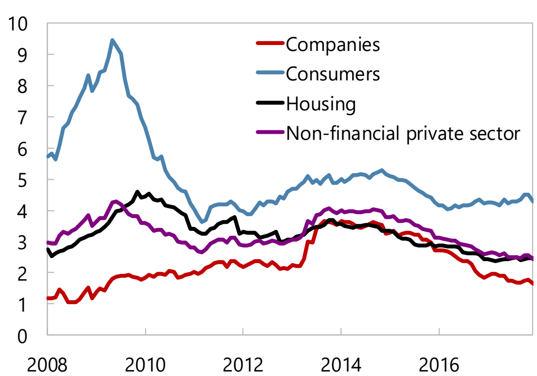
…while development bank consumer credit growth remains strong.

Development Bank Credit Growth by Sector
(Y/Y monthly growth, nominal; as of December, 2017)



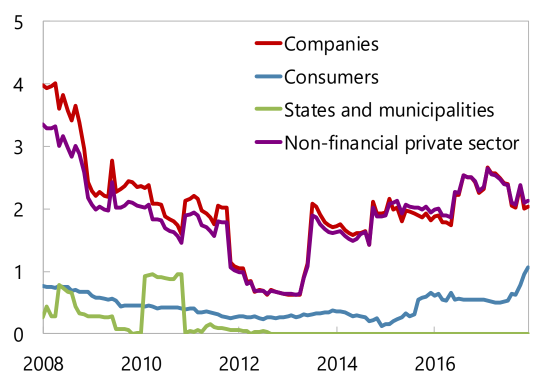
Non-performing loans at commercial banks …

Total Commercial Bank NPLs
(In percent of oustanding loans; as of December, 2017)



…and development banks remain low.

Total Development Bank NPLs
(In percent of oustanding loans; as of December, 2017)

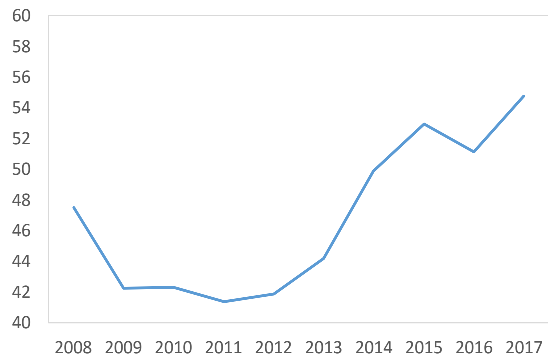


Sources: Bloomberg, Haver Analytics, National authorities; and, IMF staff estimates.

Figure 9. Mexico: Nonfinancial Corporate Sector

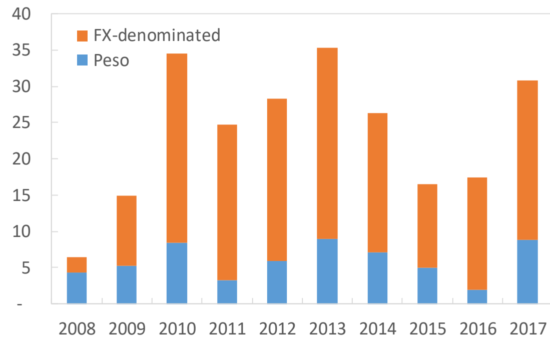
Corporate leverage edged up....

Total Debt to Total Equity
(In percent, median)



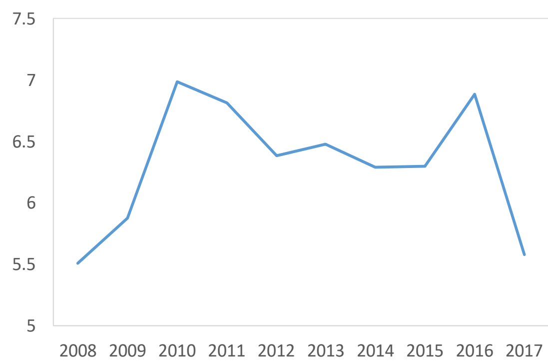
...and bond issuance expanded.

Nonfinancial Corporate Bond Issuance 1/
(In US$ billion)



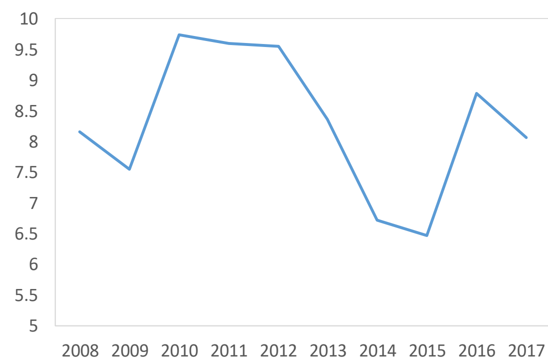
Debt servicing capacity remains strong despite a drop in 2017...

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



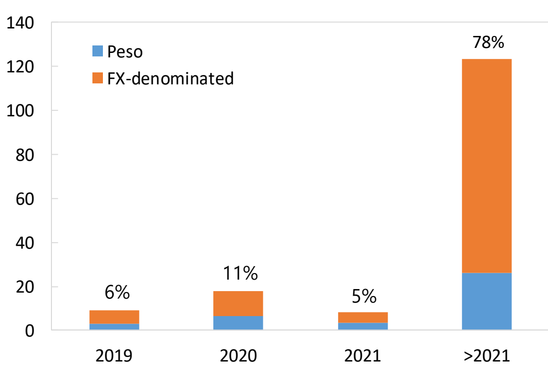
...and profitability has declined slightly.

Return on Equity
(In percent, median)



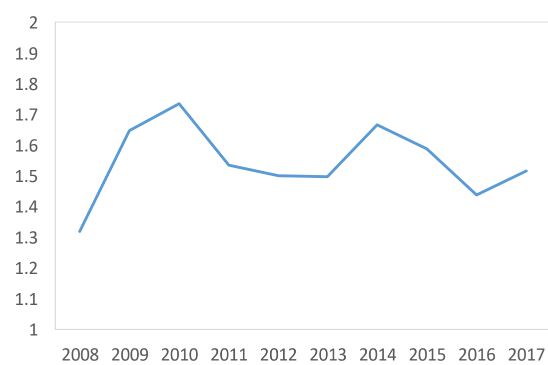
The maturity structure of borrowing has largely been termed out...

Nonfinancial Corporate Bond Maturity Profile
(In US$ billion)



...and corporate liquidity remains good.

Current ratio: Cash and Cash Equivalent to Short Term Debt
(Multiples, median)

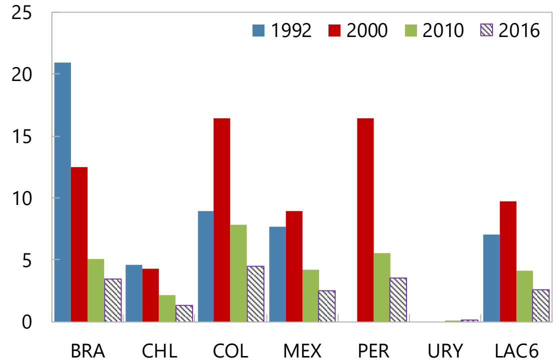


Sources: Bloomberg, Haver Analytics, National authorities; and, IMF staff estimates.
1/ Totals exclude PEMEX and its affiliates.

Figure 10. Mexico: Social Indicators

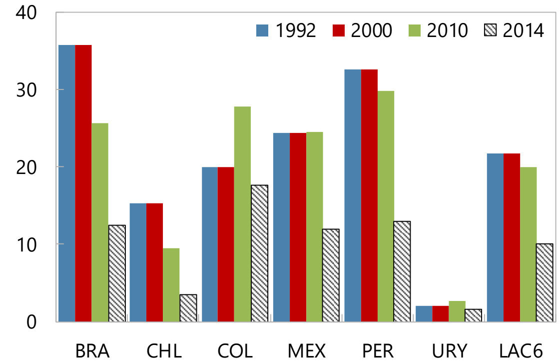
Extreme poverty has declined over the past 25 years.

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



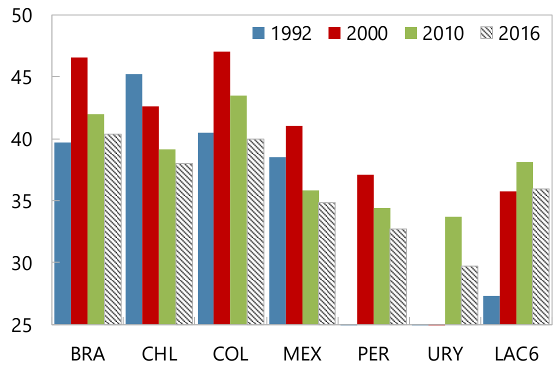
Still, poverty in Mexico remains higher than the LAC6 average.

Poverty Headcount Ratio at $3.10
(2011 PPP, % of population)



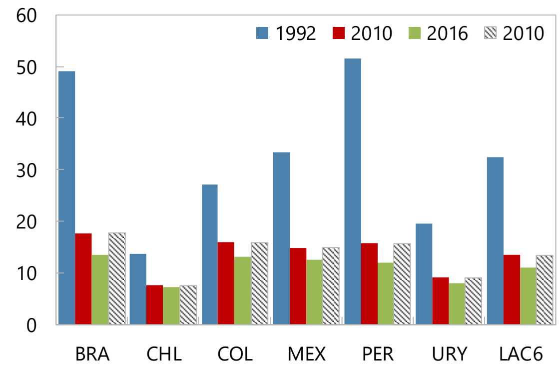
Income inequality is slightly below the regional average.

Income Share Held by Highest 10%



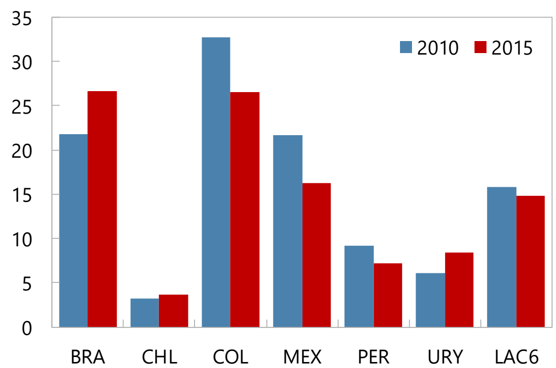
High poverty and inequality go along with higher than average infant mortality rates.

Infant Mortality Rate
(per 1,000 live births)



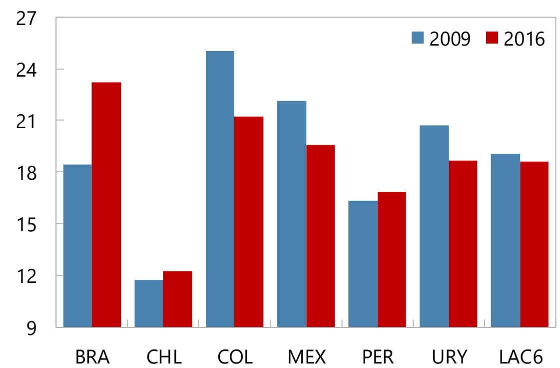
The homicide rate remains high.

Intentional Homicides
(Per 100,000 people)



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

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



Sources: World Development Indicators.

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

I. Social and Demographic Indicators

GDP per capita (U.S. dollars, 2017)	9,318.8	Poverty headcount ratio (% of population, 2016) 1/	43.6
Population (millions, 2017)	123.5	Income share of highest 20 perc. / lowest 20 perc. (2016)	8.8
Life expectancy at birth (years, 2016)	77.1	Adult illiteracy rate (2015)	94.5
Infant mortality rate (per thousand, 2016)	12.6	Gross primary education enrollment rate (2016) 2/	103.9

II. Economic Indicators

					Proj.	
	2014	2015	2016	2017	2018	2019
	(Annual percentage change, unless otherwise indicated)					
National accounts (in real terms)						
GDP	2.8	3.3	2.9	2.0	2.1	2.3
Consumption	2.2	2.6	3.6	2.6	2.9	2.6
Private	2.1	2.7	3.8	3.0	3.0	2.6
Public	2.6	1.9	2.3	0.1	2.5	2.6
Investment	1.7	4.3	1.3	-1.6	1.5	1.9
Fixed	3.1	5.0	1.1	-1.5	1.5	2.0
Private	4.5	8.9	2.0	-0.5	1.4	2.0
Public	-2.3	-10.7	-3.4	-6.6	2.2	2.7
Inventories 3/	-0.3	-0.1	0.1	0.0	0.0	0.0
Exports of goods and services	7.0	8.4	3.5	3.8	6.3	4.0
Imports of goods and services	5.9	5.9	2.9	6.5	5.0	3.8
GDP per capita	1.7	2.2	1.8	1.0	1.1	1.3
External sector						
External current account balance (in percent of GDP)	-1.9	-2.6	-2.2	-1.7	-1.7	-1.8
Exports of goods, f.o.b. 4/	4.4	-4.1	-1.7	9.5	9.6	5.8
Export volume	6.5	7.6	2.3	3.7	6.3	4.0
Imports of goods, f.o.b. 4/	4.9	-1.2	-2.1	8.6	9.6	6.6
Import volume	6.2	6.2	2.9	6.5	5.0	3.8
Net capital inflows (in percent of GDP)	-4.5	-2.3	-3.0	-2.2	-1.9	-1.9
Terms of trade (improvement +)	-0.7	-4.2	0.9	3.4	-1.2	-1.0
Exchange rates						
Real effective exchange rate (CPI based, IFS)						
(average, appreciation +)	-1.0	-10.0	-13.4	2.4	...	...
Nominal exchange rate (MXN/USD)						
(end of period, appreciation +)	-12.6	-16.9	-20.5	4.6	...	...
Employment and inflation						
Consumer prices (end-of-period)	4.1	2.1	3.4	6.8	4.4	3.1
Core consumer prices (end-of-period)	3.2	2.4	3.4	4.9	3.4	3.1
Formal sector employment, IMSS-insured workers (average)	3.5	4.3	3.8	4.4	4.5	...
National unemployment rate (annual average)	4.8	4.3	3.9	3.4	3.5	3.6
Unit labor costs: manufacturing (real terms, average)	-1.2	1.6	3.5	0.7	...	...
Money and credit						
Bank credit to non-financial private sector	6.1	15.6	17.7	13.0	14.0	12.0
Broad money	12.2	12.3	12.5	11.1	9.6	7.9
Public sector finances (in percent of GDP) 5/						
General government revenue	23.4	23.5	24.6	24.8	23.5	21.7
General government expenditure	28.0	27.5	27.4	25.9	26.0	24.2
Overall fiscal balance	-4.5	-4.0	-2.8	-1.1	-2.5	-2.5
Gross public sector debt	48.9	52.8	56.8	54.3	53.1	53.2
Memorandum items						
Nominal GDP (billions of pesos)	17,473.8	18,551.5	20,115.8	21,785.3	23,386.7	24,762.5
Output gap	-0.1	0.7	1.0	0.4	-0.1	-0.4

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/ 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)

