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BETTER POLICIES FOR BETTER LIVES

LAUNCH VERSION

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Foreword

This Survey is published on the responsibility of the Economic and Development Review Committee of the OECD, which is charged with the examination of the economic situation of member countries. The economic situation and policies of Mexico were reviewed by the Committee on 12 December 2023. The draft report was then revised in the light of the discussions and given final approval as the agreed report of the whole Committee on 5 January 2024.

The Secretariat's draft report was prepared for the Committee by Alberto González Pandiella and Alessandro Maravalle, under the supervision of Aida Caldera Sánchez. Statistical research assistance was provided by Véronique Gindrey, editorial assistance by Karimatou Diallo and Gemma Martinez and communication assistance by Laura Fortin. The Survey also benefited from contributions from Elena Vidal.

The previous Survey of Mexico was issued in 2022. Information about the latest as well as previous Surveys and more information about how Surveys are prepared is available at https://www.oecd.org/eco/surveys/.

Table of contents

Tables

Figures

Boxes

Basic statistics of Mexico, 2022

Numbers in parentheses refer to the OECD average[1]

LAND, PEOPLE AND ELECTORAL CYCLE					
Population (million)	129.4		Population density per km²	65.6	(39.0)
Under 15 (%)	24.5	(17.2)	Life expectancy at birth (years, 2021)	70.2	(78.7)
Over 65 (%)	8.3	(18.0)	Men (2021)	66.1	(75.9)
International migrant stock (% of population, 2019)	0.8	(13.2)	Women (2021)	74.9	(81.7)
Latest 5-year average growth (%)	0.7	(0.4)	Latest general election	July 2018	
ECONOMY					
Gross domestic product (GDP)			Value added shares (%)		
In current prices (billion USD)	1 468.2		Agriculture, forestry and fishing	4.4	(2.8)
In current prices (billion MXN)	29 452.8		Industry including construction	33.8	(28.3)
Latest 5-year average real growth (%)	0.4	(1.7)	Services	61.8	(68.8)
Per capita (thousand USD PPP)	23.9	(60.2)			
GENERAL GOVERNMENT Per cent of GDP					
Expenditure	27.1	(42.9)	Gross financial debt (OECD: 2021)	54.1	(113.5)
Revenue	22.0	(39.7)	Net financial debt (OECD: 2021)	48.0	(67.6)
EXTERNAL ACCOUNTS					
Exchange rate (MXN per USD)	20.06		Main exports (% of total merchandise exports)		
PPP exchange rate (USA = 1)	9.68		Machinery and transport equipment	58.3	
In per cent of GDP			Miscellaneous manufactured articles	9.1	
Exports of goods and services	42.8	(33.4)	Manufactured goods	7.0	
Imports of goods and services	45.7	(34.8)	Main imports (% of total merchandise imports)		
Current account balance	-1.3	(-1.0)	Machinery and transport equipment	42.6	
Net international investment position	-41.9		Manufactured goods	12.6	
			Chemicals and related products, n.e.s.	11.1	
LABOUR MARKET, SKILLS AND INNOVATION					
Employment rate (aged 15 and over, %)	57.8	(57.5)	Unemployment rate, Labour Force Survey (aged 15 and over, %)	3.3	(5.0)
Men	73.8	(65.4)	Youth (aged 15-24, %)	6.5	(10.9)
Women	43.5	(50.1)	Long-term unemployed (1 year and over, %)	0.1	(1.2)
Participation rate (aged 15 and over, %)	59.8	(60.9)	Tertiary educational attainment (aged 25-64, %)	20.6	(40.7)
Average hours worked per year	2,226	(1,752)	Gross domestic expenditure on R&D (% of GDP, 2020)	0.3	(2.9)
ENVIRONMENT					
Total primary energy supply per capita (toe)	1.5	(3.8)	CO_2 emissions from fuel combustion per capita (tonnes)	3.1	(7.8)
Renewables (%)	9.5	(12.0)	Water abstractions per capita (1 000 m³, 2021)	0.7	
Exposure to air pollution (more than 10 µg/m³ of PM 2.5, % of population, 2019)	99.5	(61.7)	Municipal waste per capita (tonnes, 2012, OECD: 2020)	0.4	(0.5)
SOCIETY					
Income inequality (Gini coefficient, 2020, OECD: latest available)	0.420	(0.316)	Education outcomes (PISA 2022 score)		
Relative poverty rate (%, 2020)	16.6	(11.8)	Reading	415	(476)
Median disposable household income (thousand USD PPP, 2020)	5.9	(26.6)	Mathematics	395	(472)
Public and private spending (% of GDP)			Science	410	(485)
Health care	5.5	(9.2)	Share of women in parliament (%)	50.0	(32.5)
Pensions (2019)	3.1	(9.5)			
Education (% of GNI, 2021)	4.3	(4.4)			

1: The year is indicated in parenthesis if it deviates from the year in the main title of this table. Where the OECD aggregate is not provided in the source database, a simple OECD average of latest available data is calculated where data exist for at least 80% of member countries.
Source: Calculations based on data extracted from databases of the following organisations: OECD, International Energy Agency, International Labour Organisation, International Monetary Fund, United Nations, World Bank.

Executive summary

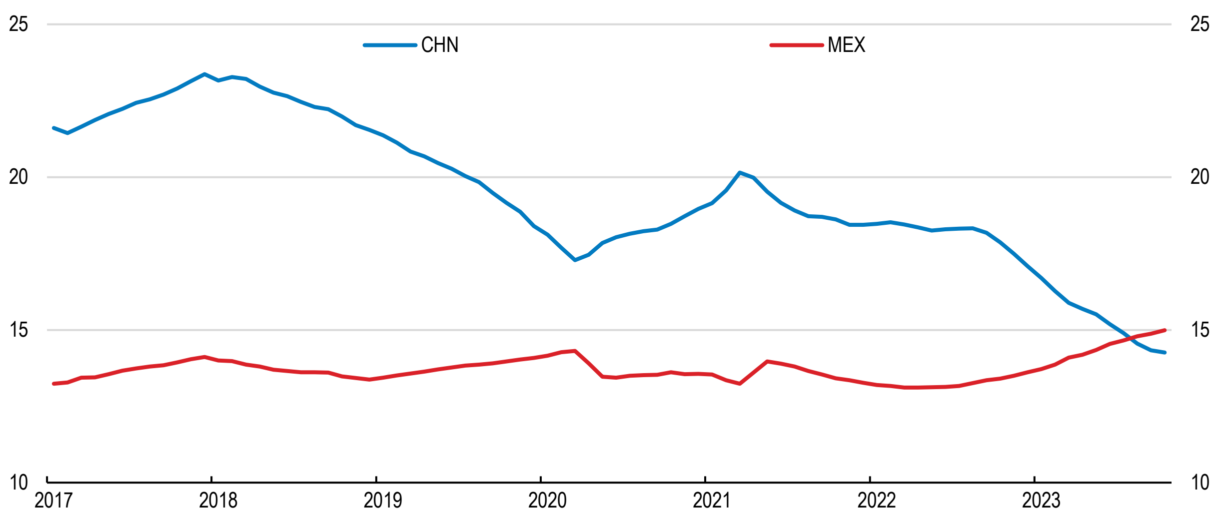
Growth is resilient and nearshoring is bringing new opportunities

The economy is navigating well the uncertain global economic environment. Headline inflation is gradually receding, but core inflation is persistent. Mexico has started to benefit from nearshoring (Figure 1), but fully harnessing its potential requires tackling long-standing challenges such as low productivity, and high inequalities.

Growth has held up well thanks to a resilient domestic demand. Consumption is supported by a strong labour market. Investment is trending up, supported by public infrastructure projects in the south and by private investment in machinery. Exports have kept their dynamism.

Figure 1. Mexico has become the main import provider to the United States

US imports from China and Mexico, 12-month moving average, % of all imports



Source: UN Comtrade.

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Monetary policy reacted decisively to high inflation. Headline inflation has softened and core inflation, while being more persistent, has also gradually fallen, although services inflation remain high. The strong appreciation of the peso has contributed to contain inflation.

GDP growth is expected to decelerate to 2.5% in 2024 (Table 1**).** Domestic demand will sustain growth, while exports will suffer from the slowing in the United States. Headline and core inflation will continue slowing down. A sharper deceleration in the United States and more persistent inflation than anticipated, requiring keeping rates high for longer, are key downside risks. On the upside the ongoing reconfiguration of global value chains could boost investment more than anticipated.

Table 1. Macroeconomic projections

Annual average growth, unless specified	2023	2024	2025
Gross domestic product (GDP)	3.1	2.5	2.0
Unemployment rate	2.8	3.0	3.1
Headline inflation index	5.5	4.1	3.2
Core inflation index	6.7	4.2	3.2
Public net debt (% of GDP)	46.8	48.7	48.6

Source: OECD Interim Economic Outlook database.

Raising tax revenues and upgrading the fiscal framework

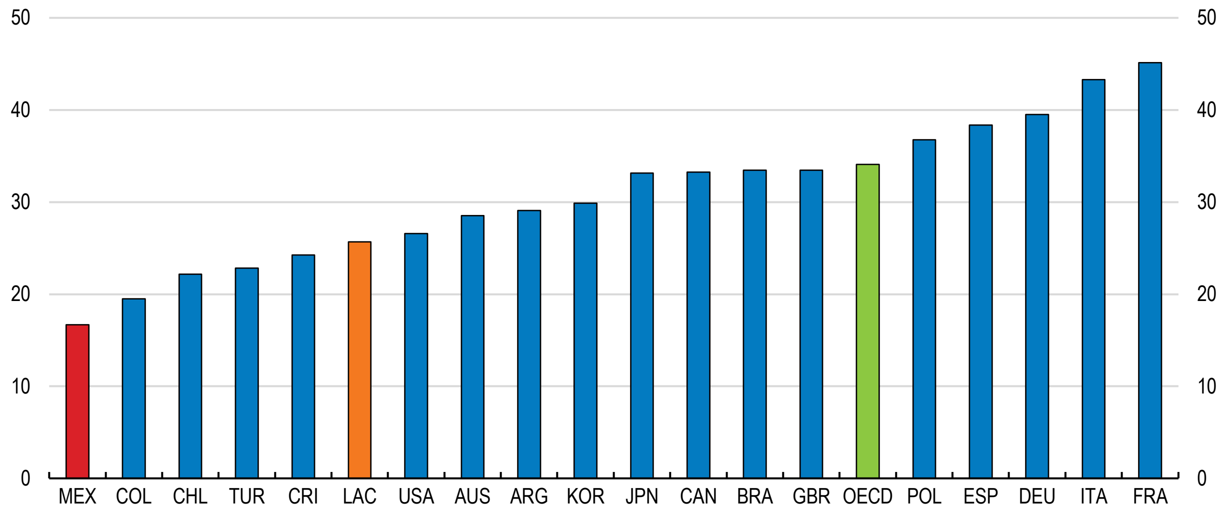
Fiscal policy has a robust track record in attaining fiscal targets and keeping public debt low. However, higher tax revenues are needed to keep fiscal prudence and to address important spending needs in productivity enhancing areas, such as education, infrastructure, the digital and green transitions, and the fight against corruption and crime. Moreover, upgrading the fiscal framework would facilitate providing support during downturns.

Mexico has the lowest tax-to-GDP ratio in the OECD (Figure 2**).** There is room to raise more revenues from the property tax, environmental taxes and to make the tax system more effective and progressive by reducing tax expenditures benefiting the more affluent. Boosting public spending efficiency could also free up additional resources. This will require a more systematic use of cost-benefit analysis in infrastructure projects and systematic evaluations and wider use of means testing in social programmes.

The fiscal framework's ability to deliver countercyclical fiscal policies is limited. Existing fiscal rules encourage pro-cyclical fiscal policy, as they favour discretionary and sharp cuts in spending to achieve fiscal targets. The coverage of the spending rule is too narrow to smooth spending over the cycle. The lack of a medium-term budget framework implies an almost exclusive focus on next year's spending allocation and fiscal target during budget preparation and discussion.

Figure 2. Tax revenues are low

% of GDP, 2021



Source: OECD Revenue Statistics database.

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Boosting productivity and fighting climate change

Mexico has large potential to attract investment from companies looking to relocate their operations to North America. This is also a significant opportunity to spread the benefits of trade throughout the country, integrate SMEs more forcefully into trade and to create more and better value chain linkages. Fully harnessing these opportunities will require tackling long-standing challenges, such as low productivity (Figure 3), and shifting to renewables and improving water management.

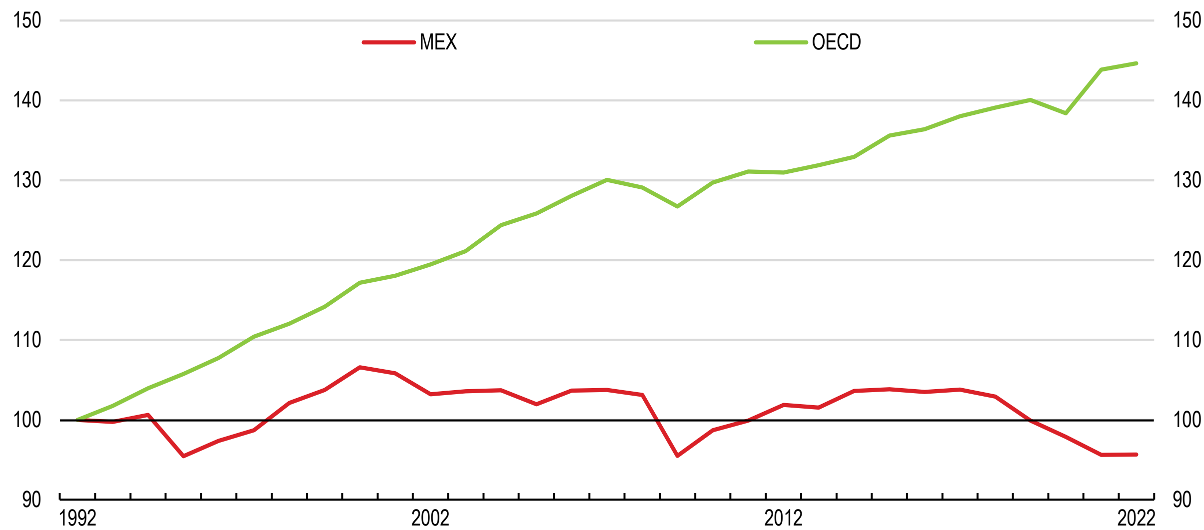
Boosting digital connectivity can help to connect regions and SMEs into trade. Despite recent investments in digital infrastructure, many parts of the country still lack access to high-speed internet and other digital services, and broadband penetration is relatively low. Multiple government agencies and regulatory bodies are involved in overseeing different aspects of the sector. The telecommunications market is highly concentrated.

Perceived corruption is high. Mexico has been making efforts to fight corruption, including through the launch of a National Anti-Corruption System, but strengthening anti-corruption agencies, including at state level, remains a priority. Increasing the share of public procurement undertaken digitally and limiting direct awards of contracts could help to reduce opportunities for corruption.

Making the most out of nearshoring requires shifting to renewables. With global manufacturing activity increasingly seeking to decarbonize its production processes, Mexico's abundant renewable energy resources could be a substantial competitive advantage. However, the share of electricity generated from renewable sources remains low. Private renewables generation has suffered from high regulatory uncertainty. Mexico is highly vulnerable to extreme climate related weather events. Increasing the share of renewables in the energy matrix would significantly reduce emissions.

Figure 3. Productivity has been low

GDP per person employed, PPP, index 1992 = 100



Source: OECD Productivity database.

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Efficient water management would enhance the reliability of water supply and safeguard the country's limited resources. By reducing operational risks and costs and promoting environmental sustainability, it would make Mexico an even more appealing destination for nearshoring. Water governance is highly fragmented, hampering policy coordination and accountability.

Reducing inequalities and bolstering growth

Despite important improvements, inequality remains high in Mexico. Improving education outcomes and reducing gender gaps and informality would help to continue the recent fall in income inequality, while also strengthen the country's growth potential.

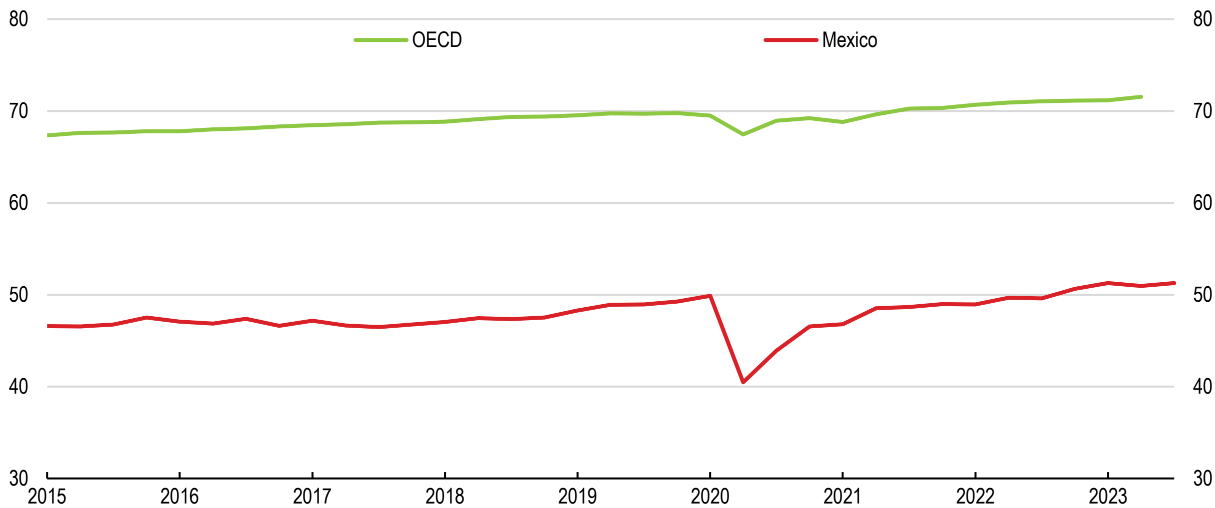
Efforts to enhance human capital should be stepped up. Access to education is nearly universal but still too many students leave the education system without completing secondary education. There is also a need to boost education quality, which suffers from large regional differences. Dual vocational programmes are being gradually deployed with positive outcomes.

Despite a recent increase, female labour participation is low (Figure 4**).** Domestic and care responsibilities fall disproportionally on women, hampering their prospects to complete education or be in the labour force. Plans for establishing a federal early education and care network should be prioritised. Expanding elderly formal care services would also support female labour market participation at a limited budgetary cost.

Recent labour market reforms have increased inclusiveness, but informality remains high. Reforms to enhance conflict resolution, workers representation and collective bargaining are paying off. Actions are needed in different policy areas to reduce informality further, which affects more than half of the labour force.

Figure 4. There is room to increase female labour market participation

Labour force participation rate, women aged 15-64, %



Source: OECD Short-term Labour Statistics.

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Improving housing and urban development

Housing supply has increased but quality is low. Around one dwelling out of four has poor construction material, is overcrowded, or lacks basic facilities. Purchasing a house is a challenge for low to middle-income households (Figure 5). Housing policies have become more targeted towards low-income households.

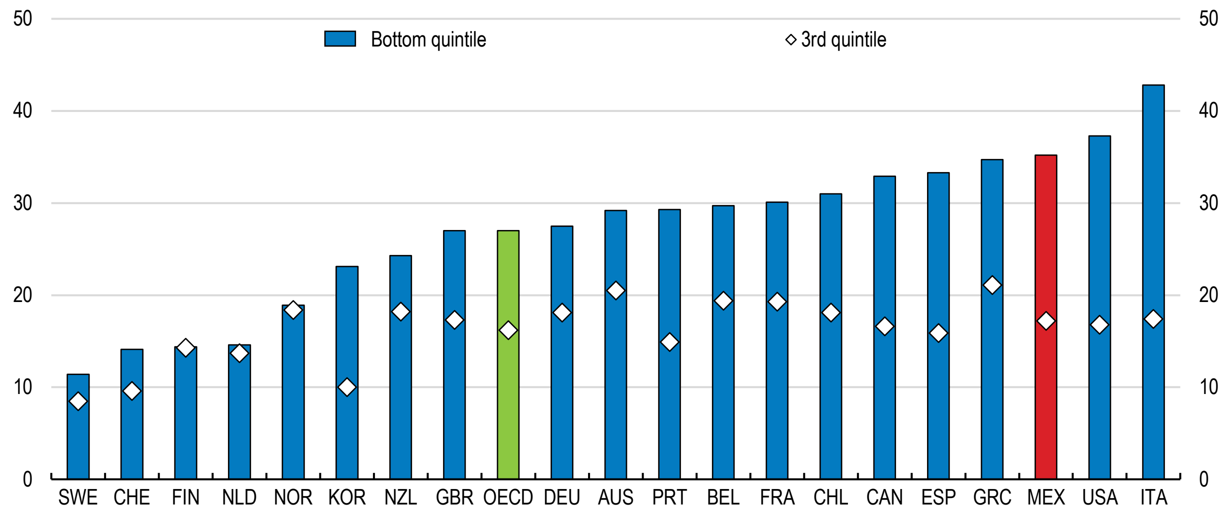
The size of the rental market is small and low-income households access to credit limited. A strong preference for homeownership and a housing policy biased towards acquisition contribute to the limited size of the rental market. Access to credit by low-income households, where informality is prevalent, could improve by using alternative information (e.g. regular payment of utility or phone bills) to assess creditworthiness.

Ensuring that housing and urban development policies are coordinated is key. Administrative fragmentation prevents local policies from aligning with national targets and weak inter and cross-government coordination provokes disordered urban development and spatial segregation. Municipalities often lack the technical capacity to attend the urban development challenges.

Large commuting costs hamper access to jobs and living conditions. Massive transport remains a marginal mode of transport in Mexico, except for Mexico City. The public transport system is based on a weakly regulated model with many small private concessionaires running low capacity and old-technology minibuses.

Figure 5. The share of low-income households overburdened by housing costs is high

Median of the mortgage burden % of disposable income



Source: OECD Affordable Housing Database.

