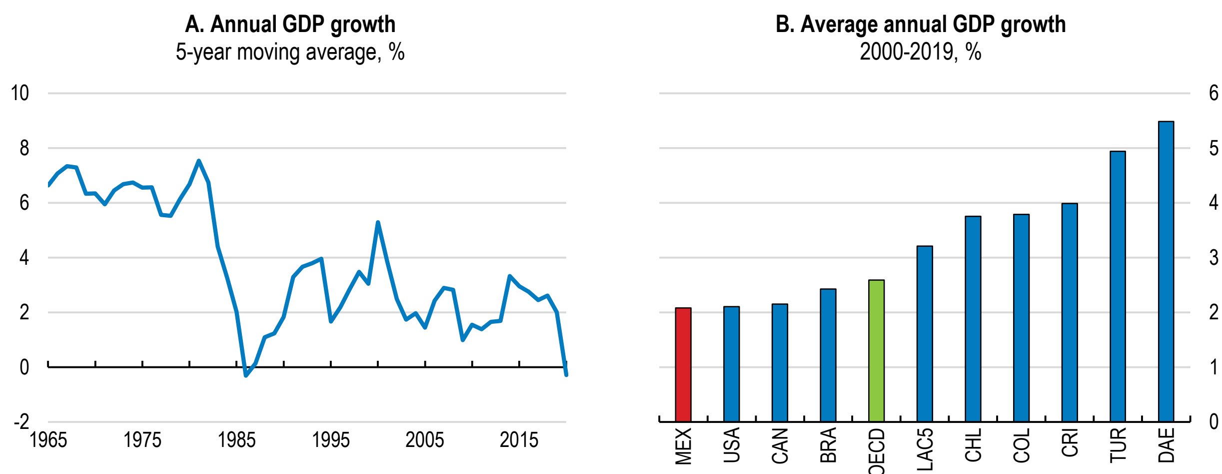
1 Key Policy Insights

The economy is recovering from the pandemic-induced recession. Manufacturing and exports are above pre-pandemic levels and services are strengthening. Informal workers, women and youth were particularly hit, widening long-standing inequalities. Mexico's large potential to be a high-growth economy remains unrealised and growth over the last decades has been low. The updated trade agreement in North America can give fresh impetus to growth. Still, a comprehensive reform agenda to reboot investment and turn around productivity is needed. Stepping efforts to transition towards carbon neutrality would also help Mexico to seize new opportunities and address climate change.

Mexico is recovering but medium-term growth prospects have weakened

Mexico is recovering from a pandemic that had deep economic and social impacts. Informal workers, women and youth were particularly hit, exacerbating long-standing social challenges. Mexico's solid macroeconomic policy framework, underpinned by an innovative debt management, sound monetary policy and a flexible exchange rate, safeguarded macroeconomic stability and comfortable access to international capital markets. The recovery is underway, thanks to strong manufacturing and agriculture sectors and accelerating services, supported by the vaccination rollover. But medium term growth prospects have weakened and growth over the past two decades has been low (Figure 1.1). Poverty rates and regional inequalities remain high (Figure 1.2). Growth increased during the 1990s, thanks to trade integration into the world economy, but has stagnated since the 2000s. Informality, financial exclusion or corruption have hindered productivity growth. Low female participation rates and weak investment since 2015 have also impacted medium-term growth prospects (Figure 1.3).

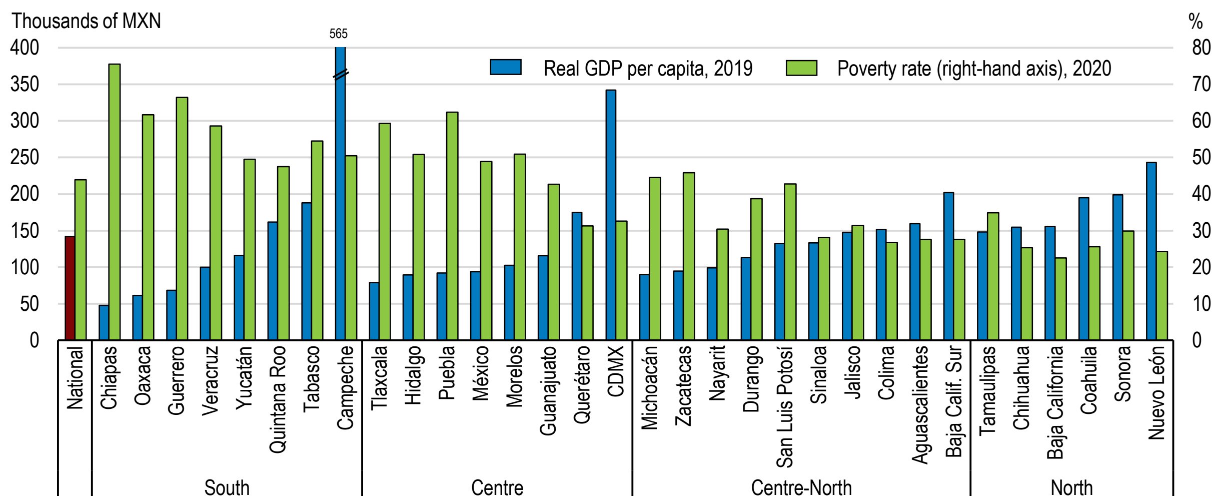
Figure 1.1. Mexico has grown more slowly than its peers



Note: Panel B: average annual growth refers to mean yearly GDP growth. LAC5 refers to Chile, Colombia, Costa Rica, Mexico and Brazil. DAE refers to a group of six dynamic Asian economies: India, Indonesia, Malaysia, Philippines, Thailand, and Viet Nam. All country group averages are unweighted.
Source: OECD Economic Outlook database.

The updated North America trade agreement can give fresh impetus to growth, as it brings long-term certainty to trade, foreign investment and conflict resolution in the region. However, additional reform efforts to boost growth and realise Mexico's full growth potential are needed. These efforts would have substantial payoffs, according to simulations based on the OECD's quantification framework (Égert, 2017[1]). An ambitious package that would reduce barriers to investment and trade, particularly in services, improve access to finance, boost female labour participation and improve the control of corruption would raise GDP per capita by an additional 25% over 10 years (Table 1.1).

Figure 1.2. Regional differences are large



Note: The poverty rate refers to the multidimensional measurement of poverty, combining information on income and satisfaction of social needs, as compiled by CONEVAL. Campeche and Tabasco are the states where oil production is concentrated and GDP-per capita does not fully reflect living standards in those states.
Source: INEGI and CONEVAL.

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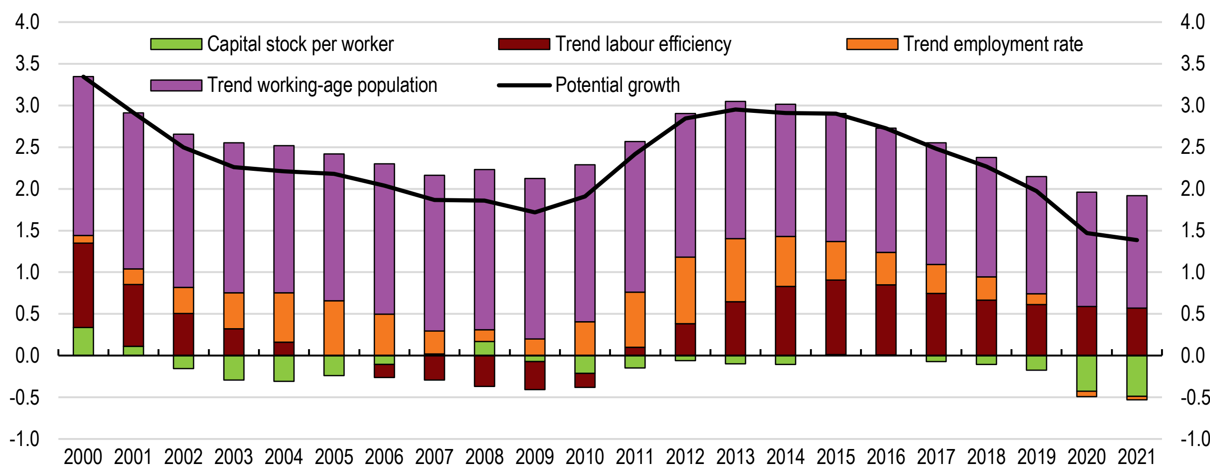
Figure 1.3. The economy's growth potential has fallen

2000-2021, %



Note: Potential growth is expressed as a percentage change. Contributions to growth are shown for the remaining variables. The OECD methodology is based on a Cobb-Douglas production function as described in (Chalaux and Guillemette, 2019[2]).
Source: OECD Economic Outlook 110 database.

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Table 1.1. An ambitious package of reforms could boost potential output significantly

Potential impact of structural reforms on GDP per capita at different horizons

Structural policy	Effect on the level of GDP per capita (%)		
	2-years	5-years	10 years
Boosting financial inclusion	1.1	3.0	4.1
Greater control of corruption	1.1	4.0	7.9
Lower barriers to trade and investment (PMR)	1.3	5.0	9.9
Higher female labour market participation	.	.	3.5
All above			25.2
Corresponding to an average annual growth of:			2.5

Note: These estimates were obtained based on numerical indicators of Mexico's policy stance in each policy area pertaining to the latest available date. The scenario about financial inclusion is based on the number of bank branches per 100 thousand adults, the barriers to trade and investment on the Product Market Regulation indexes and the active labour market policies scenario on the spending per unemployed person as a % of GDP/capita. The three scenarios, as the female labour market participation, assume that the gap with the OECD average is closed. The control of corruption is based on World Bank Governance indicator. This scenario assumes that the gap with the OECD average is halved. The quantifications are illustrative, as they are subject to uncertainty about both their magnitude and the time horizon of their materialisation.
Source: OECD calculations based on (Égert, 2017[1])

Against this background, the main messages of the Survey are:

- Maintaining and strengthening Mexico's solid macroeconomic policy framework is key for stability. The ability of fiscal policy to smooth out economic cycles and support growth during recessions can be enhanced, creating more space for public investment.
- Rebooting private investment and turning around low productivity growth are fundamental priorities. This will require comprehensive reforms to improve business regulations, boost competition, reduce informality, continue fighting corruption and transition towards carbon neutrality.
- Widening access to finance and strengthening digitalization would provide more equal opportunities and help to boost growth.

The recovery has broadened

The economy is recovering from the pandemic-related recession (Figure 1.4). External demand was the main driving force at the beginning of the recovery, with manufacturing exports above their pre-pandemic levels since February 2020, benefitting from the strong rebound in the United States. Consumption has also become a key growth driver, supported by higher mobility, the vaccination rollout and robust remittances. It is 2% below its pre pandemic level. Investment is recovering at slower pace and remains 8% below its pre pandemic level. The pace of the recovery is heterogeneous across sectors. While manufacturing and agriculture have recovered quickly and some services, such as retail, wholesale trade, education, health and financial services, are making progress, the recovery in leisure and hospitality lags behind. Tourism, an important source of jobs and revenues for several states, is 28% below pre-pandemic levels.

Figure 1.4. The recovery is underway

A. Post-recession GDP recovery
Index, t+0 = 100

B. Manufacturing exports
Index, 2013 = 100, s.a.

C. Consumption
Y-o-y % changes

D. Remittances per capita
2013 USD, 3-quarter moving average

Note: Panel A: t+0 refers to 1994Q4, 2008Q3, and 2019Q4, respectively. A broken line indicates projections. Panel C: country group averages are unweighted. LAC refers to Chile, Colombia, Costa Rica, Argentina, and Brazil. Panel D: population figures projected from 2021Q1 onward.
Source: OECD Economic Outlook database; INEGI; OECD Population Statistics; and Bank of Mexico.

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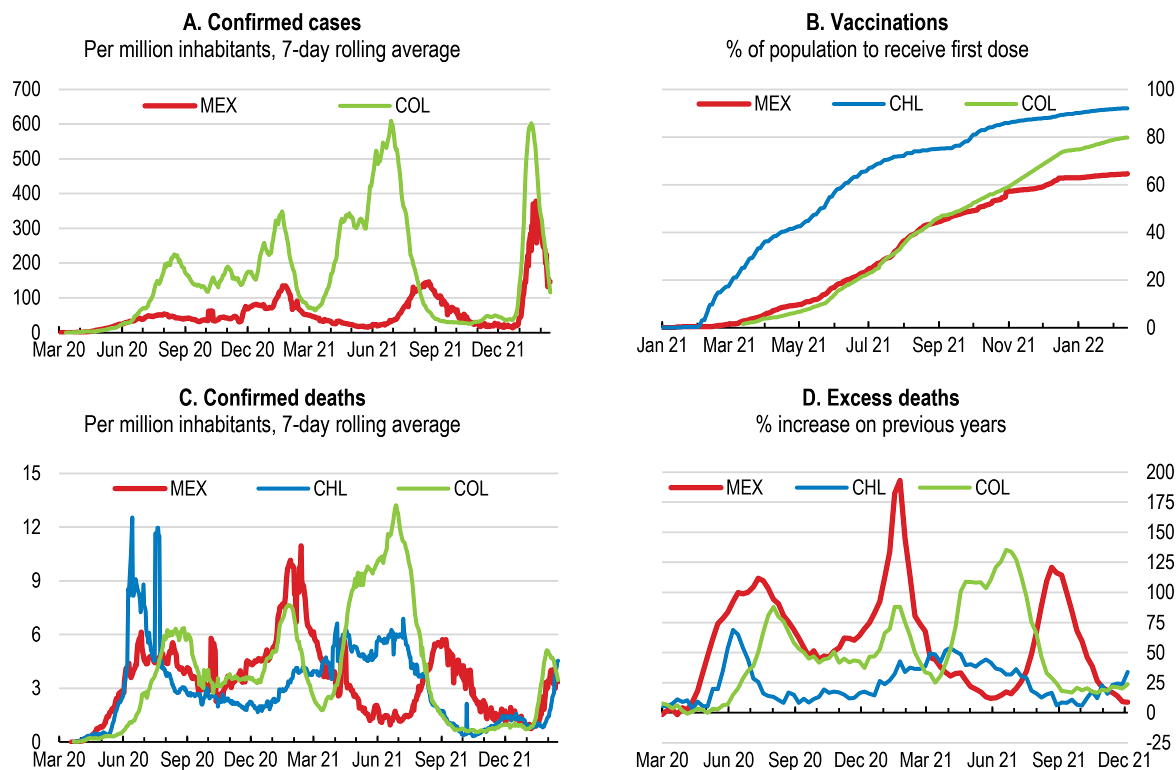
COVID-19 cases have recently started to fall and vaccination is progressing (Figure 1.5). The authorities response to the pandemic (Box 1.1) included confinement and social distancing measures, put in place in March 2020, after the first confirmed case was reported at the end of February 2020. The last infectious wave peaked in January 2022 (Figure 1.5, Panel A). Thanks to progress in vaccination (Figure 1.5, Panel B) there were fewer casualties than in previous waves (Figure 1.5, Panels C and D). As of January 30, 64% of the population have received at least one dose. This represents about 85% of the population over 18 years. 60% of the population are fully vaccinated. The vaccination roll-out is showing significant heterogeneity across regions. Accelerating vaccination as much as possible continues to be a fundamental priority and would help to protect against possible new virus outbreaks.

Figure 1.5. COVID-19 cases have recently decreased and vaccination is progressing



Note: Panel D plots the percentage increase in recorded deaths from 2020-2021 compared to the baseline number of deaths in 2015-2019.
Source: Our World In Data.

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Box 1.1. Main policy responses to the pandemic

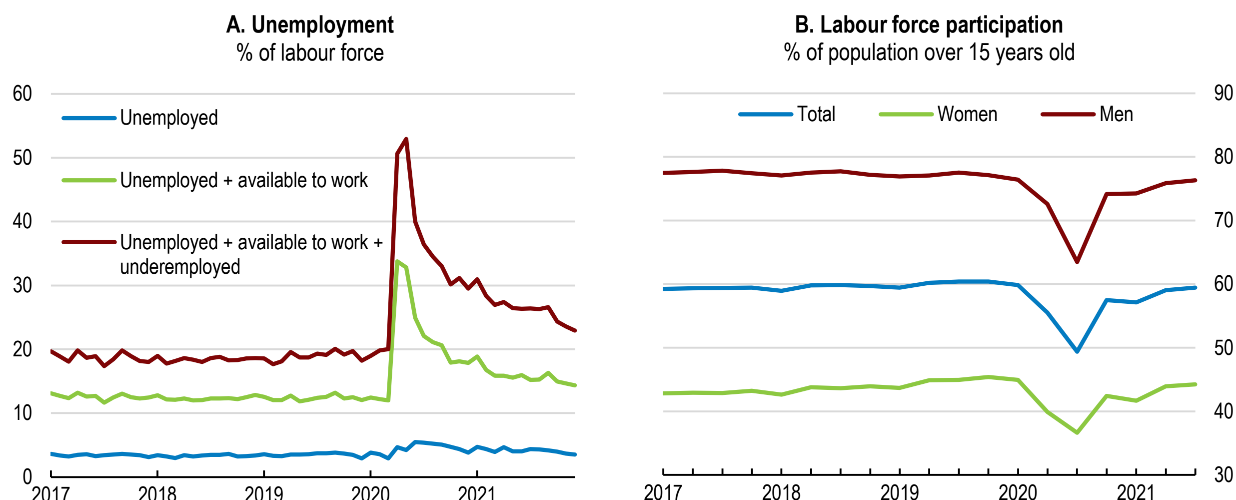
To address the pandemic, Mexico increased health expenditure by 0.4 % of GDP in 2020. In addition, Mexico took additional measures:

- Frontloaded payments of the old-age non-contributory pensions by 8 months.
- Accelerated procurement processes and VAT refunds.
- Provided loans to SMEs maintaining employees on payroll (*Créditos a la Palabra para empresas*).
- Loans to domestic workers and independent workers (*Créditos a la Palabra para personas*).
- Provided liquidity support and guarantees by development banks.
- A 3-month subsidy for workers who lost employment and hold a mortgage with the Housing Institute.
- Monetary authorities cut rates by 300 basis points from March 2020 through February 2021. The Central Bank also introduced measures to support the functioning of the financial system amounting to up to 3.5 % of GDP.
- Temporary changes in accounting standards to allow credit providers to defer loans for up to 6 months.
- Reduction of the total amount of monetary regulation deposits for commercial banks to support their access to liquidity.

Source: COVID Policy tracker database.

The labour market is gradually improving but challenges remain (Figure 1.6) and the pandemic has led to significant income losses, increasing poverty. The standard unemployment rate, at 3.9%, is still 0.6 percentage points above the level of late 2019. However, the rate jumps to 15% when considering also the population that remains outside the labour force and would accept a job, and to 24% when adding those who would like to work more hours. Labour market participation is gradually recovering, but remains below pre-pandemic levels. The recovery in participation is being slower for women, who were particularly impacted by the pandemic.

Figure 1.6. The labour market is gradually improving but challenges remain



Note: Panel A: the underemployment rate refers to the share of economically active individuals aged 15 and over who have the ability and desire to work more hours than their current occupation permits.
Source: INEGI.

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The economy is projected to expand by 2.3% in 2022 (Table 1.2). Exports will keep benefiting from buoyant growth in the United States, and consumption will grow thanks to an increasing share of the population being vaccinated and the gradual improvement in the labour market. Investment will be supported by planned infrastructure projects. Based on these projections, GDP would reach its pre-pandemic level by 2022Q3. Inflation will edge down, after the significant increase in 2021, that was triggered by higher energy prices supply bottlenecks in some inputs, such as semiconductors and pressures on some merchandise items.

Uncertainty about these projections remains very high. If infections increase again significantly, a reinforcement of containment measures may be needed, hampering economic activity. Inflation may be higher for longer than anticipated, eroding purchasing power, particularly of vulnerable households, and requiring a larger tightening of monetary policy than projected, which would weaken the recovery. Episodes of financial volatility may trigger greater risk aversion, reduce net financial inflows and increase Mexico's financing costs. An escalation of crime and violence could depress investment and compromise the recovery of tourism. Ongoing discussions about reform with some potential reversals in the energy sector creates uncertainty, which could further weaken the recovery. On the upside, if the recovery in trading partners is stronger than anticipated, exports and job creation could be more robust. Supply chain integration could deepen further thanks to the updated trade agreement with the United States and Canada and the relaunch of the high-level economic dialogue with the United States. The economy may also face unpredictable shocks, whose effects are difficult to factor into the projections. Should those shocks materialise, additional policy actions would be warranted. (Table 1.3).

Table 1.2. The recovery will continue

	2017	2019	2020	2021	2022	2023
	Current prices MXN billion	Percentage changes, volume (2013 prices)				
GDP at market prices	21,934.2	-0.2	-8.2	5.3	2.3	2.6
Private consumption	14,305.3	0.4	-10.5	7.3	2.0	2.3
Government consumption	2,548.0	-1.8	0.1	1.2	2.1	2.3
Gross fixed capital formation	4,845.7	-4.7	-17.8	10.4	4.4	4.5
Stockbuilding[1]	632.7	-0.2	-0.4	0.3	0.2	0.0
Total domestic demand	22,331.7	-1.3	-11.3	7.7	2.8	2.9
Exports of goods and services	8,258.6	1.5	-7.3	5.9	6.5	5.3
Imports of goods and services	8,656.1	-0.7	-13.7	14.6	6.0	5.8
Net exports[1]	-397.6	0.8	2.4	-2.9	0.2	-0.2
Memorandum items						
GDP deflator	-	3.6	3.4	5.7	5.4	3.4
Consumer price index (average)	-	3.7	3.8	4.7	5.6	3.4
Core inflation index[2] (average)	-	3.7	3.8	4.5	4.0	3.3
Potential growth	-	2.0	1.5	1.4	1.5	1.6
Output gap (% of GDP)	-	-4.5	-13.5	-10.2	-9.6	-8.7
Unemployment rate[3] (% of labour force)	-	3.5	4.4	4.1	4.0	3.9
Current account balance (% of GDP)	-	-0.3	2.3	-0.7	-0.8	-0.9
Public balance[4] (% of GDP)	-	-1.6	-2.9	-2.9	-3.2	-3.0
Net public debt[4] (% of GDP)	-	45.1	51.5	49.9	50.0	49.7

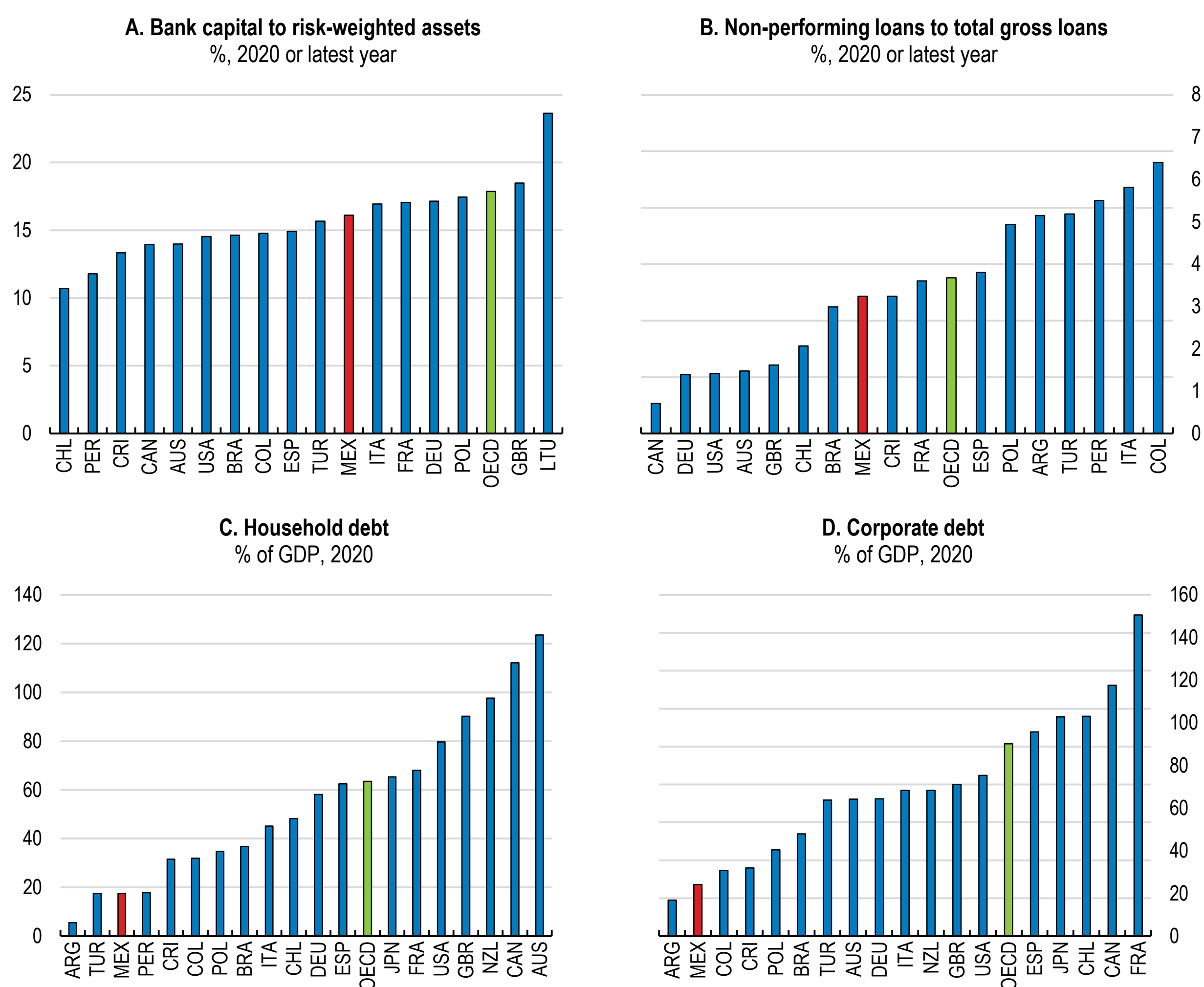
1. Contributions to changes in real GDP, actual amount in the first column. 2. Consumer price index excluding volatile items: agricultural, energy and tariffs approved by various levels of government. 3. Based on national employment survey. 4. Central government and public enterprises.
Source: OECD Economic Outlook database.