	2014	2015	2016	2017	Proj. 2018	2019	2020	2021	2022	2023
Budgetary revenue, by type	**22.8**	**23.0**	**24.1**	**22.7**	**21.5**	**20.4**	**20.4**	**20.4**	**20.5**	**20.5**
Oil revenue	7.0	4.5	3.9	3.8	4.3	3.8	3.7	3.7	3.7	3.7
Non-oil tax revenue	10.3	12.8	13.5	13.1	13.1	12.7	12.7	12.7	12.7	12.7
Non-oil non-tax revenue 2/	5.5	5.7	6.7	5.8	4.1	4.0	4.0	4.0	4.1	4.1
Budgetary revenue, by entity	**22.8**	**23.0**	**24.1**	**22.7**	**21.5**	**20.4**	**20.4**	**20.4**	**20.5**	**20.5**
Federal government revenue	16.5	17.1	17.8	17.6	16.2	15.7	15.7	15.6	15.6	15.7
Tax revenue, *of which:*	10.3	12.8	13.5	13.1	13.1	12.7	12.7	12.7	12.7	12.7
Excises (including fuel)	0.6	1.9	2.0	1.7	1.5	1.6	1.6	1.6	1.6	1.6
Nontax revenue	6.2	4.4	4.3	4.5	3.2	3.0	3.0	3.0	3.0	3.0
Public enterprises	6.3	5.9	6.3	5.1	5.2	4.7	4.8	4.8	4.9	4.9
PEMEX	2.5	2.3	2.4	1.8	1.9	1.4	1.5	1.5	1.5	1.5
Other	3.7	3.5	3.9	3.3	3.4	3.3	3.3	3.3	3.4	3.4
Budgetary expenditure	**25.9**	**26.4**	**26.6**	**23.8**	**23.5**	**22.4**	**22.4**	**22.5**	**22.5**	**22.6**
Primary	23.9	24.2	24.2	21.3	20.7	19.8	19.9	20.0	20.0	20.1
Programmable	20.5	20.6	20.7	17.7	16.8	16.2	16.2	16.3	16.3	16.3
Current	15.3	15.6	14.8	14.1	13.8	13.4	13.4	13.4	13.4	13.4
Wages	5.8	5.8	5.5	5.3	5.2	5.2	5.2	5.2	5.2	5.2
Pensions 3/	3.0	3.2	3.2	3.2	3.5	3.5	3.5	3.5	3.5	3.5
Subsidies and transfers	3.6	3.6	3.4	2.9	2.6	2.6	2.6	2.6	2.6	2.6
Other	2.9	3.0	2.7	2.7	2.5	2.1	2.1	2.1	2.1	2.1
Capital	5.1	5.0	5.9	3.6	3.0	2.8	2.8	2.9	2.9	2.9
Physical capital	4.7	4.2	3.6	2.6	2.7	2.7	2.8	2.9	2.9	2.9
Financial capital 4/	0.4	0.9	2.3	1.0	0.4	0.1	0.1	0.1	0.1	0.1
Nonprogrammable	3.5	3.5	3.6	3.6	3.9	3.7	3.7	3.7	3.7	3.8
Of which: revenue sharing	3.3	3.4	3.4	3.5	3.6	3.4	3.5	3.6	3.6	3.6
Interest payments	**2.0**	**2.2**	**2.4**	**2.4**	**2.7**	**2.7**	**2.7**	**2.7**	**2.7**	**2.7**
Unidentified measures	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**-0.1**	**-0.1**	**-0.2**	**-0.2**	**-0.2**
Traditional balance	**-3.1**	**-3.4**	**-2.5**	**-1.1**	**-2.0**	**-2.0**	**-2.0**	**-2.0**	**-2.0**	**-2.0**
Adjustments to the traditional balance	**-1.4**	**-0.6**	**-0.3**	**0.0**	**-0.5**	**-0.5**	**-0.5**	**-0.5**	**-0.5**	**-0.5**
Public Sector Borrowing Requirements	**4.5**	**4.0**	**2.8**	**1.1**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**
Memorandum items										
Structural current spending 5/	12.0	12.0	11.1	10.9						
Structural current spending real growth (y/y, in percent)	7.0	3.3	-5.0	0.4						

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

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

2/ Includes revenues from the oil-price hedge for 0.6 percent of GDP in 2015 and 0.3 percent of GDP in 2016; and Bank of Mexico's operating surplus transferred to the federal government for 0.2 percent of GDP in 2015, 1.2 percent of GDP in 2016, and 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-programable 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)

	2014	2015	2016	2017	Proj. 2018	2019	2020	2021	2022	2023
Revenue	**23.4**	**23.5**	**24.6**	**24.8**	**23.5**	**21.7**	**21.8**	**21.7**	**21.7**	**21.8**
Taxes	**10.6**	**12.8**	**13.5**	**13.1**	**13.1**	**12.7**	**12.7**	**12.7**	**12.7**	**12.7**
Taxes on income, profits and capital gains	5.5	6.6	7.1	7.2	7.1	6.6	6.6	6.6	6.6	6.6
Taxes on goods and services	4.7	5.7	6.0	5.5	5.6	5.6	5.7	5.7	5.7	5.7
Value added tax	3.8	3.8	3.9	3.7	4.1	4.1	4.1	4.1	4.1	4.1
Excises	0.9	1.9	2.0	1.7	1.5	1.6	1.6	1.6	1.6	1.6
Taxes on international trade and transactions	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Other taxes	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Social contributions	**2.1**	**2.2**	**2.1**	**2.1**	**2.1**	**2.0**	**2.0**	**2.0**	**2.1**	**2.0**
Other revenue	**10.7**	**8.6**	**9.0**	**9.6**	**8.3**	**7.0**	**7.1**	**7.0**	**6.9**	**7.0**
Property income 2/	6.1	4.3	4.1	4.6	3.0	2.9	2.9	2.8	2.8	2.8
Other	4.6	4.3	4.8	5.0	5.3	4.1	4.2	4.2	4.1	4.2
Total expenditure	**28.0**	**27.5**	**27.4**	**25.9**	**26.0**	**24.2**	**24.3**	**24.2**	**24.2**	**24.3**
Expense	**24.7**	**24.7**	**24.7**	**24.2**	**24.2**	**22.5**	**22.5**	**22.5**	**22.4**	**22.5**
Compensation of employees	3.8	3.7	3.5	3.4	3.4	3.3	3.3	3.3	3.3	3.3
Purchases of goods and services	3.4	3.8	3.8	3.3	3.1	2.6	2.6	2.6	2.6	2.6
Interest 3/	3.0	3.0	3.3	4.1	3.8	3.6	3.5	3.5	3.5	3.5
Subsidies	2.4	2.0	2.0	1.9	1.5	1.5	1.5	1.5	1.5	1.5
o/w fuel subsidy	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Grants 4/	9.0	9.0	8.6	8.3	8.3	8.1	8.3	8.3	8.3	8.3
Social benefits	3.0	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
Other expense	0.1	-0.1	0.2	0.1	0.9	0.0	0.0	0.0	0.0	0.0
Net acquisition of nonfinancial assets 5/	**3.2**	**2.9**	**2.7**	**1.6**	**1.7**	**1.7**	**1.7**	**1.7**	**1.7**	**1.7**
Gross Operating Balance	**-1.3**	**-1.1**	**-0.1**	**0.6**	**-0.8**	**-0.8**	**-0.8**	**-0.8**	**-0.8**	**-0.8**
Overall Fiscal Balance (Net lending/borrowing)	**-4.5**	**-4.0**	**-2.8**	**-1.1**	**-2.5**	**-2.5**	**-2.5**	**-2.5**	**-2.5**	**-2.5**
Primary net lending/borrowing	**-1.5**	**-1.0**	**0.6**	**3.0**	**1.3**	**1.1**	**1.0**	**1.0**	**1.0**	**1.0**
Memorandum items										
Primary expenditure	24.9	24.5	24.0	21.8	22.2	20.6	20.7	20.8	20.7	20.8
Current expenditure	24.7	24.7	24.7	24.2	24.2	22.5	22.5	22.5	22.4	22.5
Structural fiscal balance	-4.7	-4.5	-4.0	-2.4	-2.6	-2.5	-2.5	-2.5	-2.5	-2.5
Structural primary balance 6/	-1.7	-1.5	-0.7	1.7	1.2	1.1	1.0	0.9	0.9	1.0
Fiscal impulse 7/	0.6	-0.2	-0.8	-2.4	0.5	0.1	0.1	0.1	0.0	0.0
Gross public sector debt 8/	48.9	52.8	56.8	54.3	53.1	53.2	53.4	53.4	53.4	53.4
In domestic currency (percentage of total debt)	74.0	70.9	66.3	66.7	65.8	65.2	65.1	65.3	64.6	64.5
In foreign currency (percentage of total debt)	26.0	29.1	33.7	33.3	34.2	34.8	34.9	34.7	35.4	35.5
Net public sector debt 9/	42.6	46.5	48.7	46.0	44.8	44.9	45.1	45.1	45.1	45.1

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.

2/ Includes revenues from the oil-price hedge for 0.6 percent of GDP in 2015 and 0.3 percent of GDP in 2016, treated as revenues from an insurance claim. It includes also Bank of Mexico's operating surplus transferred to the federal government for 0.2 percent of GDP in 2015, 1.2 percent of GDP in 2016, and 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)

					Proj.					
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Current account	**-24.6**	**-30.3**	**-23.9**	**-19.5**	**-20.7**	**-23.2**	**-25.2**	**-26.6**	**-28.6**	**-30.0**
Merchandise goods trade balance	-3.1	-14.7	-13.1	-11.0	-12.0	-16.7	-16.8	-15.1	-13.2	-12.1
Exports, f.o.b. 2/	396.9	380.5	373.9	409.4	448.7	474.5	502.7	529.9	567.1	600.4
o/w Manufactures	337.3	340.0	336.1	364.4	394.5	417.8	436.8	457.7	481.0	505.3
o/w Petroleum and derivatives 1/	42.4	23.1	18.8	23.7	29.9	28.0	27.1	28.7	30.4	31.5
Imports, f.o.b. 2/	400.0	395.2	387.1	420.4	460.7	491.2	519.5	545.0	580.4	612.5
o/w Petroleum and derivatives 1/	41.5	33.3	31.6	42.0	50.3	50.1	49.0	48.7	48.9	49.7
Services, net	-13.3	-9.7	-8.9	-9.8	-9.5	-9.7	-10.8	-11.5	-12.5	-13.4
Primary income, net	-31.3	-30.1	-28.4	-28.3	-30.6	-29.2	-31.5	-35.9	-40.8	-44.2
Secondary income (mostly remittances), net	22.8	24.1	26.5	29.7	31.3	32.5	33.9	35.9	37.9	39.8
Capital Account, net	**0.0**	**-0.1**	**0.0**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**
Financial Account (Net lending (+)/Net borrowing (-))	**-43.1**	**-43.1**	**-32.3**	**-29.7**	**-20.6**	**-23.0**	**-25.1**	**-26.5**	**-28.4**	**-29.8**
Foreign direct investment, net	-24.0	-24.5	-28.8	-28.7	-29.4	-29.8	-33.7	-36.5	-39.6	-44.6
Net acquisition of financial assets	7.0	12.3	6.7	3.4	3.4	3.5	3.5	3.5	3.5	3.5
Net incurrence of liabilities	31.0	36.8	35.4	32.1	32.7	33.3	37.2	40.0	43.1	48.1
Portfolio investment, net	-48.6	-25.0	-31.2	-8.1	-18.6	-11.3	-11.3	-15.2	-15.3	-15.2
Net acquisition of financial assets	0.7	-4.5	-1.6	15.8	2.0	6.0	5.0	4.0	2.5	2.0
Net incurrence of liabilities	49.2	20.5	29.7	24.0	20.6	17.3	16.3	19.2	17.8	17.2
Public Sector	36.0	16.9	21.4	5.8	15.5	11.5	11.0	13.9	12.5	11.9
o/w Local currency domestic-issued bonds	23.1	1.3	-1.5	-0.3	3.0	6.0	5.0	6.9	6.0	5.5
Private sector	13.2	3.6	8.2	18.2	5.1	5.8	5.3	5.3	5.3	5.3
Securities issued abroad	8.4	0.0	-1.2	7.9	1.1	3.3	3.3	3.3	3.3	3.3
Equity	4.8	3.6	9.5	10.3	0.0	0.0	0.0	0.0	0.0	0.0
Pidiregas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial derivatives, net	0.8	-4.6	-0.4	4.0	0.0	0.0	0.0	0.0	0.0	0.0
Other investments, net	12.3	26.6	28.3	8.0	24.8	16.5	13.4	18.7	19.9	23.4
Net acquisition of financial assets	16.6	26.4	24.8	5.5	31.6	18.5	15.4	20.7	21.9	25.4
Net incurrence of liabilities	4.3	-0.3	-3.5	-2.4	6.8	2.0	2.0	2.0	2.0	2.0
Change in Reserves Assets	16.3	-15.7	-0.1	-4.8	2.5	1.5	6.5	6.5	6.5	6.5
Total change in gross reserves assets	15.5	-18.1	0.4	-2.6	2.5	1.5	6.5	6.5	6.5	6.5
Valuation change	0.8	2.4	-0.6	-2.2	0.0	0.0	0.0	0.0	0.0	0.0
Errors and Omissions	**-18.5**	**-12.7**	**-8.4**	**-10.4**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
International Investment Position, net	**-602.4**	**-601.0**	**-530.9**	**-557.5**	**-575.1**	**-598.1**	**-623.2**	**-649.7**	**-678.1**	**-707.9**
Memorandum items										
Hydrocarbons exports volume growth (in percent)	-4.2	2.7	2.0	1.2	-0.1	-6.5	1.3	10.6	9.7	5.4
Non-hydrocarbons exports volume growth (in percent)	6.9	7.7	2.3	3.8	6.5	4.3	4.2	4.7	4.7	4.8
Hydrocarbons imports volume growth (in percent)	-4.4	16.0	15.5	12.3	8.0	2.8	2.6	3.1	2.7	2.8
Non-hydrocarbons imports volume growth (in percent)	6.5	6.0	2.6	6.3	4.9	3.8	4.6	4.8	5.0	5.0
Crude oil export volume (in millions of bbl/day)	1.1	1.2	1.2	1.2	1.1	1.1	1.1	1.2	1.3	1.4
Gross international reserves (in billions of U.S. dollars)	195.7	177.6	178.0	175.4	178.0	179.5	186.1	192.6	199.1	205.7
Gross domestic product (in billions of U.S. dollars)	1,314.6	1,170.6	1,077.8	1,151.0	1,227.8	1,294.3	1,359.8	1,433.2	1,509.9	1,590.2

Sources: Bank of Mexico, Ministry of Finance and Public Credit, 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)