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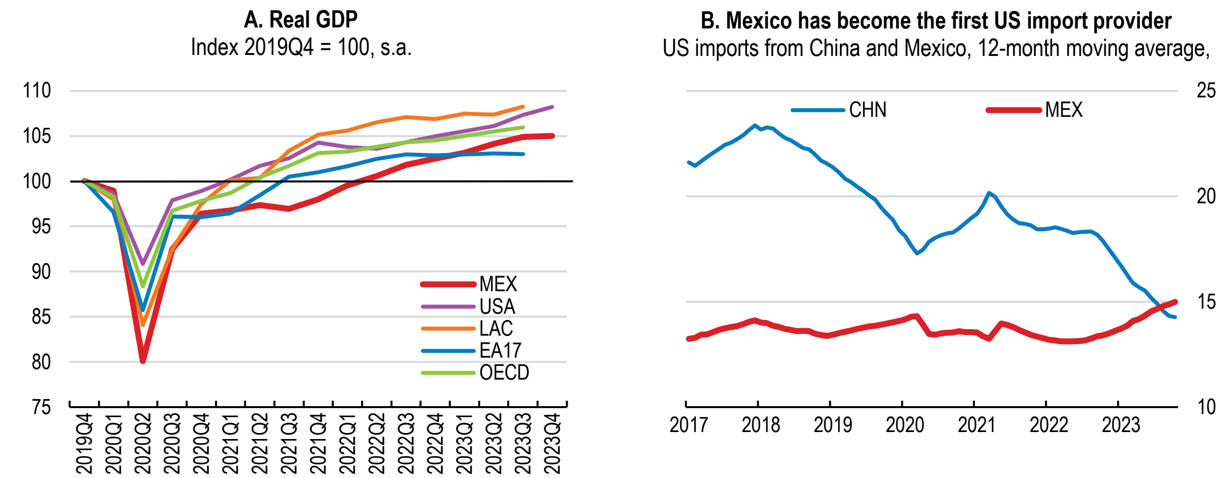
MAIN FINDINGS	KEY RECOMMENDATIONS
Further buttressing macroeconomic policies	
Inflation has softened but services inflation is persistent and one-year ahead inflation expectations are still above target.	Keep monetary policy restrictive to ensure that inflation decreases durably towards its target.
The fiscal stance for 2024 is expansionary, with social spending and public investment increasing. This could help to address social needs and support medium-term growth, but also increases the risk of high inflation.	Make fiscal policy less expansionary by targeting the increase of social spending and energy support measures towards low-income households and basing public investment projects on sound cost-benefit analysis.
Public spending is low in international perspective. Spending on pensions is trending up, while spending in other key areas, such as education, has fallen as % of GDP. Measures taken to reduce tax evasion and fraud have supported tax collection but the tax-to-GDP ratio is the lowest in the OECD. There is room to increase the progressivity of the tax system.	Gradually increase public spending in productivity-enhancing areas, such as education, the digital and green transition and the fight against crime. Gradually increase tax revenues by: • fostering immovable property tax collection. • phasing out inefficient and regressive personal income tax exemptions and lowering the income threshold for the top rate. • gradually broaden the VAT base. • continue to facilitate tax compliance.
The gains from higher public spending in key areas would be maximised if more spending is coupled with more efforts to increase efficiency	Make a more systematic use of spending reviews, of cost-benefit analysis in public infrastructure projects and of means-testing and periodic evaluations in social programmes.
There is a strong commitment with fiscal prudence, but the current fiscal framework favors sharp reductions in spending to attain fiscal targets and its ability to provide support in the event of a negative shock is limited.	In the short-term establish a multi-year budget framework. In the medium-term replace the two balanced-budget rules with a debt anchor and widen the coverage of the expenditure rule.
PEMEX is a large contingent liability for the government. Despite the favorable oil price environment and the continuous support from government, its situation continues to be challenging, as it faces negative free cash flow and large refinancing needs.	Condition any additional support on PEMEX putting in place a transparent and credible strategy to improve its ESG track record and align all SOEs governance with the OECD Guidelines on Corporate Governance of State-owned Enterprises.
Harnessing nearshoring opportunities by boosting productivity and fighting climate change	
Many parts of the country still lack access to high-speed internet. Regional differences in digital connectivity are large. The telecommunications market remains very concentrated.	Streamline and harmonize e-communications regulations. Maintain an independent and well-resourced telecommunications regulator and ensure that existing regulations to foster competition are fully applied.
The regulatory framework is complex and implies high compliance costs, particularly for SMEs, due to differences in requirements and standards across states and municipalities.	Continue to deploy e-government platforms at state and municipal level to allow firms to submit and track all regulatory requirements online.
Corruption perceptions remain high.	Continue to strengthen the fight against corruption, including by strengthening the resources, technical expertise, and independence of anti-corruption agencies, including at the state level.
The bulk of primary energy use comes from fossil fuels. Mexico's renewable resources potential are large and well distributed throughout the country. Regulation uncertainty undermines renewable generation. Transmission and distribution grids suffer from underinvestment.	Adopt regulations that promote private sector participation in renewables generation, ensure legal certainty and expand and improve electricity transmission and distribution infrastructure.
The carbon price is well below the low-end estimate of climate-related costs of carbon emissions.	Gradually increase the carbon tax, broaden its base, and use part of the revenues to offset the effects of higher energy prices on low-income households.
Reducing inequalities and bolstering growth	
Too many students leave the education system without completing secondary education. There is room to increase education quality and to reduce regional inequalities.	Identify students in need of support, provide them with targeted tutoring and assess and resolve teachers training needs.
Despite a recent increase, female labour force participation, at 50%, lags participation in OECD and other Latin America countries. Domestic and care responsibilities fall disproportionally on women.	Establish a federal network of early education and care facilities giving priority to low-income households. Expand elderly formal care services, including home-and community-based care.
55% of workers are informal, hindering well-being and productivity.	Pursue a comprehensive strategy to reduce informality, including by providing income support to low-income households through the personal income tax or reducing firms registration and licensing costs at state and municipal level.
Improving housing and urban development	
Social rental housing is marginal.	Support the creation of a social rental housing sector by setting up an adequate funding strategy and strong legal and regulatory frameworks.
Coordination and cooperation across levels of government is weak and hampers the implementation of national urban and housing policy.	Task states with ensuring that municipalities comply with federal and state urban and housing laws.
Public transport is expensive, inefficient, and polluting, commutes are long and access to basic services difficult.	Set quality standards and environmental criteria for public transport and promote an integrated transport system in metropolitan areas.

1 Realising Mexico’s large potential

After a slow recovery from the pandemic, the Mexican economy has navigated well the global environment of tightening financial conditions and heightened uncertainty (Figure 1.1, panel A). Mexico’s sound macroeconomic policies, with a track record for prudent fiscal management, a successful inflation targeting regime and a flexible exchange rate, have ensured economic stability. Inflation is lower than the OECD average (Figure 1.2). It is gradually declining, after a forceful reaction by the Central Bank, with core inflation proving more persistent. Public debt remains at a prudent level, thanks to a strong commitment to meet fiscal targets.

Going forward, Mexico is well placed to benefit from changes in the global economy and the ongoing redrawing of value chains as response to heightened geo-political tensions and supply chains disruptions during the pandemic. Nearshoring trends, by which companies are seeking to reduce supply risks and costs by locating closer to their final markets, create possibilities for Mexico to capture additional links in value chains. Mexico's advantages include wide trade agreements, covering 50 countries representing 55% of world's GDP, a 3000 kilometres border with the United States, a large domestic market, access to both the Atlantic and the Pacific oceans, and macroeconomic, political and social stability. Mexico’s already existing close integration in some manufacturing value chains and the recently updated North America trade agreement are other key additional advantages. While many nearshoring-related investment plans have been announced, their impact on macroeconomic indicators is still preliminary. Mexico has recently become the most important source of United States imports. (Figure 1.1, panel B). Industrial parks at border states are nearly at full capacity, warehouses rental prices are trending up and construction of industrial spaces is also increasing strongly (Newmark, 2023[1]). Firms surveys suggest that the greatest impact would happen over the next two years. Fully harnessing nearshoring trends would require tackling long-standing challenges such as low productivity and high inequalities, which have prevented so far Mexico from being a high-growth economy (Figure 1.3).

Figure 1.1. GDP growth has been resilient, supported by ongoing nearshoring



Note: LAC is a simple average of Chile, Colombia, Costa Rica, Argentina, Brazil, and Peru. EA17 is a weighted average of the 17 countries that are members of both OECD and Euro area.
Source: OECD Economic Outlook database; and UN Comtrade.

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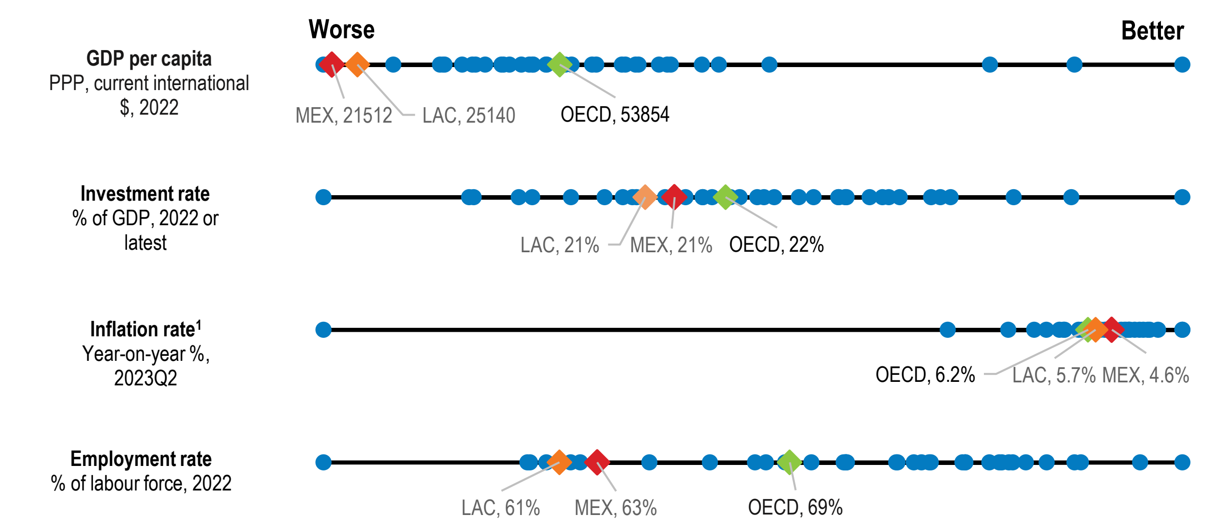
Productivity has long been stagnant and boosting it is a key priority for raising growth and competitiveness. Regional differences in productivity are large, with highly productive and trade-integrated northern states contrasting with southern states. Nearshoring is an opportunity to accelerate the transition from low-cost assembling processes into higher value-added ones. Higher investment in new technologies, addressing infrastructure bottlenecks, improving skills and more competition in key parts of the economy would support that transition. Gradually raising more tax revenues and upgrading the fiscal framework would also facilitate the transition by creating better conditions for needed productivity-enhancing public spending. Greening the economy is a challenge but also offers opportunities. Mexico's large unused renewable energy resources (Figure 1.4) can be a competitive advantage to attract investment at a moment when global manufacturing activity increasingly seeks to decarbonize its production processes.

Figure 1.2. Inflation is lower than in OECD or regional peers

Economic indicators



1. Indicator reversed so that the right side of the scale corresponds to a better outcome. LAC is a simple average of Chile, Colombia, and Costa Rica.
Source: World Bank; OECD consumer price indices complete database; OECD labour market statistics database; and OECD calculations.

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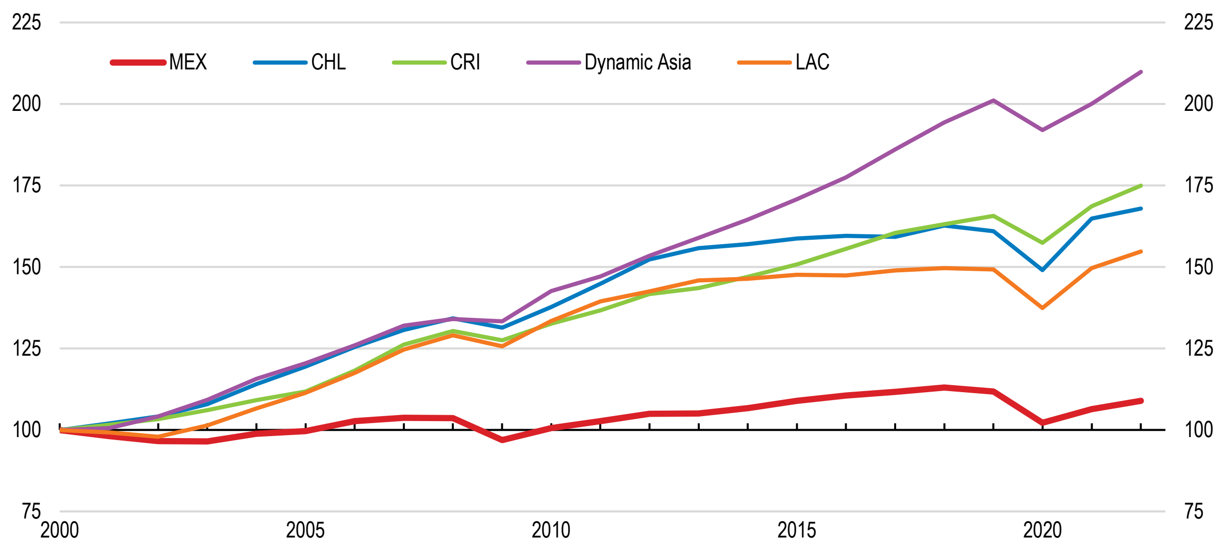
Figure 1.3. Mexico's potential to be a high-growth economy remains unrealised

Index of real PPP-adjusted GDP per capita, 2000 = 100



Note: LAC is a simple average of Chile, Colombia, Costa Rica, Argentina, Brazil, and Peru. Dynamic Asia includes India, Indonesia, Malaysia, Philippines, Thailand, and Viet Nam.
Source: World Bank World Development Indicators.

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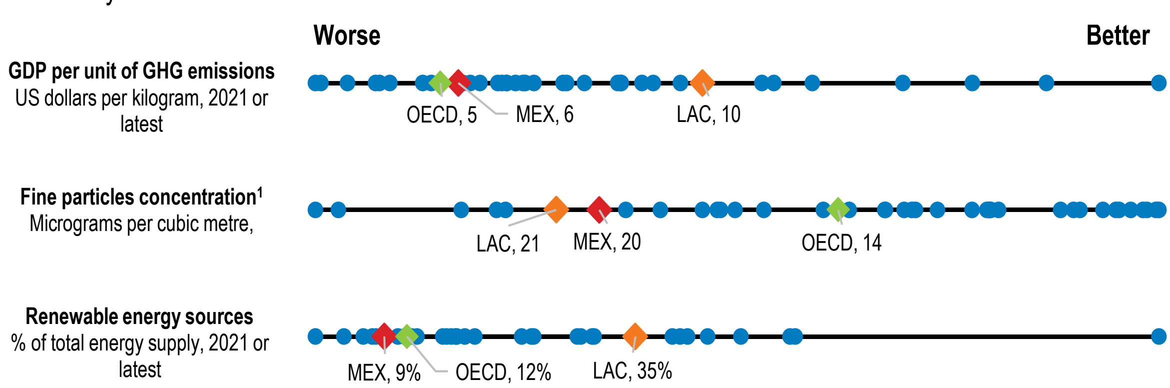
Figure 1.4. The share of renewable energy is lower than in OECD or regional peers

Sustainability indicators



1. Indicator reversed so that the right side of the scale corresponds to a better outcome. LAC is a simple average of Chile, Colombia, and Costa Rica. GHG emissions per unit of GDP is the production-based CO_2 productivity. Fine particles concentration is mean population exposure to PM2.5.
Source: OECD green growth indicators database; and OECD calculations.

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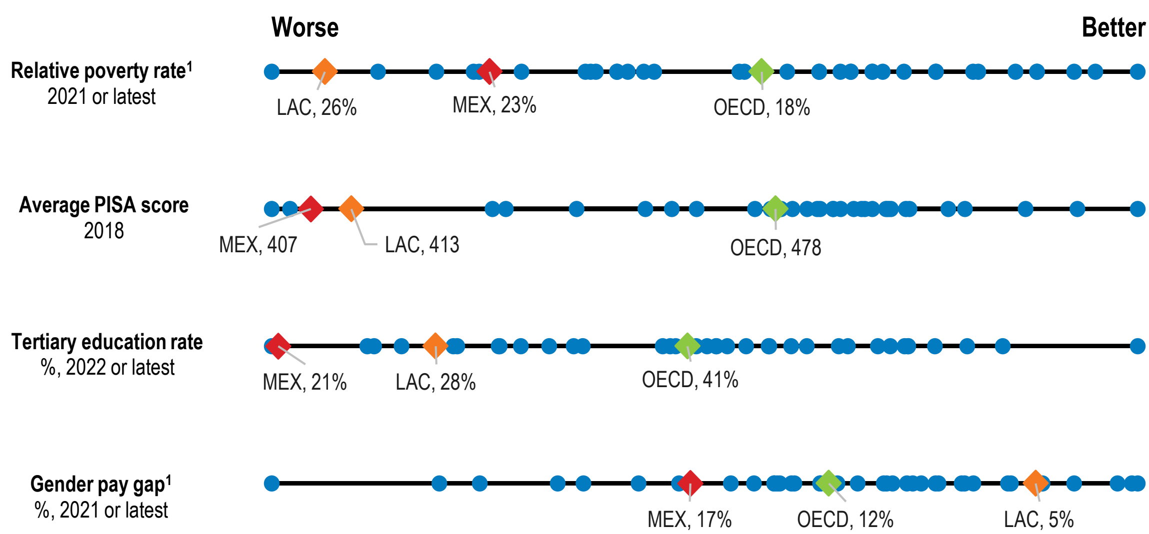
Income inequality has recently fallen, but gender gaps, unequal education outcomes (Figure 1.5) and informality remain pending challenges to reduce poverty and bolster growth prospects. Female labour market participation has recently increased to 50%, its historical high, but the gender gap in labour participation is the second largest in the OECD. Mexico's population is relatively young and the average number of years of education is gradually increasing, but the pandemic has exacerbated education inequalities, and further policy efforts to improve education outcomes are warranted. Recent labour market reforms (Box 1.1) have helped to improve labour market conditions for many Mexicans, but there is a need to lower informality, affecting 55% of workers. More than 25% of the population still lives in overcrowded housing, built with inadequate materials, or with poor access to basic services, hindering well-being, productivity, and access to jobs.

Figure 1.5. There is room to improve education outcomes and close gender gaps

Inclusiveness indicators



1. Indicator reversed so that the right side of the scale corresponds to a better outcome. LAC is a simple average of Chile, Colombia, and Costa Rica. Relative poverty rate is the rate after taxes and transfers with poverty line at 60% median household income. Average PISA score is the average scores of math, science and reading.
Source: OECD income distribution database; OECD PISA database; OECD education at a glance database; Eurostat; and OECD calculations.

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Box 1.1. Recent key reforms

Recent key reforms, put in place since the publication of the last Economic Survey in February 2022, include:

- Labour market reforms gradually being implemented to expedite conflict resolution and enhance workers representation and collective bargaining and to reduce fraud in the use of outsourcing (see also Chapter 4).
- A reform of contributory pensions, aiming at increasing coverage and benefits by lowering the minimum number of contribution years to access pensions and introducing a gradual and progressive increase in employers' contribution rates (see also Chapter 4).
- Increases in the minimum-wage to boost its purchasing power.

This survey reviews recent macroeconomic developments and policy challenges in Chapter 2 and identifies options to address them. Chapter 3 analyses how boosting productivity and fighting climate change is key to harness nearshoring opportunities. Chapter 4 identifies possible avenues to continue reducing inequalities and to bolster growth, while Chapter 5 presents an in-depth assessment of challenges in the housing sector. The main messages of the Survey are:

- Monetary policy will need to remain tight to durably bring inflation back to target. Gradually raising more revenues and greater spending efficiency would allow to respond to spending needs in key areas such as education, public investment or security. Strengthening the fiscal framework would improve the ability of fiscal policy to smooth out economic cycles and support growth during recessions.
- Improving the logistic and digital connectivity of regions and SMEs, reducing the regulatory burden and improving the rule of law would help to boost productivity. Making the most out of nearshoring trends would also require shifting to renewables and improving water governance.
- Facilitating female labour market participation, strengthening skills and reducing informality would help to continue reducing inequalities and are also key to reinforce Mexico's growth potential.
- Access to adequate housing remains challenging. Housing policies have become more focused on low-income households. Expanding the rental market, addressing urban sprawl and improving urban mobility are pending challenges.

References

Newmark (2023), “Market Reports - Industrial warehouses: Tijuana, Monterrey, Ciudad Juarez, Guadalajara”. [1]

2 Macroeconomic developments and policy challenges

Alberto González Pandiella, OECD

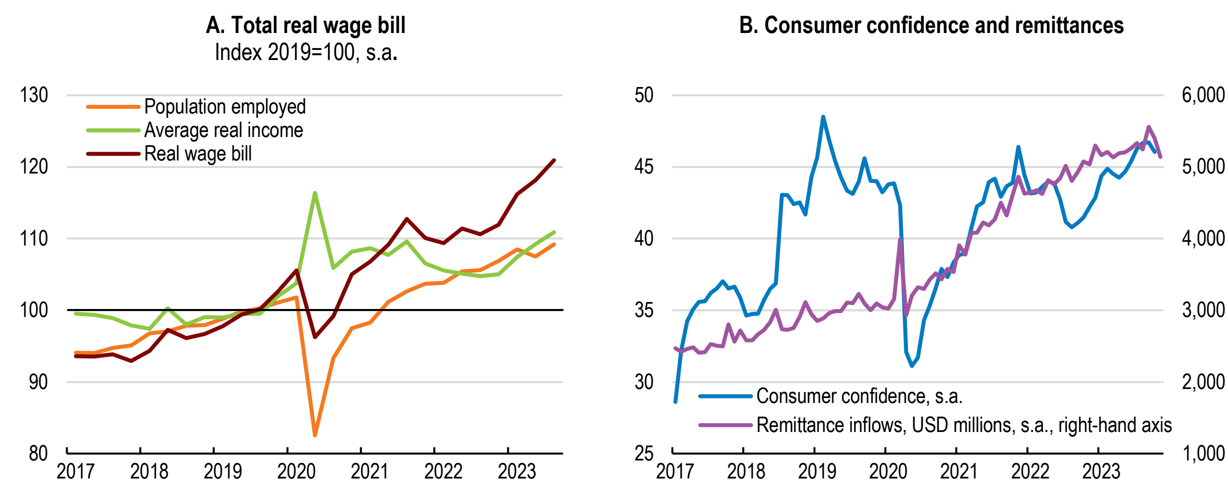
Alessandro Maravalle, OECD

Growth has held up well thanks to a resilient domestic demand that is supported by a strong labour market. Inflation is falling but monetary policy will need to remain tight until inflation returns durably to the target. The financial sector has ample buffers and good progress to buttress financial supervision should continue. Fiscal policy has strong credibility thanks to a robust track record in attaining prudent fiscal targets. Raising more revenues would enable to respond to productivity-enhancing spending needs and maintain the commitment with fiscal prudence. Reforms to the fiscal framework would enhance its ability to smooth out economic cycles and provide support during downturns.

2.1. The economy is proving resilient

GDP growth has held up well, with an enduring domestic demand despite inflationary pressures. Consumption is robust, supported by a strong labour market and increasing confidence (Figure 2.1). Remittances are high and consumer credit is gradually recovering, although it remains below its pre-covid level. Investment is trending up (Figure 2.2), supported by public infrastructure projects in the south. Thus, southern states, such as Oaxaca or Tabasco, have recently experienced particularly high economic growth (INEGI, 2023[1]). Private investment in machinery has also picked up, partly related to nearshoring. Exports and manufacturing have remained sturdy (Figure 2.3), supported by the resilience of the United States, which accounts for 84% of Mexican goods exports (Figure 2.4), a similar share as in Canada. Conversely, residential construction investment has remained weaker. Headline inflation has declined, reaching 4.9% (year-to-year) in January, while core inflation, that remained initially stickier, is now at 4.8%. Inflationary pressures remain particularly strong in services.

Figure 2.1. Real incomes and consumers' confidence support consumption



Note: Wage bill comprises both formal and informal workers.
Source: Bank of Mexico.

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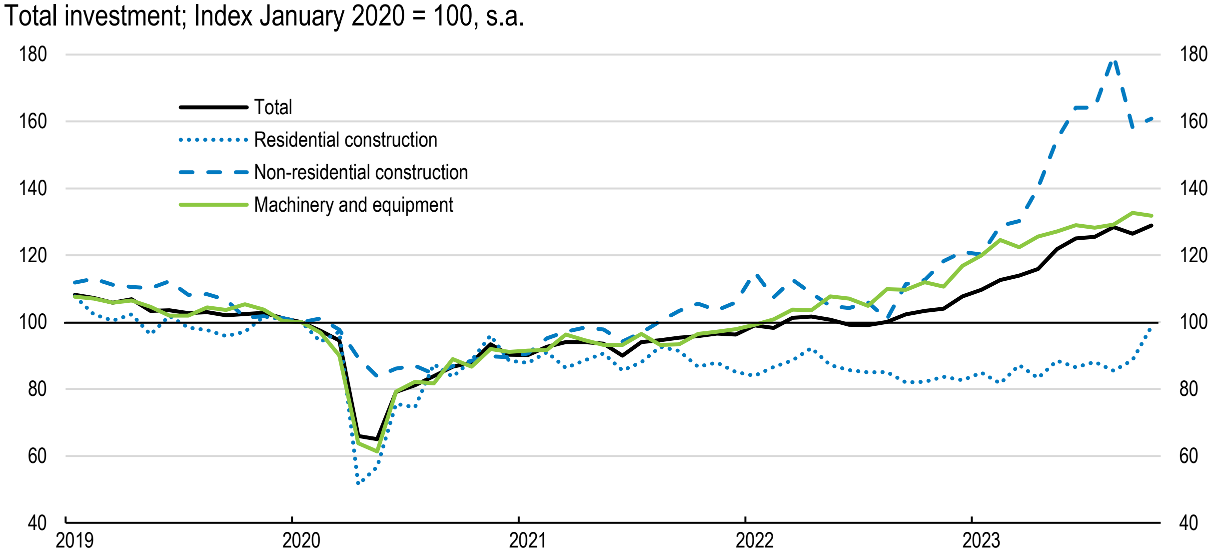
Figure 2.2. Investment is picking up

Total investment; Index January 2020 = 100, s.a.