Table 1.3. Possible shocks to the Mexican economy

Vulnerability	Possible outcome	Possible policy action
Contagion from acute financial volatility in other emerging markets	Large exchange rate depreciation and higher costs of financing the fiscal deficit and servicing debt.	Tighten monetary policy and continue active debt management to re-profile debt maturity.
Reversal of reforms	Reversal of reforms or lack of reform progress that can hurt the business climate and investment in key sectors, such as energy.	Pursue reforms that facilitate private sector investment and reduce policy uncertainty in key sectors, such as energy.
Increase in social unrest	Political disruption that could hamper implementation of reforms and hamper investment and the medium-term growth outlook.	Pursue efforts to reduce inequalities based on broad agreements that go beyond political parties. Communicate that those reforms will help to share the benefits of growth more widely.
Environmental risks and natural disasters	Seasonal and unpredictable extreme weather events, such as hurricanes, droughts or floods, hampering the agriculture sector and adding pressure on food inflation.	Strengthen disaster risk management and foster climate change adaptation strategies, including its financing.

The financial system has been stable and resilient so far (Figure 1.7), maintaining sizable capital and liquidity levels above regulatory minima and sound profitability ratios. Non-performing loans remain so far contained, but the forbearance scheme put in place during 2020 has ended and non-performing loans may still increase, particularly if economic conditions deteriorate. Even if all loans within the forbearance scheme become non-performing, this would not trigger systemic stress (Banxico, 2021[3]). However, smaller and medium-sized banks, with a greater exposure towards SMEs and consumer loans, may be substantially impacted, even if they have built additional reserve buffers. The latest stress tests conducted by the Central Bank suggest that the banking system has sufficient capital buffers and liquidity to weather extreme economic events (Banxico, 2021[3]). Households and firms indebtedness remain low in international perspective (Figure 1.7, Panels C and D). Debt servicing costs for households and firms remain contained (Banxico, 2021[3]) Households debt are largely in the form of mortgages, which are concentrated in the upper part of the income distribution, which has been less affected by the labour market impact of the pandemic. The corporate sector remains naturally hedged against currency risks, as liabilities are well covered by revenues that corporates generate in foreign currencies in which they are indebted.

Figure 1.7. The financial sector appears resilient



Note: Panel A refers to regulatory tier 1 capital to risk-weighted assets.
Source: IMF Financial Soundness Indicators; and IMF Global Debt Database.

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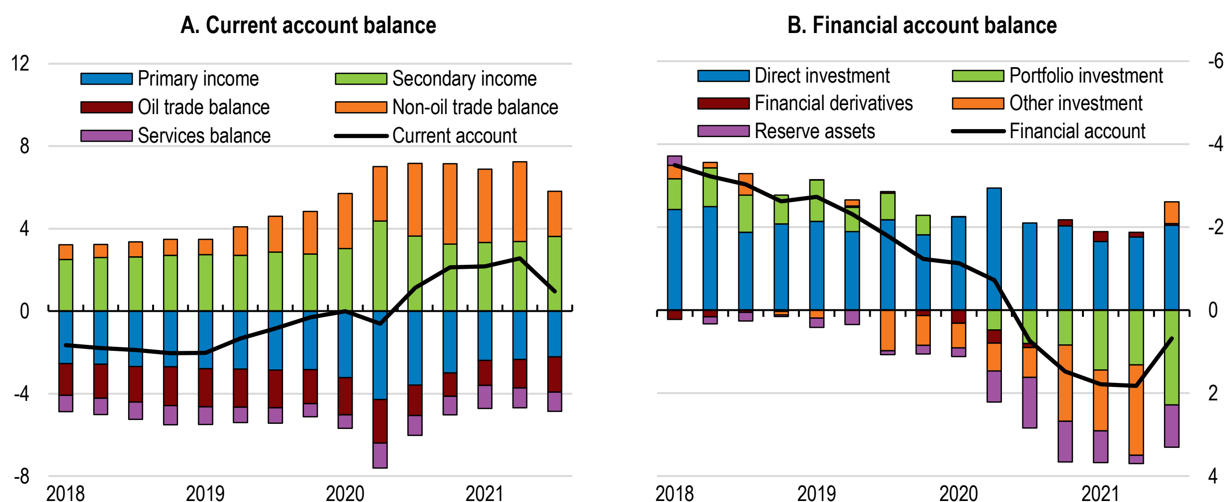
Mexico is actively assessing the potential financial impact from climate change and other environmental vulnerabilities. This includes transition risks, such as those associated with the policies to reduce global emissions, which could trigger sharp changes in asset prices and impact particularly firms without strategies to reduce emissions, as well as lenders to these firms, thus involving financial risks. Physical risks, such as those related to hurricanes, droughts, heatwaves, or floods area also included. Higher intensity or frequency of these events, which are relatively frequent in Mexico, can generate financial stability risks, including for insurance companies, thus reducing liquidity and decreasing assets values. The Ministry of Finance is developing a taxonomy to provide financial players and companies with transparent and consistent definitions of the activities that qualify as sustainable. It is also improving the regulatory framework, by incorporating environmental and social investment policy considerations for institutional investors, such as pension funds, insurance companies and development banks. This aims at facilitating that a higher proportion of investors incorporate environmental, social, and governance considerations into their investment process. Looking forward, based on the taxonomy that is under progress, phasing in mandatory disclosure of climate-related risks by financial institutions and listed companies would facilitate a more transparent management of these risks and provide incentives for allocating resources to cleaner activities. Evidence from France, which made climate-risk disclosures obligatory for asset managers, insurers and pension funds in 2016, shows that firms that had to disclose climate risks held 40% fewer bonds, stocks and other securities in fossil-fuel firms by value than those that did not have to disclose risks (Mésonnier and Nguyen, 2021[4]). The Central Bank is also taking steps to integrate climate-related risks into their risk management framework. This could be followed up by running climate change stress tests, which have started to be conducted in several OECD economies, such as France, the Netherlands or the United Kingdom.

On the external side, the current account moved into a 2.4% of GDP surplus in 2020 (Figure 1.8), as the recovery of external demand from the COVID-19 shock outpaced the recovery in domestic demand. The current account was also supported by strong remittances from abroad. Net foreign direct investment amounted to 2.3% of GDP in 2020. External debt remains contained (Figure 1.9). The flexible exchange rate is helping the economy to absorb external shocks, with further backstops provided by ample international reserves covering 40% of external debt, access to the US Federal Reserve and Treasury swap lines, as well as the IMF's flexible credit line. Mexico's risk measures have trended down, after peaking in April 2020 (Figure 1.10).

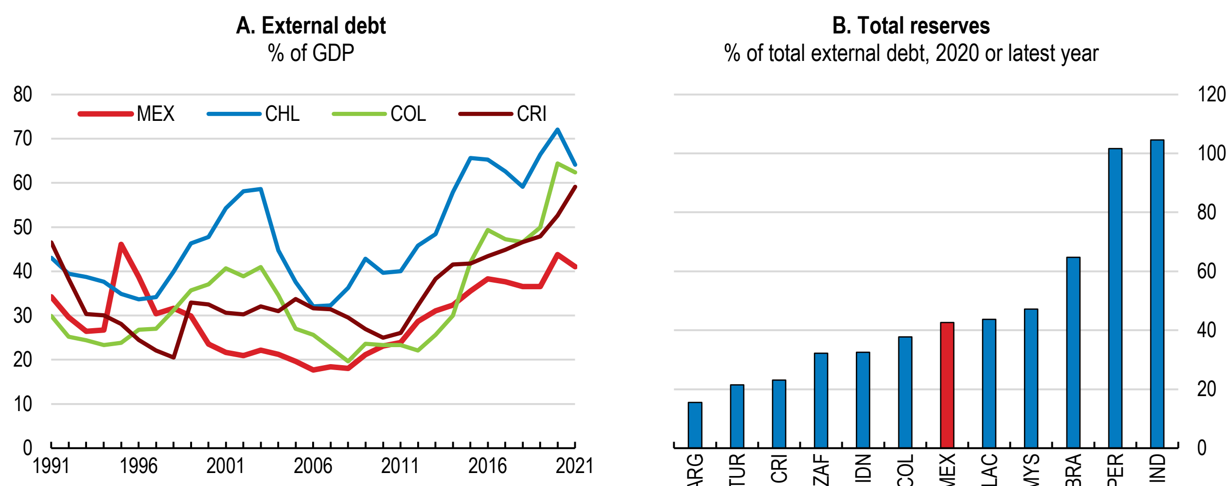
Figure 1.8. A positive non-oil trade balance and remittances drive the current account surplus

% of GDP



Source: Banxico.

Figure 1.9. Reserves are solid



Source: IMF World Economic Outlook, April 2021; and World Bank World Development Indicators.

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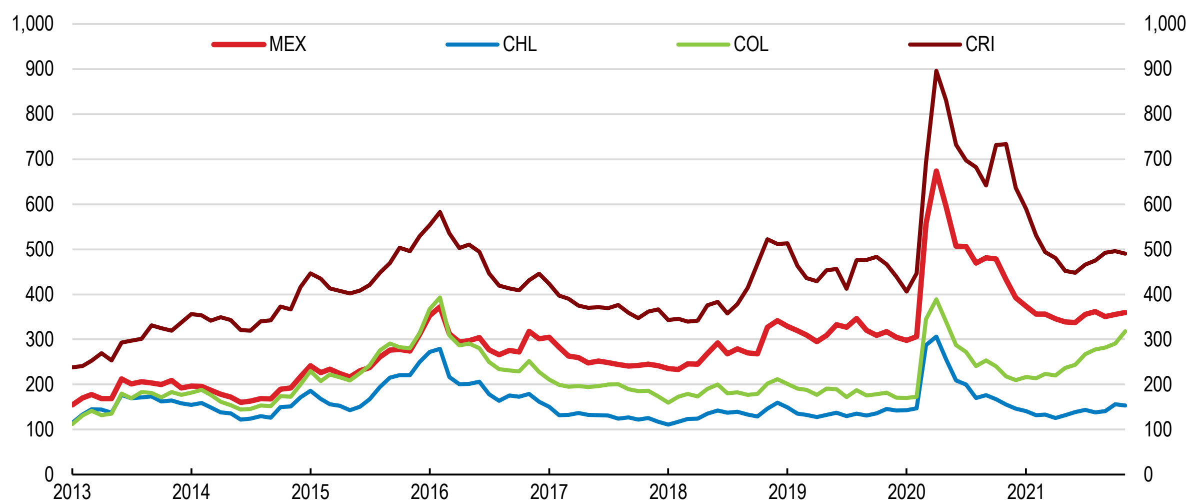
Figure 1.10. Sovereign risk premia have trended down

Sovereign risk bond spreads, basis points



Note: The sovereign risk bond spread is the spread of 10-year USD-denominated bond yields vis-à-vis US Treasury bonds.
Source: Refinitiv.

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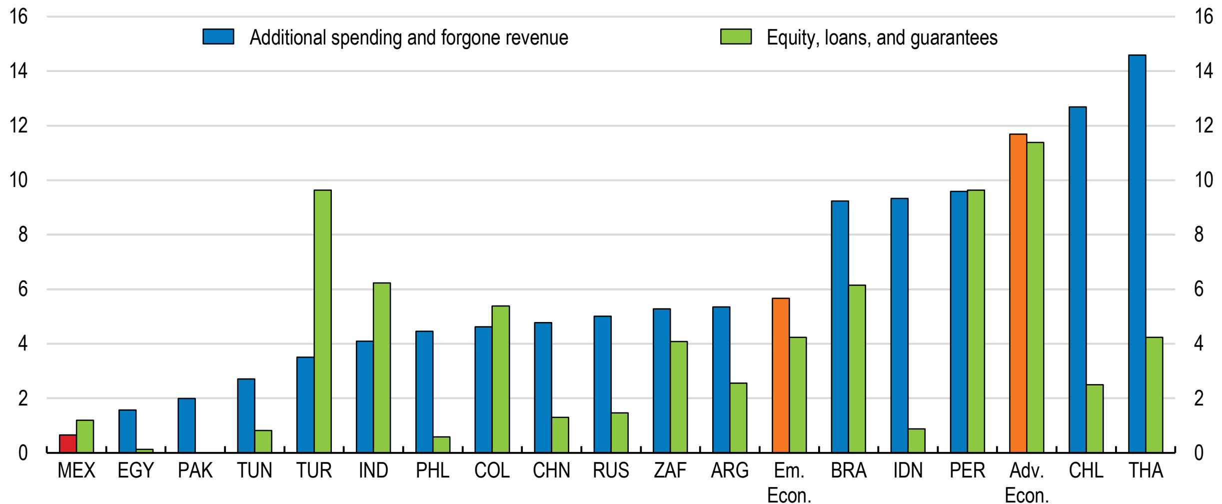
Macroeconomic policies can be further strengthened

Thanks to a solid macroeconomic framework, Mexico acted timely to mitigate the economic and financial impact of the pandemic. Monetary policy eased gradually and bold and innovative measures safeguarded financial stability and facilitated credit provision. Nonetheless, the initial fiscal response was one of the lowest among emerging markets (Figure 1.11). Public spending increased by around 0.7% of GDP, compared to 4.4% of GDP in emerging economies. Instead, the government opted for reallocating spending from operative spending towards social and health, increasing public sector programmable

spending on social protection and health by 0.7 and 0.4 percentage points respectively in 2020, relative to 2019. Mexico opted also for expanding access to existing social programmes. Looking ahead, continuing to boost social spending, including on education and health, and public investment is fundamental to support the ongoing recovery and make it reach more people. Strengthening the fiscal policy framework is also a medium-term priority to enhance fiscal policy's ability to smooth out economic cycles and provide support during downturns.

Figure 1.11. Fiscal support provided as response to Covid-19 was low

Cumulative discretionary fiscal response, % of GDP



Note: Estimates as of September 27, 2021. Em Econ = simple average of emerging economies shown in chart. Adv. Econ. = simple average of AUS, BEL, CAN, CHE, CZE, DEU, DNK, ESP, FIN, FRA, GBR, ITA, JPN, KOR, NLD, NOR, NZL, SGP, SWE, USA.
Source: IMF Database of Country Fiscal Measures in Response to the COVID-19 Pandemic, available at https://www.imf.org/en/Topics/imf-and-covid19/Fiscal-Policies-Database-in-Response-to-COVID-19.

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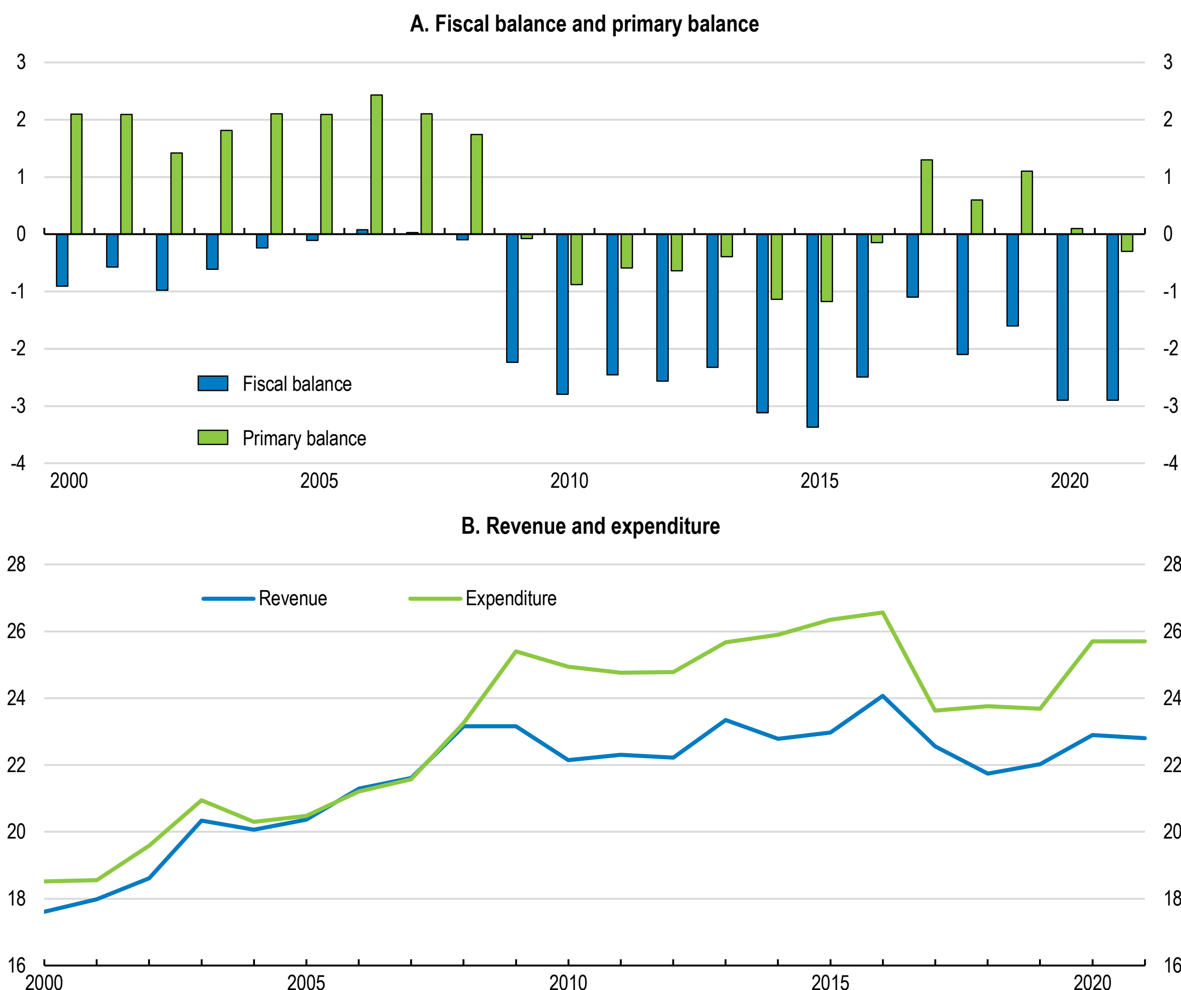
Gaining fiscal space and reinforcing the fiscal framework

Revenues were very resilient during the pandemic and the fiscal deficit widened only marginally in 2020. According to historical fiscal elasticities, tax revenues should have fallen significantly, given the fall in activity, but increased marginally instead. This was facilitated by changes in the tax code (Box 1.2) and by strengthening the prosecution of pending tax liabilities, which resulted in sizeable tax settlements with several large companies. Revenues were also supported by the stabilization funds, and by a skilful oil hedge, which safeguarded fiscal accounts from 2020's fall in oil prices. As a result, the fiscal deficit widened only slightly (Figure 1.12) and the official measure of public debt increased from 44% at end-2019 to 55% of GDP at end-2020, due to the budget deficit, the depreciation of the peso and the fall in GDP. The deficit is expected to increase during 2021 and the budget for 2022 foresees that it will remain broadly unchanged in 2022 and will gradually decrease thereafter (Table 1.4). As such, the fiscal stance for the near-term, while remaining cautious, is less restrictive than foreseen in the 2021 budget. This is a welcome change, as it will mildly support the ongoing recovery. If the recovery falters or the pandemic resurges, increasing social and health spending further and delaying the reduction of the deficit are warranted.

Figure 1.12. Tax revenues were resilient and the fiscal deficit increased marginally

Non-financial public sector, % of GDP



Note: In panel B, the widest definition of public revenues are displayed, including also social security contributions and State-Owned enterprises.
Source: Secretaría de Hacienda y Crédito Público; and OECD Economic Outlook database.

Box 1.2. Measures to improve tax collection

Several measures have been implemented by the Federal Government throughout 2019 and 2020 to increase tax revenues:

- **Elimination of universal compensation**. Until 2018, VAT positive balances could be recovered by offsetting other taxes automatically and without prior authorisation from tax authorities. This opened space for tax evasion by using fake invoices to reduce tax liabilities. In 2019, universal compensation was eliminated, which increased tax revenues by 0.5% of GDP in 2020.
- **Strengthening sanctions**. As of 2020, crimes related to tax fraud are classified as serious criminal offences and the issuance of fake invoices are considered organized crime activities. This aims at deterring tax evasion by increasing the perception of the risk of being detected and by hardening sanctions if found guilty.

- **Implementation of BEPS**. In 2020, 5 of the 15 Actions of the BEPS project were implemented. These measures could increase revenues by up to 0.4 percentage points of GDP by 2024.
- **Taxing digital services**. As of 2020, complexities for paying VAT for goods and services provided by international platforms offering intermediation services or digital goods were removed. Income tax withholding for participants on certain transactions, especially for platforms that offer intermediation services, were also introduced.
- **Phasing out tax expenditures in the special tax on production and services of fuels**. Revenues from taxes on fuel increased in 2019 and 2020 thanks to a change in the methodology to set fuel prices. Tax expenditures related to SMEs' payments on toll roads and diesel purchases for rail and mining companies were reduced.
- **General anti-avoidance rule**. Tax authorities are entitled to re-characterize a transaction as inexistent if it deems such transaction to lack a business purpose and only be pursuing a tax benefit.