					Proj.					
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Current account	**-1.9**	**-2.6**	**-2.2**	**-1.7**	**-1.7**	**-1.8**	**-1.9**	**-1.9**	**-1.9**	**-1.9**
Merchandise goods trade balance	-0.2	-1.3	-1.2	-1.0	-1.0	-1.3	-1.2	-1.1	-0.9	-0.8
Exports, f.o.b. 2/	30.2	32.5	34.7	35.6	36.5	36.7	37.0	37.0	37.6	37.8
o/w Manufactures	25.7	29.0	31.2	31.7	32.1	32.3	32.1	31.9	31.9	31.8
o/w Petroleum and derivatives 1/	3.2	2.0	1.7	2.1	2.4	2.2	2.0	2.0	2.0	2.0
Imports, f.o.b. 2/	30.4	33.8	35.9	36.5	37.5	38.0	38.2	38.0	38.4	38.5
o/w Petroleum and derivatives 1/	3.2	2.8	2.9	3.6	4.1	3.9	3.6	3.4	3.2	3.1
Services, net	-1.0	-0.8	-0.8	-0.9	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8
Primary income, net	-2.4	-2.6	-2.6	-2.5	-2.5	-2.3	-2.3	-2.5	-2.7	-2.8
Secondary income (mostly remittances), net	1.7	2.1	2.5	2.6	2.6	2.5	2.5	2.5	2.5	2.5
Capital Account, net	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Financial Account (Net lending (+)/Net borrowing (-))	**-3.3**	**-3.7**	**-3.0**	**-2.6**	**-1.7**	**-1.8**	**-1.8**	**-1.8**	**-1.9**	**-1.9**
Foreign direct investment, net	-1.8	-2.1	-2.7	-2.5	-2.4	-2.3	-2.5	-2.5	-2.6	-2.8
Net acquisition of financial assets	0.5	1.1	0.6	0.3	0.3	0.3	0.3	0.2	0.2	0.2
Net incurrence of liabilities	2.4	3.1	3.3	2.8	2.7	2.6	2.7	2.8	2.9	3.0
Portfolio investment, net	-3.7	-2.1	-2.9	-0.7	-1.5	-0.9	-0.8	-1.1	-1.0	-1.0
Net acquisition of financial assets	0.1	-0.4	-0.1	1.4	0.2	0.5	0.4	0.3	0.2	0.1
Net incurrence of liabilities	3.7	1.7	2.8	2.1	1.7	1.3	1.2	1.3	1.2	1.1
Public Sector	2.7	1.4	2.0	0.5	1.3	0.9	0.8	1.0	0.8	0.7
o/w Local currency domestic-issued bonds	1.8	0.1	-0.1	0.0	0.2	0.5	0.4	0.5	0.4	0.3
Private sector	1.0	0.3	0.8	1.6	0.4	0.4	0.4	0.4	0.4	0.3
Securities issued abroad	0.6	0.0	-0.1	0.7	0.1	0.3	0.2	0.2	0.2	0.2
Equity	0.4	0.3	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
Pidiregas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial derivatives, net	0.1	-0.4	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Other investments, net	0.9	2.3	2.6	0.7	2.0	1.3	1.0	1.3	1.3	1.5
Net acquisition of financial assets	1.3	2.3	2.3	0.5	2.6	1.4	1.1	1.4	1.5	1.6
Net incurrence of liabilities	0.3	0.0	-0.3	-0.2	0.6	0.2	0.1	0.1	0.1	0.1
Change in Reserves Assets	1.2	-1.3	0.0	-0.4	0.2	0.1	0.5	0.5	0.4	0.4
Total change in gross reserves assets	1.2	-1.5	0.0	-0.2	0.2	0.1	0.5	0.5	0.4	0.4
Valuation change	0.1	0.2	-0.1	-0.2	0.0	0.0	0.0	0.0	0.0	0.0
Errors and Omissions	**-1.4**	**-1.1**	**-0.8**	**-0.9**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
International Investment Position, net	**-45.8**	**-51.3**	**-49.3**	**-48.4**	**-46.8**	**-46.2**	**-45.8**	**-45.3**	**-44.9**	**-44.5**

Sources: Bank of Mexico, Ministry of Finance and Public Credit, 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)

	2015	2016	2017	2018	Latest data available 1/
Capital Adequacy					
Regulatory capital to risk-weighted assets	15.0	14.9	15.6	15.6	July
Regulatory Tier 1 capital to risk-weighted assets	13.3	13.2	14.2	14.0	July
Capital to assets	10.4	9.9	10.4	10.5	July
Gross asset position in financial derivatives to capital	61.1	91.8	71.1	64.6	July
Gross liability position in financial derivatives to capital	65.1	96.5	76.0	64.3	July
Asset Quality					
Nonperforming loans to total gross loans	2.5	2.1	2.1	2.1	July
Provisions to Nonperforming loans	140.5	157.1	154.8	150.7	July
Earnings and Profitability					
Return on assets	1.6	1.7	2.0	2.2	July
Return on equity	15.4	16.3	19.6	20.7	July
Liquidity					
Liquid assets to short-term liabilities	45.5	42.4	42.2	42.4	July
Liquid assets to total assets	34.6	31.4	32.0	31.8	July
Customer deposits to total (noninterbank) loans	87.7	88.9	91.4	87.8	July
Trading income to total income	3.3	4.4	5.0	5.3	July

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

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

	2015	2016	2017	2018	Latest data available
Financial market indicators					
Exchange rate (per U.S. dollar, average)	17.2	20.7	19.8	19.0	Sep-18
(year-to-date percent change, + appreciation)	-16.9	-20.5	4.6	-1.1	Sep-18
28-day treasury auction rate (percent; period average)	3.0	4.1	6.7	7.5	Sep-18
EMBIG Mexico spread (basis points; period average)	250.9	303.5	256.0	259.8	Sep-18
Sovereign 10-year local currency bond yield (period average)	6.0	6.2	7.2	7.7	Sep-18
Stock exchange index (period average, year on year percent change)	3.1	3.8	7.5	-1.9	Sep-18
Financial system					
Bank of Mexico net international reserves (US$ billion)	176.7	176.5	172.8	175.3	Proj.
Bank credit to non-financial private sector (year on year percent change)	15.6	17.7	13.0	14.0	Proj.
Nonperforming loans to total gross loans	2.5	2.1	2.1	2.1	Jul-18
External vulnerability indicators					
Gross financing needs (billions of US$)	121.0	123.3	95.2	95.2	Proj.
Gross international reserves (end-year, billions of US$) 2/	177.6	178.0	175.4	178.0	Jun-18
Change (billions of US$)	-18.1	0.4	-2.6	0.4	Jun-18
Months of imports of goods and services	5.0	5.1	4.7	4.8	Proj.
Months of imports plus interest payments	4.8	4.9	4.5	4.6	Proj.
Percent of broad money	38.7	40.3	43.0	38.0	Proj.
Percent of portfolio liabilities	37.7	39.7	35.1	35.6	Proj.
Percent of short-term debt (by residual maturity)	185.2	234.7	264.8	264.8	Proj.
Percent of ARA Metric 3/	125.8	134.4	122.2	122.2	Proj.
Percent of GDP	15.2	16.5	15.2	14.7	Jun-18
Gross total external debt (in percent of GDP)	35.7	38.5	38.1	38.5	Proj.
Of which: In local currency	10.5	9.5	9.3	9.0	Proj.
Of which: Public debt	24.0	25.9	25.8	25.6	Proj.
Of which: Private debt	11.7	12.6	12.3	12.9	Proj.
Financial sector	1.3	1.3	1.0		
Nonfinancial sector	10.5	11.3	11.4		
Gross total external debt (billions of US$)	418.3	414.6	438.6	472.1	Proj.
Of which: In local currency	123.3	102.1	107.2	110.2	Proj.
Of which: Public debt	281.0	278.7	296.6	313.9	Proj.
Of which: Private debt	137.3	135.9	142.0	158.2	Proj.
Financial sector	16.3	15.5	14.0		
Nonfinancial sector	121.1	120.5	128.0		
External debt service (in percent of GDP)	10.7	10.8	8.5	7.2	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/ Average.

2/ 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.

3/ 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

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
					Proj.					
	(Annual percentage change, unless otherwise noted)									
National accounts (in real terms)										
GDP	2.8	3.3	2.9	2.0	2.1	2.3	2.6	2.9	2.9	2.9
Consumption	2.2	2.6	3.6	2.6	2.9	2.6	2.4	2.4	2.5	2.5
Private	2.1	2.7	3.8	3.0	3.0	2.6	2.4	2.4	2.5	2.5
Public	2.6	1.9	2.3	0.1	2.5	2.6	2.6	2.6	2.6	2.6
Investment	1.7	4.3	1.3	-1.6	1.5	1.9	3.9	4.7	4.7	4.6
Fixed	3.1	5.0	1.1	-1.5	1.5	2.0	4.1	4.9	4.9	4.7
Private	4.5	8.9	2.0	-0.5	1.4	2.0	4.3	5.1	5.1	4.9
Public	-2.3	-10.7	-3.4	-6.6	2.2	2.7	2.7	3.7	3.7	3.7
Inventories 1/	-0.3	-0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exports of goods and services	7.0	8.4	3.5	3.8	6.3	4.0	4.2	4.8	4.8	4.8
Oil exports	-4.2	2.7	2.0	1.2	-0.1	-6.5	1.3	10.6	9.7	5.4
Non-oil exports	7.3	8.6	3.5	3.9	6.5	4.2	4.2	4.7	4.7	4.8
Imports of goods and services	5.9	5.9	2.9	6.5	5.0	3.8	4.5	4.7	4.9	4.9
Oil imports	-4.4	16.0	15.5	12.3	8.0	2.8	2.6	3.1	2.7	2.8
Non-oil imports	6.2	5.7	2.6	6.1	2.7	4.5	4.8	5.0	4.9	4.8
Net exports 1/	0.3	0.7	0.2	-0.9	0.4	0.1	-0.1	0.0	-0.1	-0.1
Consumer prices										
End of period	4.1	2.1	3.4	6.8	4.4	3.1	3.0	3.0	3.0	3.0
Average	4.0	2.7	2.8	6.0	4.8	3.6	3.0	3.0	3.0	3.0
External sector										
Current account balance (in percent of GDP)	-1.9	-2.6	-2.2	-1.7	-1.7	-1.8	-1.9	-1.9	-1.9	-1.9
Non-hydrocarbon current account balance (in percent of GDP)	-1.9	-1.7	-1.0	-0.1	0.0	-0.1	-0.2	-0.5	-0.7	-0.7
Exports of goods, f.o.b.	4.4	-4.1	-1.7	9.5	9.6	5.8	5.9	5.4	7.0	5.9
Imports of goods, f.o.b.	4.9	-1.2	-2.1	8.6	9.6	6.6	5.8	4.9	6.5	5.5
Terms of trade (improvement +)	-0.7	-4.2	0.9	3.4	-1.2	-1.0	0.5	0.4	0.7	0.4
Crude oil export price, Mexican mix (US$/bbl)	87.7	44.3	35.8	46.4	60.7	60.1	57.4	55.1	53.6	52.6
	(In percent of GDP)									
Non-financial public sector										
Overall balance	-4.5	-4.0	-2.8	-1.1	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5
Primary balance	-1.5	-1.0	0.6	3.0	1.3	1.1	1.0	1.0	1.0	1.0
Saving and investment 2/										
Gross domestic investment	21.9	23.3	23.7	23.1	23.1	23.1	23.2	23.5	23.7	23.9
Fixed investment	21.0	22.5	22.9	22.3	22.4	22.4	22.6	22.9	23.1	23.4
Public	4.1	3.6	3.5	3.2	3.4	3.4	3.4	3.4	3.4	3.4
Private	16.9	18.9	19.5	19.1	19.0	19.0	19.2	19.4	19.7	19.9
Gross domestic saving	20.0	20.7	21.5	21.4	21.4	21.3	21.4	21.6	21.8	22.0
Public	-0.4	-0.4	0.7	2.1	0.9	0.9	0.9	0.9	0.9	0.9
Private	20.4	21.0	20.8	19.2	20.5	20.3	20.4	20.7	20.9	21.1
	(Percent growth, unless otherwise noted)									
Memorandum items										
Bank credit to non-financial private sector	6.1	15.6	17.7	13.0	14.0	12.0	10.5	10.5	10.5	10.5
Output gap (in percent of potential GDP)	-0.1	0.7	1.0	0.4	-0.1	-0.4	-0.4	-0.1	0.0	0.0
Total population	1.1	1.1	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9
Working-age population 3/	1.9	1.8	1.6	1.6	1.5	1.5	1.4	1.3	1.3	1.2

Sources: Bank of Mexico, National Institute of Statistics and Geography, Ministry of Finance and Public Credit, 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

	2014	2015	2016	2017	Proj. 2018
Banco de México					
Net foreign assets	2,847	3,019	3,619	3,392	3,472
Net international reserves	2,896	3,074	3,682	3,457	3,538
Gross international reserves	2,897	3,075	3,683	3,458	3,539
Reserve liabilities	1	1	1	1	1
Other net foreign assets	-50	-55	-63	-65	-66
Net domestic assets	-1,784	-1,777	-2,198	-1,846	-1,676
Net domestic credit	-1,647	-1,293	-1,413	-1,627	-1,661
Net credit to non-financial public sector	-1,563	-1,543	-1,221	-1,516	-1,627
Credit to non-financial private sector	0	0	0	0	0
Net credit to financial corporations	-84	250	-192	-112	-34
Net claims on other depository corporations	-101	250	-192	-112	-39
Net claims on other financial corporations	17	0	0	0	4
Capital account	72	419	715	153	-52
Other items net	-65	-66	-70	-65	-67
Monetary base	1,063	1,242	1,420	1,546	1,796
Other Depository Corporations					
Net foreign assets	-11	6	23	92	101
Foreign assets	637	700	650	771	845
Foreign liabilities	648	694	627	679	744
Net domestic assets	5,873	6,304	7,079	7,805	9,077
Net credit to the public sector	2,826	2,835	2,854	3,071	3,331
Claims on non-financial public sector	3,148	3,217	3,272	3,526	3,819
in pesos	3,054	3,115	3,120	3,374	3,660
in FX	94	103	152	152	159
Liabilities to the nonfinancial public sector	322	382	418	455	488
Credit to the private sector	3,833	4,432	5,215	5,896	6,721
Local Currency	3,395	3,843	4,499	5,173	5,897
Foreign Currency	438	589	716	723	824
Net credit to the financial system	686	475	878	967	751
Other	-1,472	-1,438	-1,868	-2,128	-1,726
Liabilities to the private sector	5,862	6,310	7,102	7,898	9,178
Liquid liabilities	5,093	5,675	6,345	7,079	8,245
Local currency	4,816	5,294	5,780	6,384	7,453
Foreign currency	277	381	565	694	791
Non liquid liabilities	769	635	757	819	934
Local currency	754	604	730	786	896
Foreign currency	15	31	26	33	37
Total Banking System					
Net foreign assets	2,836	3,025	3,642	3,484	3,573
Net domestic assets	4,090	4,527	4,880	5,959	7,401
Liquid liabilities	6,156	6,917	7,766	8,625	10,041
Non-liquid liabilities	769	635	757	819	934
Memorandum items					
Monetary base (percent change)	15.8	16.8	14.4	8.8	16.2
Currency in circulation (percent change)	17.1	17.2	16.0	8.8	16.2
Broad money (percent change)	12.2	12.3	12.5	11.1	9.6
Bank credit to the non-financial private sector (growth rate)	6.1	15.6	17.7	13.0	14.0
Bank credit to the non-financial private sector (as percent of GDP)	21.9	23.9	25.9	27.1	28.7

Source: Bank of Mexico, National Institute of Statistics and Geography and Fund staff estimates.
1/ Data of the monetary sector are prepared based on the IMF's methodological criteria and do not necessarily coincide with the definitions published by Bank of Mexico.

Annex I. Risk Assessment Matrix

Potential Deviations from Baseline

Source of Risk	Type	Up/ Downside	Relative Likelihood[1,2]	Impact[2]	Policy Response
Sharp tightening of global financial conditions causes higher debt service and refinancing risks; stress on leveraged firms, households, and vulnerable sovereigns; capital account pressures; and a broad-based downturn. Tighter financial conditions could be triggered by a sharper-than-expected increase in U.S. interest rates (prompted by higher-than-expected inflation) or the materialization of other risks.	External	↓	H	H	Exchange rate flexibility and provision of liquidity to mitigate disorderly market conditions.
Unsustainable macroeconomic policies. Policies in systemically important countries to boost near-term activity beyond sustainable levels (due to domestic political pressures or in response to external policy spillovers) exacerbate underlying vulnerabilities and, in some cases, backfire by hurting confidence and global growth.	External	↓	M	H	Exchange rate flexibility would be critical to restore equilibrium. Temporary FX interventions and liquidity provision could help smooth extreme volatility. Steadfast implementation of structural reforms to boost growth potential.
Rising protectionism and retreat from multilateralism. Global imbalances and fraying consensus about the benefits of globalization lead to escalating and sustained trade actions and spreading isolationism. This threatens the global trade system, regional integration, labor mobility, as well as global and regional policy and regulatory collaboration. In the short term, increased uncertainty about growth triggered by escalating trade tensions leads to increased financial market volatility. Negative consequences for growth are, in turn, exacerbated by adverse changes in market sentiment and investment.	External	↓	H	H	Exchange rate flexibility would be critical to restore equilibrium. Temporary FX interventions and liquidity provision could help smooth extreme volatility. Steadfast implementation of structural reforms to boost growth potential. Support for multilateral efforts to promote global trade.