Source: INEGI.

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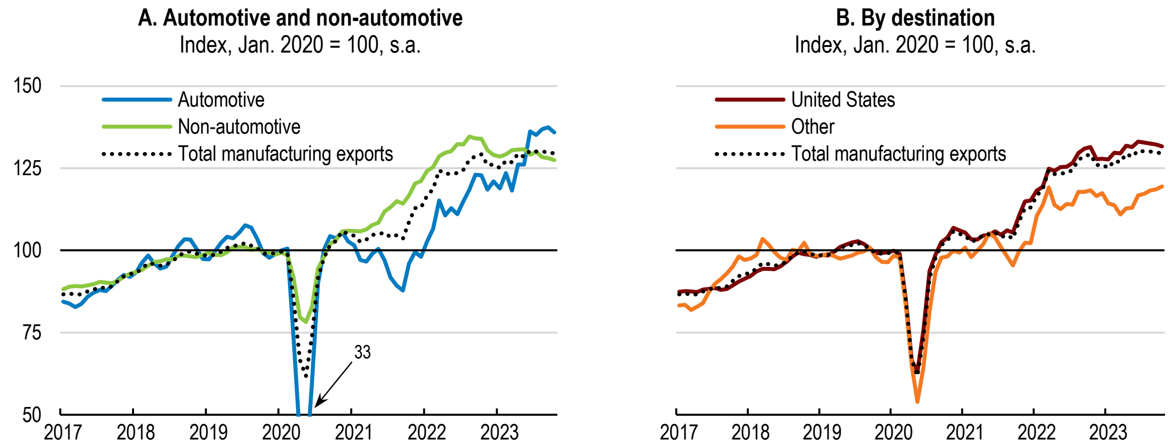
Figure 2.3. Exports remain resilient



Source: Banxico.

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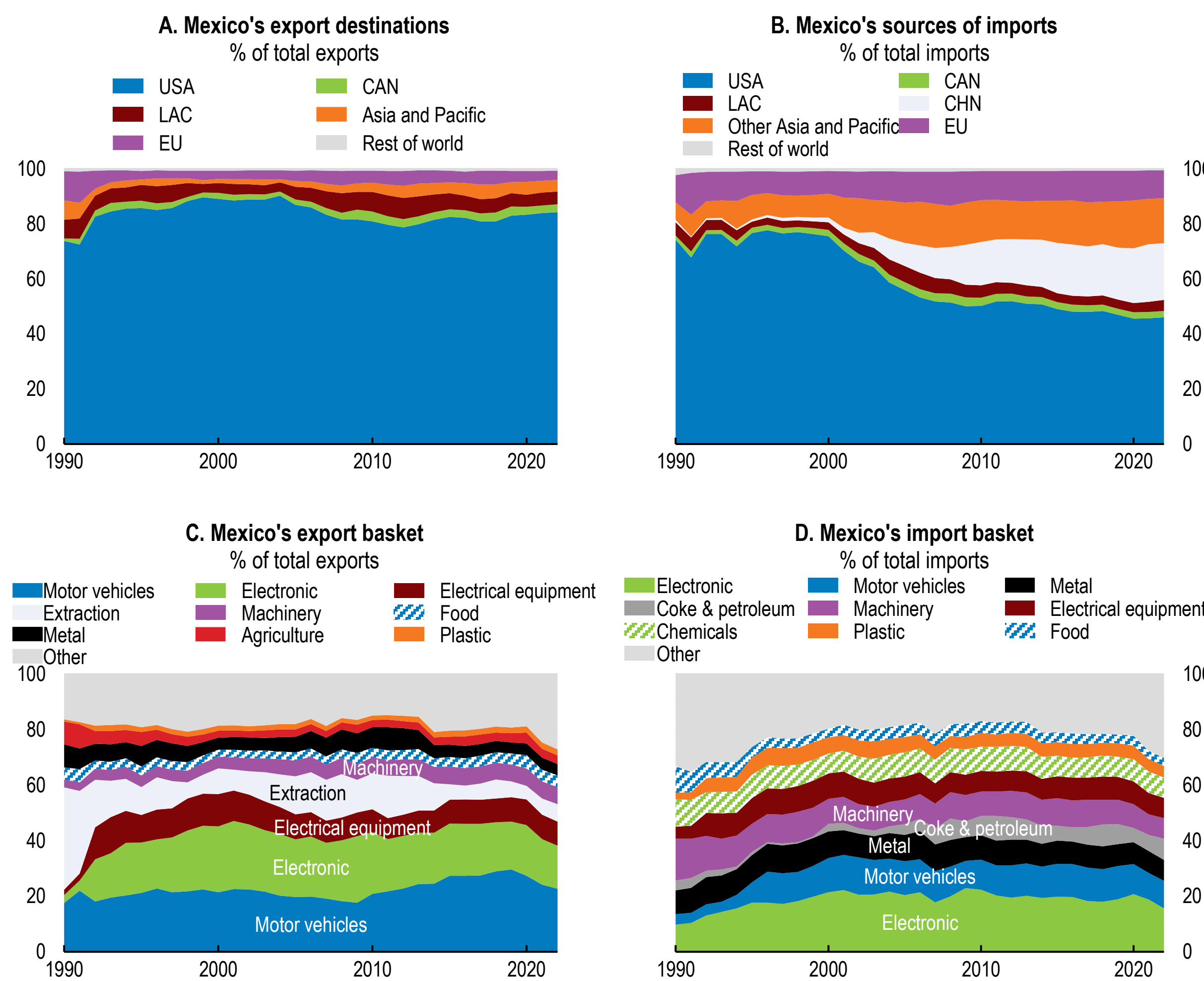
Figure 2.4. Mexico's exports are concentrated in the United States with imports more diversified



Note: LAC is a weighted average of 33 Latin American and Caribbean countries.
Source: UN Comtrade.

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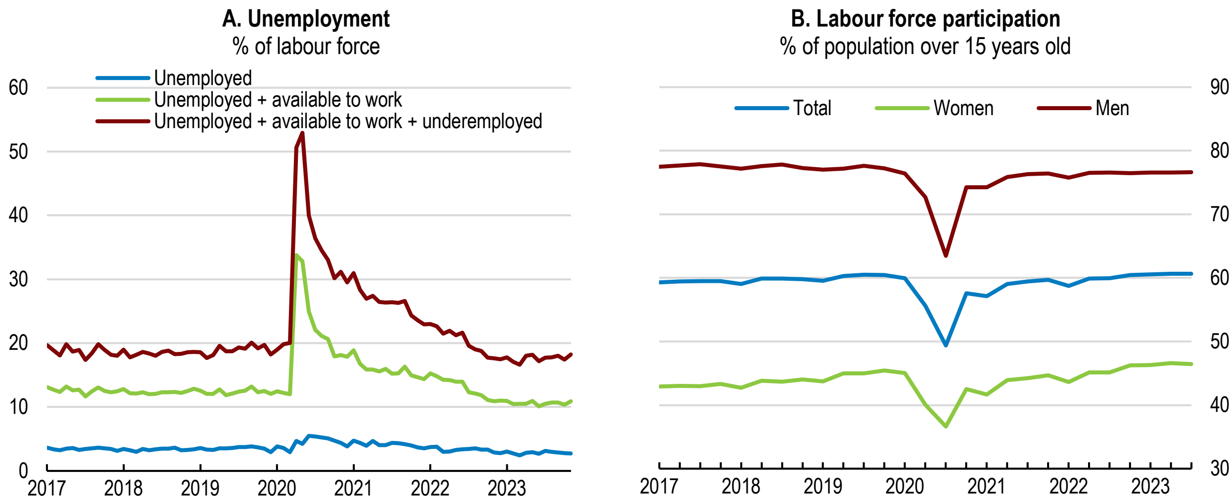
The labour market is strong, with unemployment low (2.8% in December) and broader measures of unemployment confirming the strength (Figure 2.5). Labour market participation is increasing for women, although it remains significantly lower than in regional peers and other OECD countries (see Chapter 4). There is no information about job vacancies in Mexico but recent analysis suggests that the labour market is tight (Banxico, 2023[2]) and firms report difficulties finding workers with the appropriate skills and also to retain them. With the broader measure of unemployment close to 20%, there seems to be sufficient labour market resources available to respond to increases in labour market demand derived from the ongoing nearshoring of activities to Mexico, particularly if training and education policies adapt to the expected increase in specialised skills (see also Chapter 4).

Figure 2.5. The labour market remains strong



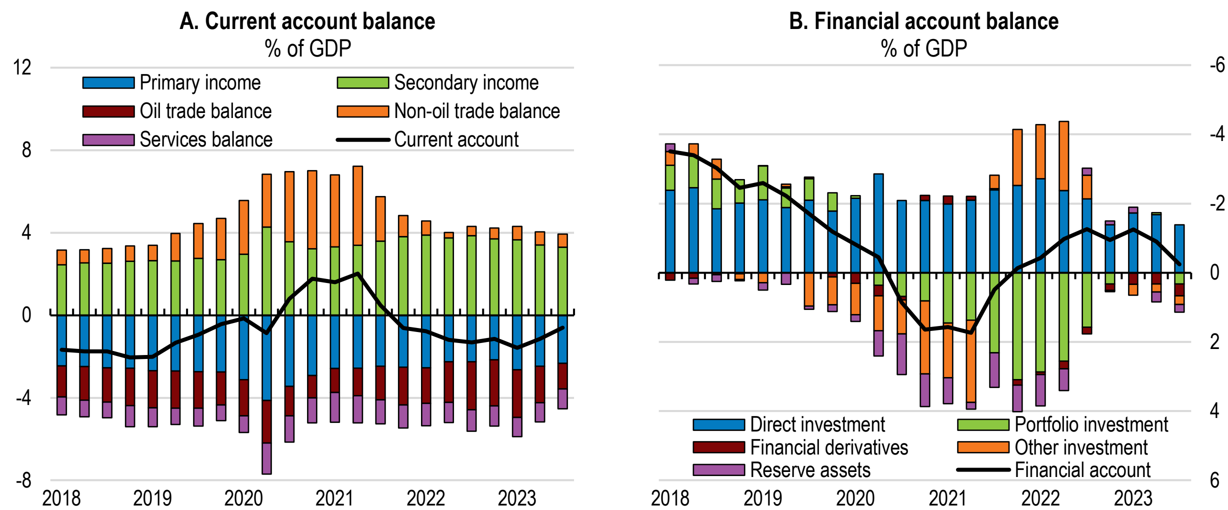
Note: Panel A: the category “available to work” includes those not economically active (i.e. without job-search activities) but that would be available to work; the “underemployment” category refers to the share of economically active individuals aged 15 and over who have the ability and desire to work more hours than their current occupation permits.
Source: INEGI.

StatLink https://stat.link/awlnty

Minimum wages have significantly increased since 2019, from 42% of the median formal sector wage in 2018 to 59% in 2023. Further increases to the minimum wage should be gradual and aligned with labour productivity growth to limit their potential negative impact on formal employment, particularly among young and low-skilled workers. The latest evaluation, undertaken in 2018, concluded that past increases did not harm employment. However, given the significant recent increases, updating that evaluation is warranted, including assessing their impact on the likelihood of youth and low-skilled workers accessing formal employment. Granting the committee in charge of advising about the minimum wage (CONASAMI in Spanish) functional autonomy and independence and appointing to the committee labour market experts from academia with technical expertise would foster evidence-based analysis and recommendations, as seen in some OECD countries such as the United Kingdom.

On the external side, the current account deficit is largely financed by a stable pipeline of foreign direct investment (Figure 2.6). External debt has significantly fallen (Figure 2.7), as the share of public debt held by non-residents has fallen, reducing vulnerability to global financial conditions. The flexible exchange rate is helping the economy to absorb external shocks, with further backstops provided by ample international reserves and the IMF's flexible credit line. Mexico's risk measures have recently trended down (Figure 2.8).

Figure 2.6. The current account deficit is financed with a stable flow of foreign direct investment



Source: Banxico.

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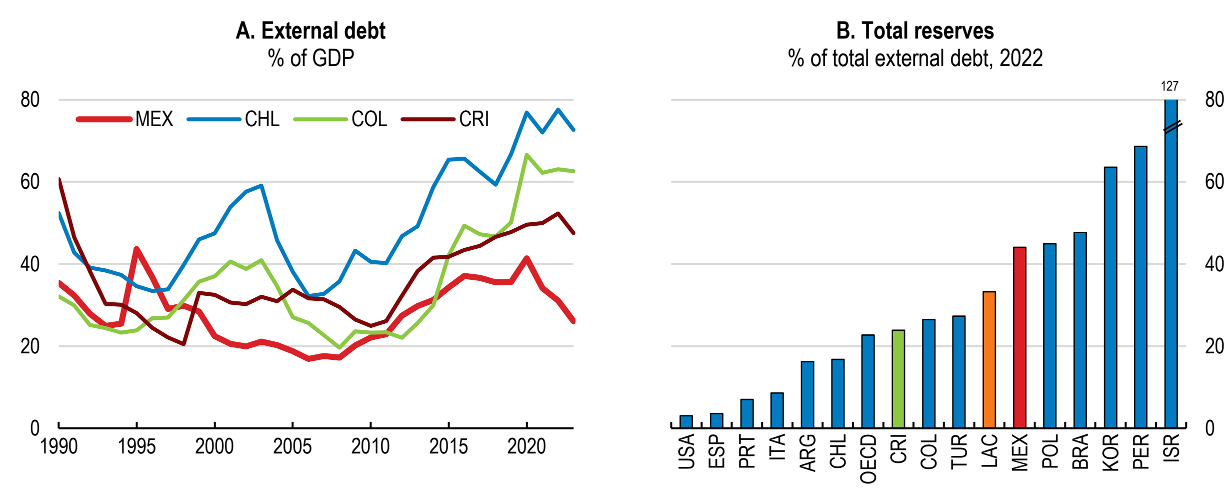
Figure 2.7. External debt has fallen and the level of international reserves is comfortable



Note: LAC is a simple average of Chile, Colombia, Costa Rica, Argentina, Brazil, and Peru.
Source: IMF World Economic Outlook, October 2023.

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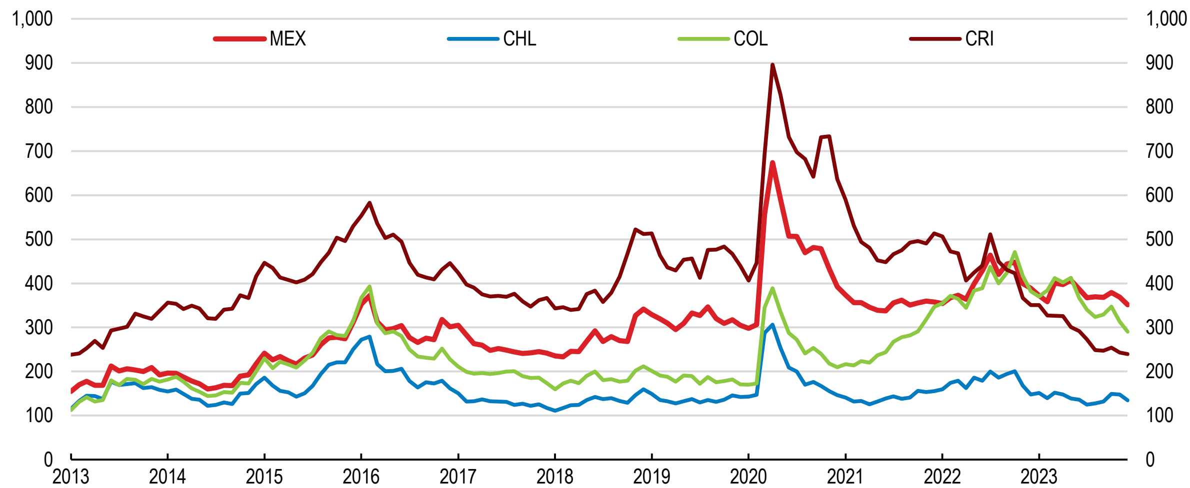
Figure 2.8. Sovereign risk premia have trended down

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 (JP Morgan Emerging Markets Bond Index spreads).
Source: LSEG.

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The economy is projected to expand by 2.5% in 2024, after growing by 3.1% in 2023 (Table 2.1). Private consumption will be a key driver of growth, supported by low unemployment. Private investment will benefit from the relocation of manufacturing activity to Mexico. Public investment will also trend up in 2024 as ongoing infrastructure projects in the South get a final push towards their completion. Exports will suffer from slower growth in the main trading partners but will continue to benefit from deep integration in manufacturing value chains. Headline and core inflation will gradually slow and are expected to return to the 3% target in the first half of 2025, as the impact of higher interest rates takes effect and external pressures abate.

The outlook is subject to significant uncertainties and risks. The inflationary outlook remains particularly uncertain. Inflation may be more persistent than anticipated, requiring keeping rates high for longer. Episodes of global financial turmoil may trigger greater risk aversion and increase financing costs and foreign exchange market volatility. A sharper slowdown in the United States could also weaken exports and remittances. Additional events that could lead to major changes in the outlook include extreme weather events (Table 2.2), which could particularly impact the agriculture sector. On the upside, the ongoing reconfiguration of global value chains could boost investment more than anticipated.

Table 2.1. Growth will moderate

	2017	2019	2020	2021	2022	2023	2024	2025
	Current prices MXN billion	Percentage changes, volume (2018 prices)						
GDP at market prices	22,536.2	-0.3	-8.6	5.7	3.9	3.1	2.5	2.0
Private consumption	15,377.7	1.2	-10.6	8.1	5.2	3.8	2.5	2.5
Government consumption	2,527.6	-1.7	-0.7	-0.5	1.2	2.2	2.1	0.9
Gross fixed capital formation	5,234.2	-4.4	-17.3	9.7	7.7	19.8	7.5	3.7
Stockbuilding[1]	-169.7	0.0	-0.3	0.2	-0.1	0.1	0.0	0.0
Total domestic demand	22,969.8	-0.4	-11.1	7.6	5.2	6.7	3.5	2.6
Exports of goods and services	8,454.3	1.2	-7.0	7.2	8.7	-6.3	0.6	4.2
Imports of goods and services	8,887.8	-1.1	-12.0	15.0	8.3	6	3.2	5.6
Net exports[1]	-433.6	0.9	2.1	-3.0	0.0	-5.4	-1.3	-1.0
Memorandum items								
GDP deflator	. .	4.3	4.8	4.5	6.4	4.3	4.0	2.9
Consumer price index (average)	. .	3.6	3.4	5.7	7.9	5.5	4.1	3.2
Core inflation index[2] (average)	. .	3.7	3.8	4.7	7.6	6.7	4.2	3.2
Potential growth	. .	0.9	0.8	1.0	1.2	1.7	2.1	2.1
Output gap (% of GDP)	. .	-0.2	-9.6	-5.3	-2.8	-1.4	-1	-1.1
Unemployment rate[3] (% of labour force)	. .	3.5	4.4	4.1	3.3	2.8	3.0	3.1
Current account balance (% of GDP)	. .	-0.5	2.1	-0.7	-1.3	-0.8	-0.7	-0.9
Government fiscal balance[4] (% of GDP)	. .	-1.6	-2.7	-2.9	-3.2	-3.3	-4.9	-2.1
Public net debt[4] (% of GDP)	. .	43.9	49.9	49.0	47.6	46.3	48.7	48.6

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. The fiscal balance shows the federal public balance. Public debt refers to the net stock of public sector borrowing requirements.
Source: OECD Interim Economic Outlook database.

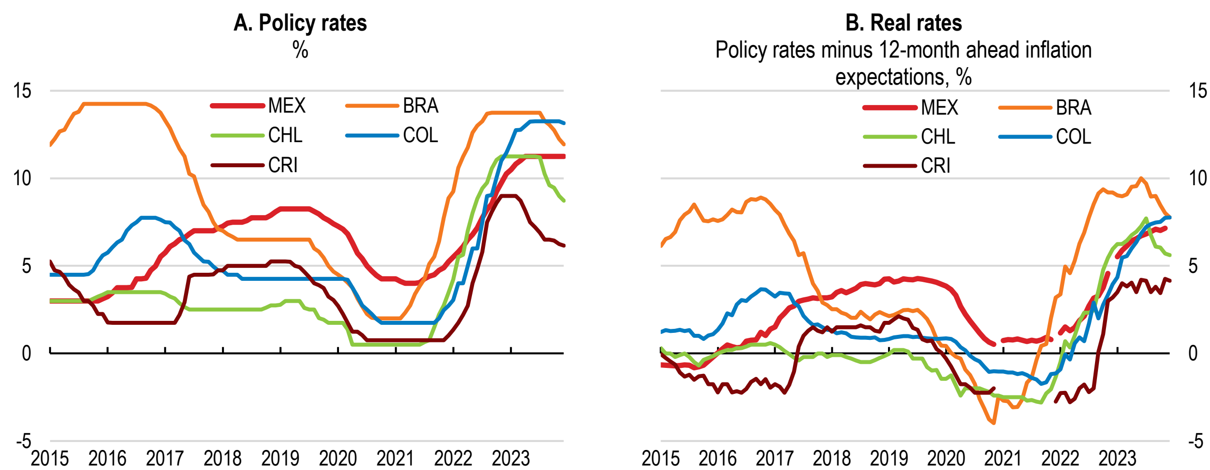
Table 2.2. Events that could lead to major changes in the outlook

Shock	Possible impact	Policy response options
Rising trade tensions and disputes in North America	Slowing of foreign direct investment into Mexico and of the reconfiguration of global value chains, which could lead to lower growth in North America.	Keep the commitment with trade agreements, including with the established mechanisms to resolve controversies.
An escalation of drug related violence	Negative impacts on investment and tourism. Potential growth could also be affected if it inhibits the relocation of manufacturing activities to Mexico.	Strengthen cooperation between Mexican military and police forces and better integration of their IT resources.
Natural disasters (e.g., earthquake) and climate-change induced extreme weather events (hurricanes, droughts, floods)	A fall in agriculture production and other sectors. Infrastructure could also be damaged.	Stand ready to trigger financial support from the Catastrophic Bond Instrument and promptly tackle infrastructure damages.

2.2. Monetary policy has reacted decisively to high inflation

The Central Bank has responded to inflationary pressures decisively and early in the cycle of interest rate hikes worldwide. Starting with 25 basis points hikes initially, and gradually increasing the size of the hikes as inflation became broad based, it has raised the policy rate by 725 basis points between June 2021 and March 2023 (Figure 2.9, panel A and Table 2.3). At 11.25%, the rate remained unchanged in the last board meetings, implying an increase in real rates (Figure 2.9, panel B). The government also launched a package of measures to mitigate food price inflation, including guaranteed prices for basic food prices or reducing import tariffs on basic foodstuffs. Headline inflation has significantly softened from a peak of 8.7% in August 2022 to 4.9% in January 2024 (Figure 2.10). Core inflation has also fallen, with services items proving more persistent (Figure 2.11). One year ahead inflation expectations remain above target but are falling while two-year ahead inflation expectations are well anchored. Inflation risks are high and include the rebound in oil prices, spill overs to food prices from international prices and severe drought conditions in some Mexican states. Monetary policy should remain restrictive to ensure that inflation decreases durably towards its target. This would require maintaining the rate unchanged at its current level, and starting to reduce it based on incoming data.

Figure 2.9. The monetary policy stance remains tight



Source: Banxico; CEIC; Banco central de Colombia; Banco central de Costa Rica.