Table 1.4. Evolution of main fiscal aggregates

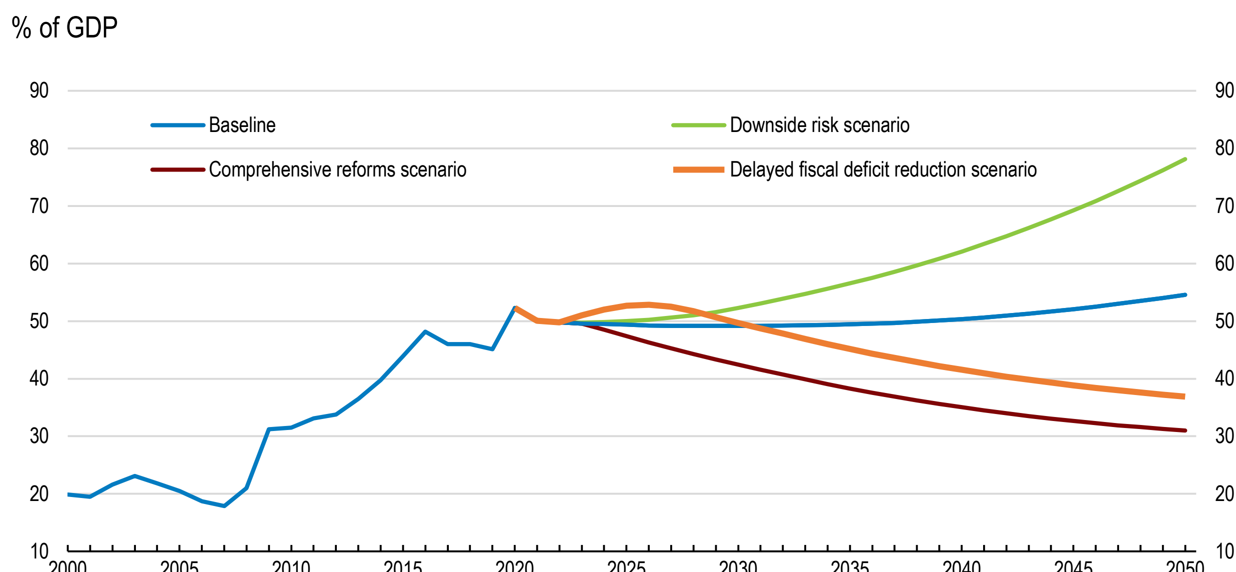
% of GDP

	2018	2019	2020	2021	2022*	2023*	2024*
Total revenues	**21.7**	**22.0**	**22.9**	**22.8**	**21.9**	**21.9**	**21.9**
Oil revenues	4.2	3.9	2.6	4.4	3.9	3.8	3.7
Non-oil revenues	17.6	18.1	20.3	18.3	18.1	18.2	18.2
Tax revenues	13.0	13.1	14.3	13.6	14.0	14.1	14.2
Personal	7.1	6.9	7.5	7.2			
VAT	3.9	3.8	4.2	4.3			
Corporate	1.5	1.9	2.0	1.5			
Imports	0.3	0.3	0.2	0.3			
Other	0.2	0.2	0.3	0.3			
Non-tax revenues	4.5	5.0	6.0	4.8			
Total expenditure	**23.8**	**23.7**	**25.7**	**25.7**	**25.1**	**24.7**	**24.4**
Primary	21.2	21.0	22.8	23.1	22.3	21.7	21.4
Programmable	17.3	17.3	19.1	19.6	18.7	18.1	17.7
of which: capital investment	2.6	2.3	2.8	2.6	3.1	2.9	2.6
Non-programmable	6.5	6.4	6.6	6.1	6.5	6.7	6.8
of which: transfers to states	3.6	3.6	3.6	3.5	3.6	3.6	3.6
of which: Interest	2.6	2.7	2.9	2.6	2.8	3.0	3.0
Primary public balance	0.6	1.1	0.1	-0.3	-0.3	0.3	0.6
Public balance	**-2.1**	**-1.6**	**-2.9**	**-2.9**	**-3.1**	**-2.7**	**-2.4**
Financing needs outside budget	0.0	-0.7	-1.2	-0.8	-0.4	-0.5	-0.5
Public sector borrowing requirements	*-2.2*	*-2.3*	*-4.0*	*-3.8*	*-3.5*	*-3.2*	*-2.9*
Gross public sector debt	*51.3*	*51.0*	*57.9*	*55.5*	57.4	57.4	57.4
Net public sector debt	46.0	45.1	51.5	49.9	49.7	49.5	49.4
Historical Balance of the Public Sector Borrowing Requirements	*44.9*	*44.5*	*51.7*	*50.1*	*51.0*	*51.0*	*51.0*

Note: * Are forecasts. Some rows may not add up due to rounding.
Source: Secretaría de Hacienda y Crédito Público.

Figure 1.13. Public debt is expected to stabilise

% of GDP



Note: In the baseline scenario real GDP growth and inflation follow OECD projections over 2021-23 and then gradually converge towards potential output growth and the inflation target rate of 3%, respectively; the exchange rate between the Mexican peso and US dollar is assumed constant over the simulation period. The interest rate yields is assumed to shift vertically following changes in inflation. The government primary balance is assumed to follow table 1.4 and remain constant until 2034 when aging costs, in the form of higher pensions and health costs, will gradually start to kick in. The downside risk scenario assumes a one-off shock of 10% to the exchange rate with the US dollar and a permanent upward vertical shift of 100 basis points in the yield curve, with respect to the baseline. In the comprehensive reform scenario a higher GDP growth is assumed over the period 2022-2031 under the hypothesis that structural reforms were implemented as to boost growth as reported in Table 1. In the delayed fiscal deficit reduction scenario, the deficit is assumed to stay at 3.2% until 2023, and fall gradually thereafter at the same pace as the reduction embedded in the Government 2022 Budget. It also assumes higher GDP growth stemming from comprehensive reforms. All scenarios and the baseline include aging costs.
Source: OECD calculations. Data prior to 2020 are from SHCP and refer to net central government debt.

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Mexico has been fiscally prudent over the years (Table 1.5), broadly meeting its fiscal targets and ensuring fiscal sustainability despite having the lowest tax-to-GDP ratio in the OECD (Figure 1.14), which is commendable. But this has been largely achieved by cutting spending, particularly public investment (Figure 1.15), hurting growth prospects. Overall public spending is low in international perspective (Figure 1.16), suggesting that there is limited room for further cuts. The government's 2022 Budget foresees an increase in social protection spending, to 5.1% of GDP in 2022 (from 3.8% in 2018). Capital spending has also increased to 3.1 % of GDP (from 2.7% in 2019), the highest level since 2016, although it is foreseen a gradual fall throughout 2023 and 2024. At the same time, the pandemic has created additional needs, as poverty has widened and the health and education systems are strained. Gaps in infrastructure remain also significant. For example, the increase in public investment needed to close the infrastructure gap in Mexico was estimated to be 1.3 percentage points of GDP a year (Woetzel et al., 2017[5]). Conducting rigorous and transparent cost-benefit analysis would ensure sound project selection and help to close that gap in a cost-effective manner.

Responding to these increasing spending needs in essential areas, while preserving debt sustainability, is the fundamental priority. The budget deficit is relatively low in international comparison (Figure 1.17) and access to markets remains comfortable. If government's medium-term fiscal targets were met, the public debt-to-GDP ratio would stabilise as of 2023 (Figure 1.13). But debt dynamics could worsen under a scenario of significant increases in global interest rates and exchange rate depreciation. Coupling spending increases in essential areas with a gradual increase in tax revenues, as outlined below, would help to respond to spending needs while maintaining and reinforcing Mexico's commitment to debt sustainability.

Strengthening tax revenues will also increase Mexico's ability to run anticyclical fiscal policies in the future. The ability of Mexico's fiscal policy to smooth cycles and support growth during recessions is hampered by a lower tax base than in peer countries, together with a country-risk premium and foreign exchange rate, which increases the cost of servicing debt, and weak automatic stabilisers on the spending side (e.g. there is no unemployment benefits system in place at the Federal level).

The additional tax measures could be designed, announced and legislated in 2022 and implementation start in 2023. Measures affecting individuals in higher income deciles, who have the lowest propensity to consume, could be prioritised. The comprehensive reform efforts proposed in this survey in Table 1.1 would also have a significant positive impact on public debt dynamics.

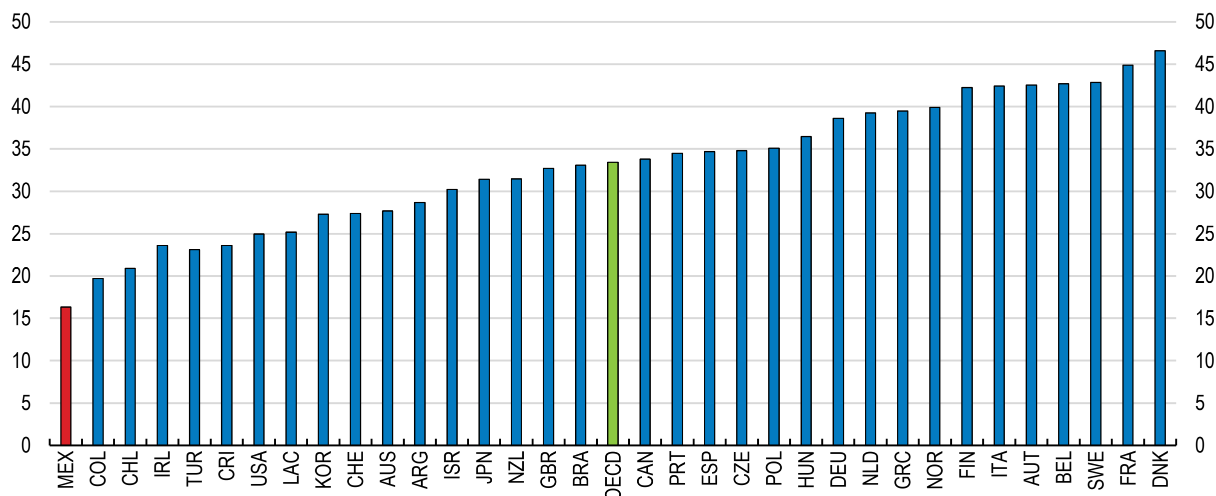
As Mexico is only at the beginning of its population ageing process, the fiscal costs of population ageing, which are included in the baseline projections, will not have much weight over the next decade but will start to kick in gradually thereafter. The reform of contributory pension system (more below) implies some savings for the budget over the next two decades. Conversely, recent rises in non-contributory pensions will increase spending. Public health expenditures have been estimated to rise by 1.5 % of GDP by 2065 (IDB, 2021[6]), although this does not account for any implications of the ongoing pandemic and for the expected increases on long-term care.

Table 1.5. Past OECD recommendations to improve macroeconomic policies

PAST OECD RECOMMENDATIONS	ACTIONS TAKEN
Maintain a prudent fiscal stance to keep the debt-to-GDP ratio stable and consider lowering it over the medium-term.	The announced budget for 2022 foresees an increase to 3.1% (from 2.9% in 2021)and a stable public debt-to-GDP ratio
Develop a comprehensive tax reform for implementation in the medium term.	Several measures have been implemented by the Federal Government throughout 2019 and 2021 to improve tax collection (See Box 1).
Broaden the VAT base by cutting exemptions and abolishing reduced rates while compensating the poor with targeted subsidies.	Digital services provided by foreign suppliers are now subject to VAT.
Increase the progressivity of personal income tax by lowering the income threshold for the top rate and further cut back tax allowances or convert them into tax credits.	No action taken
Build a nationwide property register to make more use of recurrent taxes on immovable property.	A cadastral information platform, facilitating the exchange of geographically referenced, is being created. Coordination between municipalities and states have been strengthened to improve cadastral data administration. Legal adjustments are being discussed in the senate to standardize at national level the property value and to use market valuation methods.
Establish a non-partisan, independent and adequately resourced fiscal council, along the principles defined by the OECD.	No action taken
Revise the Ley de Coordinación Fiscal to redefine and clarify responsibilities of public service delivery across the three levels of government and cut overlaps. Build capacity and professionalise the civil service at the state and municipal levels.	No action taken
Further strengthen the tax administration through adequate staffing and resourcing and improve technological capabilities.	The tax authority simplified tax filing, developed self-service oriented technological tools and increased enforcement and the effectiveness of inspection processes. All the above helped to strengthen the prosecution of pending tax liabilities.
Maintain the current monetary policy stance to curb inflation.	Monetary policy became supportive during the COVID-19 crisis by gradually decreasing the policy rate. The rate was increased gradually during 2021 as inflation was well above the 3% target.

Figure 1.14. Tax revenues are low compared to Latin American and OECD peers

% of GDP, 2019



Note: LAC refers to Chile, Colombia, Costa Rica, Argentina and Brazil. All averages are unweighted. It includes taxes on income and capital gains, taxes on goods and service, social security contributions, payroll taxes and property taxes.
Source: OECD Revenue Statistics database.

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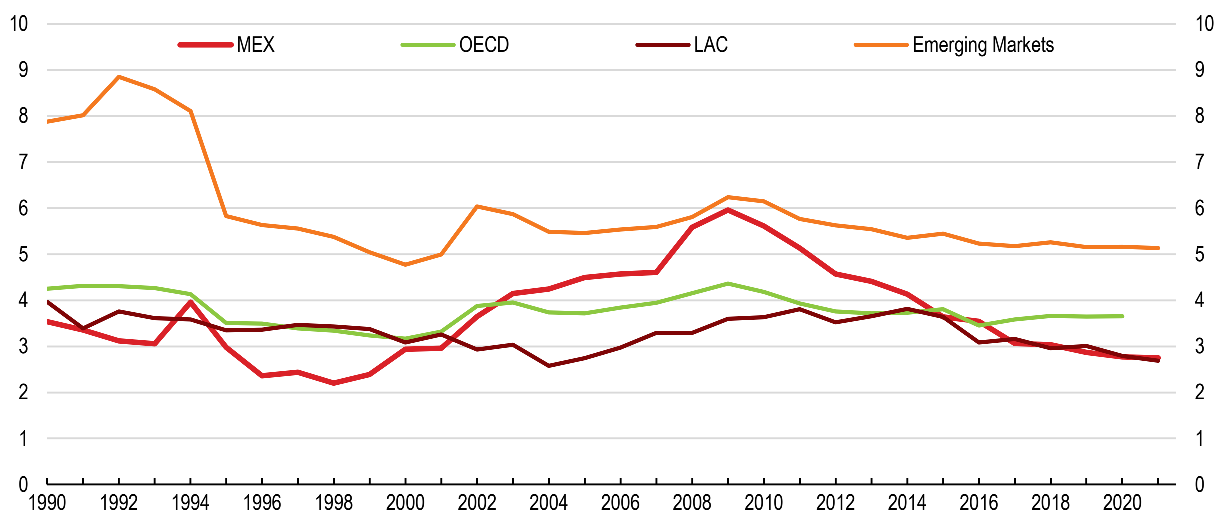
Figure 1.15. Public investment is low

% of GDP



Note: Country group averages are unweighted. Country groups are as follows: LAC: ARG, BRA, CHL, COL, CRI; Emerging Markets: ARG, BRA, CHL, CHN, COL, EGY, HUN, IND, IDN, MYS, MEX, PER, PHL, POL, ROU, RUS, ZAF, THA, TUN, TUR.
Source: IMF World Economic Outlook (October 2019); and OECD Economic Outlook database.

StatLink https://stat.link/7xiahr

Figure 1.16. Public spending is low

A. Public expenditure
% of GDP, 2020

△ 2015

KOR IRL CHL MEX COL TUR CHE LAC ARG NZL BRA AUS USA ISR JPN NLD OECD LUX PRT ISL GBR DEU ESP CAN SWE DNK FIN ITA AUT NOR GRC BEL FRA

B. Social spending by category
% of GDP, 2019 or latest year

Old age Health Labour market Other

MEX CHL TUR KOR CRI COL IRL NLD ISR LVA CHE LTU AUS ISL SVK EST CAN HUN USA CZE NZL OECD GBR SVN POL LUX JPN PRT GRC ESP NOR SWE DEU AUT ITA DNK BEL FIN FRA

Note: LAC is an unweighted average of Chile, Colombia, Costa Rica, Argentina and Brazil. OECD is an unweighted average.
Source: IMF World Economic Outlook, April 2021; and OECD Social Expenditure Database.

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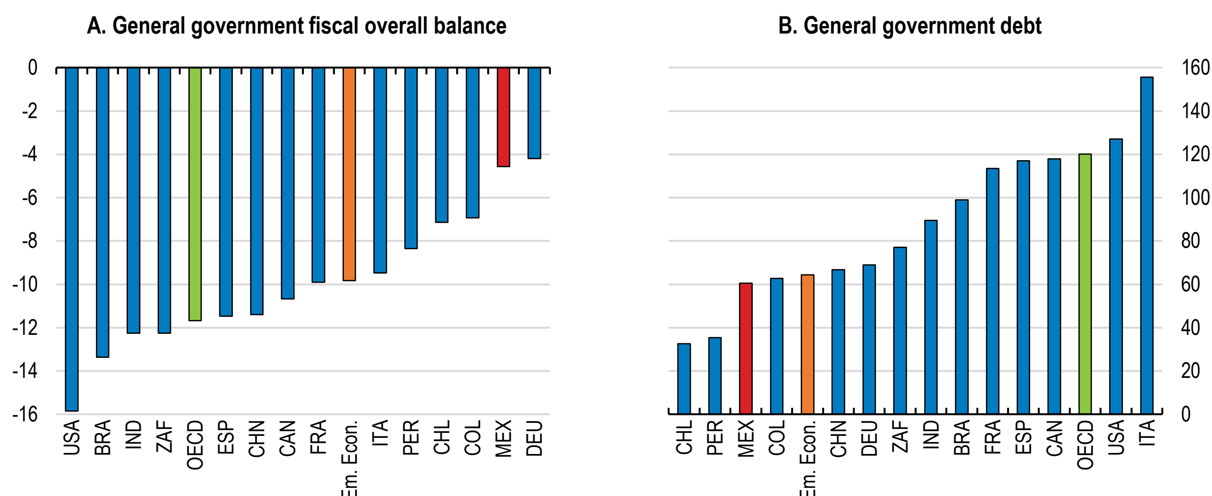
Figure 1.17. The deficit and public debt levels are low in international comparison

% of GDP, 2020



Note: Em. Econ.: simple average of emerging economies.
Source: IMF's fiscal monitor, April 2021 edition.

https://stat.link/usxjyd

Raising more revenue in a progressive and growth-friendly way

Revenues have become less dependent on oil over time (Figure 1.18), increasing the resilience of the Mexican public finances to sudden and cyclical changes in oil prices. This trend will continue given recent reduction to taxes on PEMEX. Non-oil revenues have increased recently, even though Mexico continues to raise less revenue, as percentage of GDP, from all taxes (namely personal income, VAT and property taxes) than OECD and regional peers, with the exception of corporate taxes. As a result, non-oil revenue collections, in % of GDP, are about 6 percentage points below Latin American peers and about half of those of the OECD. Additionally the redistributive capacity of the tax and transfer system is low (as further discussed in the social section of this chapter).

The government has taken valuable measures to strengthen the tax administration that will continue to materialise in the coming years and has announced additional efforts to strengthen tax administration in its latest budget. However, financing high quality public investment, enhancing social protection and ensuring fiscal sustainability will require supplementing these tax enforcement measures with additional tax measures. Those additional measures could include broadening tax bases, by phasing out regressive and inefficient tax expenditures, and improving the design of some taxes, which remain currently underutilised, such as property, vehicle and green taxes. Such measures could also increase tax progressivity and incentives to operate in the formal economy, which could boost productivity and growth and enlarge further the tax base.

Figure 1.18. Dependence on oil revenues has fallen

A. Public revenue by resource type
% of GDP

Oil revenue
Non-oil revenue

B. Personal income tax
% of GDP, 2019 or latest year

△ 2013

C. Income threshold where single taxpayers face top statutory PIT
Multiple of average wage, 2020

D. Property taxes
% of GDP, 2019 or latest year

△ 2013

Note: LAC is an unweighted average of Chile, Colombia, Costa Rica, Argentina and Brazil. OECD is an unweighted average of all member countries with available data.
Source: ECLAC; INEGI; OECD Global Revenue Statistics database; and OECD Taxing Wages Models.

https://stat.link/d6f18t

Broadening tax bases holds the promise of increasing revenues significantly without increasing rates. Tax expenditures are large across the personal and corporate income tax and the VAT (Table 1.6). Overall, they amounted to about 3% of GDP in 2020. Tax exemptions are particularly large in the VAT. As a result, VAT revenues are relatively low compared to their potential (Figure 1.19). A significant part of domestic consumption is taxed at zero rates or is exempt without a right to input tax credits. This offers opportunities to broaden the VAT base by reducing the scope of the zero rate and/or exemptions in ways that are not regressive. For instance, the zero rate that is applied to cultural goods benefits particularly high-income households and could be abolished or narrowed. Eliminating the VAT exemption for food and medicines could raise significant revenues, but even if accompanied by targeted subsidies to households in the lowest income deciles, it entails significant political economy difficulties. Before applying VAT on food, there is a need to improve the tools available to target social programmes (as discussed in the social section below) to ensure that lowest income households are duly compensated. Hence, it could be considered a medium-term option. Taxing food at a reduced rate would be another option, followed recently by Costa Rica (OECD, 2020[7]), that applies a 1% rate.

Table 1.6. Tax expenditures are large

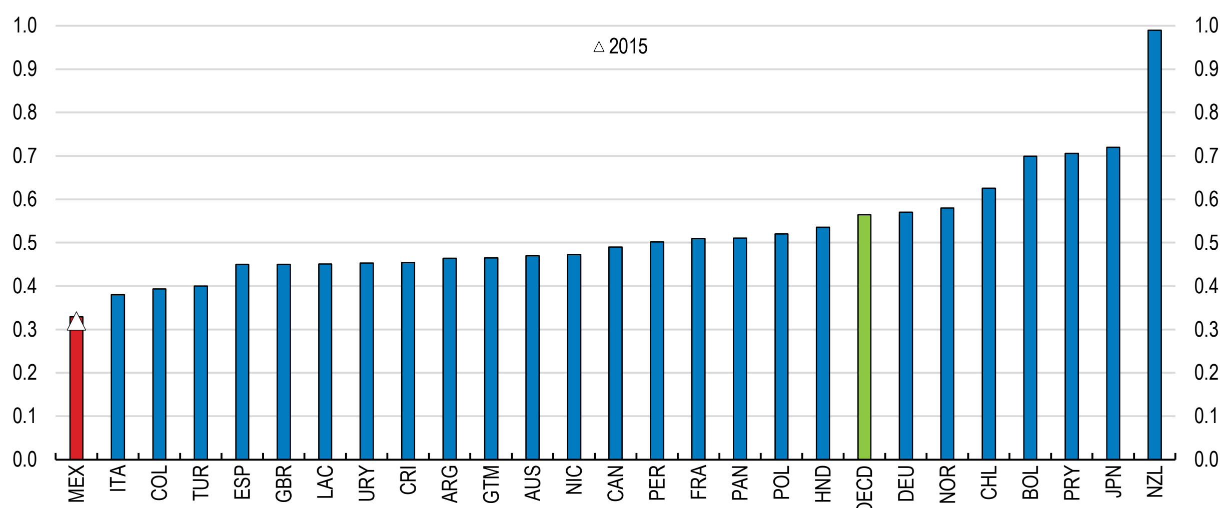
% of GDP

	2018	2019	2020
VAT	**1.4**	**1.4**	**1.4**
Zero ratings	1.1	1.2	1.2
Exemptions	0.3	0.3	0.3
Corporate income tax	**0.5**	**0.5**	**0.5**
Deductions	0.1	0.1	0.1
Exemptions	0.1	0.0	0.0
Others	0.4	0.3	0.3
Personal income tax	**1.0**	**1.0**	**0.9**
Deductions	0.1	0.1	0.1
Exemptions	0.7	0.7	0.7
Others	0.1	0.1	0.1

Source: SHCP.

Figure 1.19. The VAT revenue ratio in Mexico is low

VAT revenue as % of potential VAT revenue, 2019 or latest year



Note: A VAT revenue ratio of 100% suggests no loss of VAT revenue due to exemptions, reduced rates, fraud, evasion or tax planning. Data for Canada cover federal VAT only. LAC refers to Chile, Colombia, Costa Rica, Argentina and Brazil. All averages are unweighted.
Source: OECD Consumption Tax Trends (2020); and OECD Revenue Statistics in Latin America and the Caribbean (2021).

https://stat.link/zyboer

Personal income tax expenditures are also large and regressive. Multiple tax allowances and exemptions narrow significantly the tax base. These include allowances for medical expenses, contributions to certain retirement accounts, health insurance premiums and deposits on special savings accounts and for the acquisition of shares of investment societies. Real interest expenditure of mortgage loans (up to a maximum property value) and educational expenditures are also deductible. Some of these deductions are generous, in particular, when combined together, and tend to benefit most affluent taxpayers. Scaling them back and phasing out the most regressive ones would improve revenues in a progressive way. Inefficient or regressive expenditures amount to at least 0.7 % of GDP (IMF, 2020[8]). There is also room to make the personal income tax more progressive by reducing the threshold for the top personal income tax bracket, which is very high in international perspective (Figure 1.18, Panel C).