Weaker-than-expected global growth.	External	↓	M	H	Steadfast implementation of structural reforms to boost growth potential.
Lower energy prices. They would lead to lower fiscal revenues and prospects for energy sector investments.	External	↓	M	L	Exchange rate flexibility and fiscal adjustment.
Weaker than expected oil production at PEMEX.	Domestic	↓	M	M	Implement joint ventures to benefit from technology transfer.
Slower-than-anticipated fiscal consolidation in the context of the incoming administration's fiscal policy agenda, leading to further steady increase in public debt and an increase in country risk premiums.	Domestic	↓	M/L	H	Maintain the consolidation effort. Use positive revenue surprises to reduce the deficit faster.
A further deterioration in corruption and the weak rule of law would raise investor concerns and could weaken investment.	Domestic	↓	L	M	Push ahead with structural reforms including to strengthen the rule of law and fight crime and corruption.

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" is meant to indicate a probability below 10 percent, "medium" a probability between 10 and 30 percent, and "high" a probability between 30 and 50 percent). The RAM reflects staff views on the source of risks and overall level of concern as of the time of discussions with the authorities. Non-mutually exclusive risks may interact and materialize jointly. "Short term (ST)" and "medium term (MT)" are meant to indicate that the risk could materialize within 1 year and 3 years, respectively.
2/ Low (L), Medium (M), High (H).

Annex II. External Sector Assessment

Update as of October 15, 2018

<table>
<tr><th></th><th colspan="12">Mexico</th><th>Overall Assessment</th></tr>
<tr><td>Foreign asset and liability position and trajectory</td><td colspan="12">Background. Mexico's NIIP was -48.4 percent of GDP in 2017 (gross foreign assets and liabilities were 52.1 percent and 100.5 percent of GDP, respectively). Over the past five years, the NIIP has remained relatively stable at around -49 percent of GDP, with negative balance of payments flows largely compensated for by exchange rate- and other valuation effects. While known portfolio assets are small, portfolio liabilities stood at 43.5 percent of GDP in 2017, of which around one fifth were holdings of local-currency government bonds. A predominant share of FX liabilities was denominated in US dollars (80 percent in the case of outstanding federal government securities). 95 percent of debt securities liabilities were long term, mainly FX-denominated (41 percent) and local currency-denominated government bonds (28 percent), with average maturities of 21 and 8 years, respectively. The NIIP-to-GDP ratio is projected to decline to -46.8 percent in 2018 and to about -45 percent by 2023.
Assessment. While the NIIP is sustainable, the large gross foreign portfolio liabilities holdings could be a source of vulnerability in case of global financial volatility. A significant weakening of the peso could complicate policy making through balance sheet exposures.</td><td rowspan="6">Overall Assessment:
Developments so far in 2018 indicate that Mexico's external sector position remains broadly consistent with medium-term fundamentals and desirable policies.
The depreciation of the peso in 2016 and early 2017 contributed to the strengthening of the CA in 2017. Uncertainty about the future trade relations with the United States also contributed to a decline in private investment, while public investment continued to decline driven by a decline in investment by the state oil company (PEMEX). The undervaluation of the REER was partly reversed during the second half of 2017, reflecting a perceived reduction in the risk of severe protectionist actions. Taking into account the temporary effects on the exchange rate, staff assesses the CA and the REER to remain broadly in line with medium-term fundamentals and desirable policies.
Potential policy responses:
Despite the absence of external imbalances at this point, further structural reforms to improve competitiveness and strengthen exports will be essential for boosting growth while maintaining external sustainability also in the medium- and long term.
The authorities have committed to reducing the public sector borrowing requirement from 4.6 percent of GDP in 2014 to 2.5 percent in 2018, and met this target with a margin already in 2017.
The central bank sets monetary policy to ensure that inflation remains close to the 3-percent target. Staff recommends that the authorities continue to rely on the floating exchange rate as the main shock absorber, and use foreign exchange intervention solely to prevent disorderly market conditions. The IMF Flexible Credit Line provides an added buffer against global tail risks.</td></tr>
<tr><td>Current account</td><td colspan="12">Background. After narrowing to 1.7 percent of GDP in 2017, the current account (CA) deficit is expected to stabilize at 1.7 percent in 2018 (1.9 percent cyclically-adjusted), after recording a 1.1 percent of GDP deficit in the first half of the year. Despite higher oil prices, the oil balance is expected to decline marginally, reflecting continued low production, offset by a strong non-oil goods balance.
Assessment. The EBA model estimates a cyclically-adjusted current account norm of -2.6 percent of GDP in 2018. 1/ This implies a CA gap of 0.7 percent of GDP in 2018, with an estimated policy gap of 0.8 percent of GDP. Staff estimates a similar current account gap within the range of -0.3 and 1.7 percent of GDP.</td></tr>
<tr><td>Preliminary CA Assessment 2018</td><td>Proj. CA</td><td>-1.7</td><td>Cycl. Adj. CA</td><td>-1.9</td><td>EBA CA Norm</td><td>-2.6</td><td>EBA CA Gap</td><td>0.7</td><td>Staff Adj.</td><td>0</td><td>Staff CA Gap</td><td>0.7</td></tr>
<tr><td>Real exchange rate</td><td colspan="12">Background. The average REER in 2017 was 2.4 percent stronger than the 2016 average. It appreciated by 13.7 percent relative to its January 2017 low, reflecting a perceived reduced risk of severe protectionist action by key trading partners. The free-floating exchange rate has been a key shock absorber in an unsettled global environment. In 2018, the peso displayed significant variability, in particular related to the NAFTA uncertainty and the Mexican elections, with the peso appreciating by 4.5 percent by September 2018, relative to end-2017. As of September 2018, the REER had appreciated by 2.7 percent relative to the 2017 average.
Assessment. The EBA level REER regression estimates an undervaluation of 9.9 percent in 2018. The index approach yields higher undervaluation (24 percent). Staff puts less weight on the index approach as it has shown the peso to be persistently undervalued for the last 10 years. The external sustainability approach suggests a 6.6 percent undervaluation and the staff-assessed CA gap implies a REER undervaluation of 5.4 percent (applying an estimated elasticity of 0.13). Considering all estimates and the uncertainties around them, staff assesses Mexico's real effective exchange gap to be in the range of 2 to -13 percent. The peso is thus broadly in line with fundamentals.</td></tr>
<tr><td>Capital and financial accounts:
flows and policy measures</td><td colspan="12">Background. During 2010-14, a large share of capital inflows went into purchases of locally-issued government paper and other portfolio investments. In 2015-17 gross portfolio inflows slowed markedly. Net flows from local currency government securities were marginally negative in 2017, due primarily to the elimination of previous arbitrage opportunities favoring holdings of short term peso securities. Going forward, structural reforms are expected to lead to higher FDI, while portfolio inflows are unlikely to return to the previous high growth rates.
Assessment. The long average maturity of sovereign debt and the high share of local currency financing reduce the exposure of government finances to depreciation risks. The banking sector is well capitalized and liquid and assessed to be resilient to large shocks. Non-financial corporate debt levels are low and foreign exchange risks well covered by natural and financial hedges. Nonetheless, the strong presence of foreign investors leaves Mexico exposed to greater risk of capital flow reversals and risk premium increases. The authorities have refrained from capital flow management measures. Capital flow risks are also mitigated by prudent macroeconomic policies.</td></tr>
<tr><td>FX intervention and reserves level</td><td colspan="12">Background. The central bank remains committed to a free-floating exchange rate, which has been the key shock absorber, while discretionary intervention is used solely to prevent disorderly market conditions. In the past, the central bank built up reserves primarily through purchases of the net foreign currency proceeds of the state oil company, which have declined</td></tr>
</table>

	substantially, and occasionally through auctions. 2/ At end-2017, FX reserves had declined to US$175.4 billion (15.2 percent of GDP) from US$178.0 at end-2016. In February 2017, the Foreign Exchange Commission announced a new FX hedging program, enabling the Bank of Mexico to offer up to US$20 billion of non-deliverable forwards (NDF) settled in pesos with a maturity of up to 12 months. The program adds to the authorities' toolkit to counter disorderly market conditions. Several auctions took place in 2017, with total NDF sales amounting to US$5.5 billion. As of mid-October, no new NDF sales or other discretionary interventions had taken place in 2018. **Assessment**. At 122 percent of the ARA metric at end-2017 (expected to decline only slightly in 2018) and 265 percent of short-term debt (at remaining maturity), the current level of foreign reserves remains adequate. Staff recommends that the authorities continue to maintain reserves at an adequate level over the medium term. The Flexible Credit Line arrangement has been an effective complement to international reserves, providing protection against global tail risks.	
Technical Background Notes	1/ The current account norm estimate has a standard error of 1.3 percent. 2/ Rules-based intervention mechanisms were in place between December 8, 2014 and February 17, 2016. During this time, pre-announced amounts were automatically offered for auction when the exchange rate depreciated by more than a threshold (1 or 1.5 percent) on a given day. Regular auctions with no minimum price were also used. Since February 17, 2016, the authorities moved to discretionary intervention and used it only once in 2016 and once in 2017 (US$2 billion). Data on intervention amounts are published weekly.	

Annex III. Debt Sustainability Analysis

Mexico's public debt is expected to remain sustainable in the medium term with high probability. Under the baseline scenario, public debt is expected to stabilize over the medium term. After peaking up at 56.8 percent of GDP at end-2016, due mainly to the depreciation of the exchange rate, the public debt-to-GDP ratio is projected to decline to 53.1 percent by 2018 and remain just slightly above this level in the medium term. Gross financing needs (projected at 9.2 percent of GDP in 2018) are expected to remain contained around 10 percent over the medium term. The long average maturity and favorable currency composition of the debt mitigate short-term financing risks coming from a high foreign ownership of the debt.

Public Debt Sustainability

Baseline and Realism of Projections

- **Debt levels**. Gross debt levels are projected to stabilize below 54 percent of GDP over the medium term, while gross financing needs are projected to average around 10 percent of GDP.

- **Fiscal adjustment**. The structural primary balance (adjusted by the business cycle and oil prices) is projected to stay around 1 percent of GDP between 2018 and 2023. On the revenue side, tax revenues would slightly decline as a share of GDP in 2019 as corporate income tax revenues would slow down following the U.S. tax reform. On the spending side, projections assume compliance with the consolidation plan spelled out in the 2018 budget documents, which envisages a public sector borrowing requirement (PSBR) of 2.5 percent of GDP in 2018 and over the medium term. Compared to the distribution of fiscal adjustment episodes provided in the DSA template, the maximum projected 3-year adjustment of the cyclically-adjusted primary balance of 2.5 percent of GDP seems feasible, especially since the consolidation already took place in 2017.

- **Growth assumptions**. Past projections of growth outcomes suggest moderate forecast errors, with the median forecast error in line with other emerging markets. There seems to be no evidence of a systematic projection bias in the baseline assumption for growth that could undermine the DSA assessment. Medium-term growth is expected to pick up gradually as the effects from structural reforms take hold, stabilizing at 2.9 percent of GDP in the second half of the projection horizon.

- **Sovereign yields**. Mexico's sovereign yields increased in the first half of the year but have since stabilized, with the 10-year local-currency bond yield remaining stable around 7.7 percent in August. The EMBIG spread has remained on average at 274 basis points for the last three months. Taking into account the expectations of monetary easing by the Bank of Mexico from 2019, the effective nominal interest rate on Mexico's sovereign debt is projected to decline to 7 percent by 2020.

Debt Profile

- **Rollover and exchange rate risks**. The long maturity structure of the debt reduces rollover risks, including for the part of public debt held by non-residents that is relatively high for Mexico. The real interest rate and real exchange rate shocks have a moderate impact on the debt stock, given the low direct interest pass-through to the budget and the large share of debt denominated in local currency (around 65 percent).

Stochastic Simulations

- **Fan charts**. The fan charts illustrate the possible evolution of the debt ratio over the medium term and are based on both the symmetric and asymmetric distributions of risk. Under the symmetric distribution of risk, there is more than a 75 percent probability that debt will be below 60 percent of GDP over the medium term. If restrictions are imposed on the primary balance (i.e., the asymmetric scenario, where it is assumed that there are no positive shocks to the primary balance), there is still 65 percent chance that the debt path will remain below 60 percent of GDP over the projection horizon.

Stress Tests

- **Individual shocks**. The debt ratio would remain below 60 percent of GDP under all but one scenarios. A one-standard-deviation growth shock in 2019 and 2020 would increase debt to 60.1 percent by 2023.

- **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 67.1percent of GDP. Gross financing needs would reach 13.3 percent of GDP in 2023.

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.[1] On the basis on the present public debt stability analysis, staff estimates that net public debt (defined as gross debt minus public assets) would remain around 45 percent of GDP over the medium term.

External Debt Sustainability

- Mexico's external debt as share of GDP declined slightly by 0.4 percentage points in 2017, in part due to price and exchange rate changes (-1.8 percentage points), to 38.1 percent of GDP. However, at this level, Mexico's external debt is not very high compared to other emerging markets

[1] Consistently with their focus on the HBPSBR, the authorities also compute a "debt-stabilizing primary balance" that includes changes in assets and is therefore different from the debt-stabilizing primary balance presented here.

in the region and globally. Under the current baseline projections, the external debt is expected to increase slightly before stabilizing around 39 percent of GDP in the medium term.

- A relatively large share of Mexico's external debt, 25.8 percent of GDP is owed by the public sector, of which 16.8 percentage points by the federal government. Despite a significant share of the debt being denominated in Mexican peso (9.3 percent of GDP), a depreciation of the exchange rate remains the most significant risk to external debt sustainability; a 30 percent depreciation is estimated to lead to an increase in the external debt to up to 54 percent of GDP. However, rollover risks for federal government debt are mitigated by a very favorable maturity structure and continuous prudent debt management by the government. The banking sector is well capitalized and liquid, and assessed to be resilient to large shocks. Non-financial corporate debt levels are low and foreign exchange risks well covered by natural and financial hedges.