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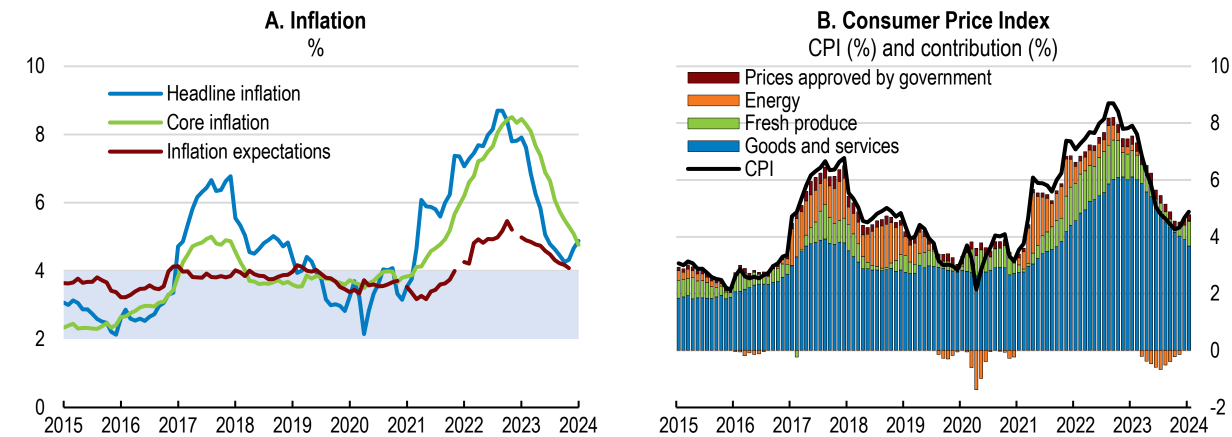
Table 2.3. Past OECD recommendations to improve macroeconomic policies

Past OECD recommendations	Actions taken since the 2022 Economic Survey
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.	The key policy rate was gradually increased to 11.25%. Long-term inflation expectations have remained anchored.
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 cadaster using digital technologies.	Public investment was increased in the 2023 budget, reaching 3.1%, with a focus on infrastructure projects in the south. Spending on universal non-contributory pensions increased. The law to avoid fraud in outsourcing has led to higher wages for formal workers, boosting tax revenues. No action taken concerning exemptions or the immovable property tax.
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.	No action taken. No action taken.
Strengthen PEMEX and other SOEs governance by aligning it to the OECD Guidelines on Corporate Governance of State-owned Enterprises.	No action taken.

Figure 2.10. Inflation has softened



Note: In Panel A, the shaded area represents the Central Bank's inflation target range and inflation expectations refer to expectations by the private sector for the next 12 months. In Panel B, the sum of contribution's growth rates does not add-up to the consumer price index growth rate.
Source: Banxico.

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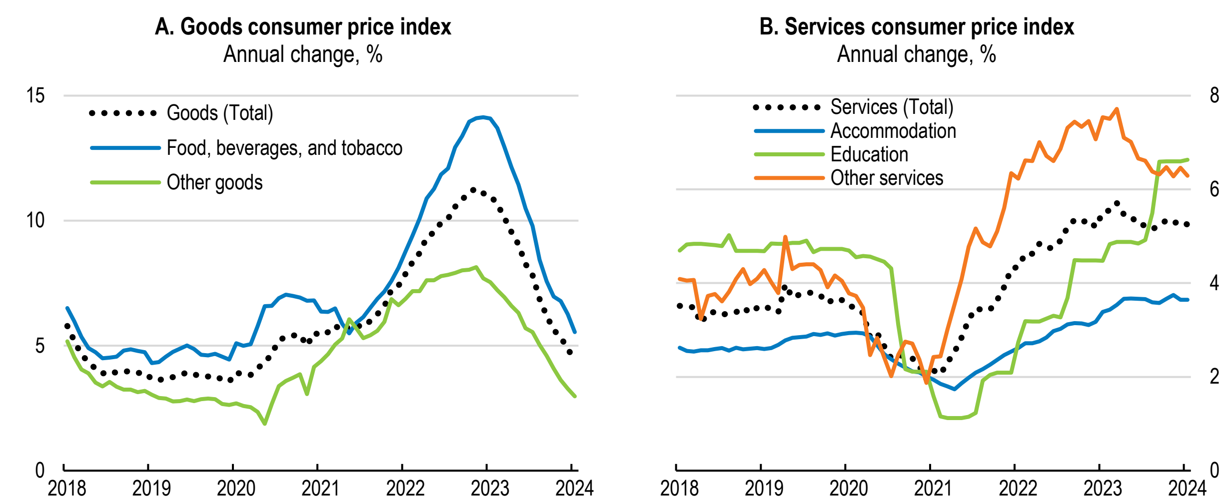
Figure 2.11. Inflationary pressures remain particularly high in processed food and some services



Note: Other services include restaurants and similar establishments, mobile phone services, car maintenance or medical consultations.
Source: INEGI.

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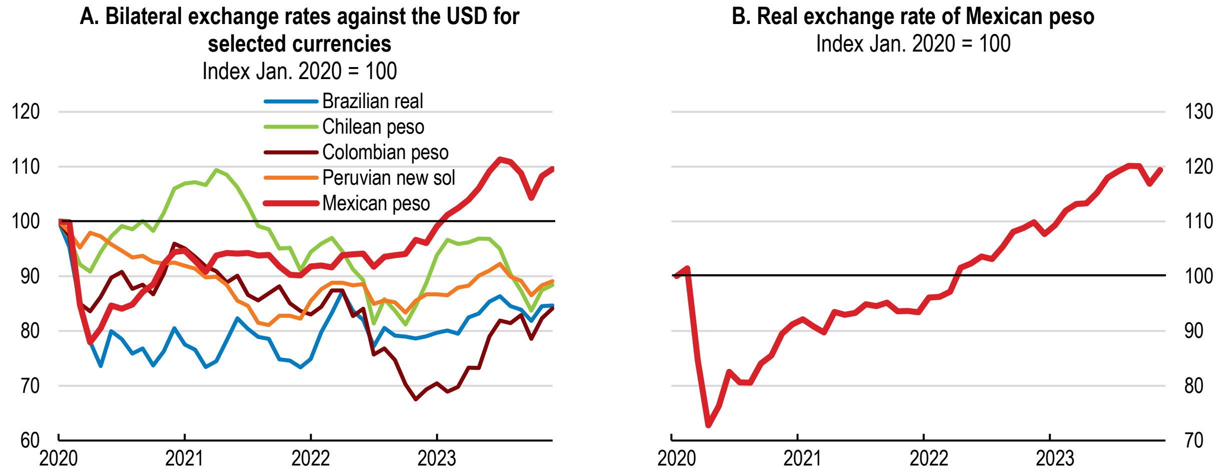
The appreciation of the peso throughout 2023 (Figure 2.12) has also contributed to contain and reduce inflationary pressures. The appreciation, stronger than of peers' currencies, can be explained by strong macroeconomic fundamentals, an attractive interest rate differential with the United States, as well as ample remittances, good nearshoring prospects leading to foreign direct investment inflows, and the recent rebound of tourism. On the real side, manufacturing activities, which in Mexico tend to rely more heavily on imported inputs and hence benefited from cost savings triggered by the peso appreciation, are better placed to navigate a strong peso environment, contrary to agriculture and services sectors, which tend to rely on domestic inputs.

Figure 2.12. The exchange rate has appreciated



Note: A decrease implies a depreciation of the Mexican peso and indicates an improvement in competitiveness. Real effective exchange rates (Panel B) are calculated against a basket of currencies (111 countries) using constant trade weights.
Source: OECD Economic Outlook: Statistics and Projections; Banco de México.

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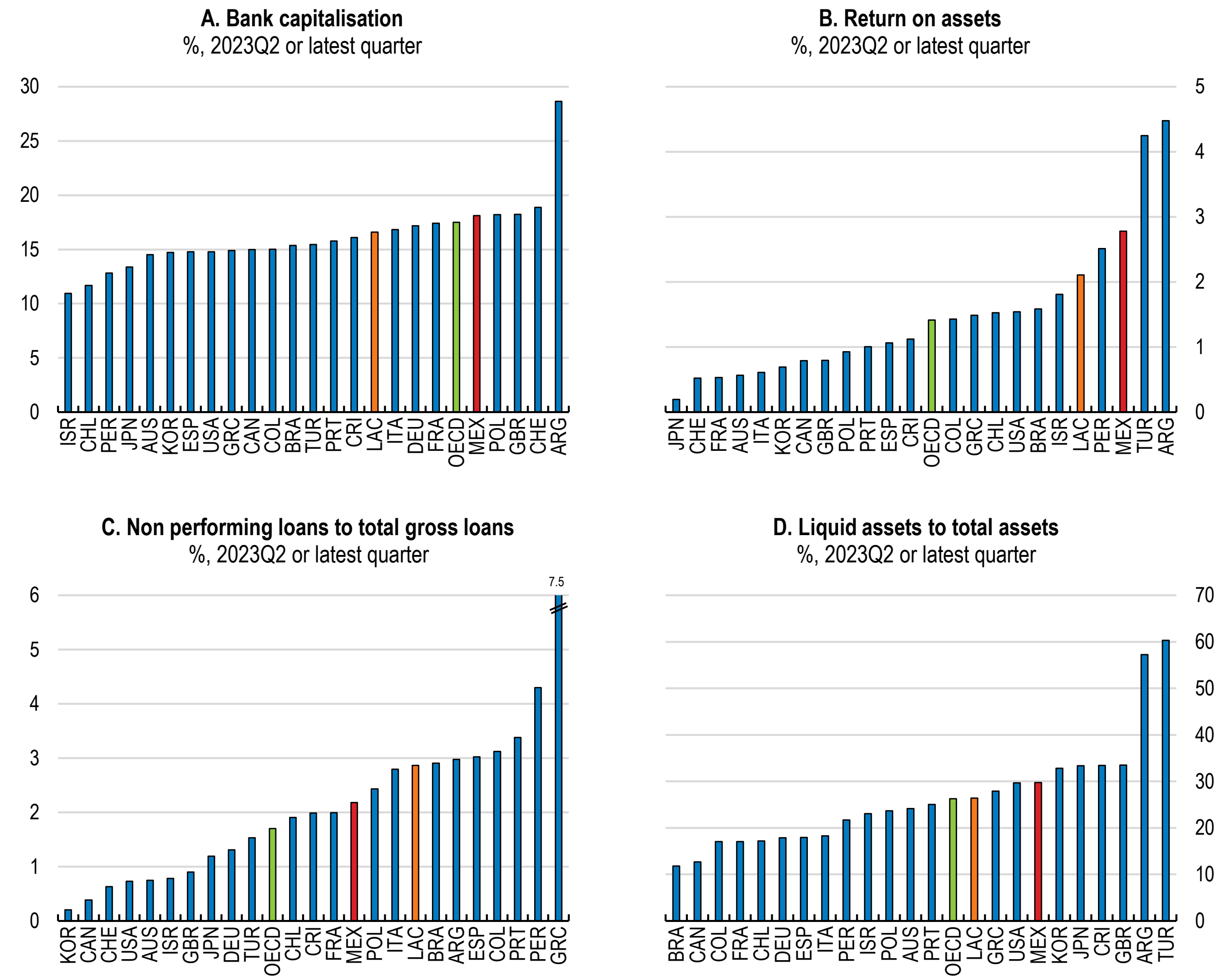
Communication is a fundamental pillar of monetary policy and Mexico's Central Bank has made significant progress over the years in this area (OECD, 2022[3]). With inflation receding and expectations still well above the target, efforts to improve communication further and aid the formation of expectations are warranted. One possibility is to broaden the forward guidance given in the policy statements. Mexico's Central Bank has been gradually providing more information about how the board expects the rate to evolve beyond the next board meeting. Continue evaluating the communication strategy, and enhancing it as needed, would help to further improve the formation of expectations.

2.3. The financial sector has ample buffers

Efforts to strengthen financial supervision after the Mexican crisis in 1994 and the global financial crisis in 2008 continue to pay off and the financial sector appeared robust during the pandemic and recent episodes of financial stress. Mexican banks exceed regulatory liquidity and capitalisation requirements (Figure 2.13) and non-performing loans are low and increased only modestly in the aftermath of the pandemic. Currently, 99.9% of bank accounts and 93.2% of deposits are fully guaranteed by the Mexican Deposit Insurance mechanism. Credit growth has continued to recover despite the tight financial conditions, particularly for non-financial companies and households, while mortgage lending remains subdued (Figure 2.14). The latter is partly related to a contraction in the lending portfolio of the Housing Fund Institute (see chapter 5).

The most prevalent risks for the financial sector are external, according to the Central Bank (Banxico, 2023[4]), most notably a recession in the United States, which could also trigger an economic deceleration in Mexico. Risks associated with tighter global financial conditions are mitigated by ample international reserves, active public debt management and low private sector debt (Figure 2.15). Mexican corporates hold relatively strong liquidity buffers, helping them to navigate the high interest rates environment. Households' debt is mainly in the form of mortgages, largely concentrated in the upper part of the income distribution, whose payment ability is less eroded by high inflation.

Figure 2.13. Banks capital and liquidity ratios are high



Note: Bank capitalisation refers to the capital adequacy, regulatory tier 1 capital to risk-weighted assets. LAC is a simple average of Chile, Colombia, Costa Rica, Argentina, Brazil, and Peru.
Source: IMF Financial Soundness Indicators database.

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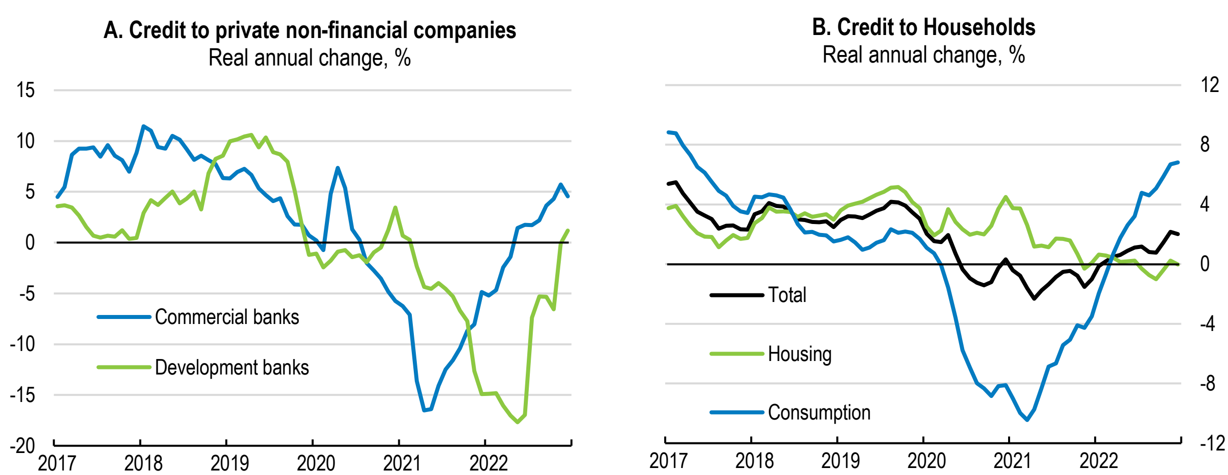
Figure 2.14. Credit growth has gradually recovered



Source: Bank of Mexico.

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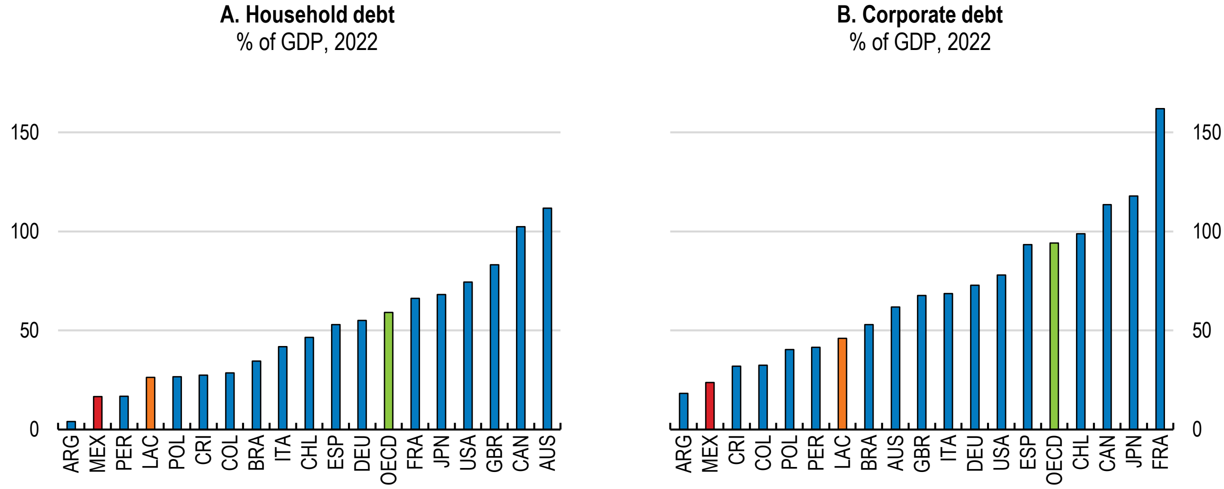
Figure 2.15. Private debt is low



Note: LAC is a simple average of Chile, Colombia, Costa Rica, Argentina, Brazil, and Peru.
Source: IMF Financial Soundness Indicators; and IMF Global Debt Database.

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Mexico has been gradually taking decisive steps to buttress the stability of the financial system. Key elements of Basel III standards, such as the total loss absorbing capacity requirements have been rolled out (IMF, 2022[5]). Legislating the supervision of financial institutions on a consolidated basis, so that affiliated financial entities are supervised as a single entity, considering their interconnectedness and potentials risk to the overall financial system, is a pending challenge to buttress banking supervision further. To enhance supervisors' ability to monitor and early warn about financial risks, greater financial information about firms and individuals could be made available, for example by building a Central Balance Sheet Database, as in several OECD countries, such as Canada, Germany, Spain or the United States. Despite recent improvements in financial inclusion, continuing efforts to increase access to finance is warranted. Enhancing financial education, boosting competition in payment card markets and continuing to promote Fintech would boost financial inclusion, as detailed in the OECD's 2022 Economic Survey.

Extreme weather events, such as hurricanes, droughts or heatwaves, are relatively frequent in Mexico and can generate financial stability risks. Efforts to assess those risks are ongoing and financial institutions are starting to integrate climate issues into their frameworks. Recent empirical work by the Central Bank revealed that the increasing exposure to hurricanes by Mexican municipalities imply that 14% more of the credit portfolio are exposed to hurricane risks (Banxico, 2023[4]). Phasing in a mandatory disclosure of climate-related risks by financial institutions and listed companies, as recommended in Mexico's OECD 2022 Economic Survey, would facilitate a more transparent management of these risks.

Mexico has continued to advance with its innovative strategy to develop sustainable finance instruments. Since 2020, it has stepped up sovereign sustainable issuances, both at international and domestic markets, and national development banks and corporate bond issuance has also strengthened, making Mexico one of the largest markets in the region. Mexico has recently launched the first taxonomy in the world that covers both environmental and social objectives. It provides financial players and companies with transparent and consistent definitions of the activities that qualify as sustainable. The taxonomy (Box 2.1) has the potential to facilitate that a higher proportion of investors incorporate environmental, social, and governance considerations into their investment process and to provide stronger incentives for allocating resources to cleaner activities. Integrating gradually the taxonomy into regulations, ensuring that the resulting standards remain comparable with international ones, would be a valuable next step, and facilitate that Mexican public and private institutions are able to tap the increasing share of global financing opportunities linked to environmental, social and governance criteria. Mexico also launched in September

2023 a strategy to raise sustainable financing, establishing a road map and indicative targets for both the public and the private sector, which can be achieved based on already existing instruments.

Box 2.1. Mexico's sustainable taxonomy

In March 2023, Mexico launched its sustainable taxonomy that covers both environmental and social objectives (SHCP, 2023[6]). A sustainable taxonomy is a classification system that enables the identification and definition of activities, assets, or investment projects with positive environmental and social impacts, based on established goals and criteria. In its first phase the taxonomy focuses on three main objectives: climate change mitigation; climate change adaptation; and gender equality. The purpose of the taxonomy is to provide certainty and transparency to financial markets and promote public and private investment in activities conducive to those objectives. By enabling the tracking of financial flows directed towards sustainability, it offers greater clarity, certainty, and security to markets. By facilitating access to timely and reliable information, the taxonomy encourages the mobilization of capital and reduces the risk of greenwashing. While other existing taxonomies focus on climate and environmental objectives, Mexico's taxonomy also includes social objectives, acknowledging the relevance of addressing social gaps and vulnerabilities in developing and emerging economies. The taxonomy is an instrument through which both public and private sector can define its investment strategies and design financial products or services conducive to sustainability. Likewise, it can be used by financial authorities to devise regulations aimed at disclosing information about asset types and serve as a framework for the issuance of sustainable debt instruments. Examples of this are the recent issuance of the first green resilience bond by the agriculture federal development bank (FIRA in Spanish), to support the agriculture sector adaption to climate change, and the launch of green mortgages by two private financial institutions, to facilitate access to sustainable housing solutions (see also Chapter 5).

2.4. The government is committed to prudent fiscal policy

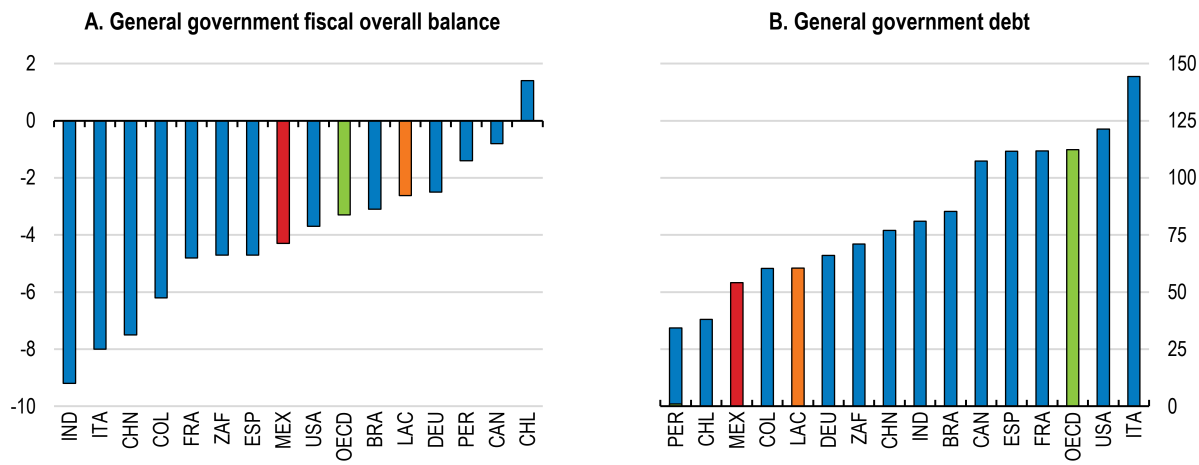
Mexico's fiscal policy has come a long way since the difficult times in the 1980s and 1990s (Box 2.2) and has gained strong credibility over the years thanks to a robust track record in attaining prudent fiscal targets and keeping public debt relatively low (Figure 2.16), despite having the lowest-tax-to-GDP ratio in the OECD. To support households' purchasing power and reduce cost pressures during the 2022 rise in energy prices, as in several other OECD countries, the government put in place untargeted fuel subsidies, mainly reducing the fuel tax. The measure helped to reduce inflation in the short run but has come at a significant budgetary cost of 1.3% of GDP in 2022 and benefited disproportionally higher income households. The subsidy is being gradually phased out and is expected to be fully eliminated in 2024, based on government oil price projections. Higher oil revenues largely covered the cost of the untargeted subsidies in 2022 but, should oil prices raise again substantially, shifting towards more targeted support and providing better incentives for energy savings would increase fiscal space and favour higher energy efficiency.

Box 2.2. Learning from the past: prudent fiscal policies and debt management in Mexico

In the 1980s and early 1990s, Mexico struggled with high fiscal deficits and high public debt resulting from two major economic crises, the 1982 debt crisis and the 1995 "tequila" crisis (OECD, 2009[7]). Both crises had a profound impact on the Mexican economy and generated a contagion effect throughout the rest of Latin America. In response to the crises, the government introduced strong fiscal consolidation and have since then followed prudent fiscal policies. In 2006, Mexico enacted its Fiscal Responsibility Law, which institutionalized the commitment with fiscal discipline by introducing rules and guidelines for responsible fiscal management, including limits on government spending, deficits, and public debt levels. Since then, Mexico has also consistently prioritized responsible debt management, diversifying its sources of finance, tapping international capital markets, reducing refinancing risks and improving reporting mechanisms to boost investors trust.