Tax revenues could also be significantly boosted by reducing informality. In this vein, the authorities have recently announced a new tax scheme (*Régimen de confianza* in Spanish), targeted at self-employed and SMEs. The scheme includes flat tax rates based on revenues, reduces accounting requirements and facilitates computations by using pre-loaded information. This seem a promising initiative, with a large number of potential beneficiaries (21 million of self-employed and 2 million SMEs). This measure should be part of a comprehensive strategy to decrease informality, with actions in different policy areas, as discussed in the productivity section of this chapter.

There is also significant room to strengthen subnational taxes, namely recurrent taxes on immovable property and vehicle taxes. The collection of property and vehicle taxes have been hampered by low technical capacity and lack of political incentives at the state or municipal level. States collect the vehicle tax while municipalities collect the property tax. When well designed, a recurrent tax on immovable property (*predial* in Spanish) can act like a "benefits" tax, which makes local taxpayers pay for the local services they receive. Mexico lacks a comprehensive nation-wide property register and the existing information is sometimes outdated. First steps are being taken to build a cadastral information platform, which would facilitate the exchange of geographically referenced data among the three levels of government. The recent experience of some Mexican municipalities suggest that making use of modern technologies, such as photogrammetric flights, can help building and updating the cadastre with higher precision and speed, and at a lower cost than the traditional documentary registration, which is very labour intensive and costly to implement for small municipalities (Ethos, 2021[9]). Building on recent efforts by some states to support municipalities in cadastral data administration, states can help establish and coordinate the use of modern technologies across municipalities and help spread best practices. There is also room to facilitate the payment of the tax. Some states have successfully experimented with payment facilities that travel around municipalities according to pre-established timetables and calendars, facilitating that a larger number of citizens can make their tax payments easily and quickly. Exempting low value properties and establishing different tax rates depending on the value could be useful to ensure progressivity, as exemplified by some OECD countries, such as Ireland.

Taxes on vehicle ownership or use (*tenencia* in Spanish) were transferred from the federal government to the states in 2012. Currently, less than half of states raise vehicle taxes. The federal government could enhance incentives for states to collect this tax, for example by allocating higher federal transfers to those states increasing vehicle ownership revenue. Estimates from the Finance Ministry suggests that collection could increase to 0.2% of the GDP with compliance rate of 70%. Restructuring vehicle taxes so that they take into account environmental performance can also incentivise the use of more energy-efficient vehicles, as exemplified by several OECD countries such as France and Israel.

Fostering the collection of both the property and vehicle ownership taxes could be the building block for enhancing the fiscal federalism framework (Box 1.3), along the lines discussed in previous OECD Economic Surveys ((OECD, 2019[10]); (OECD, 2013[11])). States and municipalities remain heavily dependent on federal transfers to finance a growing share of public spending. This leaves the burden of raising tax revenues falling almost exclusively on the federal government and reduces incentives for efficient spending and active tax collection at the subnational level. The formulas determining the transfers from the federal budget to the regions (*Participaciones* in Spanish) could be upgraded to provide better incentives for states to collect taxes, for example by limiting further increases in transfers or by conditioning a share of them to increases in tax collection. Environmental criteria could also be introduced in the formula, to acknowledge efforts by states to preserve the environment and mitigate climate change. France and Portugal are two OECD countries whose intergovernmental transfer systems include environmental criteria, such as the size of protected areas (UNDP, 2016[12]).

Box 1.3. The allocation of responsibilities across different levels of government in Mexico

Mexico is a federal country with a three-tier government structure. It is divided into 32 sovereign states. Each state is composed of municipalities, about 2 454 of them in the whole country. The federal government is responsible for matters relevant for the whole country, such as macroeconomic policy, defence and research and development policy (OECD, 2013[1]). The states are responsible for the delivery of education and health. States are also co-responsible, together with the federal government and municipalities, for poverty alleviation and water management. Municipalities are purely responsible for local matters such as water distribution and are co-responsible for school building and implementation of social programmes with the federal and state government. The three levels of government are involved in infrastructure and transportation. Federal and state governments execute roads construction, while states or municipalities mainly do maintenance (OECD, 2013[11]). Federal transfers finance the bulk of sub-national expenditure, in particular in the areas of health and education. Transfers from the federal government amount to 92% of total subnational resources, the largest share among OECD countries with decentralised government structures. Sub-national governments' own-source revenues, for both states and municipalities, account for a small share of total tax revenues, approximately 6.7%, representing 0.9% of GDP. States and municipalities have full autonomy to set their own tax rates and/or bases over the payroll tax, vehicle taxes, property taxes, and user fees.

Strengthening the fiscal framework

Mexican authorities have been for some time considering ways to further strengthen Mexico's fiscal policy framework, as a way to safeguard and benefit fully from the credibility that Mexico has been gaining over the years. Buttressing the fiscal framework would also help enhance Mexico's ability to forestall future crises, rebuild fiscal buffers, and respond to shocks. The short-term priority for fiscal policy is to continue to support the ongoing recovery. Advancing with initiatives to upgrade the fiscal framework, even if implemented in the medium-term, would also have a favourable short-term impact, as they would boost confidence.

Mexico has three fiscal rules in place (Box 1.4). However, the rules do not provide a truly countercyclical policy framework and tend to favour pro-cyclical fiscal stances. The two budget balance rules favour that fiscal targets are met through discretionary spending cuts and they lack a link with a medium-term fiscal anchor. Mexico could introduce a debt limit, replacing the two balanced budget rules, to anchor fiscal policy over the medium-term, complemented with an enhanced spending rule. The coverage of the existing spending rule, at 36% of public sector expenditure, is too narrow, hampering its ability to smooth spending over the cycle. Enhancing the spending rule by widening the share of public spending covered, leaving out only interest payments, would limit fiscal policy pro-cyclicality more forcefully.

Box 1.4. Mexico's fiscal rules

The current fiscal framework includes three fiscal rules:

- *Balanced budget rule*. The federal budget can only run a deficit of up to 2 % of GDP if it is due to public investment by the federal government and some States Owned Enterprises (such as Pemex).
- *Public sector borrowing requirement (PBSR) rule*. Legislation requires that a target for the PBSR is specified in the budget document. This target is defined as achieving a non-increasing net public debt path relative to the previous year. This rule affects all public sector entities except subnational governments and the central bank.

- *Structural current spending rule*. The real growth rate of structural current spending is capped to potential output growth. Structural current spending is defined as programmable spending excluding interest payments, cost of fuels for electricity generation, physical and financial investment of the federal government, pensions, and the expenditures of Pemex and the electricity public utility company. As a result the rule covers 36% of public sector expenditure.

The upgrade of the rule could be complemented with a review and modernisation of the stabilization funds. There are currently two stabilization funds, one for the federal and one for sub-national entities. Both funds receive a share of the annual oil revenues, and aim at compensating for reductions in revenues with respect to those approved in the budget in a given year. Thus, the funds in their current configuration do not truly act as countercyclical tools, but mostly as revenue stabilizers. Creating a truly countercyclical fund, allowing saving in good times and spending during downturns, would increase Mexico's ability to smooth out cycles and protect more the economy against possible contingencies. Simplifying the rules to access the funds and focusing the funds on stabilizing revenues over the cycle, and not with respect to budgeted revenues, are good options to move in that direction.

The impact of an enhanced fiscal rule would be strengthened by introducing a multi-year expenditure framework. These frameworks have proven to be an effective tool to optimise public expenditure over the medium-term and ensure support to government strategic priorities. Today, almost all OECD members have a multiyear framework and they are being increasingly used among emerging economies. Mexico could also establish a fully-fledged multi-year expenditure framework, building on its recently improved budget preparation.

Mexico's budgetary process has significantly improved overtime, gaining transparency and accountability. The budget is analysed and debated with the legislative branch for over two months. This process could be supported and further enhanced by establishing an independent an adequately resourced fiscal council, as recommended in the previous OECD Economic Survey (OECD, 2019[10]). By providing non-partisan fiscal analysis, fiscal councils can enrich the fiscal policy debate and help to communicate fiscal risks and policy options. They can also provide long-term sustainability assessments and policy analysis. A growing number of OECD countries and emerging economies have successfully set up independent fiscal councils. Recently, several countries in the region, such as Brazil, Peru or Chile, have set up a council (Box 1.5).

Box 1.5. Fiscal Councils in emerging economies: the Chilean case

Chile has been gradually strengthening its fiscal framework over the last decades, which has contributed to sustain economic growth and keep public debt relatively low. A fiscal rule helped to shield public spending from the copper boom, generating savings that proved crucial when the country face negative shocks, such as the global financial crisis. A key additional step forward was the creation of an autonomous fiscal council in 2019 (OECD, 2021[13]). The council is composed of five members nominated by the President and approved by the Senate. It has own resources and the mandate of the members do not coincide with the government term to foster independence. It is tasked, among other things, with evaluating the calculation of the structural revenues, monitoring the compliance with the structural balance targets, proposing mitigating measures, and evaluating and proposing changes to the fiscal rule. The institutional framework of the council is in line with OECD good practices.

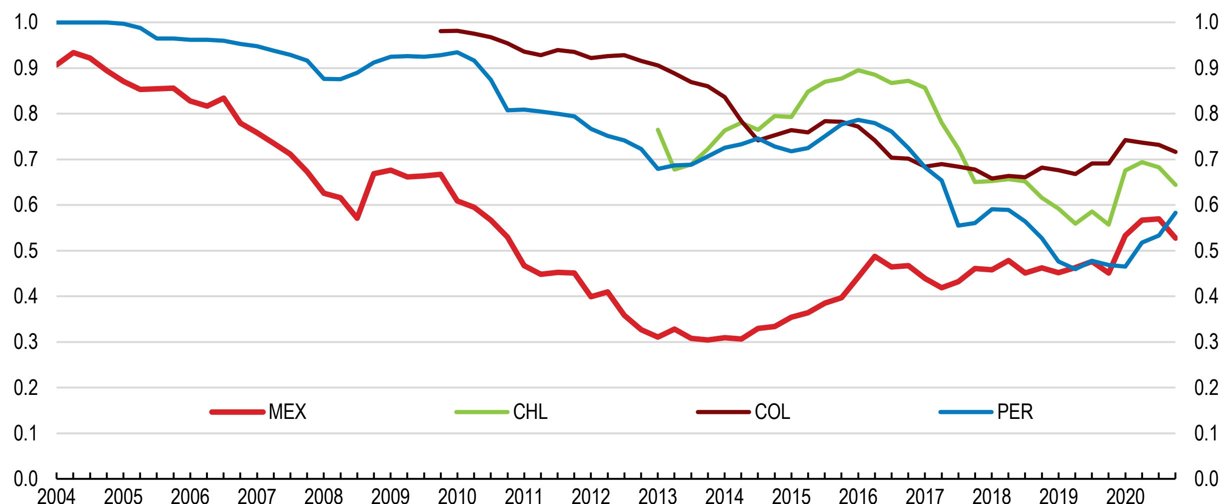
Debt management is sound and innovative

Active debt management during 2019 and 2020 has been key to provide liquidity, improve the maturity profile and manage risks. It has also reduced the debt's portfolio exchange rate risk exposure, diversifying its structure. This complements a successful strategy to attract investors to local currency debt (Figure 1.20), which has also helped to contain exchange rate risks. Having 60% of debt at fixed rates also

mitigates the impact of higher interest rates. Mexico has also been successful in widening its investors' base, including by innovative initiatives such as the first emission of debt linked to United Nations Sustainable Development Goals (SDGs) (Box 1.6).

Figure 1.20. Mexico has attracted investors to local currency debt instruments

Original Sin Index (0-1)



Note: The Original Sin Index shows to what extent countries are able to place public debt to foreign investors in their domestic currency. It is defined as one minus the local currency share of foreign-held general government debt. A value close to 1 indicates that the country is unable to place public debt to foreign investors in domestic currency.
Source: IMF Sovereign Debt Investor Base for Emerging Markets dataset.

Box 1.6. Innovative debt management: SDG bonds

In September 2020, Mexico became the first country in the world to issue a sustainable sovereign bond linked to the SDGs for an amount of EUR 750 million. The bond was placed for a 7-year term, maturating in September 2027 and paying a coupon rate of 1.35%, the second lowest coupon in the history of EUR bonds issued by Mexico. It was followed up with a second issuance in 2021 of a 15-year bond. These issuances allow to broaden investors' base and to access international funds committed to sustainable economic development.

These bonds are part of the SDG Sovereign Bond Framework (Hacienda, 2020[14]), which aims at strengthening the link between the federal budget and the SDGs. Through geospatial eligibility, criteria the framework intends to identify and select those budgetary items targeting states and municipalities with the highest social gap index. The social gap index is based on granular data collected through the Census of Population and Housing. Data considered include illiteracy rates, school attendance rates or, health services deprivation. A total of 899 municipalities (equivalent to 13 million of inhabitants out of national population of about 130 million) were selected. Whenever budgetary expenditures could not be tracked at the municipality level, the social gap index was considered at the state level instead. An amount equal to the net proceedings raised through SDG bonds will be allocated to social expenditures located in those municipalities or states, which tend to be located in the south of the country. The framework also include explicit reporting requirements to facilitate impact evaluation.

PEMEX remains a significant contingent liability

Market participants continue to assess PEMEX (the state oil and gas company) as a significant contingent liability for the sovereign (Moody's, 2021[15]). PEMEX has limited market access and there is a firm commitment from the government to continue supporting it through capital injections, tax reliefs and debt servicing. Current support amounts to about 1% of GDP. PEMEX is the most indebted oil company in the world and the ninth most indebted company in the world considering all sectors. Its debt currently stands at about 10% of Mexican GDP. Contingent pension liabilities are also large, amounting to 6.7% of GDP (Hacienda, 2021[16]). The authorities aim at strengthening energy security and build an energy system more resilient against natural disasters. With that aim, the role of PEMEX is being enlarged by boosting production and increasing refining activities, including by building new refineries. Such strategy may generate higher refining operating losses in the short and medium term, triggering additional risks for the sovereign.

PEMEX production increased during 2020 after a fall that averaged 4% during the previous 14 years. Recent tax reliefs also create the space for PEMEX to increase investment. However, further changes to its business strategy, putting a greater focus on financial objectives and seeking efficiency increases, would alleviate the burden carried by the sovereign. This would be facilitated by focusing production in profitable fields and reconsidering business lines operating at a loss. Reducing public subsidies for PEMEX and the public electricity company use of fuel oil and reallocating those resources to support investment in PEMEX to reduce fuel oil production would support the transition towards a cleaner energy sector. This could have a marked impact on regions highly dependent on oil, such as Campeche or Tabasco. Reinforcing retraining and education schemes in those regions would facilitate that affected workers can gain new skills, helping them to transition towards other economic sectors and avoiding long-term unemployment spells.

Strengthening PEMEX governance can contribute to improve its financial health and competitiveness and to mitigate contingent liabilities for the sovereign. Aligning governance with the OECD Guidelines on Corporate Governance of State-owned Enterprises (OECD, 2015[17]) would represent a first step to increase transparency and strengthen incentives to improve performance and accountability. Nomination procedures could be more competitive and merit-based, enhancing the objectivity and independence of the board members. The regulatory framework for procurement could be review to ensure that it gives PEMEX flexibility to compete in international markets and provides adequate safeguards for integrity (OECD, 2017[18]).

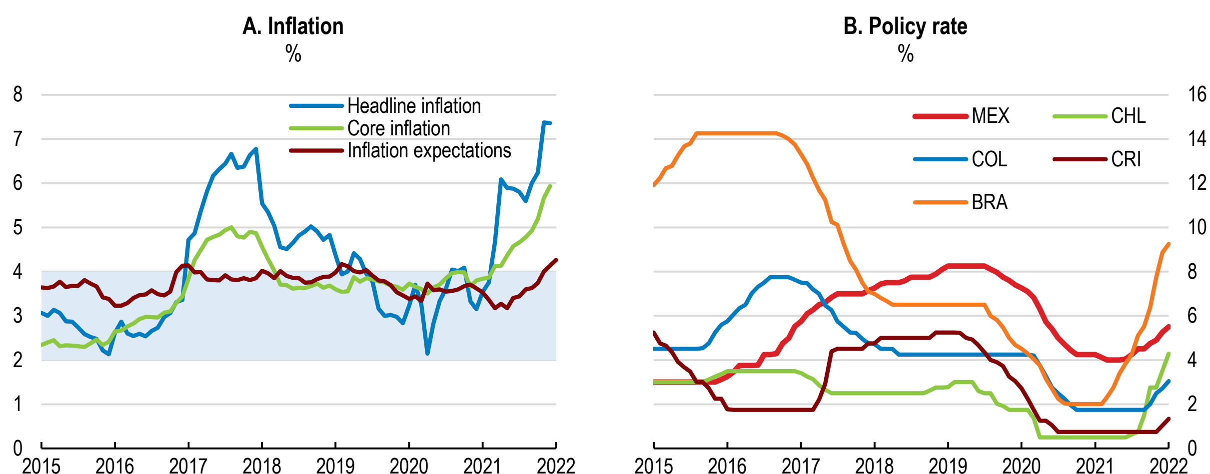
Monetary policy: containing inflation and supporting the recovery

Sound management of the monetary framework has supported the economy and the financial sector during the pandemic downturn and avoided creating additional pressures on the exchange rate, which could have triggered additional portfolio outflows. This was achieved by gradually reducing policy rates. Since the outbreak of the crisis, the Central Bank cut the target interest rate 325 basis points. The Central Bank also put in place significant liquidity and credit facilities amounting to 3.5% of GDP, a forbearance scheme and a swap line with both the United States Federal Reserve and the Unites States Treasury to support dollar funding.

As in many other economies, inflation increased significantly in the first part of 2021 (Figure 1.21). Given Mexico's high integration in global value chains, global inflation and supply chain cost-related disruptions exert significant pressure on headline and core inflation. Domestic factors, such as the recovery in the demand for some goods and services, additional pressures on some merchandise items (such as agriculture and livestock) and rises in gas prices are adding inflationary pressures. Medium and long-term inflation expectations remains anchored. The central bank increased rates in its last six meetings, leaving the rate at 6%, as it perceived that shocks weighing on inflation, while transitory, could affect price

formation processes and long-term inflation expectations. Headline inflation is expected to decrease throughout 2022 and 2023 but uncertainty is high. Going forward, if inflation does not converge towards the 3% target, further gradual increases in interest rates are warranted. Faster increases could be required if long-term inflation expectations start to rise.

Figure 1.21. Inflation has strongly picked up

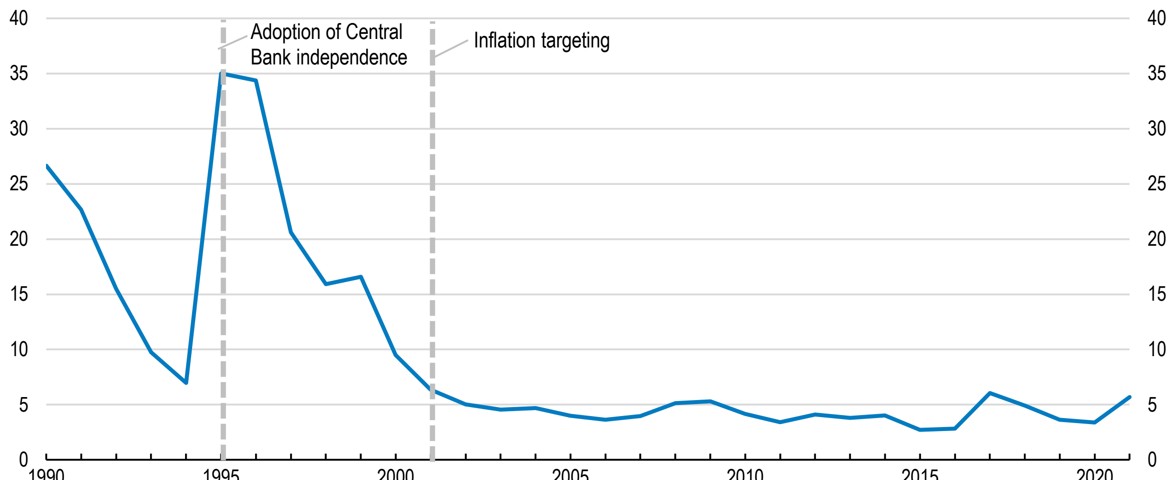


Source: Banxico; and Refinitiv.

Since the central bank's autonomy came into effect in the mid-1990s, inflation and its volatility have significantly reduced (Figure 1.22), thanks to the robust inflation targeting framework and flexible exchange rate regime. Inflation expectations have also remained robustly anchored close to the 3% target. The monetary policy transmission has gradually strengthened, although boosting financial inclusion would strengthen transmission further (Box 1.7). Preserving legal and constitutional central bank autonomy and maintaining price stability as its principal mandate is fundamental, particularly at the current juncture when episodes of financial volatility are likely to increase, as advanced economies start withdrawing part of the monetary stimulus. An independent central bank, focused on maintaining inflation low and stable, is vital for Mexico to navigate potential episodes of uncertainty and financial volatility, as its own experience during the last two decades testifies, and as illustrated as well by other countries in the region, and by most OECD countries.

Figure 1.22. Inflation has fallen significantly since introducing central bank independence

Annual consumer price inflation, %



Note: The Central Bank adopted in 2003 a fully-fledged inflation targeting framework. The multi-year inflation target was defined at 3 percent for CPI inflation. Prior to that, and since 1995, Mexico had annual inflation targets.
Source: OECD Economic Outlook database.

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Box 1.7. Assessing the monetary policy transmission in Mexico

The interest rate pass-through is a measure of the effectiveness of monetary policy. In particular, it assesses which percentage of a change in the short-term monetary policy reference rate is passed onto bank lending rates faced by households and firms. How fast market lending rates react to changes in the monetary policy reference rate is another indicator of the effectiveness of the monetary policy. A faster reaction points to a more effective monetary policy. Estimates of pass-through and speed of adjustment for four Mexican lending rates (Table 1.7 and (Maravalle, forthcoming[19])) indicates that there is significant heterogeneity in monetary policy transmission. The pass-through is significant for the reference lending rate. Mortgage lending rates and automotive loan lending rates, instead, are less sensitive to changes in the monetary reference rate. In most cases, it takes within two to three months to fully adjust. However, for the mortgage lending rate it takes longer, around one year.

Table 1.7. Pass-through and speed of adjustment vary across banking lending rates

	Lending Rate	Mortgage lending rate	Consumer credit rate	Automotive loan lending rate
Pass-through	0.97	0.43	0.80	0.36
Speed of adjustment	3 months	1 year	2 months	3 months

Note: The pass-through measures how much of a change in the monetary policy rate is transmitted to a lending rate. A value of 1 indicates full pass-through. The speed of adjustment measures how long it takes for the lending rate to adjust. The estimation is based on a Autoregressive Distributed Lag model with Error Correction Term à la (Pesaran, Shin and Smith, 2001[20]).
Source: OECD calculations based on (Maravalle, forthcoming[19]).

These estimates suggest that transmission is stronger in those segments of the financial market focused on lending to firms than in markets lending to households. This is consistent with findings that pass-through is stronger when capital markets are deeper and financial inclusion higher (Ma and Lin, 2016[21]). Households suffer from a higher level of financial exclusion and information asymmetries that hamper creditworthiness assessments. Measures to boost access to financial services by households and to facilitate creditworthiness assessments, for example by strengthening credit registries (see also chapter 2), could also help to reinforce further the transmission of monetary policy.