Mexico Public DSA Risk Assessment

Heat Map

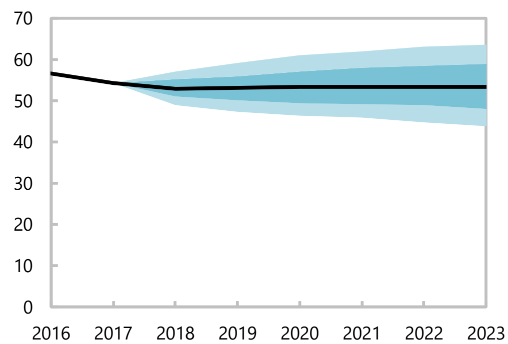
Debt level [1/]	Real GDP Growth Shock	Primary Balance Shock	Real Interest Rate Shock	Exchange Rate Shock	Contingent Liability shock
Gross financing needs [2/]	Real GDP Growth Shock	Primary Balance Shock	Real Interest Rate Shock	Exchange Rate Shock	Contingent Liability Shock
Debt profile [3/]	Market Perception	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

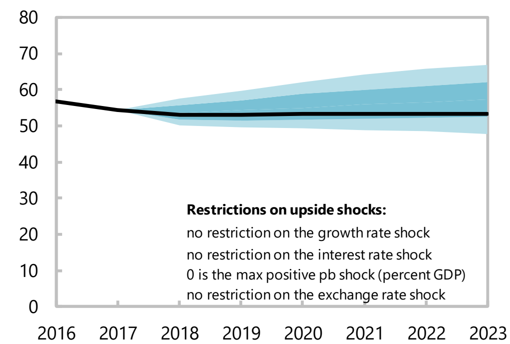
(in percent of GDP)

Baseline Percentiles: 10th-25th 25th-75th 75th-90th

Symmetric Distribution

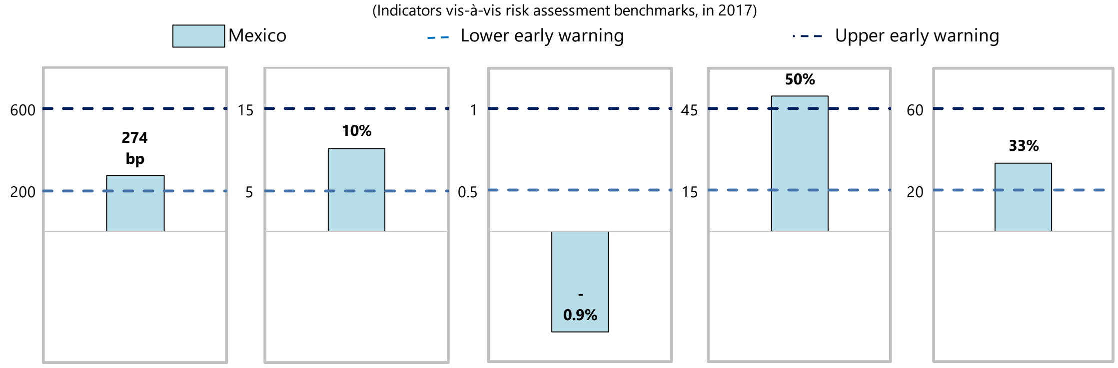


Restricted (Asymmetric) Distribution



Debt Profile Vulnerabilities

(Indicators vis-à-vis risk assessment benchmarks, in 2017)



EMBIG (in basis points) 4/	**External Financing Requirement** (in percent of GDP) 5/	**Annual Change in Short-Term Public Debt** (in percent of total)	**Public Debt Held by Non-Residents** (in percent of total)	**Public Debt in Foreign Currency** (in percent of total)

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:

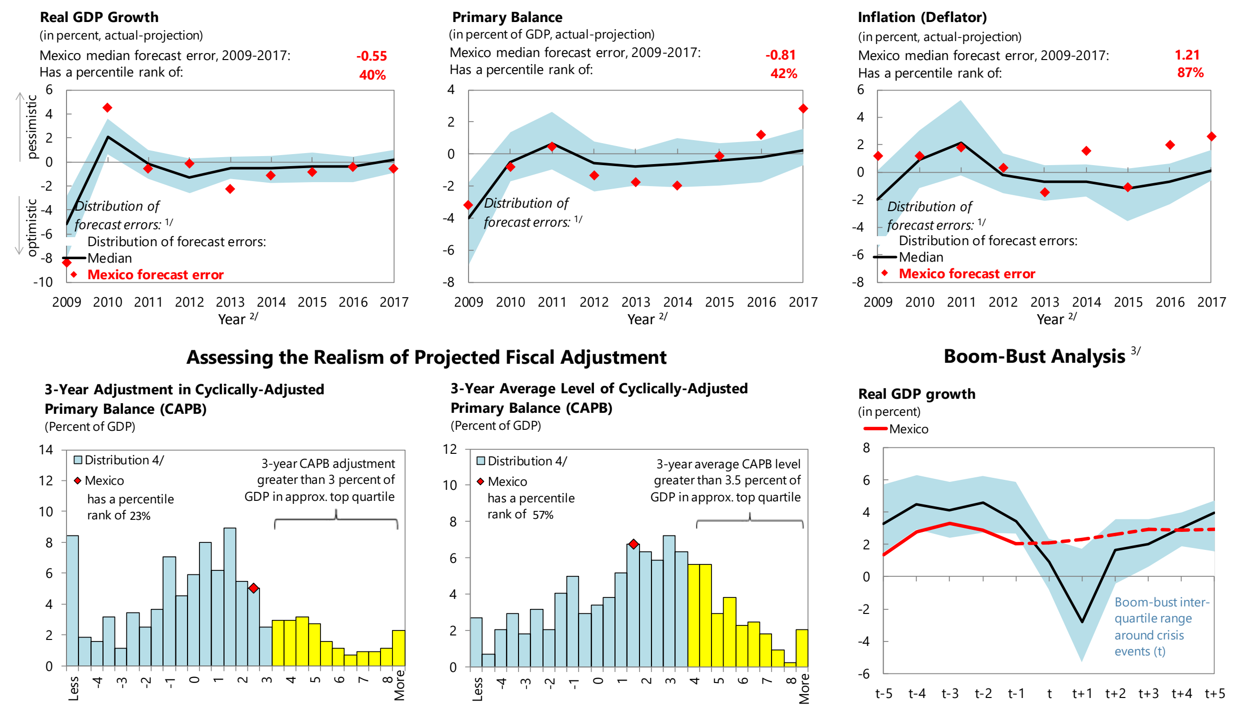
200 and 600 basis points for bond spreads; 5 and 15 percent of GDP for external financing requirement; 0.5 and 1 percent for change in the share of short-term debt; 15 and 45 percent for the public debt held by non-residents; and 20 and 60 percent for the share of foreign-currency denominated debt.

4/ EMBIG, an average over the last 3 months, 23-Jun-18 through 21-Sep-18.

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.

Mexico Public DSA - Realism of Baseline Assumptions

Forecast Track Record, versus all countries



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/ Mexico has had a positive output gap for 3 consecutive years, 2015-2017. For Mexico, t corresponds to 2018; for the distribution, t corresponds to the first year of the crisis.

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

Mexico Public Sector Debt Sustainability Analysis (DSA) - Baseline Scenario

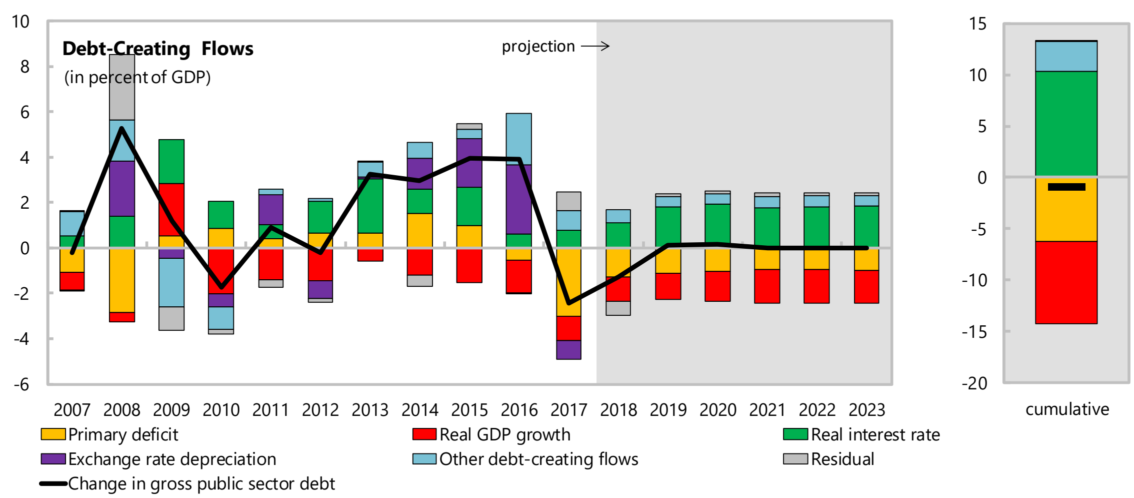
(in percent of GDP unless otherwise indicated)

Debt, Economic and Market Indicators [1]

	Actual			Projections						As of September 21, 2018		
	2007-2015 [2]	2016	2017	2018	2019	2020	2021	2022	2023	Sovereign Spreads		
Nominal gross public debt	44.3	56.8	54.3	53.1	53.2	53.4	53.4	53.4	53.4	EMBIG (bp) 3/		263
Public gross financing needs	11.1	13.6	7.5	9.2	10.1	10.3	10.0	10.4	9.9	5Y CDS (bp)		116
Real GDP growth (in percent)	2.0	2.9	2.0	2.1	2.3	2.6	2.9	2.9	2.9	Ratings	Foreign	Local
Inflation (GDP deflator, in percent)	4.3	5.4	6.1	5.2	3.5	3.1	3.2	3.2	3.1	Moody's	A3	A3
Nominal GDP growth (in percent)	6.4	8.4	8.3	7.4	5.9	5.8	6.2	6.2	6.2	S&Ps	BBB+	A
Effective interest rate (in percent) [4]	7.8	6.8	7.8	7.5	7.2	7.0	6.9	6.9	6.9	Fitch	BBB+	A-

Contribution to Changes in Public Debt

	Actual			Projections							
	2007-2015	2016	2017	2018	2019	2020	2021	2022	2023	cumulative	debt-stabilizing primary balance [9]
Change in gross public sector debt	1.7	3.9	-2.4	-1.3	0.1	0.2	0.0	0.0	0.0	-0.9	0.8
Identified debt-creating flows	1.6	4.0	-3.3	-0.7	0.0	0.0	-0.1	-0.1	-0.1	-1.0	
Primary deficit	0.2	-0.6	-3.0	-1.3	-1.1	-1.0	-1.0	-1.0	-1.0	-6.3	
Primary (noninterest) revenue and gra	24.0	24.6	24.8	23.5	21.7	21.8	21.7	21.7	21.8	132.0	
Primary (noninterest) expenditure	24.2	24.0	21.8	22.2	20.6	20.7	20.8	20.7	20.8	125.8	
Automatic debt dynamics [5]	1.2	2.3	-1.1	0.1	0.7	0.6	0.3	0.3	0.4	2.4	
Interest rate/growth differential [6]	0.6	-0.8	-0.3	0.1	0.7	0.6	0.3	0.3	0.4	2.4	
Of which: real interest rate	1.4	0.6	0.8	1.1	1.8	1.9	1.8	1.8	1.9	10.3	
Of which: real GDP growth	-0.8	-1.4	-1.1	-1.1	-1.2	-1.3	-1.5	-1.5	-1.5	-8.0	
Exchange rate depreciation [7]	0.6	3.1	-0.8	…	…	…	…	…	…	…	
Other identified debt-creating flows	0.2	2.2	0.8	0.6	0.5	0.5	0.5	0.5	0.5	2.9	
Please specify (1) (e.g., drawdown of	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Change in assets	0.2	2.2	0.8	0.6	0.5	0.5	0.5	0.5	0.5	2.9	
Residual [8]	0.1	0.0	0.8	-0.6	0.1	0.1	0.1	0.1	0.1	0.1	



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/ EMBIG.

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 $ae(1+r)$.

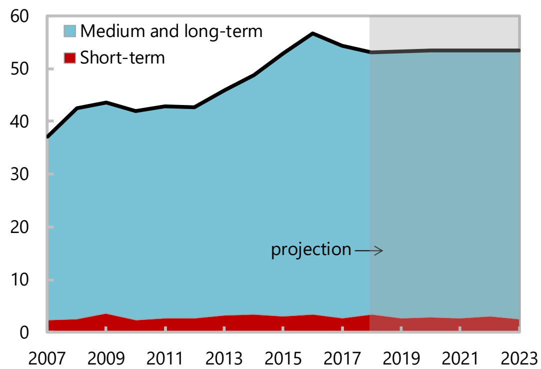
8/ Includes interest revenues (if any). For projections, includes exchange rate changes during the projection period.

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.

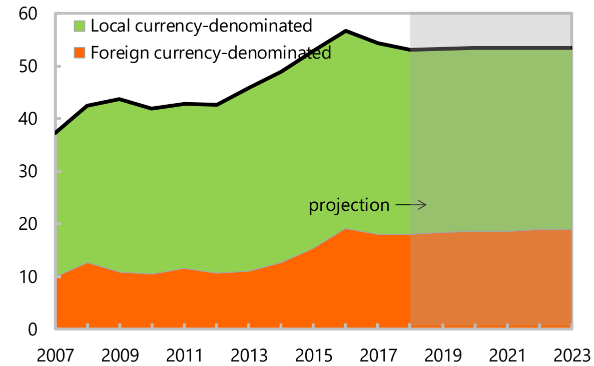
Mexico Public DSA - Composition of Public Debt and Alternative Scenarios

Composition of Public Debt

By Maturity
(in percent of GDP)



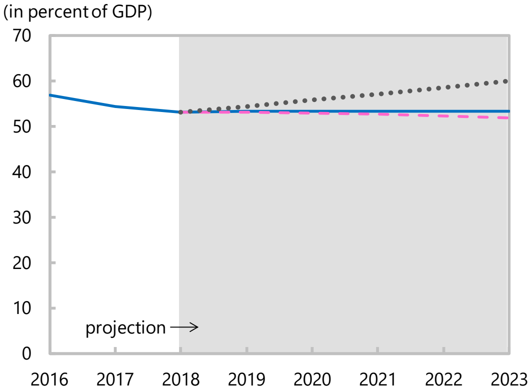
By Currency
(in percent of GDP)



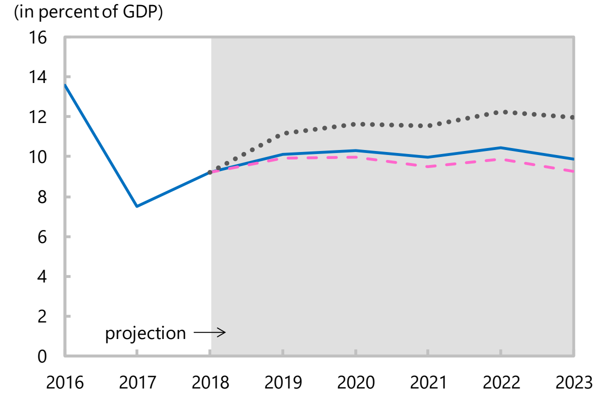
Alternative Scenarios

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	2018	2019	2020	2021	2022	2023
Real GDP growth	2.1	2.3	2.6	2.9	2.9	2.9
Inflation	5.2	3.5	3.1	3.2	3.2	3.1
Primary Balance	1.3	1.1	1.0	1.0	1.0	1.0
Effective interest rate	7.5	7.2	7.0	6.9	6.9	6.9
Constant Primary Balance Scenario						
Real GDP growth	2.1	2.3	2.6	2.9	2.9	2.9
Inflation	5.2	3.5	3.1	3.2	3.2	3.1
Primary Balance	1.3	1.3	1.3	1.3	1.3	1.3
Effective interest rate	7.5	7.2	7.0	6.9	6.9	6.9

Historical Scenario	2018	2019	2020	2021	2022	2023
Real GDP growth	2.1	2.1	2.1	2.1	2.1	2.1
Inflation	5.2	3.5	3.1	3.2	3.2	3.1
Primary Balance	1.3	0.1	0.1	0.1	0.1	0.1
Effective interest rate	7.5	7.2	6.9	6.8	6.8	6.8

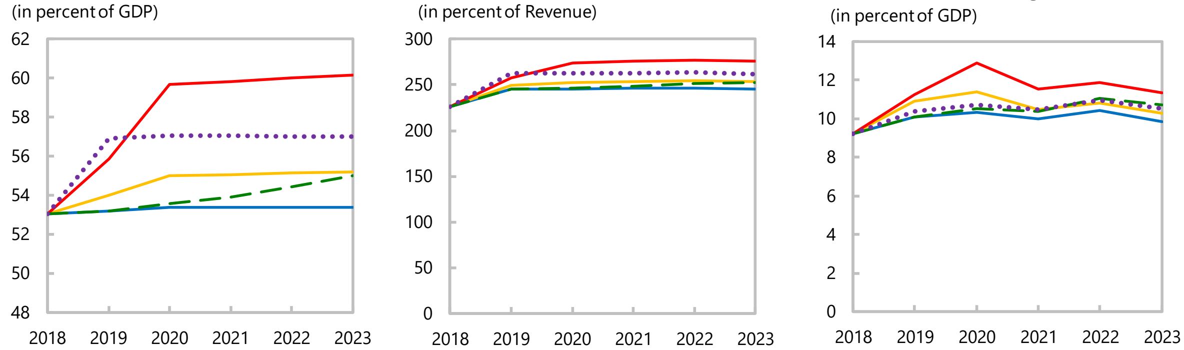
Source: IMF staff.