Figure 2.16. The deficit and public debt levels are low in international comparison

% of GDP, 2022



Note: LAC is a simple average of Chile, Colombia, Argentina, Brazil, and Peru. Panel B shows gross government debt.
Source: IMF's fiscal monitor, October 2023 edition.

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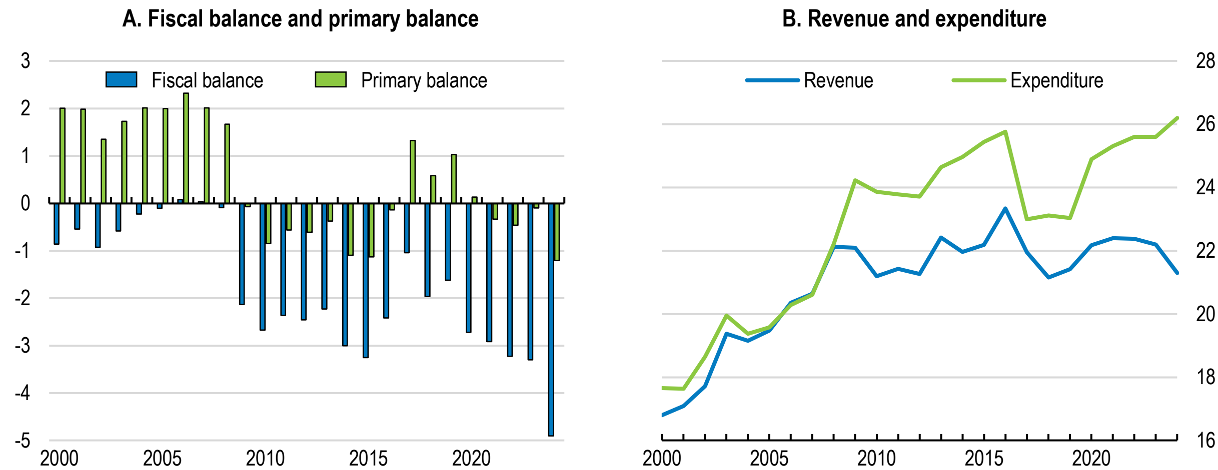
The public sector deficit is expected to reach 3.3% of GDP in 2023 (Figure 2.17), a slight increase from 3.2% of GDP in 2022, and the public debt-to-GDP ratio is expected to reach 46.5% at end-2023. The federal government targets a fiscal deficit of 4.9% in 2024, as budget allocations for social spending, particularly universal non-contributory pensions, and flagship infrastructure projects in the South significantly increased, and borrowing costs have risen. The net public debt-to-GDP ratio is expected to remain at 49% of GDP at end-2024 (Table 2.4). Thereafter, the public deficit is planned to fall to 2.1%, due to a reduction in public investment, partly linked with the end of some of the infrastructure projects in the south. The public debt ratio is expected to remain broadly stable around 50% of GDP the decades after (Figure 2.18). The expansionary fiscal stance in 2024 could help to continue addressing social gaps (see Chapter 4) and to improve medium-term growth prospects, particularly in southern states, but also increases the risk of high inflation. Making fiscal policy less expansionary by targeting the social spending increase and energy support measures exclusively at low-income households and basing the public investment projects on sound cost-benefit analysis would help to mitigate these risks. Looking forward, preserving the recovery in public investment initiated in 2020 (Figure 2.19) would support medium-term growth prospects. Infrastructure gaps remain large (see Chapter 3) and public investment as a % of GDP is lower than in other emerging economies and in the average OECD country.

Figure 2.17. Fiscal policies have remained prudent

Non-financial public sector, % of GDP



Note: Data for the year 2024 are estimates. In Panel B, the widest definition of public revenues is used, including also social security contributions and State-owned enterprises.
Source: Secretaría de Hacienda y Crédito Público; and OECD Economic Outlook database.

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Table 2.4. Evolution of main fiscal aggregates

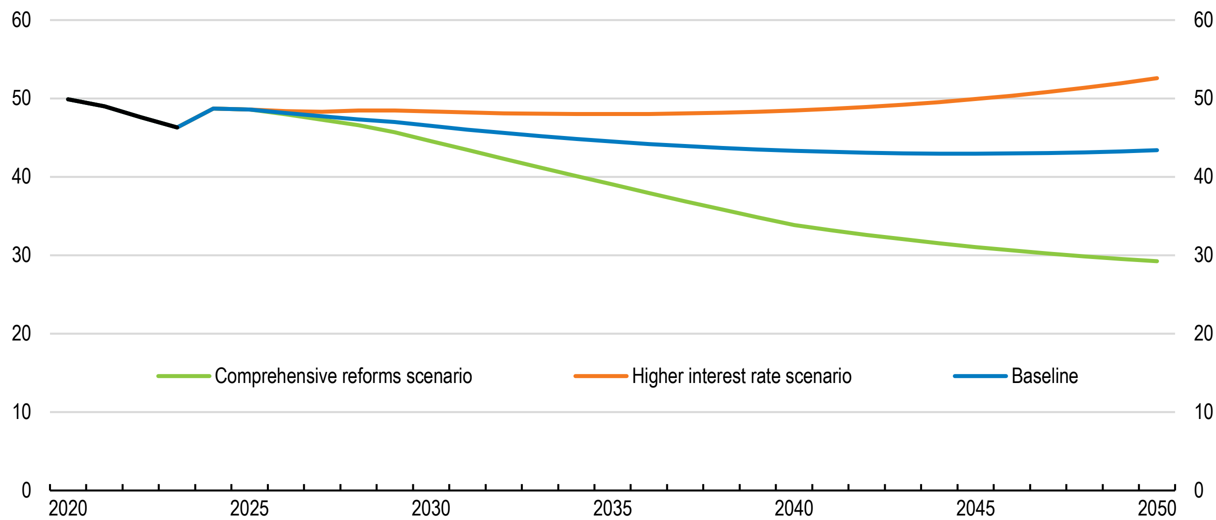
% of GDP

	2018	2019	2020	2021	2022	2023	2024*	2025*
Total revenues	**21.2**	**21.4**	**22.2**	**22.4**	**22.4**	**22.2**	**21.3**	**21.1**
Oil revenues	4.0	3.8	2.5	4.3	5.0	3.4	3.0	2.8
Non-oil revenues	17.1	17.6	19.7	18.0	17.4	18.8	18.3	18.3
Tax revenues	12.7	12.7	13.9	13.4	12.9	14.2	14.4	14.4
Personal	6.9	6.7	7.3	7.1	7.7	7.9		
VAT	3.8	3.7	4.1	4.2	4.1	4.3		
Corporate	1.4	1.8	1.9	1.5	0.4	1.4		
Imports	0.3	0.3	0.2	0.3	0.3	0.3		
Other	0.3	0.2	0.3	0.3	0.4	0.3		
Non-tax revenues	4.4	4.9	5.8	4.6	4.5	4.5	3.9	3.9
Total expenditure	**23.1**	**23.0**	**24.9**	**25.3**	**25.6**	**25.6**	**26.2**	**23.2**
Primary	20.6	20.4	22.0	22.7	22.9	22.3	22.5	20.1
Programmable	16.8	16.8	18.5	19.3	19.3	18.6	18.8	16.4
of which: capital investment	2.6	2.2	2.7	2.6	3.2	2.8	2.6	2.1
Non-programmable	6.3	6.2	6.4	6.0	6.4	7.0	7.5	6.9
of which: transfers to states	3.5	3.5	3.5	3.4	3.6	3.6	3.7	3.7
of which: Interest	2.5	2.7	2.8	2.6	2.8	3.3	3.7	3.1
Primary public balance	0.6	1.1	0.1	-0.3	-0.4	-0.1	-1.2	1.0
Public balance	**-2.0**	**-1.6**	**-2.8**	**-2.8**	**-3.2**	**-3.3**	**-4.9**	**-2.1**
Financing needs outside budget	-0.1	-0.7	-1.0	-0.9	-1.1	-1.0	-0.5	-0.5
Public sector borrowing requirements	*-2.1*	*-2.3*	*-3.8*	*-3.8*	*-4.3*	*-4.3*	*-5.4*	*-2.6*
Gross public sector debt	49.9	49.6	56.2	54.6	51.9	51.9	50.9	52.9
Net public sector debt	44.8	43.9	49.9	49.0	47.6	46.8	48.7	48.6
Historical Balance of the Public Sector Borrowing Requirements	*43.6*	*43.2*	*50.2*	*49.2*	*47.8*	*46.8*	*48.8*	*48.8*

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

Figure 2.18. The public debt-to-GDP ratio is expected to remain broadly stable

% of GDP



Note: In the baseline scenario, real GDP growth and inflation follow OECD projections over 2024-25 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 government primary balance is assumed to follow table 2.4 and remain constant as of 2025. In the comprehensive reform scenario, a higher GDP growth is assumed over the period 2025-2050 under the hypothesis that structural reforms are implemented as to boost growth as reported in Table 2.5. The higher interest scenario assumes 200 basis points more than in the baseline. All scenarios and the baseline include ageing costs.
Source: OECD calculations.

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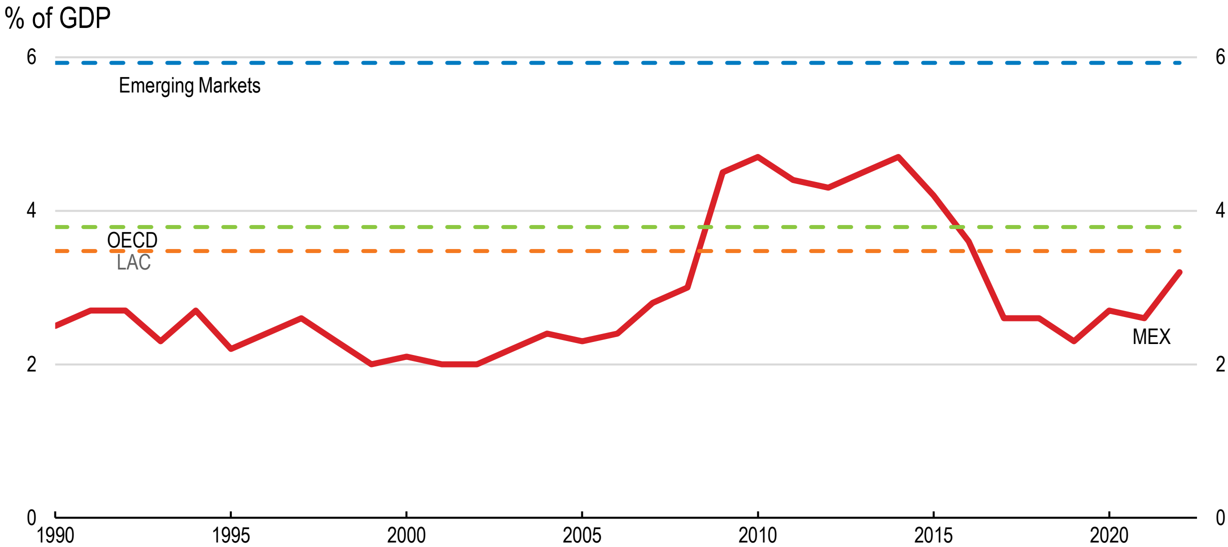
Table 2.5. Expected gains from ambitious reforms are substantial

Estimated impact of selected reforms on potential GDP per capita after 10 years

Reform	Impact on real GDP
Scenario A: Facilitate higher female employment	8.9%
Scenario B: Improve rule of law and reduce corruption	2.7%
Scenario C: Strengthen education outcomes	1.7%
Scenario D: Increase public investment	1.4%
Ambitious reform scenario: all the above together	15.6%
Implied average annual growth increase (of ambitious reform scenario):	**1.6 percentage points**

Note: Simulations based on the OECD long-term growth model (Guillemette and Château, 2023[1]). The scenarios assume that female employment rates (Scenario A), education outcomes (Scenario C) or public investment (Scenario D) reach the OECD average by 2040, and that the rule of law (Scenario B) converges to the first quartile of OECD countries by 2060, reaching the level of Chile. The individual reform effects do not sum up to the effect of the ambitious reform scenario due to non-linear effects in the model.
Source: Simulations using the OECD long-term model.

Figure 2.19. Public investment has recently increased but remains low



Note: Country group averages are unweighted. Emerging Markets average refers to the period 1990-2021 and includes ARG, BRA, CHL, CHN, COL, EGY, HUN, IND, IDN, MYS, MEX, PER, PHL, POL, ROU, RUS, ZAF, THA, TUN, TUR. LAC refers to the period 1993-2021 and includes ARG, BRA, CHL, COL, CRI, PER. OECD average refers to the period 1990-2020.
Source: Secretaría de Hacienda y Crédito Público; IMF World Economic Outlook; and OECD Economic Outlook database.

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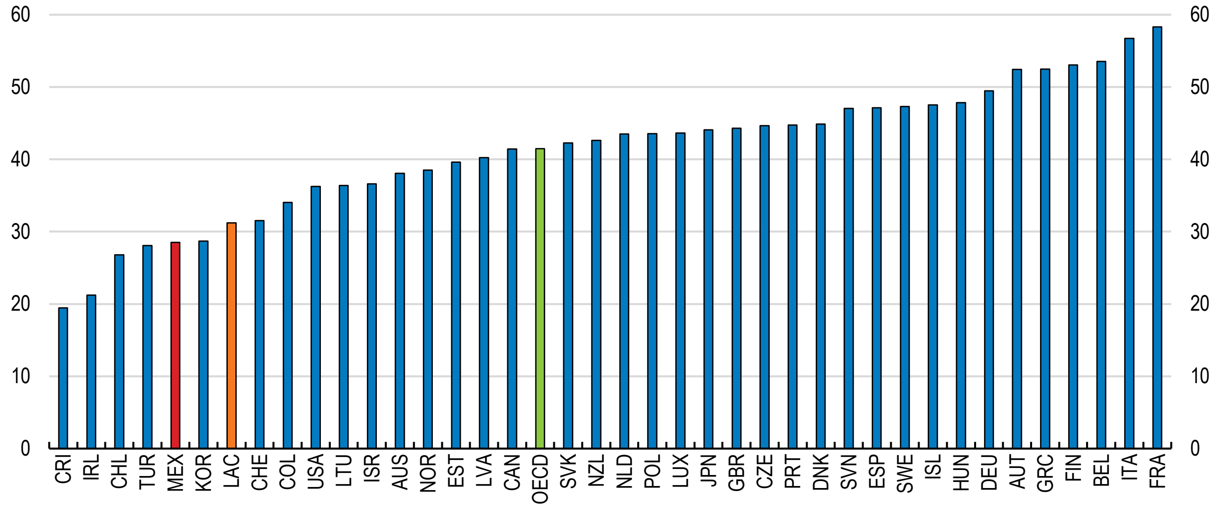
2.4.1. Keeping fiscal prudence while increasing spending to promote stronger and sustainable growth

Public spending restraint has been central in Mexico's strategy to meet fiscal targets. As a result, public spending is low in international perspective (Figure 2.20). With spending on pensions trending up, keeping spending restraint implies a fall in spending in other key areas, such as education (Figure 2.21), despite significant needs (see Chapter 4). Looking forward, recent raises in non-contributory pensions imply that spending on pensions is expected to continue increasing and there will also be increasing health spending pressures, as the share of individuals without access to health services has recently increased (CONEVAL, 2023[8]). Mexico's population is also starting to age. The fiscal costs of population ageing will have limited weight over the next decade but will increase gradually thereafter. Moreover, there are spending gaps in education, physical and digital infrastructure and the fights against climate change and corruption that will need to be addressed to strengthen growth and make it more inclusive and sustainable. The fight against crime could yield particularly large benefits, as a large share of firms perceived safety as an obstacle for their operations (see chapter 3).

Greater efforts to increase spending efficiency can contribute to create the fiscal space to finance higher spending. This could be achieved by making a more systematic use of spending reviews, cost-benefit analysis, means testing and public procurement processes. Infrastructure projects will benefit from more rigorous and transparent cost-benefit analysis, which would facilitate sounder project selection and closing infrastructure gaps in a cost-effective manner. More systematic evaluations of social policies could also help to boost efficiency. Mexico has an institute tasked with the evaluation of social programmes, CONEVAL, that runs sound ex-ante and ex-post evaluations, but its task is hampered by the quality of the registries of beneficiaries. Advancing towards the creation of a single registry of beneficiaries of social policies would be key to reduce the fragmentation of social programmes, avoid overlaps and improve targeting, as discussed and recommended in the 2022 Economy Survey (OECD, 2022[3]).

Figure 2.20. Public spending is low in comparison with other OECD countries

General government expenditure, % of GDP, 2022



Note: LAC is a simple average of Chile, Colombia, Costa Rica, Argentina, Brazil, and Peru. OECD is an unweighted average.
Source: IMF World Economic Outlook, October 2023.

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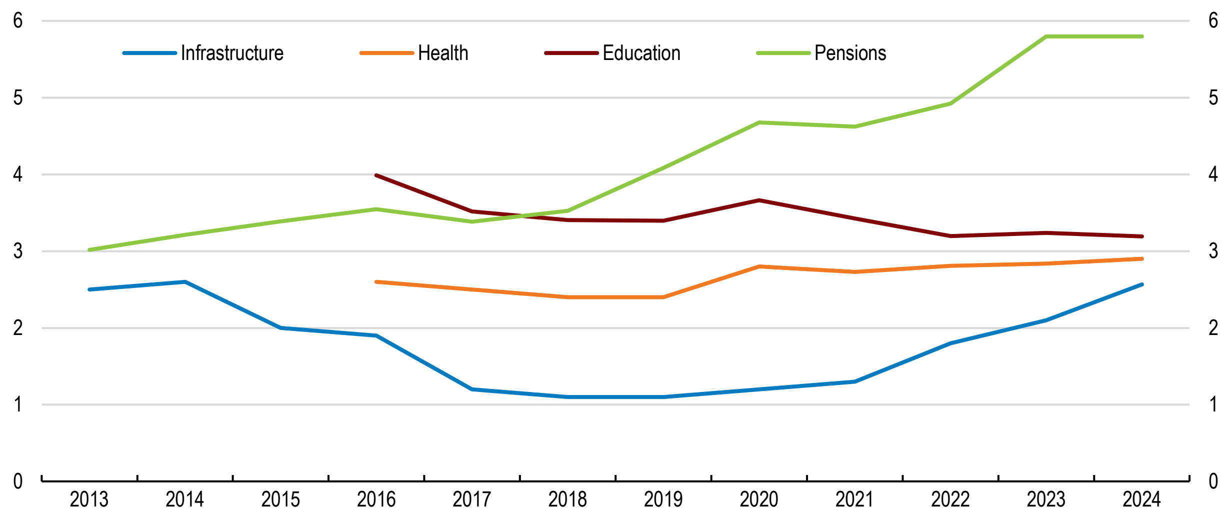
Mobilizing more tax revenues will also be needed to address spending needs in key areas and at the same time maintain Mexico's valuable commitment with fiscal prudence. Recent efforts to enhance tax collection, through administrative measures to reduce tax evasion and fraud as detailed in the 2022 OECD Economic Survey, show that tax reforms can pay off and the tax-to-GDP ratio increased to 16.7% in 2021, from 16.1 % in 2018. While these efforts are welcome, Mexico still has the lowest tax-to-GDP ratio in the OECD (Figure 2.22), 5.5 percentage points lower than Chile's or 7.5 lower than Costa Rica's (OECD et al., 2023[9]; OECD, 2022[10]). Greater efforts to facilitate tax compliance are warranted. For instance continuing ongoing efforts to expedite appointments with the tax authority and to further develop taxpayer portals and mobile apps, can enhance on-time filling rates, which, at 32% and 39% for the personal and corporate taxes (OECD, 2022[11]), are relatively low in Mexico. Supplementing these efforts to strengthen tax collection by increasing the revenue-enhancing capacity of some taxes would help to finance the increase in productivity-enhancing spending. A comparison with OECD and LAC peers tax structure indicates that Mexico derives the highest shares of its tax revenues from value added and corporate taxes (Figure 2.23) and that there is room to better utilised recurrent taxes on immovable property and environmentally related taxes (Figure 2.24).

Figure 2.21. Spending on pensions is trending up while spending on education has fallen

Public expenditure, % of GDP



Source: Centro de Investigación Económica y Presupuestaria A.C. (CIEP) based on Secretaría de Hacienda y Crédito Público.

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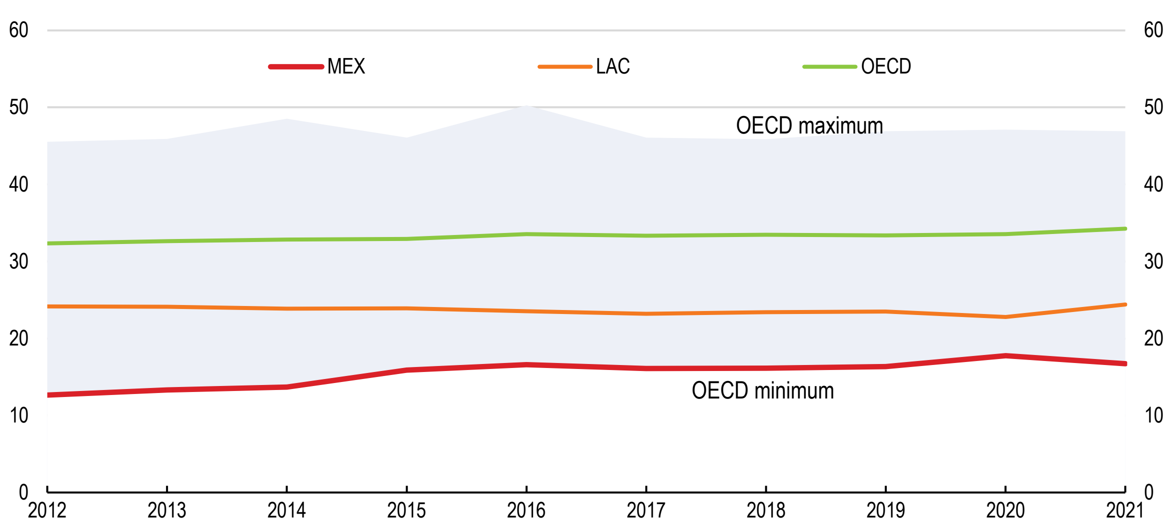
Figure 2.22. Mexico has the lowest tax-to-GDP ratio in the OECD

% of GDP



Note: LAC is a simple average of Chile, Colombia, Costa Rica, Argentina, Brazil, and Peru.
Source: OECD Global Revenue Statistics Database.

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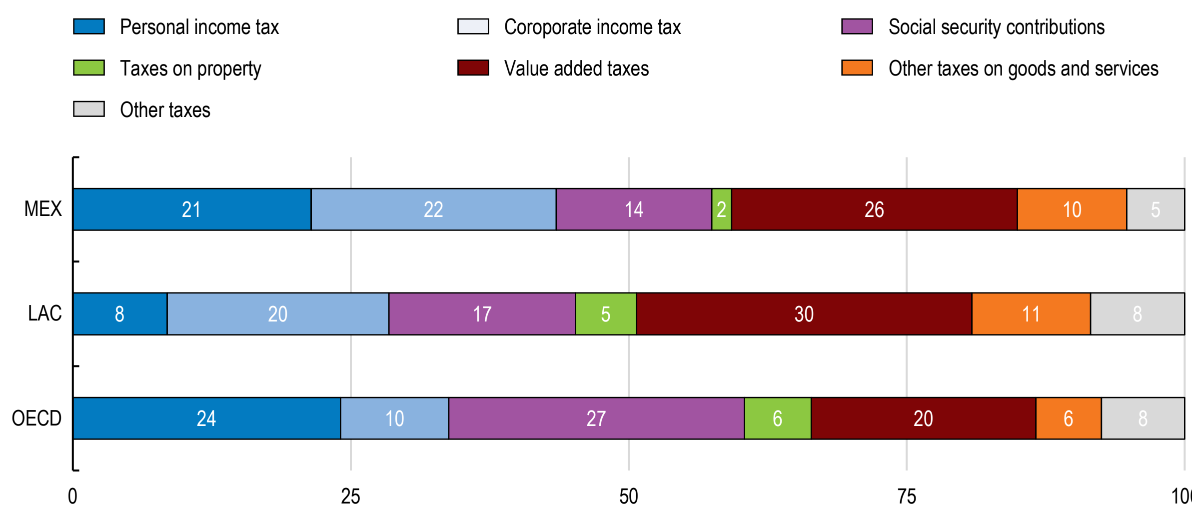
Recurrent taxes on immovable property have a significant redistributive power, are efficient and can deliver large revenue increases. In Mexico, recurrent taxes on immovable property (*predial* in Spanish) are under the responsibility of municipalities, which tend to have low technical capacity and lack incentives to raise the tax. Only 36% of municipalities manage and collect immovable property taxes. Immovable tax collection largely depends on the coherent and consistent land valuation and on the correct updating and management of municipal cadastres. Experience in some OECD countries suggests that establishing agreements between different government levels can support the update of the cadastre and the collection of recurrent immovable property taxes (Box 2.3). Some Mexican municipalities would benefit from establishing agreements with the state government to collect the tax and with the federal government to complete and update the cadastre, particularly those where the cadastre is incomplete or outdated. Establishing minimum tax rates at the federal level can prevent a race to the bottom among municipalities. Initial efforts to build a cadastral information platform to facilitate the exchange of geographically referenced data among the three levels of government, and the use of modern technologies, such as photogrammetric flights (Ethos, 2021[12]), have started.