Restarting investment and strengthening productivity growth

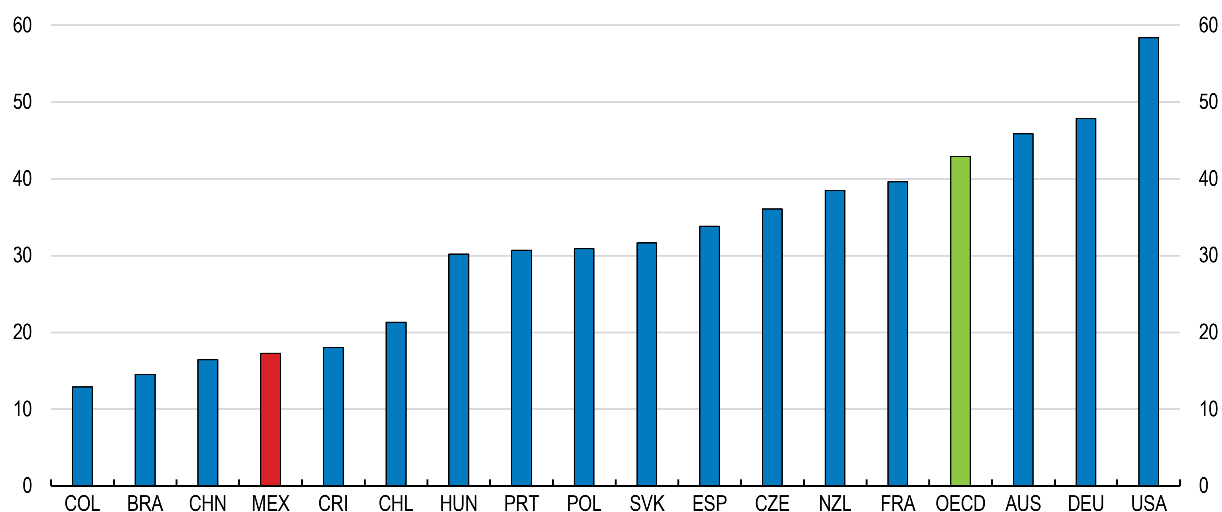
Over the last years, the economy's growth potential, which measures how fast GDP can grow sustainably, has declined from around 3% per year in 2015, to 1.6% projected by the OECD for 2023. The decline is due to a falling contribution of productivity to growth and, following weakness in investment, to a negative contribution of capital. The updated trade agreement with the United States and Canada creates new opportunities to restart investment and strengthen productivity. Previous OECD Economic Surveys have analysed some of the drivers of low productivity growth and low investment in Mexico, such as skills mismatches (OECD, 2019[10]), innovation (OECD, 2017[22]) or a perfectible fiscal federalism framework (OECD, 2017[22]). This chapter focuses on avenues to boost competition, reduce informality, improve the control of corruption and lower trade barriers in some sectors.

Boosting productivity through more competition

The level of productivity in Mexico is relatively low in international comparison (Figure 1.23). One key factor helping to explain low productivity is that the business sector is composed, on one hand, of a small number of large and relatively productive firms and, on the other hand, of a large number of SMEs. To the extent that large firms can exploit increasing returns to scale, knowledge spill-overs and specialization of employees, productivity typically increases with firm size (OECD, 2018[23]). Consequently, a high proportion of labour and capital resources are used in low-productivity firms, particularly micro and informal firms.

Figure 1.23. Labour productivity is relatively low

1000s of PPP-adjusted USD per capita, 2020 or latest year



Note: OECD is an unweighted average of all member countries with available data.
Source: OECD Productivity database.

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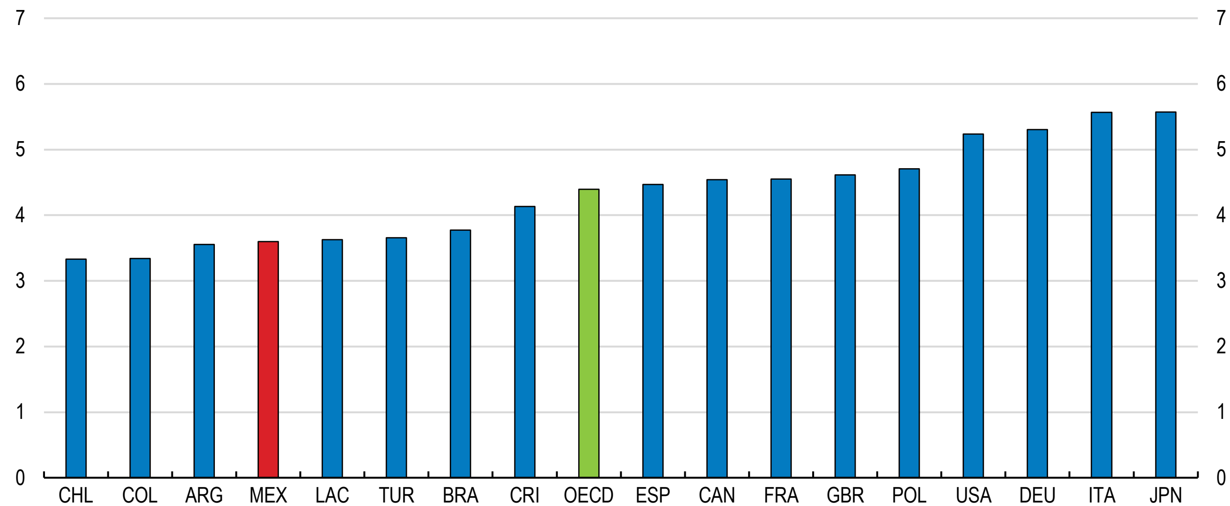
Figure 1.24. Markets are perceived to be dominated by a small number of firms

Extent of market dominance, index from 1 to 7 (best), 2019



Note: This indicator shows the extent of market dominance on a scale from 1 to 7 (best). In the World Economic Forum Executive Opinion Survey, it is the answer to the question, "in your country, how do you characterise corporate activity? [1 = dominated by a few business groups; 7 = spread among many firms]". LAC is an unweighted average of Chile, Colombia, Costa Rica, Argentina and Brazil.
Source: World Economic Forum, The Global Competitiveness Index 4.0 2019 dataset (version 10 April 2019).

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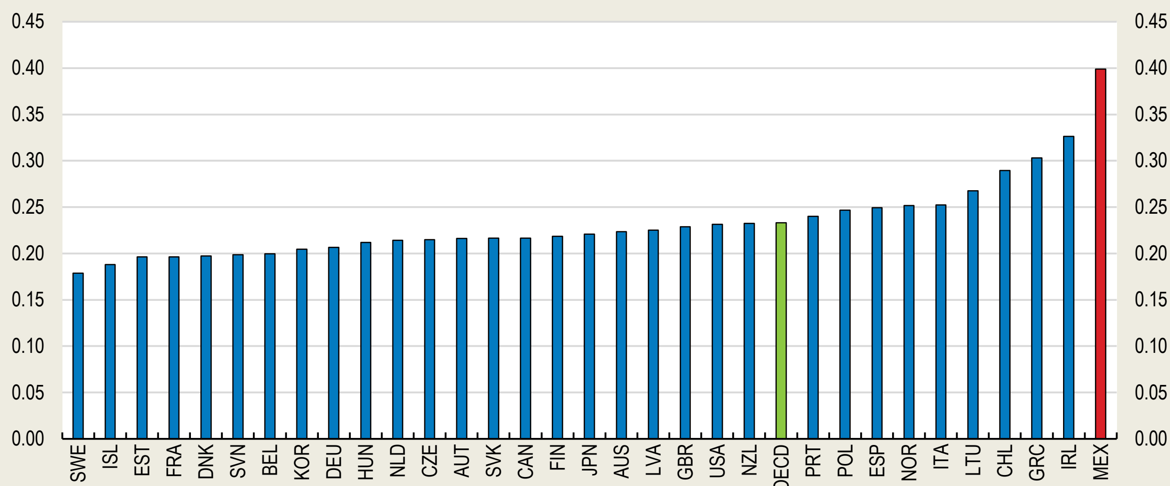
These features are typical of economies where competition is not strong enough to create an environment in which new entrants prompt incumbents to become more efficient (Klapper et al., 2006[24]). Competition has been weak in some key sectors of the economy and a few companies tend to dominate markets (Figure 1.24 and Box 1.8). High market power leads to higher prices, with a welfare loss for the poorest 10% Mexicans estimated to reach 31% of their income, compared with 6% for the richest 10% (COFECE, 2018[25]). Mexico's own experience in the telecommunication market attests than more competition leads to lower prices and higher quality (OECD, 2017[26]).

Box 1.8. Measuring market power in Mexico

The pressure of competitors and new entrants leads firms to set lower prices that reflect costs, to the benefit of consumers. In the absence of competition, firms gain market power and command high prices (De Loecker and Eeckhout, 2017[27]). Measuring market power can thus provide valuable insights about the degree of competition. Mark-ups measures help to assess to what extent firms are able to price their goods above their costs. High mark-ups can indicate weak competition in an industry or sector. Measures of mark-ups at sectoral level, computed for this Economic Survey (Gonzalez Pandiella and Tusz, forthcoming[28]), suggest that mark-ups in Mexico are higher than in most OECD countries (Figure 1.25). Wholesale and retail or mining are among key sectors where mark-ups indicators are highest and larger than in OECD countries (Figure 1.26).

Figure 1.25. The average mark-up at sector level is relatively high

Index from 0 to 1 (highest mark-ups), average 2015-2018



Note: Mark-ups are defined as gross output divided by gross operating surplus, following the methodology presented in (Égert and Vindics, 2017[29]).

Source: OECD calculations based on OECD Structural Analysis (STAN) database; and OECD Analytical database.

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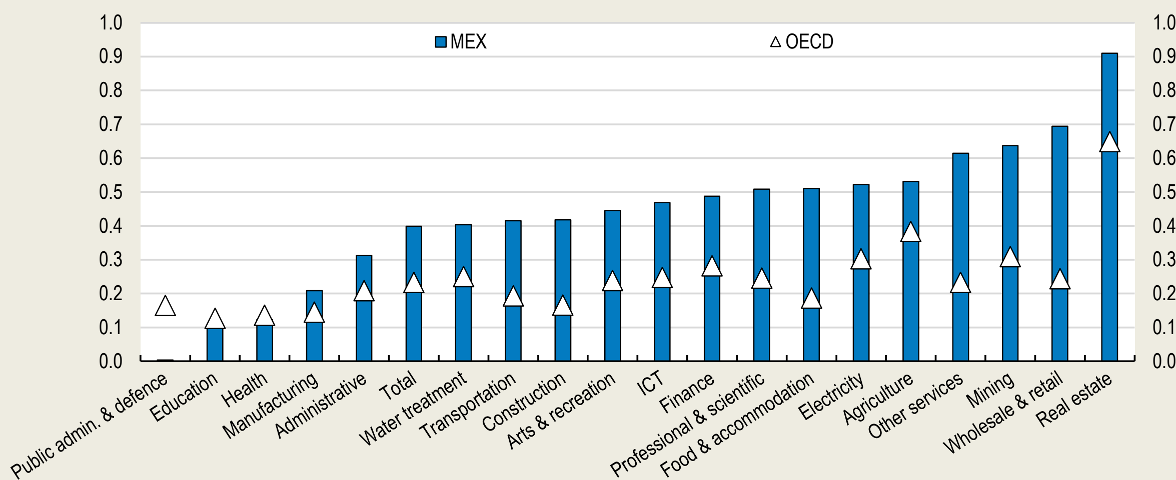
Figure 1.26. Most sectors have larger mark-ups than the OECD average

Index from 0 to 1 (highest mark-ups), average 2015-2018



Source: OECD calculations based on Structural Analysis (STAN) database; OECD Analytical database.

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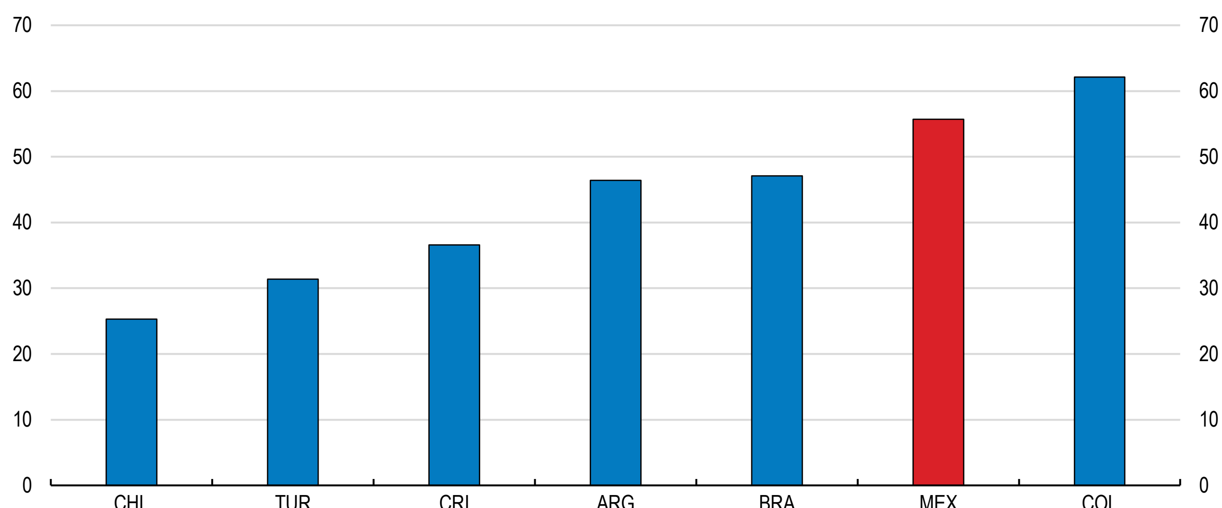
There is a need to strengthen competition. Improving regulations would be a fundamental way to boost competition. In some cases, this would involve reducing regulatory burden to facilitate firm's creation and a more dynamic business environment. In other cases, there is a need for improving the regulatory framework to reduce markets concentration, such as in the transportation market. A fully independent and resourced competition authority is another important pillar of a solid competition framework (Table 1.8). Mexico's autonomous competition authority, created in 2013, has been gradually exercising its authority more vigorously. The number of investigations had been increasing until recently. Attracting and retaining skilled staff has been a significant challenge, which has been exacerbated by a budget cut in 2019 and the establishment of salary ceilings for all public entities from the executive branch of government. The application of the salary ceilings was suspended for existing employees but applies to new recruitments and for internal promotions. This implies significant wage cuts for internally promoted staff and lower attractiveness for external candidates, including for positions in the competition authority board, putting at risk the ability of the competition authority to attract skilled staff. The status of the competition authority as an autonomous and independent body has also been challenged, and plans to change legislation to remove that condition and make it dependant on the government were announced, although not pursued. Going forward, it is important to ensure that the competition authority remains independent, that its budget is sufficient to carry out its functions effectively, and that its salary scale is appropriate to attract skilled staff and to continue building capacity. The competition framework would also significantly benefit from increasing the number of judges to assess competition matters, which remains very limited in Mexico.

Reducing informality: a win-win for productivity and inclusiveness

Informality, at around 55%, remains high (Figure 1.27) and is both a cause and a consequence of low productivity. There is no silver bullet to reduce informality. A comprehensive strategy is required, with actions needed in several policy areas. Beyond ongoing initiatives to facilitate tax compliance, as discussed in the tax section of this chapter, improving labour regulations and its enforcement and enhancing skills and their relevance in the formal labour market are key building blocks of a strategy to reduce informality, as discussed in previous OECD Economic Surveys of Mexico ((OECD, 2019[10]); (OECD, 2017[22])). Ongoing labour market reforms aimed at expediting the resolution of labour disputes could also reduce the potential costs associated to formalisation. The ongoing pension reform can also contribute to reduce informality among low-income workers, since, as of 2023, it reduces employers' social security for low-income workers, whose social security coverage would be instead partially finance via the federal budget. The reform to reduce fraud in outsourcing activities can also facilitate that more workers access formal jobs. Boosting financial inclusion (see also Chapter 2), by enabling a higher use of electronic payments and lower use of cash, can also foster formality. Strengthening the childcare network and fathers leave entitlements (see social section in this chapter) can also reduce female labour informality, which tends to increase significantly after the first child is born (Berniell et al., 2021[30]).

Figure 1.27. Informality is high

% of informal employment in total employment, 2020 or latest year



Note: Data for Costa Rica and Chile excludes own-use production workers and data for Argentina includes only main cities or metropolitan areas.
Source: ILO.

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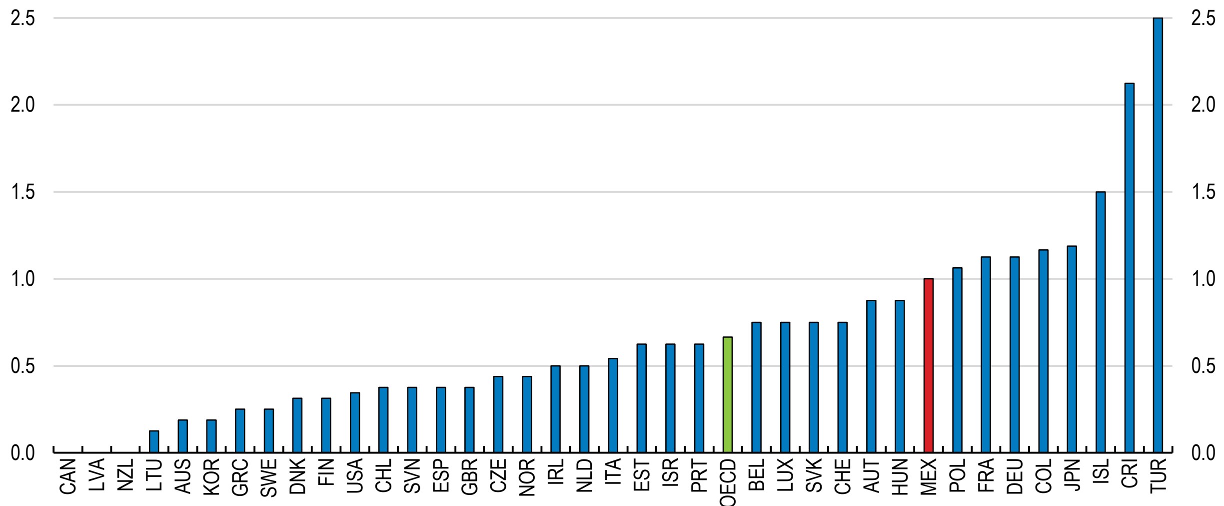
There is also room to improve business regulations, as in some instances they remain costly and complex, hampering the formalization of firms and jobs. This would also facilitate firms' entry and foster more competition. Mexico has made good progress in improving business regulations and easing the conduct of businesses overtime, although there is room to reduce the gap with OECD countries (Figure 1.28). Business regulations at the federal level have improved notably (OECD, 2019[10]). Conversely, there remains room to improve regulations at state and municipal level. Regulations can differ notably between municipalities in the same state, which implies significant barriers for small firms to formalise, grow and become more productive. A national strategy to improve regulations is being gradually launched, aiming at standardising regulations across different government levels and eliminate duplications. One-stop shop mechanisms in state and municipalities would significantly simplify and reduce the cost to start a business, as exemplified by several states and municipalities. The latest example is the state of Yucatán, that recently launched a fully digital single investment window. Increasing the use of digital tools, making possible that all administrative procedures related to starting a business can be resolved online, would also offer the double dividend of reducing the regulatory burden and the scope for corruption.

Figure 1.28. There is a room to facilitate start-up

Administrative requirements for limited liability companies and personally-owned enterprises sub-index, 2018



Note: The index goes from 0 to 6 (more restrictive).
Source: OECD indicators of Product Market Regulation.

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Table 1.8. Past OECD recommendations to boost productivity

Past recommendation	Actions taken since the 2019 survey
Ensure that the competition authorities and sector regulators have adequate resourcing and independence to carry out their mandates effectively.	The competition authority remains an independent body.
Complete the implementation of the National and Local Anticorruption Systems reforms and monitor the results. If needed, consider introducing a specialist, independent anticorruption agency that takes into account the federal structure of the government.	15 states have adapted their subnational policies to the national system and five more expected to do so in the short-term. Mexico improved 14 places between 2018 and 2020 in the Corruption Perception Index elaborated by Transparency International
Continue efforts to reduce crime and impunity	The National Guard was created in March 2019, aiming at having a more extensive and trained security force. 284 new police stations were created throughout the country and 60000 additional officials were recruited. Wage conditions have improved (they are 36% higher in the new police body)

Rebooting investment

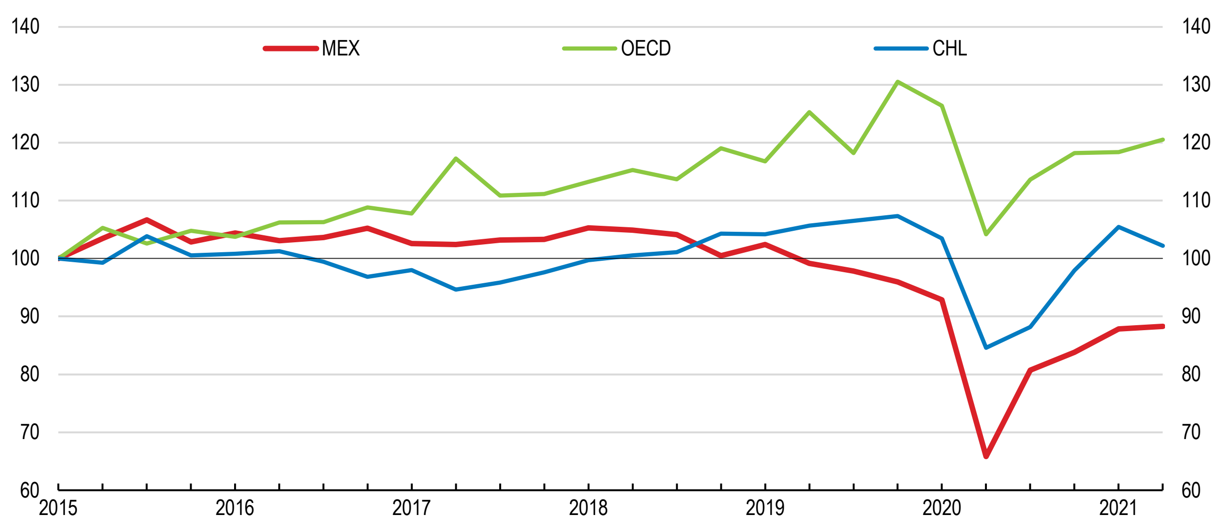
Investment has been muted since 2015 (Figure 1.29). It did not grow between 2016 and 2018, hampered by uncertainty at that time about the future of trade agreements in North America. It started to fall in 2019, after some existing investment projects were cancelled and global trade tensions. Uncertainty about domestic policy settings has remained high, following the renegotiation of established contracts, particularly in the energy sector, where the government pursues a policy of increasing energy security, strengthening the scope of the state owned PEMEX and the electricity public company, and overturning the 2014 reform that promoted private investment. Uncertainty increased at the beginning of 2021 (Figure 1.30), following the approval of the electricity reform bill, perceived as retroactively changing the rules under which investments were made and increasing legal and regulatory uncertainty (IMCO, 2021[31]), whose implementation was suspended by the court.

The potential for investment to restart vigorously is high. In addition to the updated trade agreement, the strong recovery in the United States and nearshoring trends, by which companies are likely to seek reducing supply chain disruptions risks by locating closer to their final markets, provide Mexico with historic opportunities. While some of these opportunities have started to materialised, harnessing Mexico's full potential would require providing investors, both domestic and foreign, with certainty about existing contracts and with regulatory stability.

The partnership established between the federal government and the private sector to launch a pipeline of infrastructure projects is a valuable initiative to strengthen investment and fill infrastructure gaps. The pipeline covers 67 projects, financed by the private sector, and amounting to 2.1% of GDP (Hacienda, 2021[16]). Boosting access to finance would also be key for the revival of investment (see Chapter 2). The pension reform (see social section in this chapter) has the potential to increase funding for infrastructure investment in the medium-term, as pension fund assets are expected to increase to 40% by 2038 (from 17% today). In the short-term, further integrating responsible business conduct considerations would also support investment. Environmental, social and governance considerations are increasingly taken into account by international investors and due diligence on these matters is also integrated in trade agreements with the United States and Canada (particularly in terms of labour, as further discussed in the social section of this chapter) and is mandated by major trading partners such as European Countries. In this vein, the sustainable taxonomy under development by the Finance Ministry can be a powerful tool to channel more investment flows towards activities with positive environmental and social impact.

Figure 1.29. Investment in Mexico is persistently low

Index, 2015Q1 = 100



Note: Total investment, OECD is an unweighted average of all member countries with available data.
Source: OECD Economic Outlook database.