Mexico Public DSA - Stress Tests

Macro-Fiscal Stress Tests

Baseline
Real GDP Growth Shock
Primary Balance Shock
Real Exchange Rate Shock
Real Interest Rate Shock

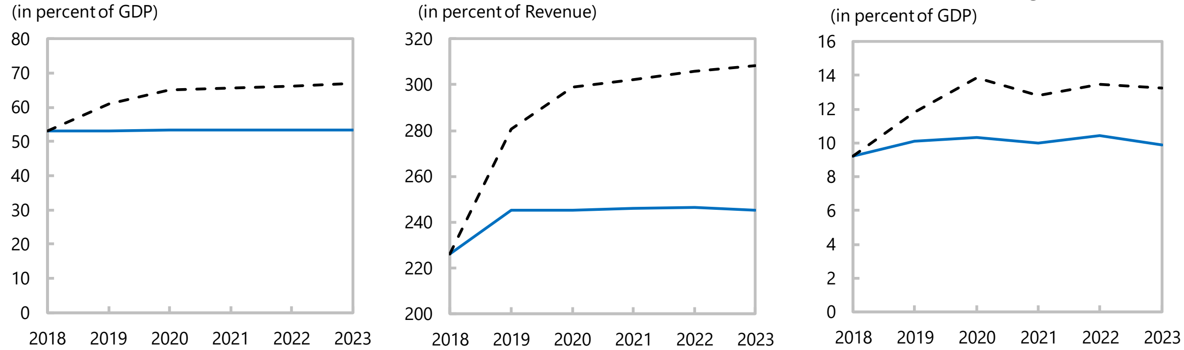
Gross Nominal Public Debt (in percent of GDP) | **Gross Nominal Public Debt** (in percent of Revenue) | **Public Gross Financing Needs** (in percent of GDP)



Additional Stress Tests

Baseline
Combined Macro-Fiscal Shock

Gross Nominal Public Debt (in percent of GDP) | **Gross Nominal Public Debt** (in percent of Revenue) | **Public Gross Financing Needs** (in percent of GDP)



Underlying Assumptions
(in percent)

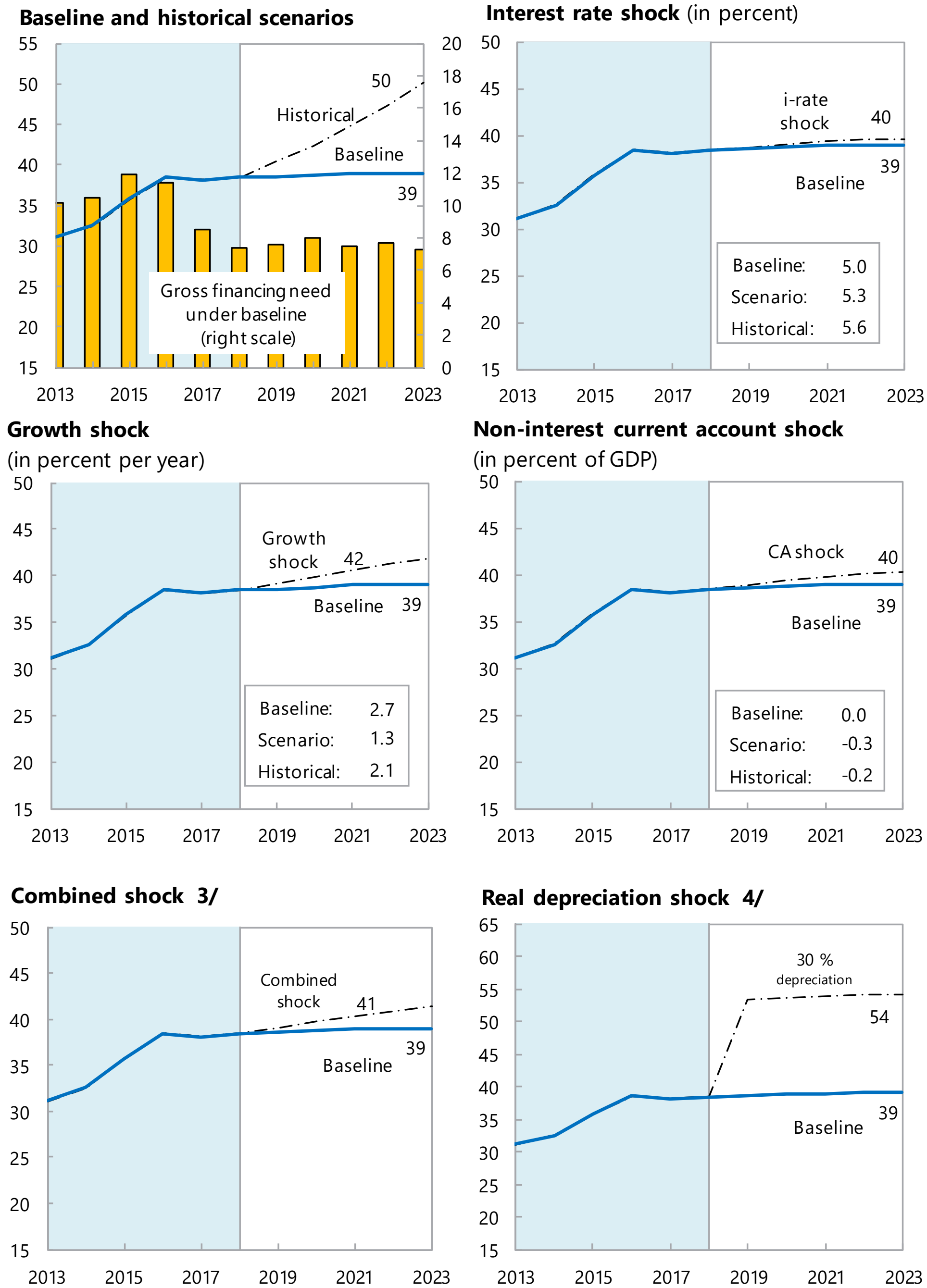
	2018	2019	2020	2021	2022	2023
Primary Balance Shock						
Real GDP growth	2.1	2.3	2.6	2.9	2.9	2.9
Inflation	5.2	3.5	3.1	3.2	3.2	3.1
Primary balance	1.3	0.3	0.2	1.0	1.0	1.0
Effective interest rate	7.5	7.2	7.0	7.0	7.0	7.0
Real Interest Rate Shock						
Real GDP growth	2.1	2.3	2.6	2.9	2.9	2.9
Inflation	5.2	3.5	3.1	3.2	3.2	3.1
Primary balance	1.3	1.1	1.0	1.0	1.0	1.0
Effective interest rate	7.5	7.2	7.4	7.6	7.8	8.0
Combined Shock						
Real GDP growth	2.1	-0.5	-0.2	2.9	2.9	2.9
Inflation	5.2	2.8	2.4	3.2	3.2	3.1
Primary balance	1.3	0.3	-0.5	1.0	1.0	1.0
Effective interest rate	7.5	7.6	7.2	7.5	7.7	8.0

	2018	2019	2020	2021	2022	2023
Real GDP Growth Shock						
Real GDP growth	2.1	-0.5	-0.2	2.9	2.9	2.9
Inflation	5.2	2.8	2.4	3.2	3.2	3.1
Primary balance	1.3	0.4	-0.5	1.0	1.0	1.0
Effective interest rate	7.5	7.2	7.0	7.0	7.0	7.0
Real Exchange Rate Shock						
Real GDP growth	2.1	2.3	2.6	2.9	2.9	2.9
Inflation	5.2	5.3	3.1	3.2	3.2	3.1
Primary balance	1.3	1.1	1.0	1.0	1.0	1.0
Effective interest rate	7.5	7.6	6.8	6.7	6.8	6.8

Source: IMF staff.

Mexico: External Debt Sustainability: Bound Tests 1/ 2/

(External debt in percent of GDP)



Sources: International Monetary Fund, Country desk data, and staff estimates.
1/ Shaded areas represent actual data. Individual shocks are permanent one-half standard deviation shocks. Figures in the boxes represent average projections for the respective variables in the baseline and scenario being presented. Ten-year historical average for the variable is also shown.
2/ For historical scenarios, the historical averages are calculated over the ten-year period, and the information is used to project debt dynamics five years ahead.
3/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and current account balance.
4/ One-time real depreciation of 30 percent occurs in 2017.

Mexico: External Debt Sustainability Framework

(In percent of GDP, unless otherwise indicated)

	Actual							Projections						
	2013	2014	2015	2016	2017			2018	2019	2020	2021	2022	2023	**Debt-stabilizing non-interest current account 6/**
1 **Baseline: External debt**	31.1	32.5	35.7	38.5	38.1			**38.5**	**38.6**	**38.8**	**39.0**	**39.0**	**39.0**	**-2.4**
2 Change in external debt	2.3	1.4	3.2	2.7	-0.4			0.4	0.1	0.2	0.2	0.0	0.0	
3 Identified external debt-creating flows (4+8+9)	-1.9	-1.6	2.0	0.7	-3.7			-1.2	-1.0	-1.1	-1.3	-1.3	-1.5	
4 Current account deficit, excluding interest payments	1.0	0.3	0.9	0.3	-0.2			-0.1	0.0	0.1	0.1	0.0	-0.1	
5 Deficit in balance of goods and services	-63.8	-64.9	-71.1	-76.0	-77.8			-79.8	-80.4	-81.1	-81.0	-82.1	-82.5	
6 Exports	31.3	31.9	34.5	37.0	38.0			39.0	39.2	39.5	39.6	40.2	40.5	
7 Imports	-32.5	-33.1	-36.6	-39.0	-39.8			-40.8	-41.2	-41.6	-41.4	-41.9	-42.1	
8 Net non-debt creating capital inflows (negative)	-3.0	-2.1	-2.5	-2.8	-2.8			-2.2	-2.0	-2.0	-2.1	-2.1	-2.3	
9 Automatic debt dynamics 1/	0.1	0.2	3.6	3.1	-0.7			1.0	0.9	0.8	0.7	0.9	0.9	
10 Contribution from nominal interest rate	1.5	1.6	1.7	1.9	1.9			1.8	1.8	1.8	1.8	1.9	1.9	
11 Contribution from real GDP growth	-0.4	-0.8	-1.2	-1.1	-0.7			-0.7	-0.8	-1.0	-1.1	-1.1	-1.1	
12 Contribution from price and exchange rate changes 2/	-1.0	-0.5	3.1	2.4	-1.8			...	...	...	...	...	...	
13 Residual, incl. change in gross foreign assets (2-3) 3/	4.2	3.0	1.2	2.1	3.3			1.6	1.1	1.3	1.5	1.4	1.5	
External debt-to-exports ratio (in percent)	99.5	102.0	103.6	104.0	100.3			98.5	98.5	98.1	98.5	97.0	96.4	
Gross external financing needs (in billions of US dollars) 4/	129.1	136.9	139.0	122.9	97.8			90.9	97.6	109.0	107.0	115.9	116.3	
in percent of GDP	10.1	10.4	11.9	11.4	8.5	10-Year	10-Year	7.4	7.5	8.0	7.5	7.7	7.3	
Scenario with key variables at their historical averages 5/								**38.5**	**40.4**	**42.4**	**44.8**	**47.3**	**50.1**	**-0.2**
Key Macroeconomic Assumptions Underlying Baseline						Historical Average	Standard Deviation							
Real GDP growth (in percent)	1.4	2.8	3.3	2.9	2.0	2.1	2.8	2.1	2.3	2.6	2.9	2.9	2.9	
GDP deflator in US dollars (change in percent)	4.7	0.3	-13.8	-10.5	4.7	-0.7	9.2	4.5	3.0	2.4	2.4	2.4	2.3	
Nominal external interest rate (in percent)	5.5	5.2	4.7	4.8	5.2	5.6	0.6	5.0	4.8	4.9	4.8	5.2	5.3	
Growth of exports (US dollar terms, in percent)	2.8	5.0	-3.6	-1.3	9.8	4.9	12.9	9.6	5.8	6.0	5.5	7.1	6.0	
Growth of imports (US dollar terms, in percent)	2.8	5.1	-1.5	-1.8	9.0	4.8	12.8	9.3	6.5	5.9	5.1	6.6	5.7	
Current account balance, excluding interest payments	-1.0	-0.3	-0.9	-0.3	0.2	-0.2	0.5	0.1	0.0	-0.1	-0.1	0.0	0.1	
Net non-debt creating capital inflows	3.0	2.1	2.5	2.8	2.8	2.2	0.6	2.2	2.0	2.0	2.1	2.1	2.3	

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 IV. Staff GDP and Inflation Forecast Errors

1. Staff's forecast errors in projecting GDP growth are largely explained by the recent revision in National Accounts Statistics. While Mexico compared positively to the sample of EMDEs, the RMSE for growth projections since 2012 exceeded that of trading partners and regional peers. The largest same-year forecast errors arose in the years 2014-16. In all these three years, the errors are largely explained by revisions of National Accounts statistics carried out in 2017. In 2014 and 2015, growth revisions in the US represent an additional factor explaining the forecast errors.

2. Mexico stands out positively in terms of staff's errors in projection inflation. Mexico's RMSE is lower than that of both the EMDE sample as a whole and the samples of regional peers and trading partners.

Current Year Forecast Errors

Real GDP Growth	Root Mean Square Error	2012	2013	2014	2015	2016	2017
Mexico	0.66						
Trading Partners	0.43						
EMDEs	0.91						
Latin America and the Caribbean	0.49						

Inflation	Root Mean Square Error	2012	2013	2014	2015	2016	2017
Mexico	0.12						
Trading Partners	0.23						
EMDEs	0.49						
Latin America and the Caribbean	0.21						

	Over-prediction	Under-prediction
between 0 and 1 std. dev.		
more than 1 std. dev.		

Mexico: Real GDP Forecast Error

Vintages	2012	2013	2014	2015	2016	2017
Mexico Real GDP Growth						
Outturn	3.6	1.4	2.8	3.3	2.9	2.0
Forecast in October	3.8	1.2	2.4	2.3	2.1	2.1
Error	-0.1	0.1	0.4	1.0	0.8	-0.1
US Real GDP Growth						
Outturn	2.2	1.8	2.5	2.9	1.6	2.2
Forecast in October	2.2	1.6	2.2	2.6	1.6	2.2
Error	0.1	0.3	0.3	0.3	0.0	0.0
Mexico CPI Inflation (avg.)						
Outturn	4.1	3.8	4.0	2.7	2.8	6.0
Forecast in October	4.0	3.6	3.9	2.8	2.8	5.9
Error	0.2	0.2	0.1	-0.1	0.0	0.2

Source: WEO and Fund Staff Calculations

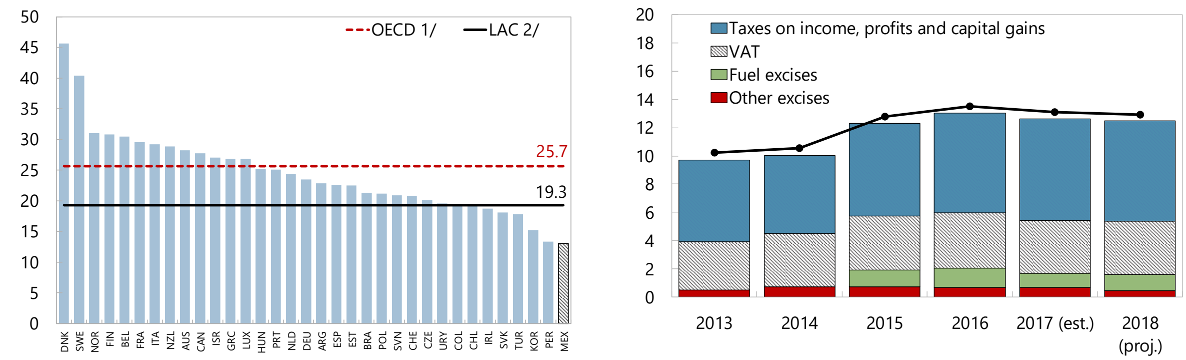
Annex V. Tax Revenue Mobilization

1. **While recent gains in tax revenue have been impressive, Mexico's revenue performance significantly lags that of regional and international peers**. The tax-to-GDP ratio has increased by almost three percentage points since 2013, the year before the last major tax reform. This increase has been primarily driven by increases in direct taxes and fuel excises as fuel price subsidies have been reduced. By contrast, revenue from value added tax (VAT) has stagnated and remains much below that of other countries (Figure 1).