Figure 2.23. Mexico derives the highest share of its tax revenues from value added taxes

% of total tax revenue, 2021



Note: LAC is a simple average of Chile, Colombia, Costa Rica, Argentina, Brazil, and Peru. The OECD average refers to the year 2020.
Source: OECD, Revenue Statistics in Latin America and the Caribbean 2023.

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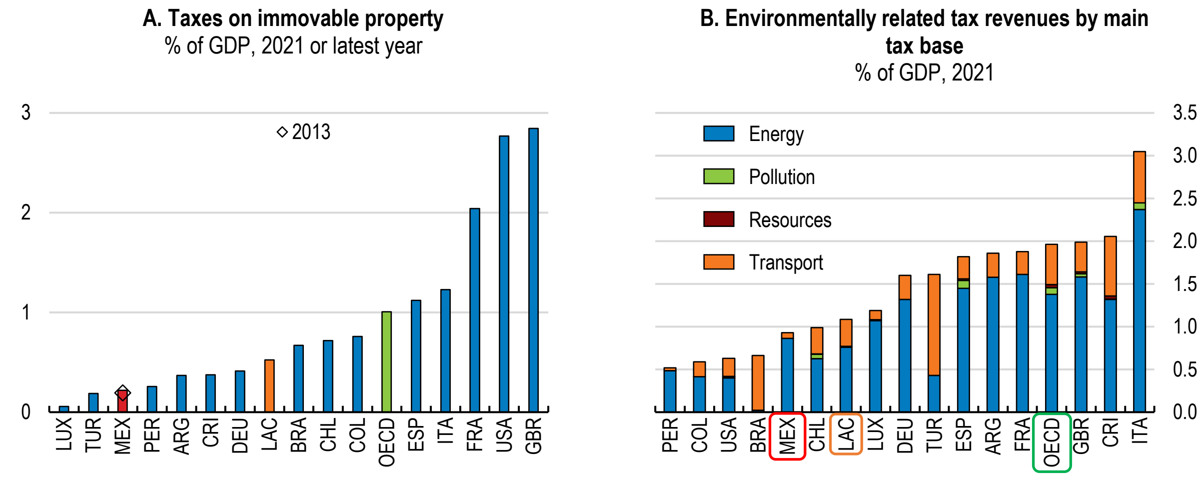
Figure 2.24. There is room to strengthen immovable property and environmentally related taxes



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

StatLink https://stat.link/gpu8hv

Box 2.3. Lessons from improving cadastres in Colombia

Colombia is the country in Latin America that raises the highest proportion of revenue from recurrent taxes on immovable property. In 2021, it generated revenues equivalent to about 0.8% of GDP, four times more than Mexico.

As in many countries, many municipalities had problems updating cadastral values. As a response, Colombia introduced in 2020 the Multipurpose Cadastre, which implied a reconfiguration of the cadastral functions that is being gradually adopted. Despite its novelty, municipalities where the new system is in place report increases in revenue ranging from 11% to 30% in 2022. For example, in Soacha, a municipality where the cadastre had not been updated in 12 years, revenues increased by 250% (Verástegui Niño, 2022[13]).

In the new system, the different government levels and individual operators collaborate in the collection, storage and update of the legal, physical and economic information about immovable properties (Verástegui Niño, 2022[13]). The system is composed of three actors: i) A geographical institute (Instituto Geográfico Agustín Codazzi), that operates at the national level and is the main cadastral authority, establishing all necessary regulations and being in charge of undertaking directly the cadastral management in those municipalities or regions that do not have a cadastral manager; ii) cadastral managers, which are public entities in charge of managing cadastral responsibilities; they can be individuals, regional or local entities or several entities with a collaborative agreement; and iii) cadastral operators, who are public or private entities with accredited technical capacity that are actually operating the cadastral processes under a contract agreement.

Taxes related to the purchase, ownership and usage of vehicles have become an important source of tax revenue for many OECD governments and are increasingly designed to influence consumer behaviour for environmental purposes. In Mexico, taxes on vehicle ownership or use (*tenencia*) were transferred from the federal government to the states in 2012. Currently, less than half of the 32 states collect vehicle taxes. Estimates from the Finance Ministry suggest that collection could increase by 0.2% of GDP (Table 2.6) with a compliance rate of 70%. The federal government could enhance incentives for states to collect and green this tax, for example by allocating higher federal transfers to those states doing so. It could also establish minimum tax rates at the federal level to avoid the race to the bottom among states occurring in some parts of Mexico. Restructuring the vehicle tax so that it considers environmental performance would also incentivise the use of more energy-efficient vehicles, as exemplified by several OECD countries, such as France and Israel. There is also room to green the tax system further by broadening the scope of the carbon price (see Chapter 3).

Table 2.6. Illustrative fiscal impact of some recommendations

Fiscal recommendation	Estimated impact on fiscal balance, % of GDP
Revenue side	
Broaden personal income tax base	+0.7
Strengthen recurrent taxes on immovable property	+1.2
Strengthen vehicle tax	+0.3
Broaden and increase carbon tax	+1.4
Total spending side	*+3.6*
Spending side	
Boost public investment	-1.3
Set up a childcare network at federal level	-0.7
Expand elderly formal care services	-0.5
Strengthen education programs	- 1.0
Total revenue side	*-3.5*
Resulting change in primary balance	**+0.1**

Note: Numbers in this table are estimates and some are subject to uncertainty. Implementation would take several years.
Source: OECD calculations.

There is also room to make the tax system more progressive, as its contribution to reduce income inequality is weak. This could be achieved by reducing the threshold for the top personal income tax bracket, which is very high in international perspective, as discussed in the 2022 Economic Survey of Mexico. The income threshold where single taxpayers face the top statutory tax rate is set at 25 times the average wage in Mexico, while it is 6 times in the average OECD country. Broadening tax bases, by eliminating exemptions benefiting most affluent taxpayers as recommended in the 2022 Economic Survey, would also increase revenues without increasing tax rates and increase progressivity. A significant part of the consumption basket is taxed at zero rate or is exempt, as outlined in the 2022 Economic Survey. Eliminating these exemptions and putting in place targeted social support to households in the lowest income deciles, could raise significant revenues, but entails significant political economy difficulties. In the short-term, exemptions particularly benefiting high-income households, such as those applied to cultural goods, education or certain financial services, such as insurance policies, could be phased out. Further broadening of the VAT base could be a medium-term option, once the tools available to target social programmes, to mitigate the effects of higher prices, have improved. Phasing out personal income tax expenditures, also large and regressive, would also improve revenues in a progressive way. Tax allowances and expenditures benefiting the most affluent taxpayers include deposits on special saving accounts and for the acquisition of shares of investment societies, health insurance premiums or educational expenses.

Tax revenues could also be significantly boosted by reducing informality. A comprehensive strategy would be needed for that, with actions in different policy areas, as further discussed in Chapters 3 and 4 of this survey. A simplified tax regimen targeted at self-employed and SMEs was introduced in 2021 (*Régimen de confianza*) to facilitate formalization. An evaluation of the scheme could help to enhance its design to facilitate SMEs tax compliance, which would be part of the comprehensive strategy to decrease informality.

To ensure the medium-term stability and credibility of its tax system, Mexico should also remain proactive in the on-going international efforts to harmonise tax standards and avoid base erosion and profit shifting. Mexico's special tax regimes, granting tax reductions to firms located in some areas, such as in the border with the United States, are one of the elements in its strategy to attract foreign direct investment. Updating domestic tax rules in line with new international standards is the best way to remain attractive for foreign direct investment, maintain a sound reputation for international cooperation and transparency on tax issues and would also increase tax revenues. At the same time, progress towards establishing a minimum global corporate effective tax of 15% means that elements such as the availability of highly skilled workers or a green electricity matrix will become increasingly important to attract foreign direct investment (see Chapters 3 and 4).

2.4.2. Enhancing the fiscal framework

The current fiscal framework has helped to deliver fiscal prudence and ensure debt sustainability. However, under its current configuration the framework does not deliver countercyclical fiscal policies. Its ability to smooth out economic cycles and provide support during downturns is limited. Instead, the framework favours sharp reductions in spending to attain fiscal targets.

Three stabilization funds and three fiscal rules are the key building blocks of Mexico's fiscal framework. There are two stabilization funds for the federal and another one for sub-national entities. Federal funds receive a share of the annual oil revenues. They aim at compensating for reductions in revenues with respect to those approved in the budget in a given year. The funds were depleted during the pandemic and authorities are considering alternatives to replenish them. They have been traditionally financed through oil revenues. Mexico is no longer an oil-based economy and oil revenues are shrinking and they are unlikely to be sufficient to finance the funds. Widening the sources of financing of the stabilization funds is therefore a priority. At the moment fiscal buffers in the main stabilization fund amount to 0.3% of GDP. A bill is under discussion in Congress, adding two additional sources of financing. This will reinforce the role of the funds as contingent fiscal buffers.

Mexico has three fiscal rules in place, two balanced budget rules and one structural current spending rule, as detailed in the 2022 Economic Survey Surveys (OECD, 2022[3]). 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. 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. Replacing the two budget balance rules with a debt-anchor and widening the share of public spending covered by the spending rule, as recommended in the 2022 OECD Economic Survey, would buttress Mexico's fiscal framework and enhance its ability to forestall future crises, rebuild fiscal buffers, and respond to shocks. Canada and Sweden are among the OECD countries where debt-anchors successfully complement existing fiscal rules. Efforts to put in place these mechanisms are also progressing in other countries in the region, such as Chile.

These changes would entail major reforms to the Federal Budget and Fiscal Responsibility Law, requiring sustained efforts to build the necessary political consensus. In the meantime, Mexico would greatly benefit from putting in place a multi-year budget framework, as done by many OECD countries (Box 2.4). This would help to avoid the current exclusive focus on next year's spending allocation and fiscal target. Mexico's budgetary process could be supported and further enhanced by establishing an independent an adequately resourced fiscal council, as recommended in previous OECD Economic Surveys (OECD, 2022[3]), (OECD, 2019[14]) and following the OECD principles for independent fiscal institutions.

Box 2.4. Medium-term budgeting frameworks in OECD countries

Today, most OECD countries have a multiyear budget framework in place (OECD, 2019[15]). They typically employ a 3–4-year time horizon, including the budgeted fiscal year. In countries, such as Canada, France, Germany, New Zealand, Portugal, Sweden or Switzerland, governments present their multi-year budget bill to their respective Parliaments, detailing the proposed budget for the upcoming fiscal year and the subsequent years. Multi-year budgeting frameworks put together short-term and medium-term fiscal policies, helping governments to align budgetary decisions with long-term policy goals, such as investments in education, healthcare, infrastructure or environment protection. Multi-year budgeting also facilitates better planning, accountability and evaluation. By setting targets and objectives over a multi-year period, ministries gain assurance about available resources and can track progress and assess the effectiveness of its policies and spending decisions.

The credibility of Mexico's fiscal framework could also be further enhanced by making the support to PEMEX more transparent and predictable. Despite the favourable oil price environment and the continuous support from the federal government, the situation of PEMEX continues to be challenging. Support from the federal government has taken the form of lower tax burden, extraordinary liquidity injections, capital investment and explicit support when raising financing. Its liabilities amount to 15% of GDP, making PEMEX a large contingent liability for the government. The materialization of sizeable contingent liabilities can be a major source of fiscal distress, as exemplified by several euro area countries in the 2010s (ECB, 2021[16]).The 2024 budget sets aside explicitly for the first time the financial support that PEMEX will receive in 2024, amounting to USD 8.5 billion (0.5% of GDP), helping PEMEX to meet the USD 10.9 billion (0.7% of GDP) in payments due in 2024. Estimates suggest that PEMEX will need USD 20 billion per year (1.1% of 2023 GDP) of additional support between 2024 through 2027 (FitchRating, 2023[17]). Mexico should condition any support to PEMEX to implement a transparent and credible strategy to improve its environmental, social and governance (ESG) track record, including an explicit strategy to adapt to ongoing changes in the energy market and to reduce its carbon footprint. Aligning the governance of PEMEX and other State-owned enterprises with the OECD Guidelines on Corporate Governance of State-owned Enterprises (OECD, 2015[18]), as recommended in the 2022 OECD Economic Survey, would also strengthen incentives to improve performance, accountability and transparency.

Table 2.7. Policy recommendations to further buttress macroeconomic policies

MAIN FINDINGS	CHAPTER 2 RECOMMENDATIONS (Key recommendations in bold)
The fiscal stance for 2024 is expansionary, with social spending and public investment increasing. This could help to address social needs and support medium-term growth, but also increases the risk of high inflation.	**Make fiscal policy less expansionary by targeting the increase of social spending and energy support measures towards low-income households and basing public investment projects on sound cost-benefit analysis.**
Untargeted fuel subsidies, put in place to support households purchasing power, contained headline inflation at a budgetary cost of 1.3% of GDP.	Shift towards more targeted support and provide better incentives for energy savings.
Public spending is low in international perspective. Public spending on pensions is trending up, while spending in other key areas, such as education, has fallen as % of GDP. Measures taken to reduce tax evasion and fraud have supported tax collection, but the tax-to-GDP ratio is the lowest in the OECD. There is room to increase the progressivity of the tax system.	**Gradually increase public spending in productivity-enhancing areas, such as education, the digital and green transition and the fight against crime.** **Gradually increase tax revenues by:** • **fostering immovable property tax collection.** • **phasing out inefficient and regressive personal income tax exemptions and lowering the income threshold for the top rate.** • **gradually broaden the VAT base.** • **continue to facilitate tax compliance.** Establish collaborative agreements between the three government levels to update the cadaster. Make some of the transfers to states conditional on levying the vehicle tax and reforming it to incentivize the use of more energy-efficient vehicles.
The gains from higher public spending in key areas would be maximised if more spending is coupled with more efforts to increase efficiency.	**Make a more systematic use of spending reviews, of cost-benefit analysis in public infrastructure projects and of means-testing and periodic evaluations in social programmes.**
In response to the pandemic recession, Mexico almost depleted its stabilization funds. Mexico is no longer an oil-based economy and oil revenues are unlikely to allow replenishing the funds.	Continue widening the sources of financing of stabilizations funds.
There is a strong commitment with fiscal prudence, but the current fiscal framework favors sharp reductions in spending to attain fiscal targets. and its ability to provide support in the event of a negative shock is limited.	**In the short-term establish a multi-year budget framework.** **In the medium-term replace the two balanced-budget rules with a debt anchor and widen the coverage of the expenditure rule.**
Inflation has softened but services inflation is persistent and one-year ahead inflation expectations are still above target.	**Keep monetary policy restrictive to ensure that inflation decreases durably towards its target.** Continue evaluating monetary policy communication strategy.
Minimum wages have significantly increased from 42 % of the median formal sector wage in 2018 to 59% in 2023.	Link further minimum wage increases to labour productivity gains. Grant the Committee advising about the minimum wage independence and reinforce its technical expertise by appointing to the committee labour market experts from academia.
Mexico has been gradually taking decisive steps to buttress the stability of the financial system, but some challenges remain. Consolidated supervision is done on a best effort basis.	Introduce legislation to ensure that financial conglomerates are supervised on a consolidated basis. Increase the availability of financial information about firms and individuals.
Despite recent improvements, financial inclusion remains relatively low.	Continue efforts to increase access to finance, including by enhancing financial education, boosting competition in payment card markets and continuing to promote Fintech.
As part of its innovative efforts to develop sustainable finance, Mexico has launched the first world taxonomy that covers both environmental and social activities to provide transparent and consistent definitions to investors.	Gradually incorporate the environmental and social taxonomy in regulations ensuring that it remains consistent with international standards.
Mexico's budgetary process would be supported and further enhanced by establishing a fiscal council.	Establish an independent and adequately resourced fiscal council.
PEMEX is a large contingent liability for the government. Despite the favorable oil price environment and the continuous support from government, its situation continues to be challenging, as it faces negative free cash flow and large refinancing needs.	Condition any additional support on PEMEX putting in place a transparent and credible strategy to improve its ESG track record and align all SOEs governance with the OECD Guidelines on Corporate Governance of State-owned Enterprises.

References

Banxico (2023), "Informe de Estabilidad Financiera". [4]

Banxico (2023), "Informe trimestral, enero-marzo 2023". [2]

CONEVAL (2023), "Medición de Pobreza 2022". [8]

ECB (2021), "Contingent liabilities: past materialisations and present risks", *Financial Stability Review, May 2021. European Central Bank*. [16]

Ethos (2021), *El impuesto predial: la oportunidad que todos dejan pasar*, Ethos Laboratorio de Políticas Públicas. [12]

FitchRating (2023), "Mexico's Budgeted Pemex Support is Directionally Positive", *Non-Rating Action Commentary*. [17]

IMF (2022), "Mexico: 2022 Article IV. IMF Country Report No. 22/334; November, 2022", *2022*. [5]

INEGI (2023), "Indicador Trimestral de la Actividad Económica Estatal Segundo trimestre de 2023". [1]

Marten, M. and K. van Dender (2019), "The use of revenues from carbon pricing", *OECD Taxation Working Papers*, No. 43, OECD Publishing, Paris. [20]

OECD (2022), "International Survey on Revenue Administration (ISORA): 2020 and 2021". [11]

OECD (2022), "OECD Economic Surveys: Mexico 2022". [3]

OECD (2022), *Revenue Statistics 2022: The Impact of COVID-19 on OECD Tax Revenues*, https://doi.org/10.1787/8a691b03-en. [10]

OECD (2019), *Budgeting and Public Expenditures in OECD Countries 2019*, OECD Publishing, Paris, https://doi.org/10.1787/9789264307957-en. [15]

OECD (2019), *OECD Economic Surveys: Mexico 2019*, OECD Publishing, Paris, https://doi.org/10.1787/a536d00e-en. [14]

OECD (2019), *Supplement to Taxing Energy Use 2019: Country Note - Mexico*, OECD publishing, https://www.oecd.org/tax/tax-policy/taxing-energy-use-mexico.pdf (accessed on 26 October 2021). [19]

OECD (2015), *OECD Guidelines on Corporate Governance of State-Owned Enterprises, 2015 Edition*, OECD Publishing, Paris, https://doi.org/10.1787/9789264244160-en. [18]

OECD (2009), "OECD Review of Budgeting in Mexico", *OECD Journal on Budgeting*. [7]

OECD et al. (2023), *Revenue Statistics in Latin America and the Caribbean 2023*, https://doi.org/10.1787/a7640683-en. [9]

SHCP (2023), "Taxonomía sostenible de México. Primera Edición: Marzo 2023", *Secretaría de Hacienda y Crédito Público (SHCP)*. [6]

Verástegui Niño, E. (2022), "La gestión catastral como mecanismo para aumentar los ingresos de las entidades territoriales por medio del cobro del impuesto predial", *Revista de Derecho Fiscal*, pp. 183-204. [13]

3 Harnessing nearshoring opportunities by boosting productivity and fighting climate change

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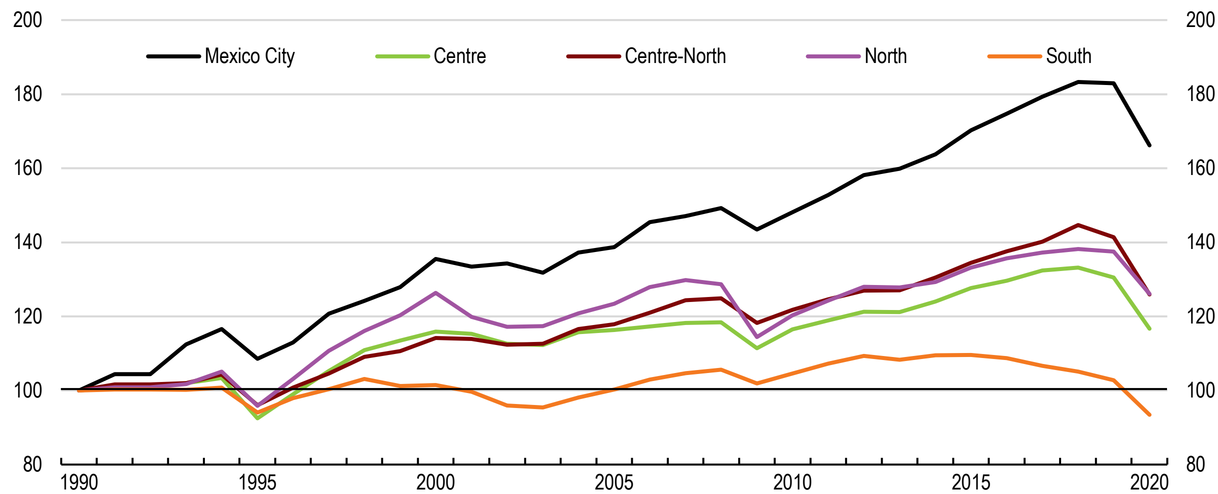
Mexico has large potential to boost its productivity and attract investment from companies looking to relocate their operations to North America. It also has an historic opportunity to spread the benefits of trade throughout the country, integrate SMEs more forcefully into value chains and to create more and better value chain linkages. Nearshoring is also an opportunity to step up efforts to address and mitigate climate change. Fully realising these opportunities will require addressing long standing challenges related to transport and digital connectivity, regulations, the rule of law, renewable energy or water scarcity.

Mexico is very open to foreign trade and investment. The 1994 North American Free Trade Agreement (NAFTA) triggered a transformation of the Mexican economy, which became deeply integrated into global value chains in manufacturing sectors such as auto or electronics, with exports as a share of GDP tripling since 1988. The modernised trade agreement in North America and the ongoing redrawing of global value chains (GVCs) are bringing substantial additional opportunities to Mexico that can help spread the benefits of trade throughout the country, beyond the Northern and Central regions, which greatly benefited from the new export opportunities brought by NAFTA, in contrast with Southern regions (Figure 3.1). Spreading the benefits of nearshoring would also avoid creating excessive agglomeration, adding to already existing difficulties to access affordable housing and public services (see chapter 5), and belts of urban poverty.

The recent upheaval of public investment aims at particularly benefiting southern states. A key infrastructure project is the Interoceanic Corridor of the Isthmus of Tehuantepec, which seeks to create a logistics hub in south-eastern Mexico by connecting the Pacific and Atlantic Oceans through a railway system, both for cargo and passengers. It involves the improvement of ports and the creation of 10 industrial parks.

Figure 3.1. Northern and central regions benefited from increasing trade integration

Real GDP per capita by region groupings, index, 1990 = 100



Note: Data referring to the "South" exclude Campeche, where oil production is concentrated and whose GDP-per capita does not fully reflect living standards.
Source: INEGI.