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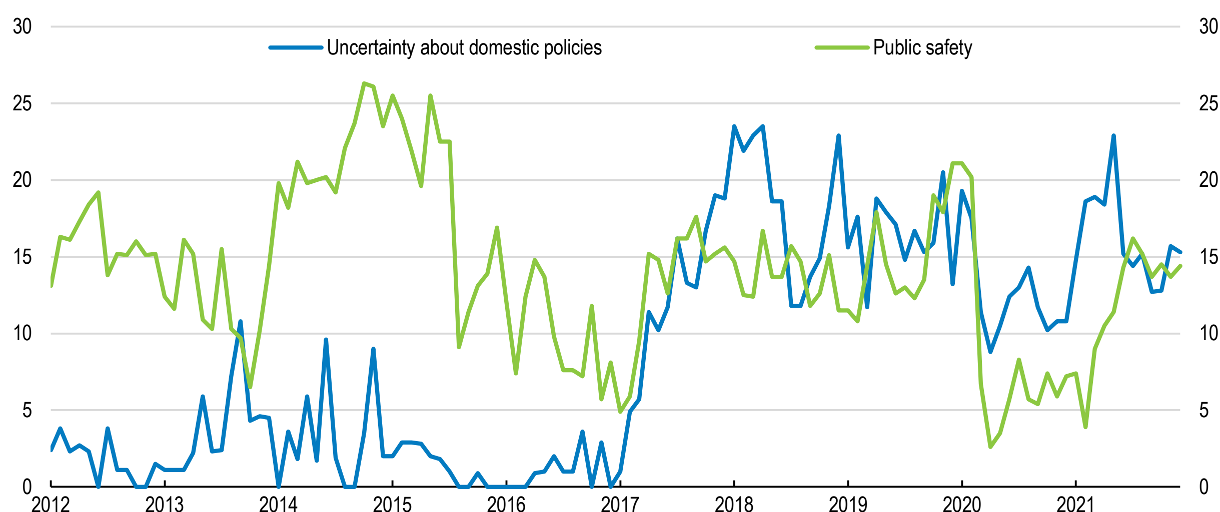
The recovery of investment may be hampered by the impact of the pandemic. SMEs in the formal sector were supported via small loans of MXN 25,000 (USD 1,260). According to a survey by the statistical institute 20% of SMEs disappeared during the recession (INEGI, 2020[25]). SMEs may struggle to repay their debts, particularly those in sectors whose recovery is lagging. Converting the loans into grants (i.e. the loan does not have to be repaid) can improve prospects for SMEs to invest and contribute to the recovery. Grants have been increasingly used among OECD countries, from wage subsidies to compensation for lost revenue or fixed costs and vouchers for digital, up-skilling in countries as Chile,

Ireland or Sweden (OECD, 2021[32]). Several countries have also converted lending facilities to grants. For example, in the United States, the Paycheck Protection Programme, a loan aiming to incentivise small businesses to retain personnel, is forgiven if certain employee retention criteria are met. Mexico has already budgeted the loans under the subsidy category so their conversion into grant would be straightforward.

Figure 1.30. Uncertainty about domestic policies has increased

Share of specialists' responses identifying uncertainty and safety as risks for economic growth, %



Note: Specialists were asked the following question: "In your opinion, what are the three principal factors that will limit growth in economic activity over the next six months?"; they could select up to three factors.
Source: Banxico (Encuestas Sobre las Expectativas de los Especialistas en Economía del Sector Privado).

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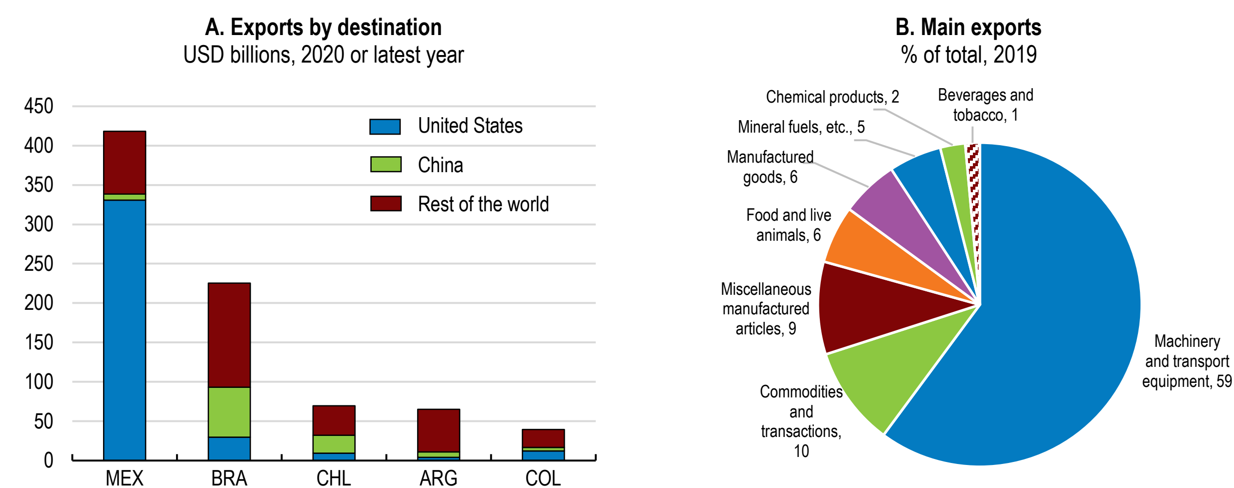
Enhancing trade integration in services

Mexico has greatly benefited from its open trade and foreign investment policies. It has 13 free trade agreements with more than 50 countries. As a share of GDP, exports of goods and services increased from 26% in 1996 to nearly 40% in 2019. Boosted by NAFTA, Mexico has become a manufacturing hub, with manufacturing comprising nearly 90% of its exports. The value of Mexico's manufactured exports more than exceeds the rest of Latin America's manufacturing exports combined. Insertion in global value chains (GVCs), supported by strong FDI inflows, has allowed Mexico to climb up the value chain, particularly in the auto industry, whose structure has become extremely interlinked with the United States. As a result, exports to the United States represent more than 80% of total exports (Figure 1.31).

Figure 1.31. United States is the main trading partner



Source: UN Comtrade; and UNCTAD.

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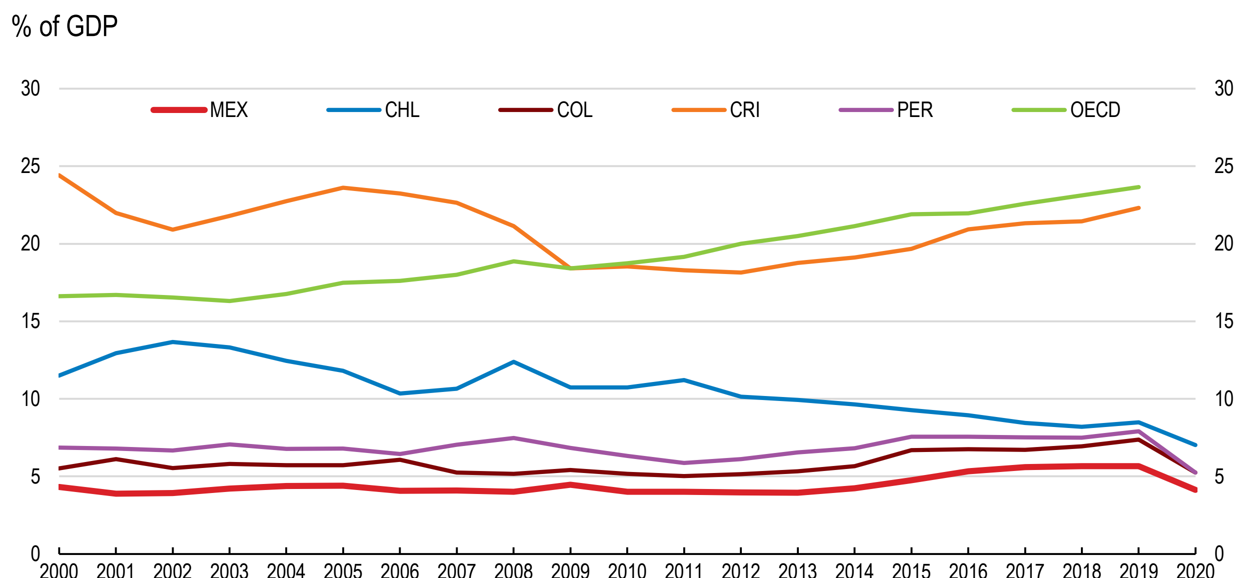
However, Mexico's high potential in trade is not fully exploited. Services exports have not mirrored Mexico's integration in manufacturing trade. The share of services exports is low and smaller than in regional peers (Figure 1.32). It has hardly changed in the last two decades, in contrast with OECD countries. Trade in services is an increasingly important part of global trade, and modern manufacturing is a heavy user of service inputs (OECD, 2017[33]). Boosting services competitiveness and integration in the world economy would reinforce Mexico's position in manufacturing trade.

Figure 1.32. Trade in services is low

% of GDP



Note: Trade in services is the sum of service exports and imports divided by the value of GDP, all in current USD. OECD is an unweighted average of all member countries, excluding Ireland and Luxembourg.
Source: World Bank World Development Indicators; and UNCTAD.

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Reforming trade regulations would also bring benefits to consumers and strengthen domestic productivity. The cost of service trade restrictions fall disproportionally on SMEs. Hence, reforms in this area are particularly important for Mexico, as the participation of Mexican SMEs in global value chains is limited (OECD, 2017[22]). Restrictions on services trade are higher than in most OECD countries (Figure 1.33). Restrictions have been reduced over time in some sectors, notably telecommunications, but there is still a substantial gap with OECD in many sectors. Restrictions are particularly high in areas key for integration in GVCs, as logistics, customs brokerage, courier services, and road, rail and air transportation. Easing those restrictions would particularly benefit SMEs and firms in the south of the country, whose integration in trade is particularly hampered by high logistics and transportation costs. Work is ongoing to modernise trade agreements and legal frameworks in finance, with the aim of bringing certainty to foreign investors and further promoting cross-border financial services. This is a promising initiative to expand access to financial services, as discussed in chapter 2 of this survey. Boosting digitalisation, as also discussed in chapter 2, would also promote a more competitive, agile and innovative service sector.

Figure 1.33. Services trade restrictions are high in some sectors

A. Services trade restrictiveness index, international comparison

Average score, index from 0 to 1 (most restrictive)

B. Services trade restrictiveness index by sector

Index from 0 to 1 (most restrictive)

Source: OECD Services Trade Restrictiveness Index.

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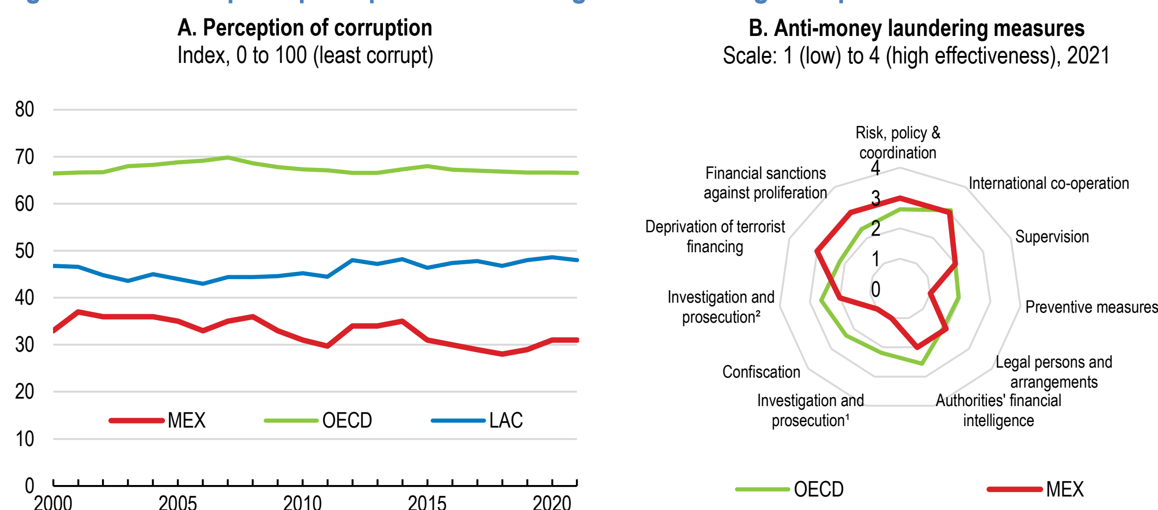
Looking ahead, additional efforts to transition towards carbon neutrality would help Mexico to maintain and reinforce trade competitiveness. The global transition to net zero greenhouse gas emissions by 2050 will require stronger policy action by all countries. Carbon pricing is expected to increase in many countries, which has triggered concerns about carbon leakage (whereby foreign emissions increase because of the introduction of domestic climate policies) and some proposals to introduce border carbon adjustment mechanisms. Strengthening efforts to reduce the carbon footprint, as further discussed in the climate change section in this chapter, could reinforce Mexico's medium-term trade competitiveness in a global economy that is transitioning towards lower carbon content. It would also help to harness all the potential of the updated trade agreement in North America, which has enhanced provisions to fight climate change.

Continuing to improve governance and reduce corruption

Systemic corruption hampers productivity, as it distorts incentives, undermines confidence in institutions and fair competition in markets, erodes public services, and undercuts social trust. The importance of quality of governance in explaining the differences in productivity across countries is well-documented (Hall and C. Jones, 1999[34]). Mexico has been significantly reinforcing its anticorruption framework overtime. Corruption perceptions have slightly fallen over the last years but the gap with OECD and regional peers remains notable (Figure 1.34).

The institutional framework to fight corruption has been strengthened but there are implementation gaps. Further progress has been made towards building the National Anticorruption system, with 17 states having so far adapted their subnational policies to the national system and five more expected to do so in the short-term. The Head of the Special Prosecutor's Office for Corruption-related Offences have been recently appointed but additional measures are necessary to finalise pending reforms (OECD, 2021[35]). This includes appointing the judges of the Federal Court of Administrative Justice. There is also significant heterogeneity among states anticorruption systems, both in terms outcomes and budgets (OECD, 2021[36]). Mexico could also consider involving more formally the private sector, including SMEs in the functioning of the National Anticorruption system, which could be done by engaging business associations in Citizen Participation Committees (OECD, 2021[37]).

Figure 1.34. Corruption perceptions remain higher than in regional peers



Note: Panel A: LAC refers to a simple average of Chile, Colombia, Costa Rica, Argentina and Brazil. Panel B shows ratings from the FATF peer reviews of each member to assess levels of implementation of the FATF Recommendations. The ratings reflect the extent to which a country's measures are effective against 11 immediate outcomes. 1. Refers to money laundering. 2. Refers to terrorist financing.
Source: Transparency International Corruption Perception Index; and OECD calculations based on Financial Action Task Force (FATF) data.

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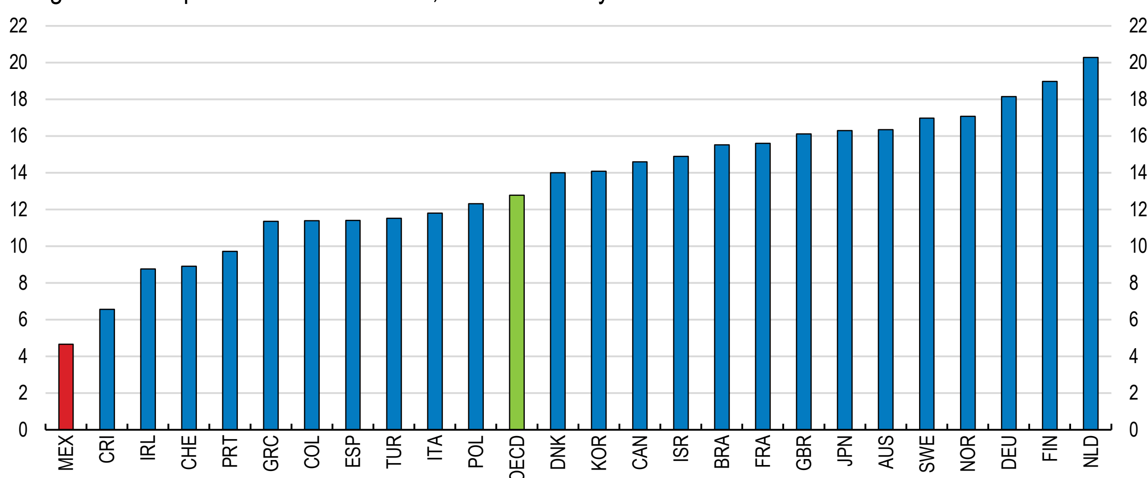
The toolkit to fight corruption has also been expanded. A national digital platform has been launched, putting together and interconnecting all data from federal agencies and the state anticorruption systems. The statistical institute has also put together a comprehensive catalogue of corruption indicators, assessing at state and municipal level the prevalent type of corruption and which procedures are more likely to be affected. The availability of more tools to fight corruption is a step ahead but it has to be followed up by willingness to make an effective use of them. Boosting technical expertise in anticorruption agencies would facilitate that corruption cases are pursued based on technical criteria. Boosting public procurement can serve as an additional tool to reduce the scope for corruption. Mexico's use of public procurement is the lowest in the OECD (Figure 1.35), and has been recently further hampered by an increasing use of direct awards and limits to access information. Strengthening transparency, stakeholder participation, access, e-procurement, as well as oversight and control, can contribute to high integrity in public procurement processes and to fight corruption, and will also contribute to higher public spending efficiency.

Figure 1.35. There is room to increase the coverage of public procurement

General government procurement % of GDP, 2020 or latest year



Source: OECD Government at a Glance database.

https://stat.link/mwa9kb

There is also room to strengthen foreign anti-bribery enforcement (OECD, 2021[35]) . Over the last 20 years, Mexico has not successfully concluded any case of foreign bribery. Enacting specific legislation to protect public and private sector employees who report suspicions of foreign bribery is a necessary step ahead to strengthen whistle-blower protection and the fight against foreign bribery.

Redoubling efforts to improve equality of opportunities

The pandemic has exacerbated long standing social inequalities. The poverty rate, in its multidimensional definition, increased to 44% in 2020, from 42% in 2018 (Coneval, 2021[38]). Those with jobs linked to trade, such as in manufacturing, have recovered the income they had before the pandemic, while for those depending on tourism or other services not linked to foreign trade the recovery is taking longer. Informal workers had been particularly impacted. The government is prioritising reducing inequality in the short-term with social programs, complemented with a longer-term strategy based on infrastructure to boost growth and investment, job creation and productivity in southern regions. Expanding access to finance in those regions would also be particularly beneficial, as discussed in chapter 2.

The pandemic and the associated increase in poverty and social vulnerability signal also there is a need to continue strengthening the social protection system and make it also more efficient. Putting in place policies that mitigate economic fluctuations without discretionary government action would better equip Mexico against future economic shocks, facilitate recoveries and better shield Mexicans. Upgrading social protection.

All OECD countries except Mexico have in place an unemployment benefits system, which takes the form of insurance schemes, of unemployment assistance programmes or of a combination of both. Unemployment benefit systems provide income protection for individuals losing employment during a downturn and they also help to stabilize the economy, acting as a valuable counter-cyclical tool. As an increasingly open economy, Mexico's exposure to global economic shocks has increased notably. Establishing an unemployment insurance scheme would be key both from macroeconomic and social protection angles. It is possible for unemployed workers to make early partial withdrawals from their pension funds for up to three months of their latter base wage. However, these early withdrawals hinder future pensions and provides less protection to workers that are more vulnerable. Some states, such as Mexico City, have an insurance scheme, but the full benefits of the tool to pool resources that can be deployed during a downturn can only be achieved if the insurance scheme were established at federal level. To avoid increasing non-wage costs, the scheme could be partly financed by the employers' social security contributions that currently go to finance the housing fund (*Infonavit*) and partly with general taxes. This financing could provide strong incentives for labour formalization, since it would bring benefits for workers with a formal job, without implying additional cost for employers.

An upgraded social protection system should also safeguard informal workers, providing them also with income protection. A number of countries in the Latin America region have recently set up emergency measures to provide informal workers with support during the pandemic recession (Box 1.9). Establishing similar mechanism in Mexico, by which informal workers who lose temporarily their jobs get income support, would also be a key building block of an upgraded social system.

Box 1.9. Providing income support to informal workers during the pandemic recession

Reaching informal workers is a challenge for public policies. Out of tax or social benefit systems and, in many cases, without access to banking services, many informal stay out of the radar of public policies. Several countries in Latin America successfully launched innovative schemes to reach them and provide them with income support during the pandemic recession. Chile supported more than 2 million vulnerable and informal households through different cash transfers, handing out debit cards to those without a bank account (OECD, 2021[13]). Costa Rica launched *Bono Proteger*, a direct cash transfer to individuals losing their job or facing reduced working hours during the pandemic, including those in the informal sector (OECD, 2020[7]). Applicants had to fill out an online form, sign an affidavit as a statement of good faith, and provide a valid domestic or foreign document of identity and an IBAN. Those without a bank account would get one opened through the application process. Brazil used a smartphone application to provide an emergency benefit, reaching more than 50 million Brazilians (OECD, 2020[39]). Colombia payed out benefits to 1.5 million households, previously not covered by social benefits, also providing free digital banking products.

Indicative scenarios suggest that an upgrade of the social programmes would contribute to decreasing both income inequality and poverty rates (Box 1.10 and (Turroques and Gonzalez Pandiella, forthcoming[40])). The fiscal cost of such measures depends on the length and size of the benefits. Starting with three-month benefits would keep the fiscal cost contained (Esquivel, 2020[41]) and (Table 1.10). The number of recipients of social programmes has recently increased to 30% of all households (from 28% in 2018). This reflects government efforts to widen the scope of social policies to reach vulnerable groups, such as old age people and the disabled. Social programmes were estimated to prevent 4.6 million people from falling into extreme poverty and 3.3 more in working poverty during the pandemic (Coneval, 2021[38]). Non-conditional programs, such as scholarships (*Benito Juarez* programme) and non-contributory pensions (Pensión para el Bienestar de las Personas Adultas Mayores) have become the backbone of social policies (Table 1.11), replacing Prospera, a conditional cash households transfer programme in place for over 21 years. The shift implies a greater focus on nearly universal social programmes with the goal to expand support to more individuals, provide beneficiaries with more flexibility and lower

administrative and operative costs. The share of households in the three lowest income deciles receiving monetary transfers has fallen, while for the rest of deciles, it has increased (Figure 1.36). This calls for strengthening efforts to reach more households in the lowest income deciles by strengthening means testing and increasing the size of programmes with larger coverage among lower-income households, such as early education scholarships.

Box 1.10. Impacts of some reforms on inequality and poverty: a simulation experiment

Simulations using Mexico's households data suggest that upgrading Mexico's social protection system, reducing informality and boosting female labour market participation would result in substantial decreases in inequality and poverty (Table 1.9). Introducing a 3-month unemployment benefit, complemented with income support, also for 3 months, for those informal workers that lose their job would cause poverty to fall by 11.6 percentage points. Closing the gap with the OECD in female labour market participation would trigger a fall in inequality, measured by the GINI index, by nearly 2 percentage points. Reducing informality of workers in lower income deciles would make inequality fall by 2 percentage points and extreme poverty by 1.5 percentage points.

Table 1.9. Impact on inequality and poverty of some reforms based on a simulation experiment

Redistributive impact of reforms on current income per capita by decile, 2020

Deciles	Current income (MXN)	Current income per capita (MXN)	Increase in current income per capita (%)		
			Unemployment benefits plus income support for informal (1)	Lower informality (2)	Higher female labour market participation (3)
1	2,673.2	1,066.5	238.35	54.39	52.23
2	5,041.7	1,802.5	165.26	17.83	24.71
3	6,871.2	2,299.7	128.54	5.24	14.82
4	8,666.9	2,733.1	103.08	0.79	8.30
5	10,610.2	3,159.7	80.57	0.00	5.21
6	12,866.8	3,669.6	58.43	0.00	0.00
7	15,617.5	4,278.3	38.44	0.00	0.00
8	19,340.4	5,133.9	21.49	0.00	0.00
9	25,398.9	6,615.1	6.82	0.00	0.00
10	51,572.9	13,581.9	0.64	0.00	0.00
Total	16,186.5	4,515.2	42.25	2.25	3.77
	Current		Effects on poverty and inequality		
Poverty %		43.9%	32.3%	42.3%	41.5%
Extreme poverty %		8.5%	6.2%	7.0%	7.8%
Gini coefficient %		42.9%	47.2%	40.9%	41.3%

Note: These scenarios are indicative and are based on a set of assumptions, particularly: (1) Unemployed workers in the formal sector who earn less than 1.5 the minimum wage receive a benefit equal to the minimum wage for 3 months; Informal workers out of work who earn less than the minimum wage receive a subsidy equal to the minimum wage for 3 months; (2) The share of households working in the informal sector decreases in the four lowest deciles and become equal to average informality in the fifth one. New formal individuals in each decile got the same salary as the average wage of formal workers in the 5th decile. (3) The female labour market participation reaches the OECD average (70%) in the five lowest-income deciles. Women who enter the labour market get the average women wage.
Source: Estimations by (Turroques and Gonzalez Pandiella, forthcoming[40]) based on ENIGH-INEGI, 2020.