Figure 1. Tax Revenue

Total Tax Revenue
(As percent of GDP, 2017)

Decomposition of Total Revenue
(As percent of GDP)



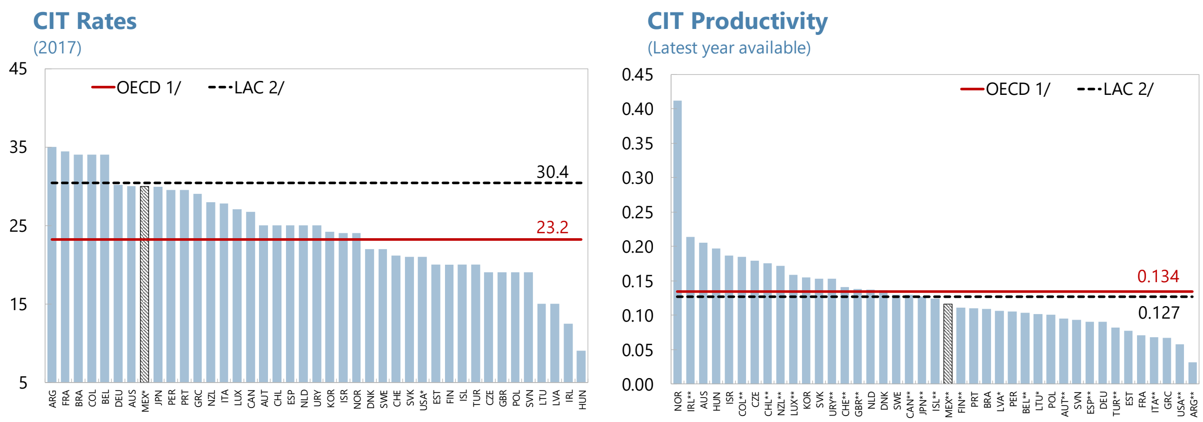
Sources: IMF World Economic Outlook
1/ OECD unweighted average excluding Iceland, Japan, Lithuania, Latvia, Mexico, United States , and United Kingdom
2/ LAC unweighted average including Argentina, Brazil, Chile, Colombia, Peru, and Uruguay

Sources: IMF Staff calcluations.

2. **Strong reliance on corporate income tax (CIT) revenue implies that Mexico is exposed to potential revenue losses associated with the recent U.S. tax reform**. Profit-shifting and, over the medium term, relocation of production, could undermine the tax base. Beer et al. (2018)[1] estimate that losses in CIT revenue from multinational enterprises (MNE) are larger in Mexico than in most other countries they consider. These losses could be exacerbated if Mexico lowers its CIT rate, which is relatively high (Figure 2). At the same time, given that the productivity of CIT is at the average of international peers and above that of several advanced economies, there seems to be little scope to increase CIT revenue through base broadening measures (Figure 2).

[1] Beer, S, Klemm, A. and Matheson, T, 2018. Tax Spillovers from U.S. Corporate Income Tax Reform. IMF Working Paper, WP/18/166.

Figure 2. Corporate Income Taxes



Source: FAD Tax Policy Rates Database.
1/ OECD unweighted average excluding Mexico
2/ LAC unweighted average including Argentina, Brazil, Chile, Colombia, Peru, and Uruguay
3/ Asterisks denotes data last year availability (*) 2018

Sources: OECD, Eurostat, World Economic Outlook, FAD Tax Policy Rates Database; and, IMF Staff calcluations.
1/ OECD unweighted average excluding Mexico
2/ LAC unweighted average including Argentina, Brazil, Chile, Colombia, Peru, and Uruguay
3/ Asterisks denotes data last year availability: (*) 2015, (**) 2016 and (***) 2017
4/ CIT productivity defined as CIT revenue as percent of GDP over CIT rate

3. **By contrast, there is much scope to increase VAT revenue, with the potential to more than double its current revenue intake**. Current levels of VAT revenue are very low relative to the rate of 16 percent (Figure 3). While OECD and regional peers collect 0.4 and 0.3 percent of GDP for each percentage point of the VAT rate, respectively, Mexico only collects 0.23 percent of GDP which is also reflected by Mexico's low c-efficiency ratio (Figure 3). Weak revenue performance is a combination of low tax compliance and a narrow base implying large policy and compliance gaps.

4. **Mexico currently taxes all food items at a zero rate creating revenue losses in excess of 1 percent of GDP**. In a first-best scenario, taxing all goods and services at a single rate—and providing targeted social benefits where needed—would be desirable. In a second-best scenario, all goods taxed today at zero-rate would be VAT exempt. This, in turn, would decrease the complexity of VAT and would likely significantly reduce the number of VAT refunds, bringing relief to the tax administration and increasing revenue.[2] In addition, unhealthy food items which are subject to excises, and food items typically consumed by the rich (such as frozen or processed food) could be taxed at the standard rate.

5. **Mexico allows taxpayers to use unpaid refunds to offset obligations from other tax types, distorting official tax statistics and amplifying opportunities for tax fraud**. These offsets amounted to 1.1 percent of GDP and would normally need to be deducted from the official VAT revenue figures under GFS guidelines. This would lower VAT revenue by over 25 percent and further

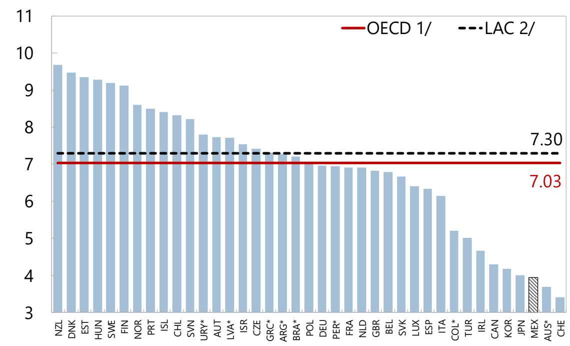
[2] Firms cannot claim input tax on goods that are exempt. Replacing zero-rate taxation by a tax exemption would reduce the number of requests for VAT refunds on intermediate goods used to produce exempt goods, and therefore likely increase revenue.

worsen measures of VAT efficiency and productivity. Cross-crediting also complicates verification of the claims by the tax administration, increasing the chances of fraud.

Figure 3. Value-Added Taxes

VAT Revenue

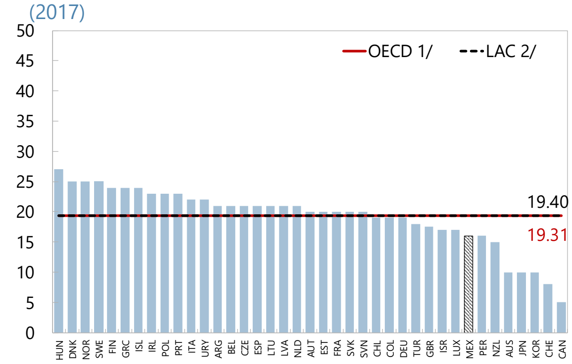
(As percent of GDP, 2016)



Sources: OECD, World Economic Outlook; and, IMF Staff calcuations
1/ OECD unweighted average excluding Mexico and United States.
2/ LAC unweighted average including Argentina, Chile, Colombia, Peru, and Uruguay.
3/ (*) Latest data available 2015.

VAT Rates

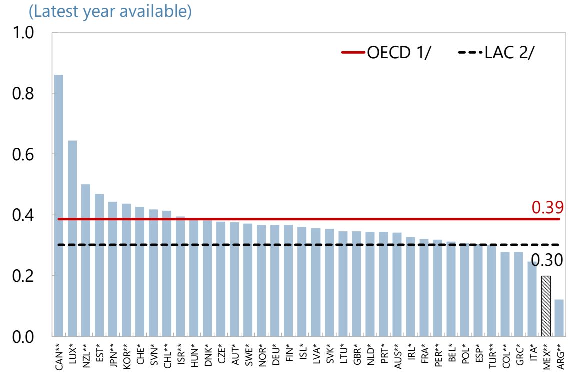
(2017)



Sources: FAD Tax Policy Rates Database.
1/ OECD unweighted average excluding Mexico and United States.
2/ LAC unweighted average including Argentina, Chile, Colombia, Peru, and Uruguay.

VAT Productivity

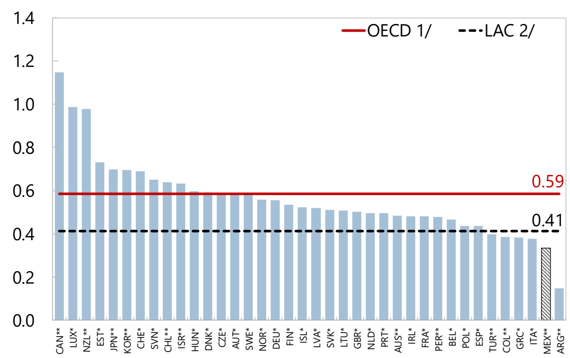
(Latest year available)



Sources: OECD, Eurostat, World Economic Outlook, FAD Tax Policy Rates Database; and, IMF Staff calcuations
1/ OECD unweighted average excluding Mexico and United States
2/ LAC unweighted average including Argentina, Chile, Colombia, and Peru.
3/ Asterisks denotes data last year availability: (*) 2015, (**) 2016 and (***) 2017
4/ VAT productivity defined as VAT revenue as percent of GDP over VAT rate.

VAT C-efficiency

(Latest year available)



Sources: OECD, Eurostat, World Economic Outlook, FAD Tax Policy Rates Database; and, IMF Staff calcuations
1/ OECD unweighted average excluding Mexico and United States
2/ LAC unweighted average including Argentina, Chile, Colombia, and Peru
3/ Asterisks denotes data last year availability: (*) 2015, (**) 2016 and (***) 2017
4/ VAT C-Efficency defined as VAT Revenue/(Total Final Consumption net of VAT Revenue * VAT Rate)

6. **The VAT regime of e-commerce and digital services should be modified**. The economic importance of e-commerce and digital services is growing and hence the potential to collect VAT in this area. It is therefore important to tax all services provided abroad but consumed in Mexico, by requiring the providers of those services to register for VAT in Mexico. In addition, platforms that enable P2P transactions in Mexico should likewise be required to register for VAT and to provide information on providers, users and payments.

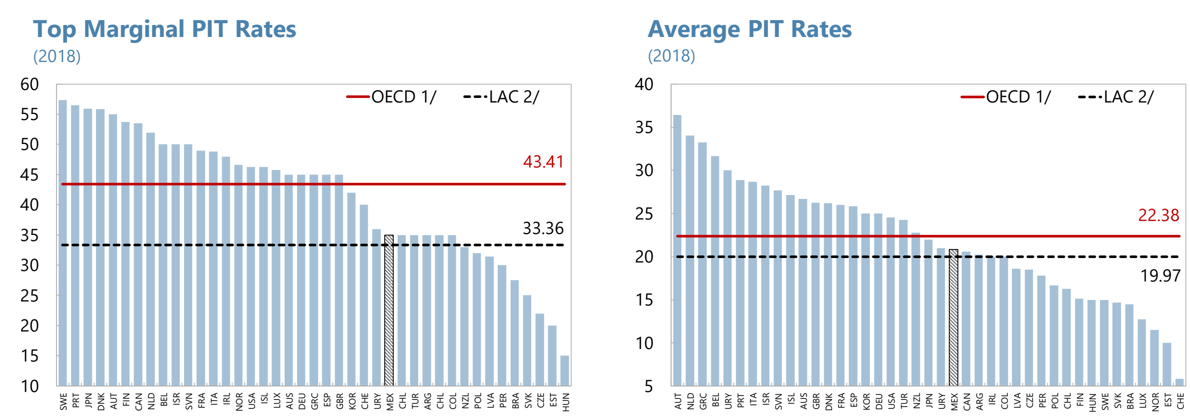
7. The small taxpayer regime is overly complex and there is no evidence that it helps reduce informality. This regime imposes a significant compliance burden on small taxpayers as tax obligations can vary by industry, type of clients and sales relative to two different thresholds. This can cause significant distortions and productivity losses. Despite the increase in the number of small taxpayers, the level of additional revenue generated is very low, and a rigorous evaluation of whether the small taxpayer regime actually helps taxpayers graduate into the normal regime is necessary.

8. A comprehensive strategy by Mexico's tax administration (SAT) to address VAT non-compliance could help reduce the compliance gap. SAT has several sophisticated tools, systems, and legislation in place to deal with high VAT non-compliance. However, the lack of a comprehensive compliance improvement plan that aims at increasing VAT revenue collection and SAT's fragmented organizational structure render ineffective. In addition, audit probabilities for VAT payers are extremely low, making the risk of detection of fraudulent behavior unlikely.

9. There is scope to generate additional revenue from fuel price excises. The current practice of fuel price smoothing – while preferable to outright fuel subsidies – is still costly in terms of foregone revenue and could be reduced or abolished altogether.

10. By contrast, there does not seem to me much room to increase revenue from personal income taxation (PIT) through rate increases. Both, average and top marginal PIT rates, are above the regional average, suggesting that there is only little scope to increase revenue through rate hikes (Figure 4), even though the labor wedge does seem to be excessively high. In addition, the top marginal rate has already been increased by five percentage points as part of the 2014 tax reform.

Figure 4. Personal Income Taxes



Source: FAD Tax Policy Rates Database
1/ OECD unweighted average excluding Lithuania and Mexico
2/ LAC unweighted average including Argentina, Brazil, Chile, Colombia, Peru, and Uruguay

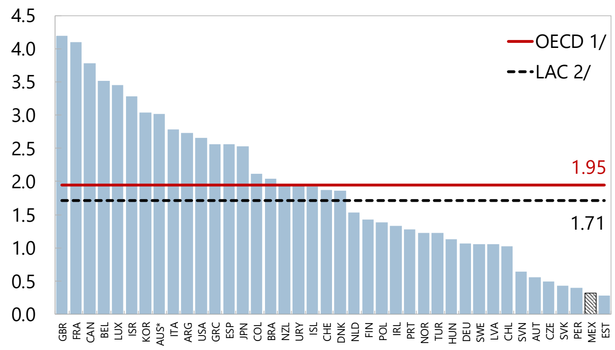
Sources: IBFD
1/ OECD unweighted average excluding Mexico
2/ LAC unweighted average including Argentina, Brazil, Chile, Colombia, Peru, and Uruguay

11. At the local level, there is much potential to increase revenue from strengthening property taxation. Revenue from property taxation is very low and as percentage of GDP much below the regional and OECD averages (Figure 5). However, increasing revenue from property taxation is typically only feasible over the medium term.

Figure 5. Property Taxation

Property Tax Revenue

(As percent of GDP, 2016)



Sources: OECD Revenue Statistics.
1/ OECD unweighted average excluding Mexico
2/ LAC unweighted average including Argentina, Brazil, Chile, Colombia, Peru, and Uruguay
3/ Asterisks denotes data last year availability: (*) 2015

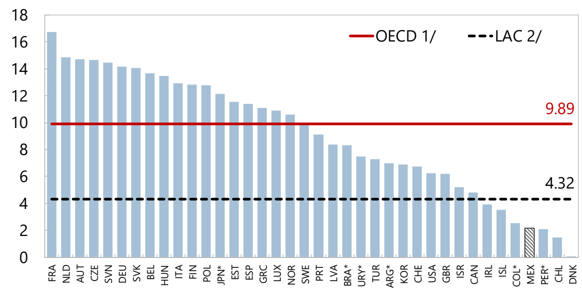
12. Revenue from social security contributions (SSC) is also relatively low, presumably in part due to evasion and avoidance. Social security contributions are levied on the base wage of salaried workers in Mexico, but not on the wage of non-salaried workers which facilitates avoidance. The vast majority of firms implicitly report effective SSC rates of less than the required norm, with significant variation in average rates paid across industries and states. Regression analysis suggests that non-compliance with the social security regime can be deeply entrenched in certain neighborhoods, industries and supply chains and that the compliance of individual firms will not improve unless compliance of other firms they compete and interact with changes as well (Box 1).