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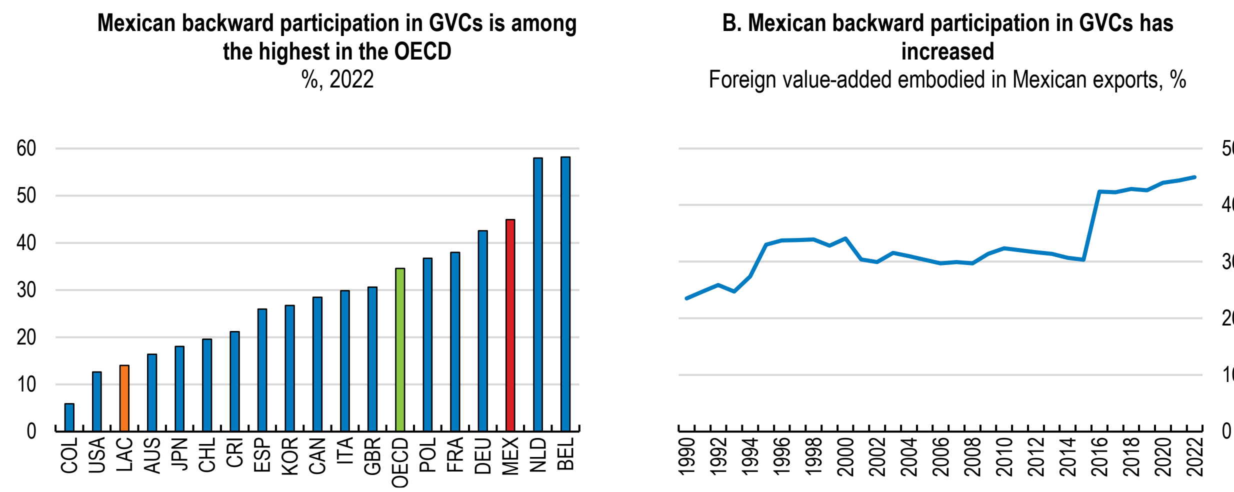
Nearshoring is also an opportunity for Mexico to take a leap forward in the fight against climate change. At a moment when global manufacturing activity increasingly seeks to decarbonize its production processes, Mexico's large and unused renewable energy resources are a remarkable competitive advantage. Shifting to low-carbon energy sources would facilitate both attracting investment and reducing Mexico’s carbon footprint. Enhancing transportation infrastructure and logistics would also reduce emissions associated with the transportation of goods. In the same vein, with companies increasingly factoring in environmental considerations when choosing their manufacturing and production locations, strengthening climate change mitigation can be another avenue to increase competitiveness by enhancing the reliability of certain inputs, such as water, and reducing operational risks for companies.

Nearshoring also holds the promise to improve supply chain linkages, shifting from low-cost assembling processes to higher value-added functions being carried out in Mexico. Mexico is well integrated into GVCs from a backward perspective (i.e. the share of foreign value added in Mexico's gross exports is large). Such participation has been increasing overtime (Figure 3.2 and (Vidal and González Pandiella, forthcoming[1])), serving as a strong engine of exports and jobs. Conversely forward participation (i.e. the share of Mexican value added embodied in foreign countries' exports) is low and shows more limited progress overtime (Figure 3.3).

Figure 3.2. Backward participation in global value chains is high and increasing



Note: LAC is an unweighted average of Chile, Colombia, Costa Rica, Argentina, Brazil, and Peru.
Source: UNCTAD-Eora Multi-Region Input-Output tables (MRIO) (1990-2017); and estimations (2018-2022).

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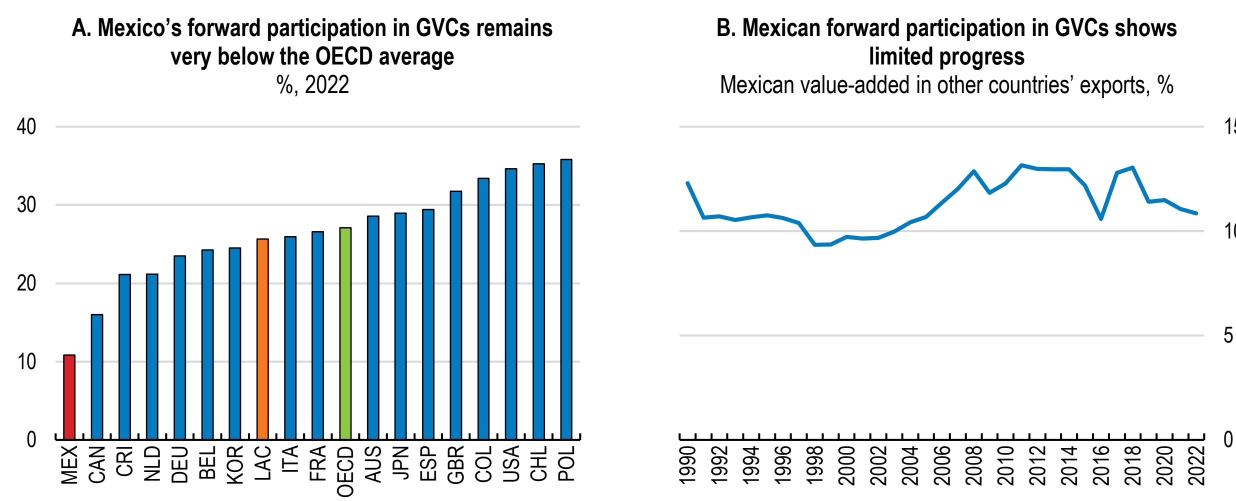
Figure 3.3. Forward participation in global value chain remains low



Note: LAC is an unweighted average of Chile, Colombia, Costa Rica, Argentina, Brazil, and Peru.
Source: UNCTAD-Eora Multi-Region Input-Output tables (MRIO) (1990-2017); and estimations (2018-2022).

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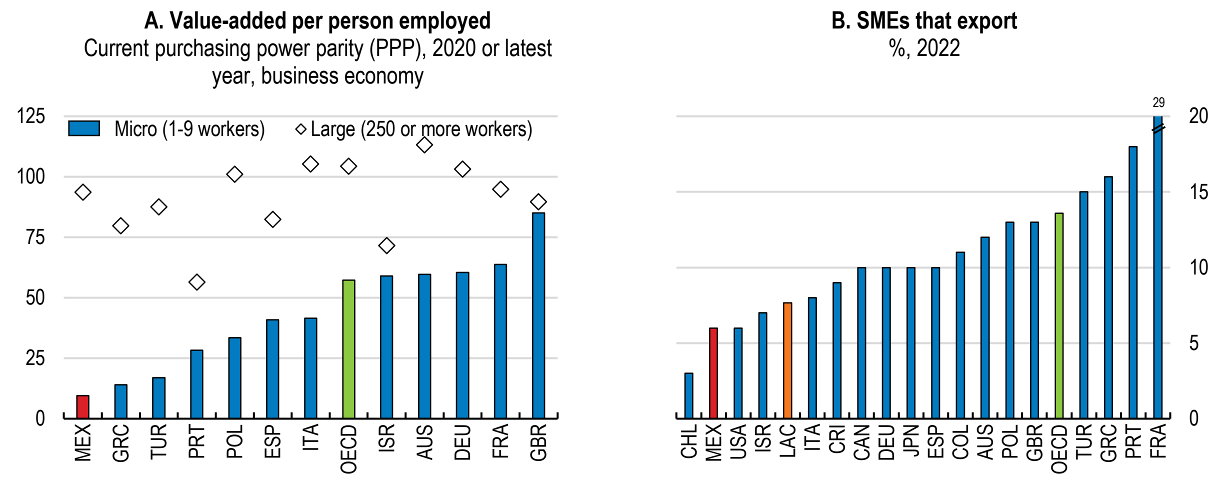
Another key challenge is to increase the participation of Mexico's SMEs in international trade. SMEs are the backbone of the Mexican economy, representing more than 99% of the companies in the country and generating around 70% of employment. But only 5% of SMEs participate in foreign trade. A key barrier is that Mexican SMEs tend to be very small, with a high share of low productive micro-firms below 10 employees (Figure 3.4). Boosting SMEs' productivity is essential for them to access international markets as it enables them to meet international quality standards and to offer competitive prices. A new policy package has been launched (*Mano a mano*, in Spanish) to support SMEs' institutional, digital and financial inclusion. Specific programmes to promote women's participation in trade (*Mujer Exporta Mexico*, in Spanish) have also been deployed.

Figure 3.4. Mexican SMEs have low productivity and few of them export



Note: LAC is an unweighted average of Chile, Colombia, and Costa Rica.
Source: OECD SME and Entrepreneurship Outlook 2023.

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Becoming suppliers or partners for FDI firms can help Mexican SMEs to boost their productivity and value added, as illustrated by positive experiences in some OECD countries (Box 3.1) and could act as a steppingstone for them to operate internationally more extensively. Mexico has put in place a four-stage programme to facilitate SMEs becoming local suppliers of companies growing in Mexico or relocating there. This includes diagnosis of each sector needs, putting in pace training programs targeted at SMEs, and matching processes between local SMEs and foreign firms. Strong collaboration with the private sector will be essential for the success of this initiative. Certification procedures can also facilitate SMEs becoming suppliers to larger firms. By obtaining internationally recognized certifications in areas such as product safety and quality or environmental sustainability, SMEs can demonstrate their commitment to meeting high standards and ensuring product or service reliability, making large firms more inclined to engage with them as trusted suppliers. Going through the certification process tends to be costly and lengthy. Simplifying certification procedures and providing assistance to SMEs, including financial support, can make certification procedures more accessible and increase SMEs chances of tapping into global value chains.

Box 3.1. Facilitating that local SMEs benefit from foreign direct investment flows: the case of Costa Rica

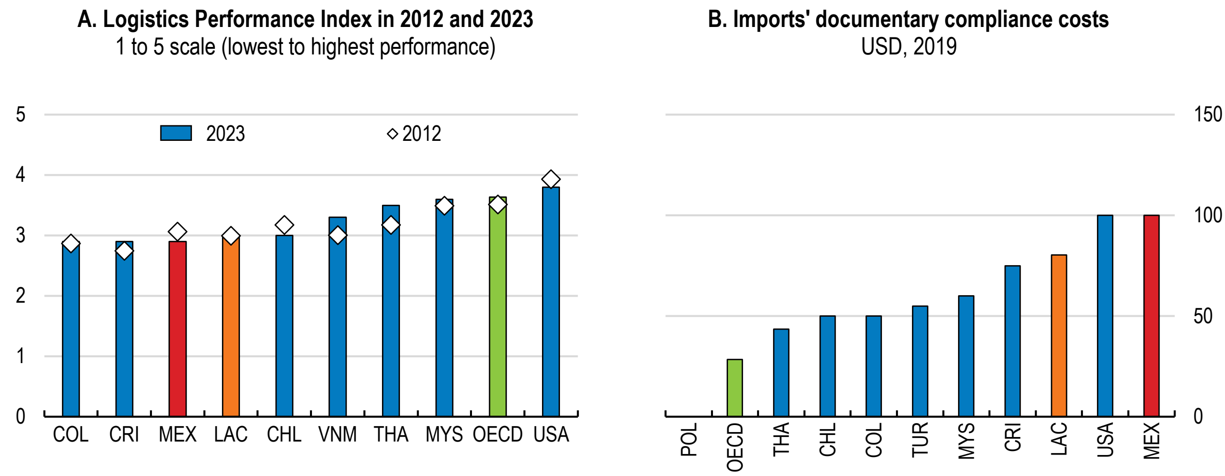
By bringing financing, advanced technology, and know-how to host countries, foreign direct investment can have positive spillover effects on domestic firms. These positive spillovers cannot be taken for granted and empirical evidence about them is mixed. Costa Rica is one of the few cases in which there is robust empirical evidence of positive spillovers (Alfaro-Urena et al., 2019[2]). Firms that supply foreign-owned firms have, four years after the first sale, 33% higher sales, 26% more employees, 22% more net assets, and 23% higher total input costs. Total Factor Productivity increases range from 4% to 9%. Costa Rica has put in place explicit policies to promote these linkages. *Procomer*, a public institution working alongside the Ministry of Trade, offers a series of services to promote linkages between local firms and multinationals firms in the country. They recruit and evaluate local potential suppliers and assess whether they are suited to become providers of foreign firms. Among other elements, they evaluate their infrastructure, production capacity, marketing or human capital and provide them with recommendations and support to upgrade performance. *Procomer* also facilitate exchanges between local firms and international ones through an electronic platform. Around 70% of multinationals participate in these exchanges by detailing their expectations on the products and services to be supplied, visiting potential local suppliers, carrying audits and advising about upgrades to be implemented by local firms. Beyond the traditional matchmaking between domestic SMEs and multinationals, Costa Rica has recently established additional support programmes to strengthen linkages between SMEs and large institutions in the public sector, such as the Social Security Fund or the Costa Rican Electricity company, and in new sectors, such as tourism and agriculture.

3.1. Enhancing logistics and digital connectivity

Mexico's large size implies that the average distance of exports to ports and airports is 3500 kilometres, significantly higher than in peer countries (World Bank, 2022[3]). Improving infrastructure and logistics, including in remote areas, is therefore key to attract investment, boost productivity and would also contribute to reduce carbon emissions. Several infrastructure projects are underway to improve connectivity, including the Interoceanic Corridor of the Isthmus of Tehuantepec, the Maya Train, which interconnects southern states, or suburban trains in Monterrey and Mexico State.

Logistic performance indexes suggest that, beyond improving infrastructure, Mexico has also room to improve the quality of logistics services (Figure 3.5), which encompasses trucking, forwarding and customs brokerage. The cost to import a container following documentary compliance is US$100 in Mexico, compared with less than US$60 in Malaysia, Turkey, and Thailand. Mexico also shows one of the highest import times spent complying with documents (18 days) and at the border (44 days), compared with only 1 and 0 days in Poland or 2 and 7 days in Turkey, respectively (World Bank, 2022[3]). Mexico performs better on the cost and time to export. According to OECD's Trade Facilitation Indicators, Mexico has room to reduce logistics costs by making a greater use of advanced rulings and improving the availability of information, including by digital means, and appeal procedures. These are initiatives which are less demanding in terms of financing than building physical infrastructure, but the resulting payoff could be large. The existing national committee for trade facilitation, putting together relevant government agencies and the private sector, will be a valuable tool to continue moving Mexico towards OECD best practices in trade facilitation. Likewise, the ongoing cooperation with the United States through the High-Level Economic Dialogue to enhance trade facilitation and borders infrastructure can trigger a material improvement in the Northern area. Reducing existing trade barriers in logistics-related services (Figure 3.6), such as customs brokerage, road transportation, cargo handling or storage, would improve competition and reduce costs.

Figure 3.5. There is room to improve logistics



Note: LAC is an unweighted average of Chile, Colombia, Costa Rica, Argentina, Brazil, and Peru.
Source: World Bank Logistics Performance Index 2023.

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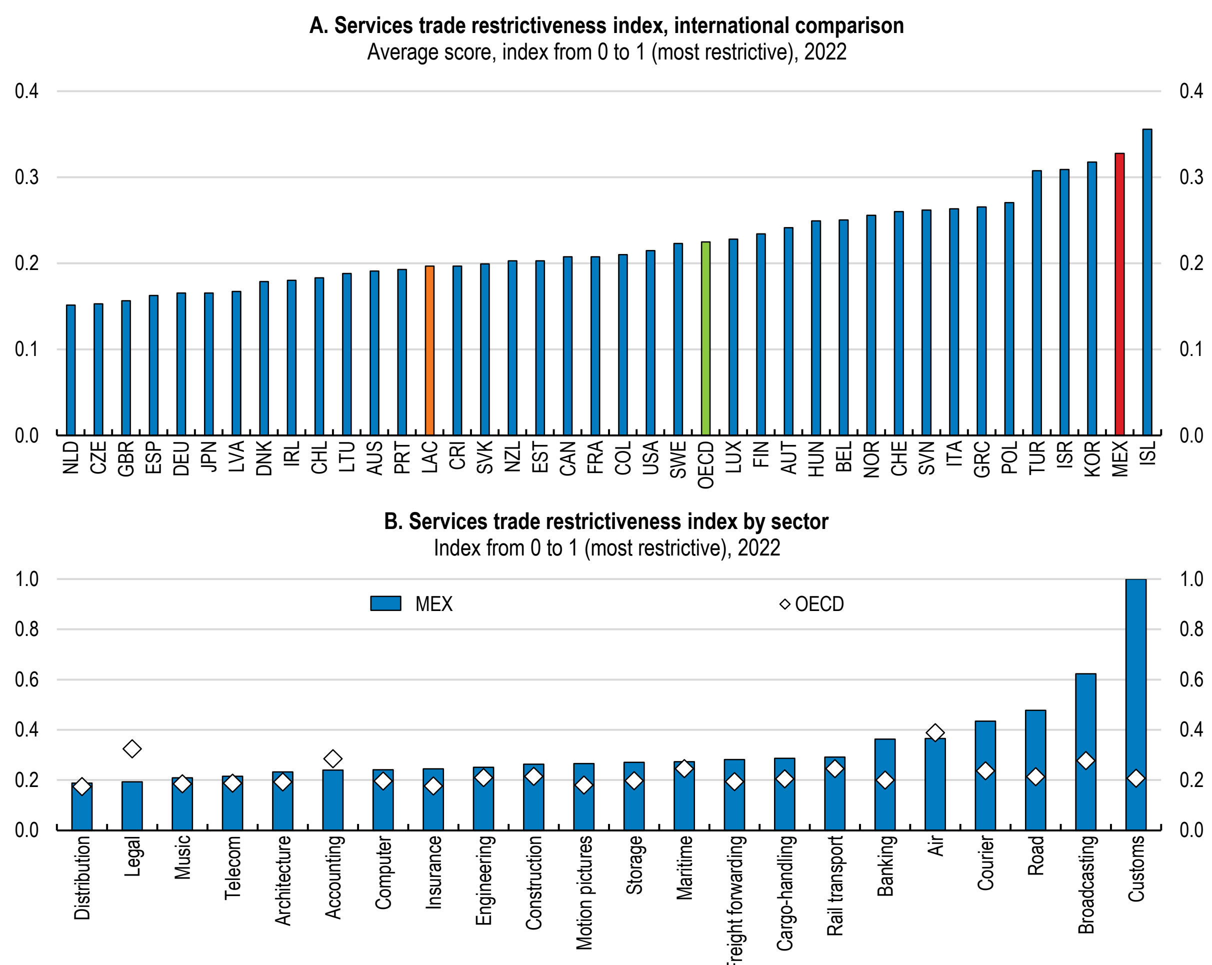
Figure 3.6. Services trade restrictions are high, particularly in logistics



Note: LAC is an unweighted average of Chile, Colombia, and Costa Rica.
Source: OECD Services Trade Restrictiveness Index.

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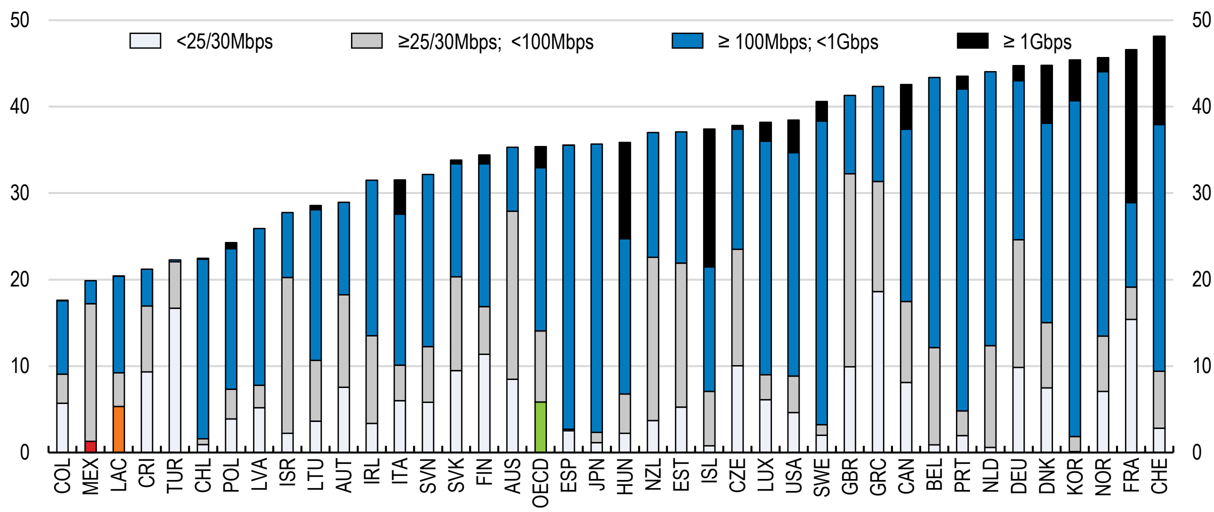
Boosting digital connectivity can also help to overcome remoteness of regions and promote participation of SMEs in international trade. About 30% of entrepreneurs do not have Internet access and rural areas and remote communities are often underserved, with limited access to high-speed internet (Figure 3.7). Access to digital infrastructure is uneven across Mexico (Figure 3.8). While there have been recent investments in digital infrastructure, investment levels in this area are still relatively low compared to other countries. Streamlining regulations would encourage higher investment. The regulatory process is complex and fragmented, with multiple government agencies and regulatory bodies involved in overseeing different aspects of the sector. Regulations tend to be overly complex with significant divergences at the local and municipal level, which is a critical obstacle to infrastructure deployment.

Figure 3.7. Mexico lags in broadband

Fixed broadband subscriptions per 100 inhabitants, by speed tiers, December 2022



Note: Mbps = megabits per second and Gbps = gigabits per second. LAC is an unweighted average of Chile, Colombia, and Costa Rica.
Source: OECD Broadband Portal (database)

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Figure 3.8. Regional differences in digital connectivity are large

Digital infrastructure development index, from 0 (lowest) to 100

Note: The Digital infrastructure development index refers to coverage, access, quality, affordability, and infrastructure of data.
Source: Centro México Digital (2023), *Índice de Desarrollo Digital Estatal 2023*.

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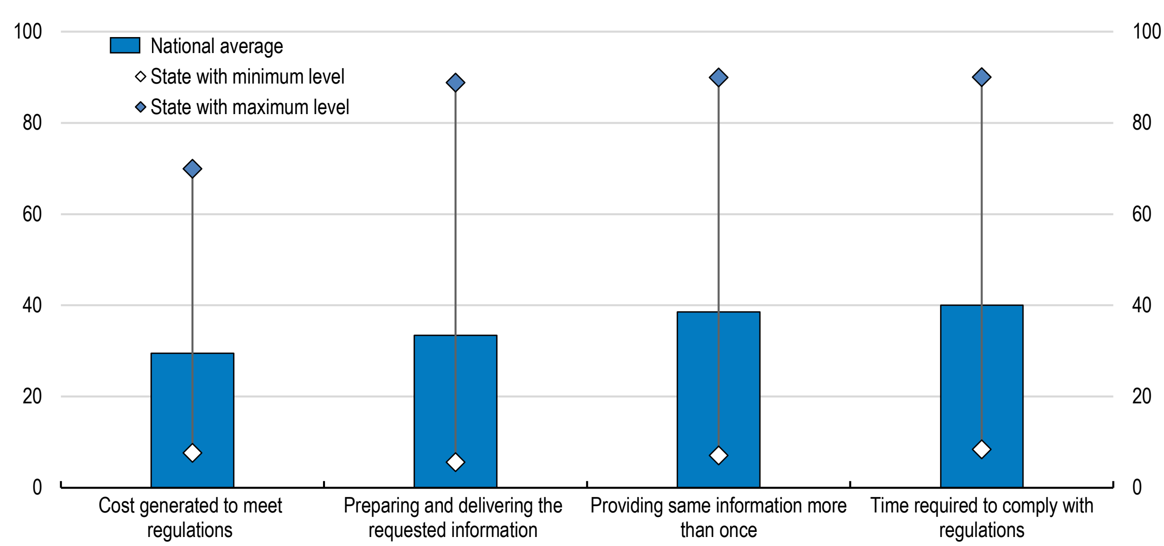
Mexico's ICT market is highly concentrated (OECD, 2022[4]), with one company having more than 60% of mobile subscribers. Limited competition can raise prices and slow the development of new digital infrastructure. Opening markets by favouring the entry of new provides would spur competition, promote investment, enhance access and improve quality. Southern states are likely to benefit the most from it. While the sharing of infrastructure by dominant companies is mandatory, this has not been enforced effectively, with dominant companies challenging the scope and application of the sharing rules. Maintaining an independent and well-resourced telecommunications regulator would be essential to facilitate more competition in the sector and to enforce existing regulations about infrastructure sharing. The federal administration has stopped appointing new commissioners, resulting in several vacancies in the board regulator, which reduces the regulator's scope of action. Filling those vacancies is a first critical step to ensure that the regulator can operate effectively and that the existing regulations to foster competition are fully applied, including by sanctioning incumbent dominant companies when they do not meet the requirements established in laws. Modernising regulations, by applying additional mechanisms to accelerate effective competition, removing obsolete requirements, strengthening cybersecurity or establishing regulations for deploying private networks into industrial parks, would also be key to boost digitalization.