Table 1.10. Illustrative fiscal impact of some OECD recommendations

Measure	Change in fiscal balance (percentage points of GDP)
Spending side	
Unemployment benefit (3 months; minimum wage benefits)	- 0.4
Income support for informal workers (3 months; minimum wage benefits)	- 1
Boosting public investment	- 1.3
Expanding the childcare network	-0.7
Total spending side	*-3.4*
Revenue side	
Broadening personal income tax base	0.7
Broaden VAT	Up to 1.4
Strengthen property tax	1.2
Strengthen vehicle tax	0.2
Total revenue side	*3.5*

Note: The impact of putting in place unemployment benefits and income support for informal workers is based on simulations experiments presented in Table 1.9. The impact of boosting public investment is based on the assessment by (Woetzel et al., 2017[5]) on the increase needed to cover infrastructure needs. The impact of expanding the childcare network is based on (UN and ECLAC, 2020[42]). On the revenue side, it is assumed that the property tax reaches the average of the other OECD Latin American countries. The impact of broadening personal income tax and VAT are based on (IMF, 2020[8]), and on Mexico's finance ministry for the vehicle tax.
Source: OECD calculations.

Boosting coverage, targeting and efficiency of social programmes

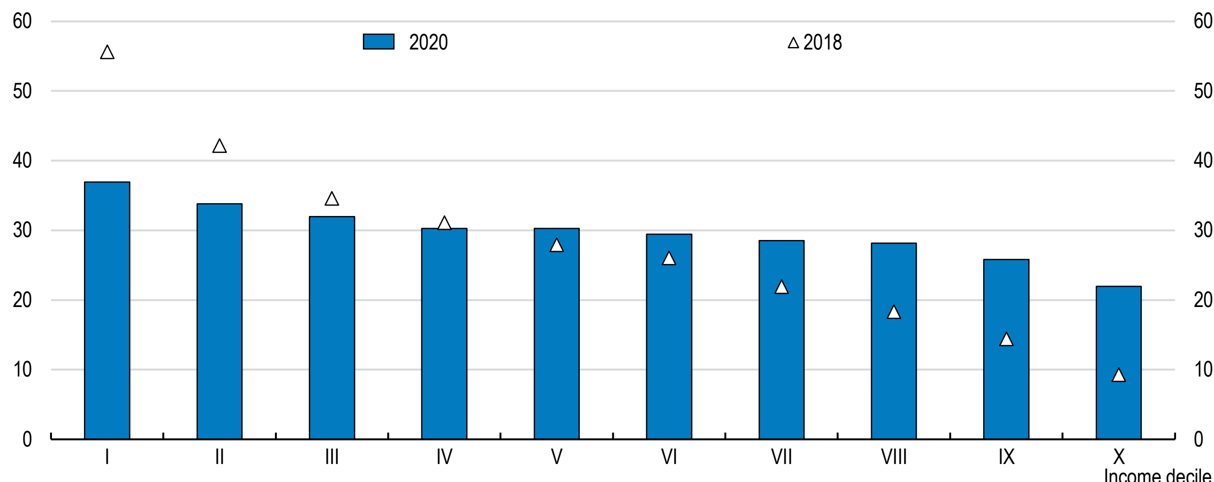
Mexico has also recently put in place *Sembrando Vida*, an innovative programme aiming at improving the quality of life of people in marginalized rural communities and promoting sustainable development. Participants in the programs receive a monetary transfer and support for agroforestry activities, such as planting trees for fruit or timber on small plots of land. Thus, the programme provides a direct monetary transfer but also in-kind support. The programme has been deployed in 20 regions and covers 430000 individuals (as of 30 August 2021). The program holds promise for achieving both climate and social development goals in marginalized rural areas. Evaluating thoroughly the program and strengthening its design based on the outcomes of the evaluation would be important steps ahead for realising its full potential.

Table 1.11. Past OECD recommendations on social policies

Past recommendation	Actions taken since the 2019 survey
Expand access to good quality, affordable childcare.	A constitutional reform was approved in 2020 by the Lower Chamber establishing the right to a decent care and creating the National Care System.
Increase the length of the pre-school day for three- to five-year olds.	No action taken
Reduce high female drop-out rates in education.	Several scholarships schemes have been put in place (*Becas Benito Juarez* and *Jovenes Escribiendo Futuro*). The VAT rate on menstrual products was reduced from 16% to 0% in Budget 2022. This improves the affordability of these products and facilitates that adolescents do not interrupt their learning activities.
Lower social security contributions for low wage earners.	According to the pension reform approved in 2020, employer's social security contributions will be reduced for low-wage workers. Social security would be instead partially financed by the federal budget.
Implement a coordinated approach to reduce informality, comprising lower administrative burdens to doing business, including tax compliance costs, and reduced dismissal costs while stepping up social protection.	All procedures with the Social Security Institute have been digitalised and can now be completed online. Programmes to facilitate the formalization of domestic workers and platform workers have been launched. A series of certifications to municipalities have been put in place, recognizing the simplification of regulations, procedures and services.

Figure 1.36. There is room for some social programmes to reach more low-income households

Share of households covered by key cash social programmes run at federal level, %



Note: This figure displays coverage of cash social programmes run at federal level, as captured in 2021 and 2018 Households Expenditure and Income Survey waves. For 2021 the programmes are Beca Bienestar para las Familias de Educación Básica, Beca Benito Juárez para Jóvenes de Educación Media Superior, Beca Jóvenes Escribiendo el Futuro de Educación Superior, Pensión para el Bienestar de Personas con Discapacidad, Apoyo para el Bienestar de los Hijos de Madres Trabajadoras, Seguro de vida para Jefas de Familia, Programa Jóvenes Construyendo el Futuro and Pensión Adultos Mayor. For 2018, the programs captured are Prospera, Procampo, Tarjeta SinHambre, Programa de Empleo Temporal (PET) and programs for adults over 65.
Source: Own computations based on 2021's and 2018's Households Expenditure and Income Survey (ENIGH, Encuesta Nacional de Ingresos y Gastos de los Hogares).

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There is also room for gaining efficiency and boosting coverage by reducing programmes fragmentation, as there is a large number of schemes, run by different levels of government, with overlaps and gaps in coverage. The number of programmes run by the federal government has fallen from 272 in 2009 to 123 in 2021. Over half of these programmes (57%) are delivered directly and have a register of beneficiaries, while the rest are delivered through intermediaries, such as local governments, and some lack beneficiaries' registries. There are also 1444 programs run by states and 6829 run by municipalities (CONEVAL, 2021[43]). Establishing a comprehensive and unique registry of existing beneficiaries of social programmes would help to assess and improve efficiency and targeting. This would help to increase the ability of the tax and transfer system to reduce inequality, which is currently relatively low (Figure 1.37). To do so the registry should cover programs run by all levels of government. Based on this registry, reducing programme fragmentation and overlaps between programs run by different levels of government could result in significant efficiency gains, which could allow reaching some of those currently unsheltered. Recent progress by Costa Rica (OECD, 2020[7]) and Brazil (OECD, 2020[39]) in building universal registers of social programmes recipients illustrates that this is a promising avenue to focus spending on those more vulnerable and to expand coverage. Digitalising the registry and making use of modern tools, such as machine learning algorithms, and of new data sources, such as mobile phone and satellite data, can help to build a comprehensive registry, to improve the targeting social programs and to deploy emergency cash transfers, at relatively low costs.

Figure 1.37. The transfer and tax system redistribute little

A. Gini coefficient before taxes and transfers
2018 or latest year

CHE SVK KOR CAN NOR MEX SWE CZE EST SVN NLD DNK POL AUS OECD HUN BEL TUR AUT DEU CHL JPN LTU USA ESP GBR FIN ITA PRT GRC IRL FRA CRI

B. Gini coefficient after taxes and transfers
2018 or latest year

SVK CZE SVN BEL NOR DNK FIN AUT SWE POL NLD DEU HUN IRL CHE CAN FRA EST GRC PRT OECD AUS ITA ESP JPN KOR LTU GBR USA TUR MEX CHL CRI

Note: Data for Mexico refer to 2018. OECD refers to an unweighted average of all member countries with available data. Panel A: the data point for Mexico, Hungary and Turkey show the Gini coefficient after taxes and before transfers.
Source: OECD Income Distribution Database.

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Key reforms of labour policies and the pension system are underway

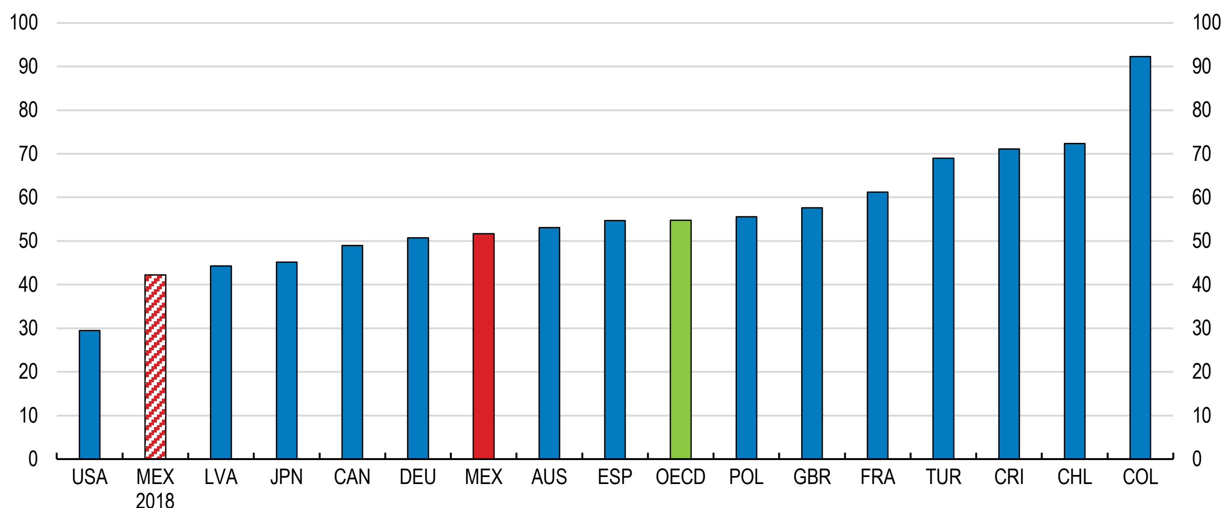
The implementation of several important labour market reforms is underway. This includes reforms to respond to new requirements in the trade agreement in North America to enhance conflict resolution mechanisms, workers representation and collective bargaining. A key reform is the creation of a new labour justice system, with more emphasis on conciliation, as a way to expedite conflict resolution between workers and employers. Before the reform, it took four years to resolve a labour dispute, which increased costs significantly both for employers and workers. The conciliation and arbitration boards, in charge of conflict resolution, did not have an independent court and were overburdened. The reform created new independent and specialized courts, the so-called centres for labour conciliation and registration. They are expected to facilitate a quicker and more independent resolution of disputes. The target is that at least 60% of conflicts between workers and companies get resolved through these new conciliation bodies. When a conciliatory agreement is not reached, oral trials should allow a resolution in less than 6 months. The reform also established new rules for workers representation and collective bargaining, including

personal, free, direct and secret vote to elect union leaders and negotiate the conditions of the workforce. The reform holds the promise of facilitating labour disputes resolution and compliance with workers' rights. Full implementation throughout the country, including at state level, will be key to realise its full potential. Reinforcing the mechanisms to guarantee the full application in practice of the right to freedom of association and collective bargaining and promoting effective social dialogue on labour-related policies would be key milestones in the implementation of the reform (OECD, 2021[37]).

Minimum wages, which were lower than in most OECD countries relative to median income (Figure 1.38), have been increased by 50% in real terms from 2019 to 2021. Further increases in the minimum wage are planned until 2024, until the minimum wage allows purchasing two basic consumption baskets (it covers currently 1.3 baskets). Around 13% of full-time workers earn the minimum wage (Conasami, 2021[44]). Before the pandemic started, the proportion of Mexican workers whose income was insufficient to meet basic needs fell in tandem with increases in the minimum wage. Previous evaluations suggest that past increases did not harm employment in the lower part of the distribution (Conasami, 2019[45]) but further evaluations of recent increases are warranted. Further increases should be gradual and aligned with productivity growth to limit their potential negative impact on formal employment, especially as the labour market is still gradually recovering from the pandemic recession.

Figure 1.38. The minimum wage has increased

Minimum wage as % of median wage, 2020



Note: OECD refers to an unweighted average of all member countries with available data.
Source: OECD Labour Force Statistics.

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A reform to reduce fraud in the use of outsourcing was approved in April 2021, and agreed with the private sector after its reformulation. Before the reform, around 20% of formal workers were subcontracted and under an outsourcing scheme. After the reform, subcontracting is only allowed for specialized services that are not part of the main activity of the firm. Subcontracting firms have to be officially registered in the Labour Ministry to be able to provide their outsourcing services. The reforms has the potential to reduce inequalities, as workers in subcontracting firms tend to have lower wages and job-quality, but also entails a risk of curtailing formal job creation. Flanking the reform with additional efforts to reduce the cost to formalise can mitigate this risk. It also remains important that the registration process remains flexible and agile overtime. Based on administrative data, around 2.7 million workers have migrated to standard contracts so far and the salary has increased around 12% on average.

Besides labour market reforms, Mexico has also started to implement a pension reform agreed with the private sector to address some of the weakness of Mexico's pension system, such as very low replacement rates and limited coverage (currently only 30% of the population gets a pension). Starting in 2023, employer's contributions will increase gradually over 8 years, 1% per year, from 5.5% to 13.87%. The number of minimum years to access pensions has been lowered from 25 to 15 years. It will be gradually increased and reach around 19 years by 2030. Government estimates suggest that the reform will expand access, reaching 80% of formal workers once the reform is fully implemented. Replacement rates would increase, particularly for low-income workers. The reform also caps the commissions that pension funds can charge by establishing a maximum based on a formula which uses commissions charged in comparator countries. The government has also announced a reduction in pension age eligibility to 65 (from 68) for non-contributory pensions and an increase in pension entitlements.

These pension reforms hold the promise of increasing access to pensions and pension adequacy in Mexico. The increase in non-contributory pensions is in line with previous OECD Economic Survey recommendations. These reforms will also boost capital markets in Mexico, as pension funds' assets will increase from 17% of GDP today to 40% in 2038. To avoid that higher employer contributions for some workers could deter formal job creation it would be important to flank the pension reform with complementary measures to reduce informality, such as reducing the cost to register formal firms. The reform of contributory pensions will have a limited budget impact, as their financing is borne by employers. However, public spending on pensions are expected to continue increasing, following increases in non-contributory pensions, the demographic transition, and the budget contribution to finance pensions in SOEs, such as PEMEX. Thus, spending on pensions is expected to increase to 5.3% of GDP in 2026, from the current 4%. This will increase budget rigidity and erode further Mexico's ability to respond to economic cycles, reinforcing the case for increasing public revenues.

There remains also a need to reduce fragmentation of the pension systems. Some states, municipalities or public universities run independent pension systems. There is no coordination neither across the various plans nor across the federal and local levels, even for non-contributory schemes (OECD, 2019[46]). The lack of portability of entitlements between schemes and entities also harms labour mobility. Unifying these schemes will reduce duplications and inequalities and facilitate a more efficient management.

There is also significant fragmentation in health services between the contributory system, the non-contributory system and public sector workers scheme. The non-contributory system suffered from lower coverage, as some diseases and treatments covered by the contributory scheme were excluded. To tackle this, the Institute of Health for Well-being (INSABI) was created in January 2020, aiming at offering universal and free health coverage. INSABI, whose start was disrupted by the pandemic, faces significant challenges. The share of the population that reports lacking access to health services increased to 28% in 2020, from 16% in 2018 (Coneval, 2021[38]), even if they are entitled to coverage by INSABI. This highlights that achieving a truly universal coverage remains a challenge. INSABI has inherited from the previous non-contributory scheme lower availability of staff and material resources, which highlights the need to strengthen public spending in this area.

Reducing gender inequalities would boost growth and well-being significantly

Female labour force participation continues to lag the OECD average and other Latin America countries (Figure 1.39). Mexican women suffer from a 10% pay gap. Women have been particularly hit by the pandemic and the recovery of female participation has been slower than for men, as they were particularly affected by schools closures. Violence against women, a long-standing issue, has also become more acute during the pandemic (Vaeza, 2020[47]).

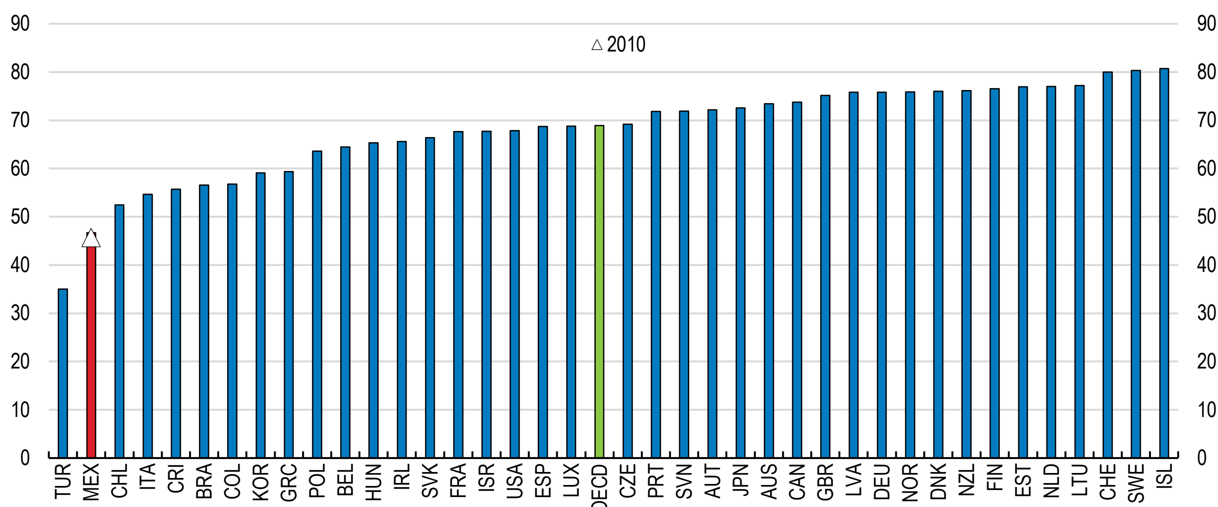
Care responsibilities fall disproportionally on women, hampering women prospects to complete education or be in the labour force. There has been some progress overtime in extending the coverage of early childhood education and care but there remains a gap with OECD countries or regional peers such as

Chile or Colombia. Recently a network of childcare facilities (*Estancias Infantiles*), that workers could access free of charge, was replaced by subsidies. But the subsidy was insufficient to cover the cost and the number of recipients was reduced. The Finance Ministry, in cooperation with other ministries and institutions from the federal government, is analysing different strategies to expand the childcare system in coordination with subnational governments and the private sector. Achieving full coverage for children under 6 years old would cost 1.2% of GDP annually, while Mexico already spends 0.5% of GDP (UN and ECLAC, 2020[42]). To fully grasp the potential benefits of an expansion of the childcare system, it is fundamental that low-income workers are prioritised and that access is not linked to labour market status so that informal workers also get access to the network.

To implement an efficient childcare system, there is a role for the federal government to coordinate efforts by subnational governments and the private sector, including by establishing general rules (e.g. quality assurance) and consolidating the information of the provision and quality of childcare centres. However, local governments could contribute to the design, given their knowledge of the particular needs in their area. Finally, for public childcare centres, coordination among the three levels of governments is crucial for a proper functioning. For example, local governments could be responsible of some expenditures as salaries, according to the current legal framework, and federal government could provide infrastructure (through existing programs, such as La Escuela es Nuestra).

Figure 1.39. Female labour market participation is low

% of female population aged 15-64, 2020



Source: OECD Labour Force Statistics.

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Promoting the take-up of paternity leave entitlements for fathers would also help. In Mexico, fathers are entitled to fives day of leave. Contrary to mothers leave that is financed via the Social Security system, fathers leave is fully paid by the employer. Fathers leave take-up has been low, as there is social stigma and is only available to formal workers. Financing the leave entitlement via the Social Security System, as done for mothers in Mexico and for fathers in many OECD countries, could facilitate take-up and break stigmas. Mexico could consider also lengthening parents leave, following the recent trend of many OECD countries, including France and Spain.

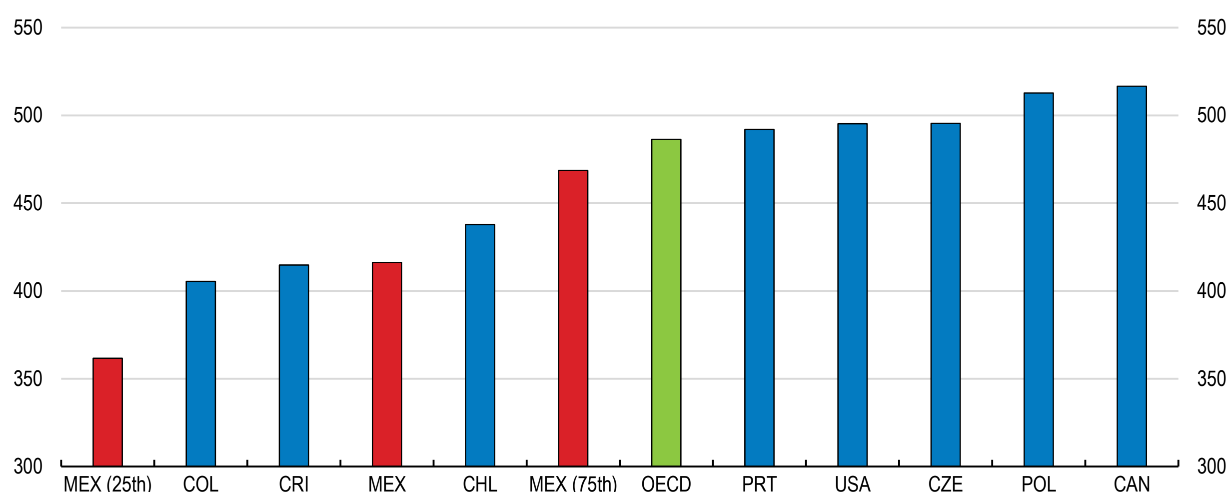
Mexico has made good progress in improving female political representation. The share of women in Congress has been on an increasing trend and reaches now 52%. In the current cabinet, 42% of ministers are women, in comparison with 31% in the OECD average (IMCO, 2021[48]). Conversely, Mexico female participation in private company boards, at 7%, is lower than observed in most OECD countries (27% on average). Promoting gender diversity in leadership positions in private companies can contribute to enhance diversity and improve economic outcomes. There is a requirement for listed companies to report on their progress to reduce gender imbalances, but the requirement is frequently unmet. Ensuring that the requirement is met would promote gender equality, as exemplified in several OECD countries, such as Australia or the United Kingdom (ILO, 2020[49]). Increasing gender pay gap transparency in those reports, by including mandatory pay-gap reporting, is a promising avenue to reduce gender pay gaps (OECD, 2021[50]), and is being done in half of OECD countries.

Boosting education outcomes

The education system was highly impacted by the pandemic, exacerbating longstanding challenges, such as a significant inequality. Before the pandemic hit, best performing students had a similar level of performance as the OECD average (Figure 1.40). However, the gap between top and bottom students was large and equivalent to four years of schooling. After one of the longest schools closures in the region and in the OECD (Figure 1.41), these inequalities are likely to widen even further. Differences in households' digitalization are particularly stark in Mexico, which prompted authorities to deploy learning tools via television rather than the Internet.

Figure 1.40. Educational inequalities are large

Mean score in reading, math and science in PISA, 2018



Note: MEX (25th) refers to the score at which 25% of students scored lower; similarly, MEX (75th) refers to the score at which 75% of students scored lower.
Source: OECD PISA 2018.