Box 1. Evasion of Social Security Contributions

Tax evasion is by definition hidden and therefore difficult to quantify in most cases. However, Mexico's 2013 Economic Census covers all urban firms with fixed establishments regardless of firm size, past tax payments or registration status and contains information on social security contribution (SSC) payments, along with a range of other variables, and allows computing a measure of evasion of SSC at the firm level. It is compiled by INEGI, an autonomous public agency that is not linked to tax or social security administration.

Revenue from social security contributions are relatively low in Mexico, presumably in part due to evasion and avoidance. SSC are levied on the base wage of salaried workers, but not on the wage of non-salaried workers which facilitates avoidance. While the legally required rate of SSC varies across workers on firms, the legal effective minimum rate is around 17 percent for taxpayers under the normal tax regime. Before 2014, the legal effective minimum rate was binding for all firms with salaried workers.

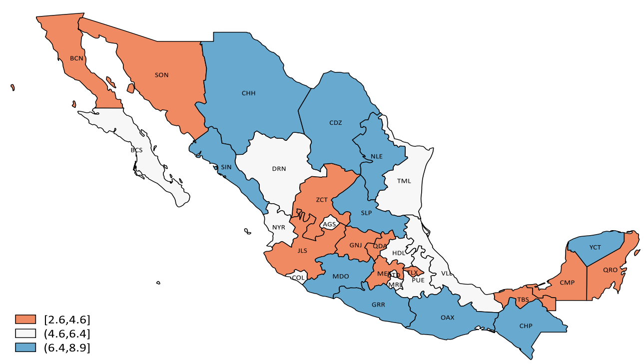
Social Security Contributions
(As percent of GDP, 2016)



Sources: OECD, World Economic Outlook; and, IMF Staff calcuations.
1/ OECD unweighted average excluding Australia, Lithuania, and Mexico.
2/ LAC unweighted average including Argentina, Chile, Colombia, Peru, and Uruguay.
3/ (*) Latest data available 2015.

The Economic Census allows calculating the combined social security contribution for health, pensions and housing as a share of the wage bill of salaried workers. Interestingly, the vast majority of firms implicitly report effective SSC rates of less than 17 percent. In addition, there is significant variation in the average rates reported across states, with a difference of 7.3 percentage points between the state with the lowest and the highest rate. These stylized facts suggest that there are likely structural factors that drive, at least in part, these differences, together with complexities in the social security regime.

Evasion of Social Security Contributions
(As percent of GDP, 2016)



Sources: INEGI; and, IMF Staff calcuations.

A simple regression analysis at the firm-level suggests that social security contribution evasion is endemic and that a large-scale effort of the authorities would be required to change compliance behavior. The dependent variable is the firm-level rate of social security contributions, and various controls are added, alongside a range of fixed effects. The variables of interest are the average rate of SSC of firms located in the immediate vicinity of the firm, potential competitors defined as firms operating in the same industry and located in the same state and firms operating in upstream and downstream industries in the same state. The coefficient estimates on these variables are all significant and suggest that non-compliance with the social security regime can be deeply entrenched in certain neighborhoods, industries and supply chains and that the compliance of individual firms will not improve unless compliance of other firms they compete and interact with changes as well.

Annex VI. Fintech Regulation: Balancing Risks and Rewards

1. **Mexico has witnessed rapid growth in Fintech investment and business transactions in recent years but its penetration rate remains low**. According to Finnovista, there were 238 fintech firms operating in Mexico as of June 2017, mainly focusing on payment, lending, cryptocurrency, data and analytical support; 69 percent of Fintech firms began operations within the last 3 years and 39 percent have less than 10 employees. Mexico now accounts for 25 percent of Fintech activities in Latin America. Despite its rapid growth, Fintech transactions volume and adoption rates are still low: e.g., total electronic payments with Paypal Mexico (the largest e-money firm) only amounted to MXN11billion in 2016. The largest peer-to-peer lending platform, Kubo Financiero, has a loan balance of only about USD10 million in 2017.

2. **Fintech is expected to help strengthen competition in the financial sector, promote financial inclusion and reduce intermediation costs**. Financial inclusion in Mexico is still low compared to peers, while the banking sector is highly concentrated and suffers from a cost-to-income ratio that is among the highest in the region. Fintech has the potential to strengthen competition and to promote easier and cheaper access to credit for households and SMEs. In addition, the cost for payment and remittance transactions could be reduced, especially for migrant workers due to increased competition from low-cost Fintech firms. Fintech also has specific advantages over the traditional banking model. Some P2P lending platforms, for example, use big data algorithms in social media and e-commerce to analyze credit risk. Moreover, online based P2P lending could improve financial inclusion in rural areas where bank branches are scarce. Finally, money transfer operated by Fintech typically is faster and cheaper, particularly for cross-border payments.

3. **Fintech firms are exposed to similar risks as traditional financial intermediaries such as ML/TF, cyber risk, data privacy and financial fraud**. For example,

- The fund-raising activities of fintech firms could turn into Ponzi games without appropriate supervision and consumer protection.
- The risk pricing models used by Fintech firms (e.g. big data-based lending algorithms) have yet to be tested fully across economic cycles. In the case of a significant mispricing of risk, investors could suffer potentially large losses, thus weakening confidence in the sector.
- Some fintech asset managers face maturity mismatches between assets and liabilities and are thus subject to liquidity risk or deposit runs.
- Cryptocurrency assets might pose considerable ML/TF risks due notably to their varying levels of anonymity and the absence of a regulated intermediary.

4. The new legal and regulatory framework for Fintech should reduce the legal uncertainty and boost investor confidence in the sector. The law that was approved in March 2018 will give Fintech companies greater regulatory certainty regarding crowdfunding, payment methods and rules surrounding cryptocurrencies such as bitcoin. Key clauses include: (i) P2P lenders should not guarantee a fixed return for investors while Fintech firms should have "skin the game" by linking their fee or own capital to the performance of the P2P loan; (ii) an open data framework will be adopted to allow financial institutions and Fintech firms to share transactions data with the permission of the consumer. The fee to access the data will be regulated to cover the cost of providing the data through open data APIs. Regulation on e-payment and crowdfunding was published in September 2018, which covers license requirements, investor protection, data sharing and AML/CFT. Fintech firms can formally apply to enter the new regulatory regime.

5. With Fintech still evolving rapidly, the regulations aim to strike a balance between promoting innovation and investor protection. They recognize the sandbox approach to provide regulatory relief for Fintech firms who might be unable to meet these requirements initially. To mitigate risks, sandboxes often include safeguards to contain restrictions on the scope of the experiment, such as the duration, and number and type of customers. For example, an e-payment firm with demonstrated benefit for its users can operate under regulatory sandbox for up to one year, extendable for another year upon request under the discretion of the regulator. Given the low credit penetration and financial inclusion in Mexico, Fintech has good potential to improve competition, lower transaction costs, and ease credit access, especially for SMEs and households.

6. Fintech regulations should be proportional and adaptive to balance innovation and risks while ensuring a level playing field. Regulatory uncertainty and overreach can hurt the Fintech industry. The regulatory stance currently varies significantly across countries in terms of licensing requirements, transaction size and flexible bank charters. Given the rapid changes in the Fintech industry, international best practices on Fintech regulations have yet to emerge, including on data access, the definition of security (e.g. P2P loan, initial coin offering) and the licensing regime. Ideally, Fintech regulations should be technology-neutral and designed to reduce regulatory arbitrage. To reflect the rapid progress in the field of Fintech, CNBV has set up a sandbox for testing innovative ideas free of regulatory burden on a small scale and for targeted products.

INTERNATIONAL MONETARY FUND

MEXICO

STAFF REPORT FOR THE 2018 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

October 18, 2018

Prepared By

The Western Hemisphere Department
(in consultation with other departments)

CONTENTS

FUND RELATIONS

(As of August 31, 2018)

The 2018 Article IV discussions were held in Mexico City during September 10-21. The mission comprised Costas Christou (head), Jorge Alvarez, Frederic Lambert and Christian Saborowski (WHD), Julia Bersch (SPR), Hui Miao (MCM), Florian Misch (FAD), and Richard Berkhout (LEG). Robert Rennhack (WHD) joined the concluding meetings. Mr. Hurtado and Ms. Arevalo Arroyo (OED) also participated in the meetings. The mission met with Bank of Mexico Governor Diaz de Leon, Secretary of Finance and Public Credit Gonzalez Anaya, Economy Secretary Guajardo, other senior officials, and representatives of the business community, other IFIs, and academics. Juan Pablo Cuesta, Patricia Delgado and Javier Ochoa (WHD) contributed to the preparation of this 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	7,441.95	83.50
Reserve position in Fund	1,470.79	16.50
New Arrangement to Borrow	258.50	

SDR Department:	**SDR Million**	**Percent of Allocation**
Net cumulative allocation	2,851.20	100.00
Holdings	2,892.07	101.43

Outstanding Purchases and Loans: None

Latest Financial Arrangements

Type	**Arrangement Date**	**Expiration Date**	**Amount Approved (SDR Million)**	**Amount Drawn (SDR Million)**
FCL	Nov. 29, 2017	Nov. 28, 2019	62,388.90	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

Projected Payments to the Fund (SDR million):

		Forthcoming			
	2018	2019	2020	2021	2022
Principal					
Charges / Interest		0.05	0.05	0.05	0.05
Total		0.05	0.05	0.05	0.05

Exchange Rate Arrangement: Mexico has a free-floating exchange rate, although it temporarily shifted to a floating arrangement between May and November 2015. 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 8, 2017. The staff report was published as IMF Country Report No. 17/346.

Technical Assistance

Year	Dept.	Purpose
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
General: Data provision is adequate for surveillance.
National Accounts: The national accounts statistics generally follow the recommendations of the *System of National Accounts, 2008 (2008 SNA).* 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. 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. INEGI publishes annual and quarterly GDP statistics and sectoral accounts and balance sheets.
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.
Government finance statistics: The authorities compile fiscal statistics following national concepts, definitions, and classifications that make international comparison difficult. The statistics are comprehensive and timely, except for states and municipalities. The new government accounting law mandates accounting standards that follow international standards for all levels of government, and that take into account 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.

The authorities have started to report government finance statistics in GFSM 2014 format in 2017. They reported a time series that covers GFS from 2008 to 2016 inclusive, and it is published in the GFS yearbook.
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. No FSIs are reported on the non-financial corporations sector.
External sector statistics: 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. Several measures to improve external debt statistics have been carried out, including the compilation of data on external liabilities of the private sector and publicly traded companies registered with the Mexican stock exchange. STA conducted two technical assistance missions on external sector statistics (ESS) in 2014 and 2015. The missions assisted in further strengthening their data collection and compilation system for ESS focused on foreign direct investment, financial derivatives, bank accounts used in foreign exchange operations, capital account, financial intermediation services indirectly measured private sector debt, and the migration to the *BPM6*. As a result of the implementation of the missions' recommendations, the quality of ESS has significantly improved. There are ongoing efforts to compile manufacturing services on physical inputs own by others, and to improve the coverage of capital account transactions and nonfinancial private sector transactions and positions. In addition, there is now better coverage of nonbank financial intermediaries.

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 Sep. 30, 2018								
		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		Aug. 2018	Sep. 2018	D	D	D		
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[1]		Aug. 2018	Sep. 2018	W	W	W		
Reserve/Base Money		Jul. 2018	Sep. 2018	D	D	D	LO, O, O, LO	LO, O, O, O, O
Broad Money		Jul. 2018	Sep. 2018	M	M	M		
Central Bank Balance Sheet		Jul. 2018	Sep. 2018	W	W	W		
Consolidated Balance Sheet of the Banking System		Jul. 2018	Sep. 2018	M	M	M		
Interest Rates[2]		Jul. 2018	Aug. 2018	D	D	D		
Consumer Price Index		Sep. 2018	Sep. 2018	Bi-W	Bi-W	Bi-W	O, O, LNO, O	LO, LNO, O, O, LNO
Revenue, Expenditure, Balance and Composition of Financing[3]–Gen. Government[4]		Jul. 2018	Aug. 2018	M	M	M	LO, LNO, LNO, O	O, O, O, O, O
Revenue, Expenditure, Balance and Composition of Financing[3]–Central Government		Jul. 2018	Aug. 2018	M	M	M		
Stocks of Central Government and Central Government-Guaranteed Debt[5]		Jul. 2018	Aug. 2018	M	NA	M		

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

External Current Account Balance		Q2 2018	Aug. 2018	Q	Q	Q	LO, LO, LNO, LO	LO, O, O, O, LO
Exports and Imports of Goods and Services		Aug. 2018	Sep. 2018	M	M	M		
GDP/GNP		Q2 2018	Sep. 2018	Q	Q	Q	O, O, O, LO	LO, O, LO, LO, O
Gross External Debt		Q2 2018	Sep. 2018	Q	Q	Q		
International Investment Position[6]		Q2 2018	Sep. 2018	Q	Q	Q		

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

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

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

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

[5] Including currency and maturity composition.

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

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

[8] Reflects the assessment provided in the data ROSC 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).

[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.

Statement by the IMF Staff Representative
November 5, 2018

This statement provides information that has become available since the staff report was finalized. This information does not alter the thrust of the staff appraisal.

1. **On October 30, the authorities published the 2018:Q3 GDP flash estimate.** The Mexican economy grew 2.6 percent year-on-year in the third quarter of the year. In seasonally adjusted terms, it expanded by 0.9 percent quarter-on-quarter. The flash estimate is broadly in line with staff's expectations and the annual growth projection of 2.1 percent.

2. **President-elect Lopez Obrador announced on October 29 that he would cancel the partially-completed new Mexico City airport project following a public consultation.** The consultation was organized by the incoming administration which promised to fully guarantee the rights of investors and bondholders. Nevertheless, the peso lost some 3½ percent the following day.

3. **On October 31, Fitch cut the outlook for Mexico's foreign currency credit rating to 'negative' from 'stable'.** Fitch kept Mexico's rating at BBB+ but revised down the outlook citing risks to the incoming administration's fiscal stance and the follow-through on previously approved reforms, including the energy reform. On October 19, Fitch had affirmed PEMEX's rating at BBB+ but similarly cut the outlook to 'negative'. Fitch added that the revision in the outlook reflects the increasing uncertainty over PEMEX's future business strategy coupled with the company's deteriorating Standalone Credit Profile.

4. **The U.S. Treasury announced a tripling in the size of an emergency swap line for Mexico.** On October 17, the two countries agreed to update their exchange stabilization agreement and increase the swap line from $3 billion to $9 billion. The swap line has been in place since 1994 when NAFTA came into force. Under the agreement, Mexico can temporarily borrow dollars in exchange for pesos at a rate and for an amount to be negotiated at the time of the request. Mexico has also been part of the Federal Reserve System's swap network since 1967 and has currently access to a $3 billion swap line.

5. **Insurer AXA suffered a cyber-attack on October 22 but client resources are said to be safe.** AXA Insurance reported inconsistencies in its payment matching system but noted that none of its clients have been affected. The attack follows a series of coordinated attacks on Mexico's interbank electronic payment system in April and May 2018 as part of which some $15.6 million were stolen.