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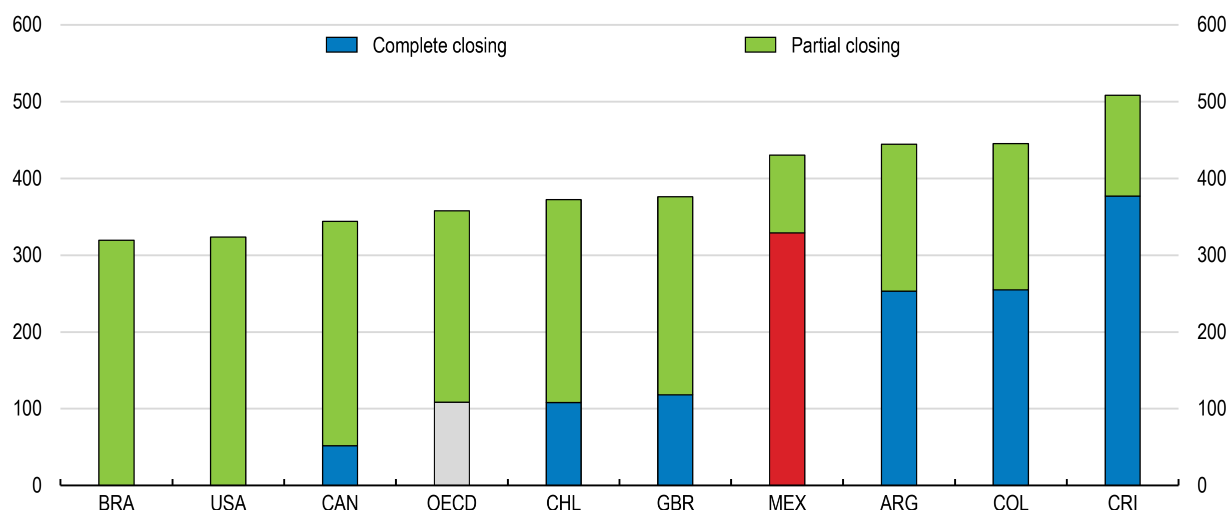
The impact of school closures is likely to be significant and long lasting. In the short-term, dropouts are likely to increase. In fact, in the midst of the pandemic, 3 millions of Mexicans at primary and secondary education level interrupted their studies and did not restart the 2020-2021 academic year (INEGI, 2021[51]). Schools closures imply a significant risk of further increases in the number of individuals exiting education with low skills, placing them at high risk of informality, poverty, and social exclusion. Putting in place

targeted programmes aimed at reintegrating back to schools those who dropped during the pandemic would be essential to reverse the negative impact of school closures. Some of those who stayed in education may also require targeted support and tutoring to avoid that, after the weaker learning during the schools closure, they stay behind and end up dropping out. In this vein, Germany recently launched a scheme to provide additional teaching to pupils once schools were open again. Mexico has put in place a monitoring process that should help to assess learning gaps, and which would be a good basis to set-up additional tutoring to students. This would be fundamental to support youth in acquiring relevant skills to successfully engage in increasingly digitalised and greener economies, as reflected in the recently updated OECD youth action plan.

Figure 1.41. Schools have been closed for a long time

Cumulative days of school closing due to COVID-19 since 1 January 2020



Note: Partial closing refers to the following situations: recommended closing or significant changes to normal operations; required closing only of specific levels or categories (e.g. high schools, public schools); or the required closing of all levels in a targeted geographic area. Days with partial closing are counted as 0.5 days.
Source: Oxford Policy Tracker.

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Reallocating more resources towards the earliest stages of education (preschool and primary) could not only help to mitigate the effects of the pandemic but also make the education systems more equitable. This will facilitate that educational efforts reach the largest proportion of students. Efforts to make education more equitable could be reinforced by establishing numerical equity targets, such as for reducing the number of school-leavers with poor basic skills or the number of early school dropouts, and by allocating higher-quality teachers to schools with a higher share of vulnerable students. Experience in OECD countries suggests that establishing targets can be a useful policy lever by articulating policy in terms of what is to be achieved rather than in terms of formal processes or laws (OECD, 2007[52]). Upgrading schools infrastructure and strengthening teachers training, with a focus on more vulnerable areas, would also help to reduce inequality of opportunities. Mexico has put in place a program (*La escuela es nuestra* in Spanish) aimed at improving basic infrastructure in primary schools. The program prioritises more vulnerable schools. The current funding of the program has allowed so far for supporting around one quarter of the schools who requested support. Increasing funding allocated to this type of programmes would be a step ahead to improve schools infrastructure and reduce inequalities.

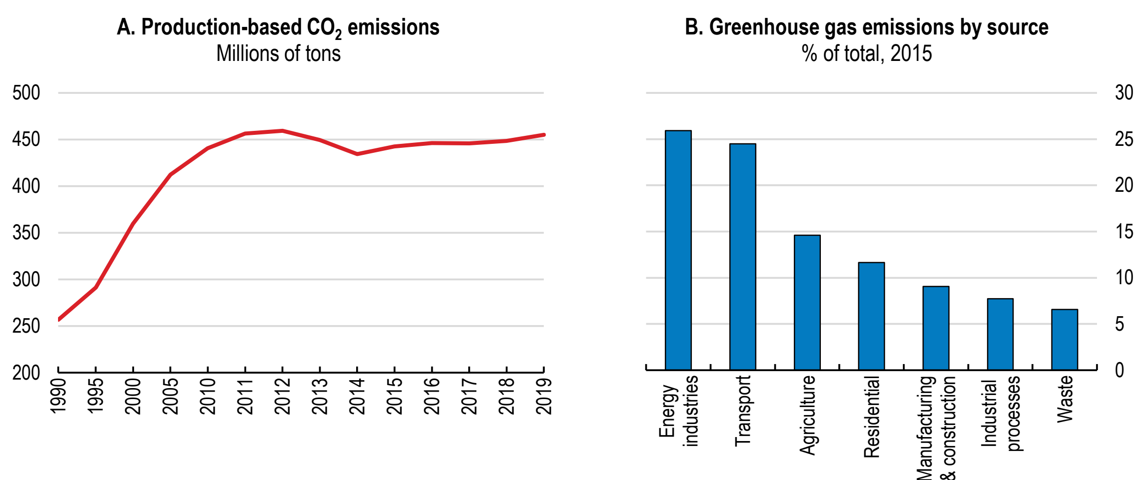
Reducing greenhouse gas emissions and mainstreaming climate-change mitigation

Mexico was a pioneer among emerging economies in taking action on climate change mitigation and adaptation. It was the first emerging economy to introduce carbon price mechanisms. It also began in 2019 a pilot program for the implementation of an emissions trading scheme, in collaboration with the local governments of California and Quebec.Mexico was also the first Latin American country to set its nationally determined contributions, which have been enshrined into Mexico's climate change law. In 2015, it committed to reducing greenhouse gas emissions (GHGs) by 22% relative to a business as-usual scenario by 2030, and targets have not been strengthened since then. Mexico, as other countries participating in COP26, will be revisiting the 2030 targets during 2022 to align with the Paris agreement temperature goal, taking into account national circumstances. Emissions had been on an increasing trend since 2014 (Figure 1.42, Panel A). They were estimated to fall by 13% in 2020 due to the pandemic recession. However, under currently implemented policies, this reduction will not been maintained and Mexico, as many other OECD countries, will not meet its emission targets (Climate Action Tracker, 2021[53]).

Mexico is the 12th largest contributor to GHG emissions globally (Semarnat, 2020[54]). Estimated costs of environmental harm in Mexico are high, amounting to 4.5% of GDP in 2019, according to estimates by the national statistical agency. The impact of climate change is already visible in Mexico. In the last 50 years, average temperatures in the country have increased approximately by about 1°C and the spatial and temporal distribution of precipitations has changed (Semarnat, 2020[54]). This is exacerbating water stress, a critical vulnerability for Mexico. Climate-change related events, such as droughts, heatwaves or floods, are frequent in Mexico.

Policy options to reduce emissions include gradually increasing carbon pricing, enhancing regulations, greening the energy matrix and transitioning towards cleaner transportation. Mexico has taken important steps towards greening the tax system through the introduction of the carbon price, a tax on pesticides and the phasing out of fuel subsidies. Going further would induce further emission cuts. There is room to broaden the scope of the carbon price, as coal is taxed at a reduced rate and natural gas is zero-rated. The overall carbon price remains low, at about two euro per tonne of emissions (OECD, 2019[55]). This is much lower than the low-end estimate of climate-related cost of carbon emissions of around 60 euros per tonne (Arlinghaus and K. van Dender, 2017[56]). Increasing the carbon price implies significant political economy challenges. Phasing the increase in a gradual manner and using part of the additional revenues to offset the effects of higher energy prices on low-income households could facilitate buy-in.

Figure 1.42. CO2 emissions are increasing



Source: OECD Green Growth Indicators.

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Energy and transport sectors are the largest emitters (Figure 1.42, Panel B). About 90% of primary energy supply comes from fossil fuels (Figure 1.43). 23% of the energy supply comes from gas. Renewables generation started to pick up modestly in 2012. With abundant renewables sources across the country, Mexico's potential in the renewables sector is high and much of it remains untapped. The regulations affecting renewables energy projects have been subject to significant uncertainty, as the Ministry of Energy has introduced several reform attempts, challenged legally by market participants and whose implementation was suspended by courts. A constitutional reform of the electricity market is currently in Congress (Box 1.11).

These reform attempts follows the suspension of long-term auctions for renewable energy generation in 2019. The auctions had triggered a significant flow of foreign direct investment and led to record the lowest price for a large- scale solar in the world (OECD, 2019[10]), also below prices of conventional sources. The oversupply of renewables permits, that exceeds the capacity of the grid and creates geographical unbalances, and the fluctuating and intermittent nature of renewable have been signalled by the Ministry of Energy as an argument to favour conventional-based generation. However, experience in OECD countries and emerging economies illustrates that renewables decrease the cost of energy and at the same time can provide flexibility to power systems and reduce the risk of blackouts (IEA, 2019[57]). Modernising the electricity grid, by implementing smart grid technologies, would be a fundamental step ahead to green the electricity mix. Smart grids would also improve efficiency, reliability, and safety and serve to integrate storage devices into the network (Binz et al., 2019[58]).

Box 1.11. An overview of the constitutional reform of the electricity market

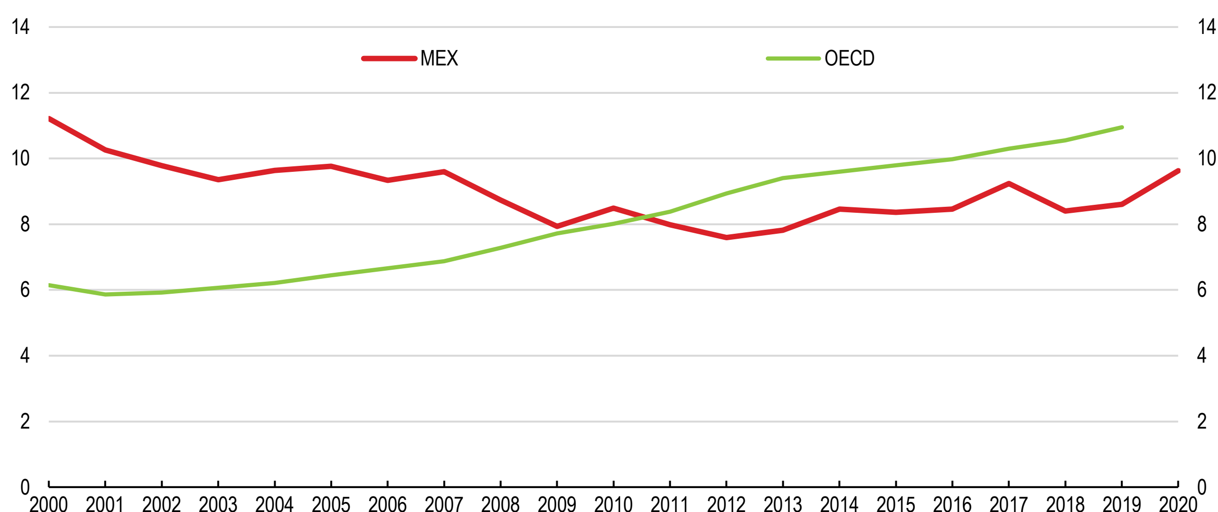
A constitutional reform proposal of the electricity market was announced in September 2021. The proposal will be discussed with key stakeholders and investors and is expected to be debated in Congress in 2022. With that reform, the Ministry of Energy aims at ensuring energy security, maintaining conventional plants as backups for renewables and at avoiding the oversupply of renewables permits, which exceeds the capacity of the grid and creates geographical unbalances. The proposal aims at phasing out some elements in private contracts which are deemed to be detrimental to the finances of the state-owned Federal Electricity Commission (*Comisión Federal de Electricidad* or CFE) and of the government, such as the subsidizing of the transmission fees. The proposal also aims at tackling problems in the design of self-supply mechanisms, such as the creation of a parallel electricity market. The initiative also attempts to redesign mechanisms to issue permits, particularly for renewables, to mitigate the oversupply problem. The reform proposal establishes a guaranteed market share of at least 54% for CFE. The constitutional reform also expands CFE's role in the oversight of the sector and eliminates independent sector regulators. CFE would also be in charge of setting tariffs and granting permits. The electricity reform also changes the rules for generators to access the grid, prioritizing the dispatch of electricity generated by the state-owned company. Prior to the reform, access to the grid was based on marginal power generation costs, giving priority to the least expensive generated electricity, which is renewables-based and largely generated by the private sector. Conversely, electricity generated by the state company is coming from hydroelectric, geothermal and nuclear centrals or is fuel-based.

Table 1.12. Past OECD recommendations on green growth

Past recommendation	Actions taken since the 2019 survey
Raise the carbon tax gradually and predictably, eliminate exemptions and reduced rates and compensate the poor.	Tax credits for fuel consumption for transport, fishing and mining, benefiting high-income taxpayers, were narrowed or eliminated.
Resume long-term auctions to encourage the supply of renewable energy, linking the remuneration of supply to market conditions.	No action taken
Allow and encourage municipalities to create joint metropolitan governance arrangements on their own initiative, in particular metropolitan transport authorities.	No action taken
Invest in integrated public transport systems focusing on improving access in low-income areas.	Large transport infrastructure projects are underway, involving 5 states. Around 461 kilometres of new bike lines, distributed in 5 cities, will become available by 2023.

Figure 1.43. The share of renewables in the energy matrix is lower than in OECD countries

Share of renewable energy in total energy supply, %



Note: OECD is an unweighted average of all member countries with available data.
Source: OECD Green Growth Indicators.

In parallel Mexico is increasing investment in further fossil fuel exploration and extraction and building a new refinery. A reform of the oil market has also been approved, allowing the Ministry of Energy to suspend the licences already granted to private companies in case of imminent danger to national security, energy security, and the national economy. The Government would be in charge of the operations intervened during the suspension. The reform also adds new conditions, such as a minimum storage capacity, for a company to obtain and keep its permits.

Transport is the second largest CO_2 emitter sector. Mexico has one of the highest transport CO_2 emissions per unit of GDP in the OECD (OECD, 2021[59]). Mexicans are exposed to higher levels of air pollution than the population in other OECD countries (OECD, 2021[59]). Mexico City's road traffic congestion in the metropolitan zone ranks among the highest in the world (OECD, 2015[60]). Transitioning towards massive urban and interurban transport can have a material impact to reduce congestions and emissions. This would require channelling private and public investment towards massive transport projects.

Experiences of several states attest the multiple benefits of transitioning towards cleaner transportation means. Mexico City has recently prioritised mass transportation, establishing networks of exclusive lanes for public transport and for cycling and measures to curb cars traffic. The mass transit network will also expand, by increasing the length of metro lines and bus rapid transit lines. These changes hold the promise of reducing CO2 emissions substantially but their ambition could be expanded should more resources for investment become available. Increasing the uptake of electric and other low- and zero-emission vehicles would have the biggest effect in cutting emissions in Mexico City, as two thirds of all emissions come from private cars (Windisch et al., 2021[61]). Electric train systems in Guadalajara and Monterrey are other valuable examples illustrating the benefits of clean mass transportation. Cable cars in Mexico City, crossing hilly and heavily traffic-congested areas, is another innovative and clean public transportation initiative.

Mexico has taken valuable steps to mainstream green growth and climate mitigation policies. The framework built to issue sustainable bonds could also be deployed to target green sustainable development goals. The Finance Ministry is developing a taxonomy to promote the design of financial instruments to catalyse public and private investment into low-carbon and climate-resilient technologies.

However, there is room to give climate-change mitigation criteria a greater role when defining government policies in all areas. So far, climate change criteria is assessed occasionally, ex post, and only under the arduous insistence of the environment ministry. A paradigmatic example is the social programme *Sembrando Vida,* which provides rural dwellers an income in exchange for planting trees on their plots (see also social section in this chapter). The program was launched in 2019, conceived as a social programme, but has potential to mitigate climate change. However, only recently the environment ministry started assessing its environmental impact. Experience in some OECD countries, such as the Netherlands, where finance and environmental issues are within the same ministry, suggests that strengthening the link between finance and environment ministries can be effective to ensure that climate change criteria are fully embedded in policy design. Recent valuable steps taken by Mexico's finance ministry to green financial regulations suggest that this is a promising avenue in Mexico to give greater focus to environmental issues in the policy agenda.

The resources assigned for activities and programs associated with the mitigation and adaptation of climate (Annex 16 in the Federal Budget) increased by 22% in 2021 compared to that assigned for 2020. However, budget allocations for key environmental agencies, such as the Ministry of the Environment and Natural Resources, have decreased overtime (Muller et al., 2021[62]). Programmable spending on environment protection was 0.2% of GDP in 2014 and 0.1% in 2021's budget. Raising government revenues would create better opportunities to channel more resources to environmental agencies.

Table 1.13. Policy recommendations from this chapter

MAIN FINDINGS	CHAPTER 1 (Key recommendations are bolded)
Safeguarding the on-going recovery	
The share of vaccinated population is rising but remains below the one observed in OECD and regional peers. Additional infection waves would hamper the recovery.	**Accelerate vaccination.**
Activity has rebounded. The recovery of the labour market is still ongoing. The fiscal stance for the near-term provides mild support to the recovery.	**Stand ready to provide further targeted support if the recovery falters or the pandemic resurges.**
Further improving macroeconomic policies	
Public spending is low in international perspective. Spending on social protection and public investment have recently increased, but the pandemic has strained health and education systems, poverty has increased and infrastructure gaps remain significant. **Responding to increasing spending needs while maintaining commitment with debt sustainability requires increasing tax revenues. The tax-to-GDP ratio is the lowest in the OECD and lower than in regional peers.**	**Increase public investment, based on sound and transparent cost-benefit analysis, and spending on social programs, education and health, with a special focus on low-income households, over the medium-term.** **Broaden tax bases by phasing out inefficient and regressive exemptions and by reducing informality, and foster property tax collection by updating the cadastre using digital technologies.** Increase the progressivity of the personal income tax by lowering the income threshold for the top rate. Make some of the transfers to states conditional on levying the vehicle tax and on reconfiguring it to incentivise the use of more energy-efficient vehicles.
The budgetary process has improved. The ability to run countercyclical fiscal policies and support the economy during downturns is limited. The existing current spending rule covers only around 36% of public sector expenditure.	**Establish an independent and adequately resourced fiscal council** **Introduce a long-term debt anchor and widen the share of public spending covered by the spending rule.** Reform stabilization funds to focus them on stabilizing revenues over a multi-year cycle.
States and municipalities remain dependent on federal transfers, leaving the burden of raising tax revenues almost exclusively to the federal government. Currently, federal transfers do not acknowledge efforts made by states to preserve the environment or mitigate climate change.	Upgrade the formulas determining the transfers from the federal budget to the regions by providing better incentives for states to collect taxes and introducing environmental criteria.
Inflation picked up well above 3%. The increase was triggered by supply chain cost-related disruptions and additional domestic pressures on some merchandise items. There are risks that price formation mechanisms may be affected in a generalised way.	**Gradually increase the interest rate for inflation to return to the 3% target. Tighten at a faster pace if long-term inflation expectations start to rise.** Fully preserve central bank autonomy and maintain price stability as primary mandate.
Support to PEMEX has increased to 1% of GDP. Despite new business plans, PEMEX remains a significant risk for the sovereign.	Focus PEMEX activities in profitable fields, reconsider business lines operating at a loss and reduce fuel oil production. **Strengthen PEMEX and other SOEs governance by aligning it to the OECD Guidelines on Corporate Governance of State-owned Enterprises.**
The financial system enjoys adequate capital and liquidity buffers. Credit defaults and market corrections may materialise with delay. Mexico is actively assessing the potential financial impact associated to climate change risks.	Ensure that financial institutions with higher exposure to SMEs and households remain well capitalised. Phase in gradually a mandatory disclosure of climate-related risks by financial institutions and listed companies
Improving equality of opportunities	
Female labour force participation at 45% is low. Family care responsibilities hamper women prospects to complete education or be in the labour force.	**Establish a network of childcare facilities, giving priority to low-income households.** Lengthen fathers paid leave entitlement and finance it via the Social Security System. Ensure that listed companies report regularly on progress made to reduce gender imbalances, including mandatory pay-gap reporting.
Education inequalities are large. Pandemic-related schools closures are likely to have long-term negative effects on skills and growth.	**Put in place programmes aimed at reintegrating back to schools those who dropped during the pandemic and provide targeted support and tutoring to those with learning difficulties** Reallocate spending towards early stages of education Upgrade schools infrastructure and strengthen teachers training, with a focus on more vulnerable areas
Unemployment insurance schemes provide income protection for individuals losing employment during a downturn and act as a valuable counter-cyclical tool.	**Establish a federal unemployment insurance scheme.**

The number of programmes run by the federal government has fallen but, at 123, remains high. The number of programs run by states and municipalities is also large. Only 57% of the federal social programmes have a register of beneficiaries.	Create a registry of beneficiaries of all social programmes and use it to reduce fragmentation and duplications and extend coverage.
Restarting investment and boosting productivity	
Competition has been weak in key sectors of the economy and a few companies tend to dominate markets..	Strengthen competition, including by ensuring that the competition authority remains independent and adequately resourced, and by reducing regulatory burden.
Investment has been weak since 2015. Reform reversals and planned regulatory changes in electricity and oil markets increase uncertainty and hamper investment sentiment.	**Provide investors with certainty about existing contracts and regulatory stability.** Consider converting loans given to SMEs during the pandemic into grants
Integration in manufacturing value-chains is high but there are services restrictions that hamper SMEs competitiveness and trade integration.	Reduce barriers to trade and investment, particularly in services and in areas critical for integration in global value chains, such as transportation and logistics.
Corruption perceptions have fallen but remain higher than in peers. The toolkit to fight corruption has strengthened but implementation efforts lag.	Appoint the judges of the Federal Court of Administrative Justice. **Continue to strengthen the fight against corruption, including by boosting technical expertise in anticorruption agencies.** Strengthen transparency and use of digital tools in public procurement process, and limit direct contracting. Enact legislation to protect those who report suspicions of foreign bribery.
At about 55% of workers, informality is high. Informality is both a cause and a consequence of low productivity.	**Establish a comprehensive strategy to reduce the cost of formalization, including reducing firms' registration costs at the state and municipal level.**
Strengthening green growth	
Under currently implemented policies, Mexico's commitments to curb emissions, as in many other countries, will be challenging to achieve. **Mexico has huge untapped potential in renewables. A reform of the electricity market under discussion establish a maximum private participation of 46% in the electricity market and eliminates regulatory bodies overseeing competition and granting permits.** Budget allocations for environmental agencies remain low Air pollution creates significant health damages. Mexico is subject to unpredictable extreme weather events, such as hurricanes, droughts or floods	**Broaden the carbon tax base, gradually increase the rate, and use part of the revenues to offset the effects of higher energy prices on low-income households.** **Maintain regulations that promote renewables generation and facilitate private sector participation.** **Upgrade the electricity grid by implementing smart grid technologies and integrating storage devices into the network.** Increase budget allocations for environmental agencies. Effectively direct public and private investment into infrastructure that fosters mass transportation. Strengthen disaster risk management and foster climate change adaptation strategies.

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