3.1. Strengthening competition

Pro-competition regulation in goods and services markets can lift productivity and facilitate investment, both by domestic and foreign firms. Weak competition favours high prices and rent seeking behaviours and weakens innovation incentives. Fostering competition can also contribute to the fight against climate change. This is particularly the case in energy markets, where higher competition can drive down prices of green energy options and incentivise investment in cleaner and more efficient technologies, contributing to a lower carbon footprint. Mexico's electricity and oil markets are good examples of how strengthening competition, in the case of these two markets by enabling higher private sector participation (see also the renewable energies section below and 2022's Mexico Economic Survey), would simultaneously make Mexico more attractive to attract investment and enhance efforts to combat climate change.

Figure 3.9. Regulatory burden remains high and heterogenous across states

Perceptions of barriers to meet regulatory requirements, % of enterprises, 2020



Source: INEGI, Encuesta Nacional de Calidad Regulatoria e Impacto Gubernamental en Empresas 2020 (ENCRIGE).

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Overall, Mexico has made good progress in improving regulations at federal level, including by establishing regulatory impact assessment. At the same time, Mexico's federal system gives a significant amount of autonomy to its states and municipalities in terms of regulations. While this can allow for greater flexibility and responsiveness to local needs, it also creates a complex regulatory environment with varying requirements and standards across different regions. 40% of Mexican firms cite the time required to comply regulations as a key barrier for their operations. In some states the share reaches 80% (Figure 3.9). Regulations related with the establishment of formal companies, such as licensing and permitting procedures, are particularly complex. This complexity can make it difficult for businesses, particularly SMEs, to navigate the regulatory environment, leading to increased costs and delays in approval processes. It also makes it challenging for firms to grow and to expand across different states, as they would need to navigate varying regulations and compliance requirements, which also hampers competition. It can also create opportunities for corruption, as officials may use their discretion to enforce regulations selectively or demand bribes in exchange for regulatory compliance. Efforts have been made to address this issue in Mexico, such as through the creation of federal standards for certain sectors and the implementation of e-government platforms to streamline regulatory processes. However, further policy efforts are warranted (Table 3.1).

Table 3.1. Past OECD recommendations to enhance productivity

Past OECD recommendations	Actions taken since the 2022 survey
Provide investors with certainty about existing contracts and regulatory stability.	No action taken
Continue to strengthen the fight against corruption, including by boosting technical expertise in anticorruption agencies.	No action taken
Establish a comprehensive strategy to reduce the cost of formalization, including reducing firms' registration costs at the state and municipal level.	No action taken

Establishing regional regulatory harmonization agreements could reduce regulatory heterogeneity and the associated cost. Mexicos's National Commission for Regulatory Improvement (CONAMER), is responsible for coordinating regulatory improvement efforts across different levels of government in Mexico. CONAMER has started to compile the National Catalogue of Regulations, Procedures and Services (*Catálogo Nacional de Regulaciones, Trámites y Servicios*), a tool aiming at compiling information about all regulations from federal government, state and municipal governments. So far regulations from 5 out of 32 states and 7 out of 2541 municipalities are in the catalogue. Work has started with other 123 municipalities. Completing the catalogue would be a key step to enhance transparency. It could be followed up by introducing a legal requirement that government agencies are not entitled to request any document that has been already provided to another government agency. This could reduce regulatory overlaps and encourage the deployment of e-government platforms to allow firms and individuals to submit and track all regulatory requirements online. Some states and municipalities, such as the State of Yucatan and the City of Puebla, have recently put in place one-stop e-government platforms, where all licences and permits to start operations can be resolved online, reducing or eliminating the need for physical visits to different regulatory agencies. Deploying this platforms throughout the country would reduce significantly regulatory burden, benefiting particularly SMEs.

CONAMER has also established certification procedures to promote regulatory improvement across states and municipalities. States, municipalities or federal agencies successfully fulfilling a set of requirements about regulatory improvement established by CONAMER obtain a certificate of regulatory quality. These procedures increase transparency and certainty for firms and individuals and have the potential to trigger simplification efforts across the three levels of government. First certifications were issued in mid-2020. A gradual process of certification is taking place but there is room for a larger share of municipalities and states going through the certification procedures. Efforts to continue promoting and publicizing these certificates and to encourage its adoption, for example by providing additional financing to states adopting them, are warranted.

Beyond regulations, independent and well-resourced competition authorities and sector regulators are critical building blocks for a solid competition framework. Mexico's competition authority ability to attract and retain skilled staff has been hampered by a budget cut and the application of salary ceilings. The scope of action of some regulators has been limited, as some positions in their boards have remained vacant, as no candidate was proposed by the government. Ensuring that the competition authority and regulators in key markets, such as telecommunications or energy, remain independent and operative is fundamental to achieve competitive prices of goods and services that are key inputs for Mexican firms, thereby increasing their competitiveness, the ability to attract foreign investment and improving the prospects for stronger linkages between foreign and domestic companies.

Ensuring investors, both domestic and foreign, with certainty about existing contracts and with regulatory stability, as recommended in the 2022 Economic Survey of Mexico, would also enhance competition. This would facilitate attracting investors, leading to stronger competition within goods and services markets.

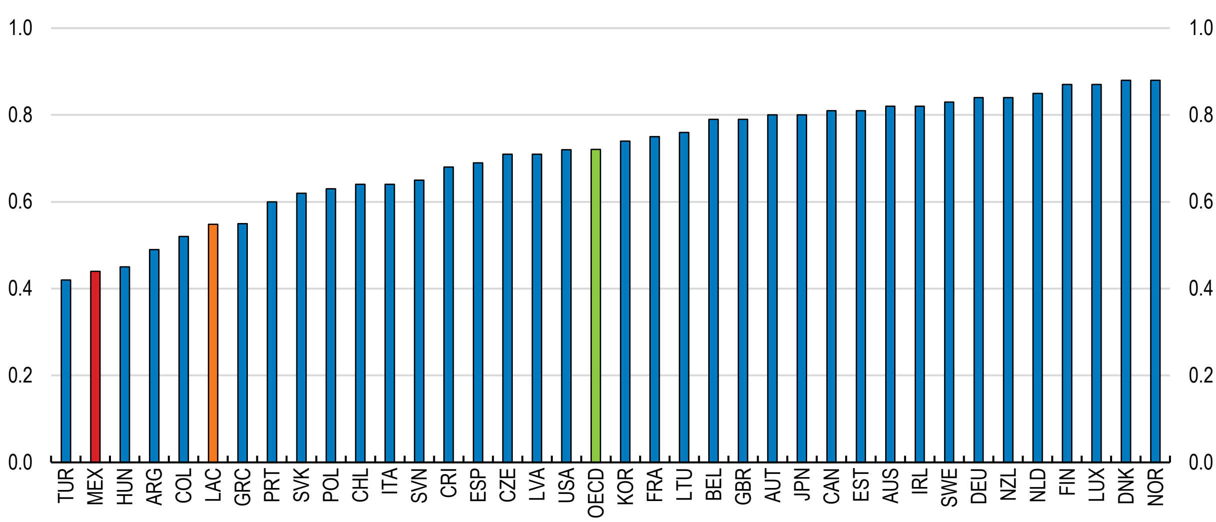
3.2. Improving the rule of law and redoubling efforts to reduce corruption

Governance and the quality of institutions also matters for productivity growth and FDI attraction. A key challenge in Mexico is that, while appropriate legislation may be in place, enforcement is weak (Figure 3.10). This can limit the growth and productivity of domestic SMEs, as they can opt for limiting commercial relationships to avoid having commercial disputes. Weak enforcement also hampers financial inclusion, by complicating collateral seizures. Enforcement of environmental standards and regulations, which have become more sophisticated in Mexico City and other major cities , is also lacking (SGI, 2022[5]), hindering the green transition.

Improving law enforcement would also help in the fight against crime, which remains high (Figure 3.11), is a key concern for firms (Figure 3.12) and hinders citizens' well-being, particularly women. Low enforcement means that impunity remains also high, reaching 90% in some states. Crime and impunity translate into higher costs for firms, limiting the potential benefits of nearshoring. They increase the need to invest in safety measures, diverting resources that firms could have invested in productivity-enhancing areas.

Figure 3.10. Enforcement of existing legislation is low

Extent to which legislation is fairly and effectively implemented and enforced, index from 0 to 1 (highest), 2023



Note: LAC is an unweighted average of Chile, Colombia, Costa Rica, Argentina, Brazil, and Peru.
Source: Factor 6 of the World Justice Project Rule of Law Index.

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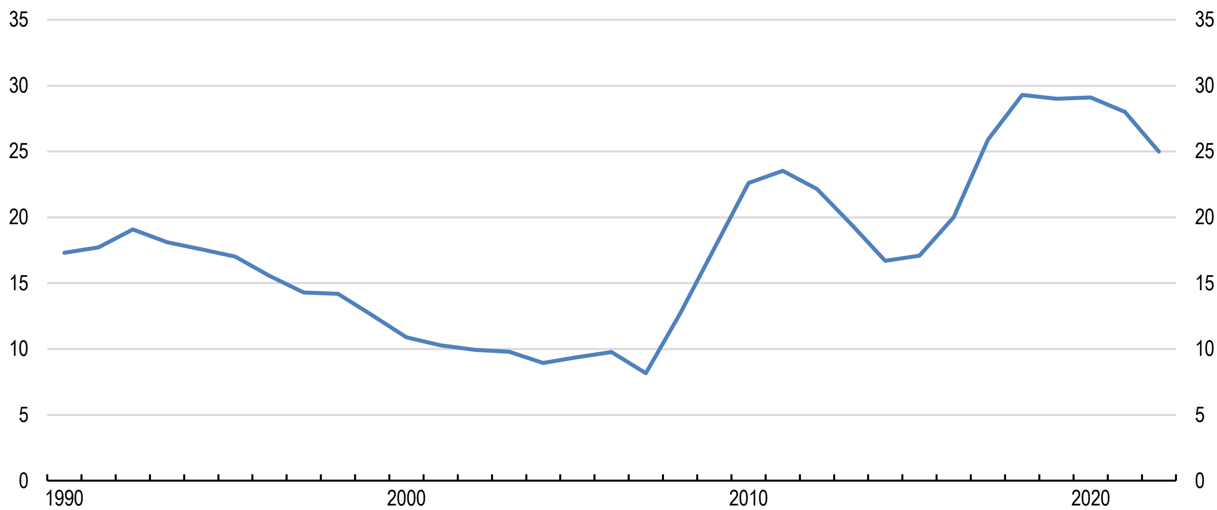
Figure 3.11. Crime remains high

Homicide rate per 100,000 inhabitants



Note: Data for 2022 are provisional.
Source: INEGI: and Consejo Nacional de Población.

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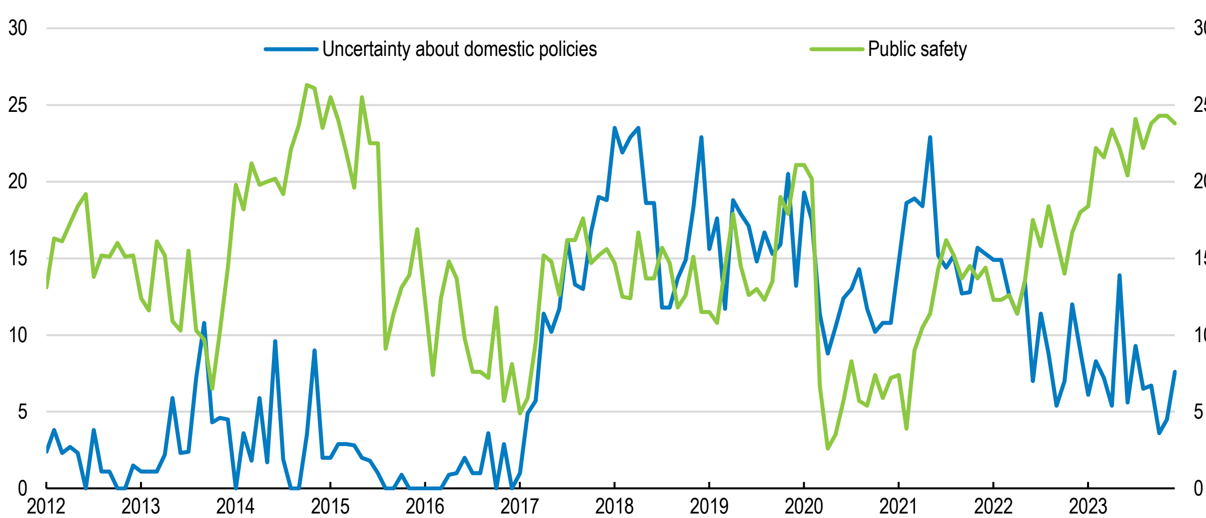
Figure 3.12. Public security and uncertainty about domestic policies are perceived to limit growth

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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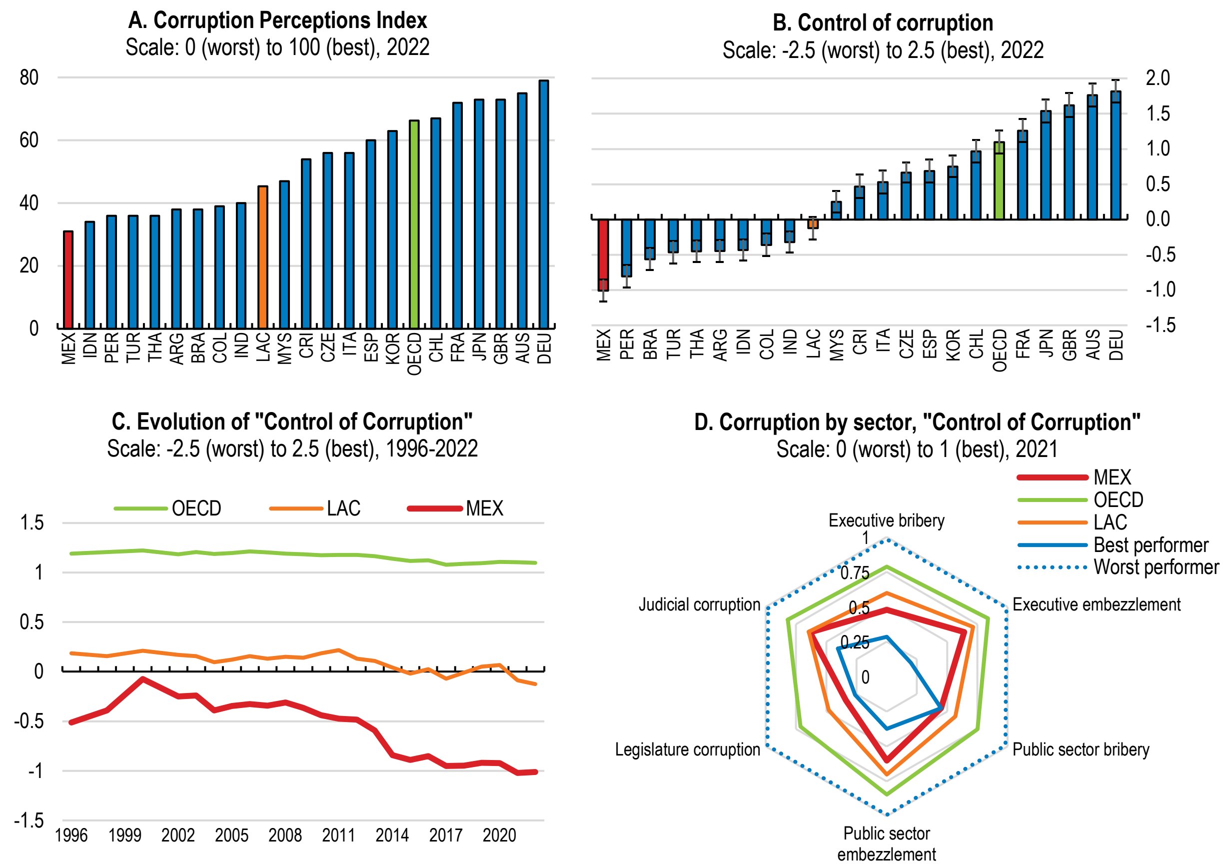
The federal government's spending on public security and justice accounted for 1.3% of GDP in 2020, below the 1.5% of GDP recorded in 2018. Ensuring that the judiciary system, including judges, lawyers and police, receive adequate resources, training, an integrity framework and technology, would be key to accelerate the decline in crime rates and speed courts performance, which would help to reduce impunity and improve contract enforcement. Efforts to increase the digitalization of the Mexican justice system would be particularly valuable. By implementing modern technologies, such as digital case management systems, electronic evidence submission, and online court proceedings, the justice system can streamline processes, reduce paperwork, and expedite case resolutions. Digital platforms can also enhance transparency and accessibility, allowing citizens to track their cases online and reducing the likelihood of corruption. Data analytics can also assist judges and law enforcement agencies in making informed decisions and allocating resources more effectively. Increasing the use of out-of-court mediation mechanisms to settle commercial disputes would also help to accelerate commercial disputes resolution and alleviate pressures in courts. The successful experience of some municipalities previously burdened by high criminal violence suggests that strengthening collaboration between citizens, the three levels of government and the respective military and police forces, providing them with top technology and improving police remuneration, can help to reduce crime and violence (Aguayo and Dayán, 2021[6]).

Mexico has been making efforts to fight corruption, including the launch of a National Anti-Corruption System, which included a new anti-corruption prosecutor's office and an independent administrative tribunal, although the impact of these efforts remains to be tested in practice. It also created a Citizen Participation Committee to oversee and provide input on anti-corruption measures. Efforts have been also pursued at state level, with heterogenous results. Corruption perceptions continue well above those in OECD and regional peers (Figure 3.13). Pursuing policy efforts in this area is therefore warranted. Strengthening the resources and independence of anti-corruption agencies, including at state level, would increase their ability to investigate and prosecute corruption cases more effectively. Indeed, of the 31 445 cases opened by state anticorruption attorneys, only 243 ended up in a sanctioning sentence (less than 1%). Ensuring the full appointment of key positions in the anti-corruption institutions is critical for its functioning. There is also room to increase the use of public procurement, to limit the scope for corruption in direct awards. Some states have made good progress in strengthening public procurement governance and limiting direct contracting (OECD, 2023[7]). Replicating these efforts in other states would boost public spending efficiency and reduce the scope for corruption. Increasing the use of e-procurement processes and professionalising the public procurement workforce, both in the federal government and at state level, has also good potential to reduce the scope for corruption, as illustrated by experiences in several OECD countries (Box 3.2).

Box 3.2. E-procurement can help fight corruption – experience from some OECD countries

E-procurement, the use of information and communication technologies in public procurement, can increase transparency, reduce direct interaction between procurement officials and companies, increasing competition and allowing for easier detection of irregularities and corruption, such as bid rigging schemes. The digitalisation of procurement processes strengthens internal anti-corruption controls and detection of integrity breaches, and it provides audit services trails that may facilitate investigation activities (OECD, 2016[8]). Korea introduced in 2002 a fully integrated, end-to-end e-procurement system called KONEPS, which covers the entire procurement cycle electronically. Evaluations signalled a significant increase in integrity perceptions after adopting KONEPS. Estonia also illustrates the merits of putting in place user-friendly e-procurement processes. The register is free of charge for all contracting authorities and suppliers and offers the full range of e-procurement services, including e-notification, e-access and e-submission. After the introduction of e-procurement in Estonia, corruption cases related to public procurement remain limited (EC, 2015[9]).

Figure 3.13. Corruption perceptions remain high



Note: LAC is an unweighted average of Chile, Colombia, Costa Rica, Argentina, Brazil, and Peru. Panel B shows the point estimate and the margin of error. Panel D shows sector-based subcomponents of the "Control of Corruption" indicator by the Varieties of Democracy Project.
Source: Panel A: Transparency International; Panels B & C: World Bank, Worldwide Governance Indicators; Panel D: Varieties of Democracy Project, V-Dem Dataset v12.

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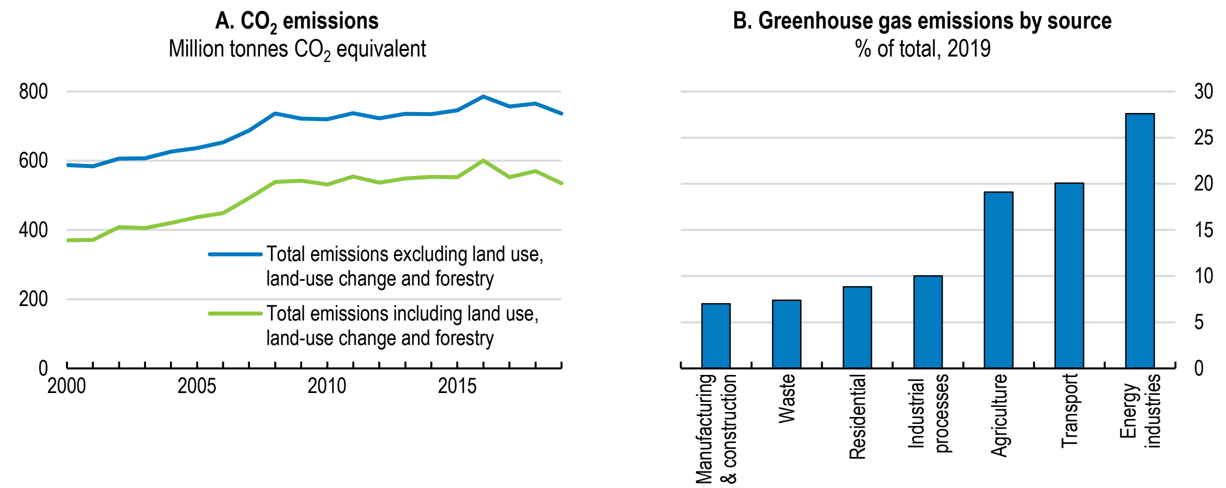
3.3. Reducing emissions by shifting to renewable energies and strengthening carbon pricing

Mexico's large renewable resources stand as a potent competitive advantage, aligning with ongoing manufacturing companies' efforts to decarbonize their production process, which requires abundant clean energy. Mexico's renewable resources are well distributed throughout the country, facilitating that all Mexican regions could reap the benefits of nearshoring. Solar power potential is very high in large parts of the country, particularly in the west. Moreover, the southeast region combines significant solar, wind and geothermal potential and the largest water resources in Mexico. This gives the region the potential to become an energy hub, exporting clean energy to the rest of the country and to Central America.

Figure 3.14. Energy and transport sectors are the largest emitters



Source: OECD, "Air and climate: Greenhouse gas emissions by source", OECD Environment Statistics (database); and OECD Green Growth Indicators.

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Carbon pricing is increasing in many countries, which has triggered concerns about carbon leakage and some proposals to introduce border carbon adjustment mechanisms (EU, 2023[10]). At the same time, Mexico is already suffering from climate change and has one of the highest prevalence of extreme climate-related events in Latin America (Cárdenas et al., 2021[11]). Mexico updated its Nationally Determined Contributions (NDC) in 2022, committing to reduce greenhouse gas (GHG) emission by 35% from business-as-usual levels by 2030 without condition, and by 40% if external support is secured. These updated targets are less ambitious than those set in 2016, are not consistent with the 1.5°C temperature limit in the Paris Agreement (Climate Action Tracker, 2022[12]), and do not set net zero targets nor targets beyond 2030. Thus, stepping efforts to transition towards carbon neutrality would help to address and mitigate climate change and, at the same time, would help Mexico to maintain and reinforce its trade competitiveness in a global economy that is transitioning towards lower carbon content.

A forceful shift to renewables energy would be a key building block in such strategy to reduce GHG emissions, as energy and transport sectors are the largest emitters (Figure 3.14). Conversely, the land use, land-use change and forestry sector has been a stable sink of GHG emissions over the last 20 years. Transitioning towards massive urban and interurban transport, as discussed and recommended in the 2022 Economic Survey and in chapter 5 in this survey, would also be key to reduce traffic congestions and emissions.

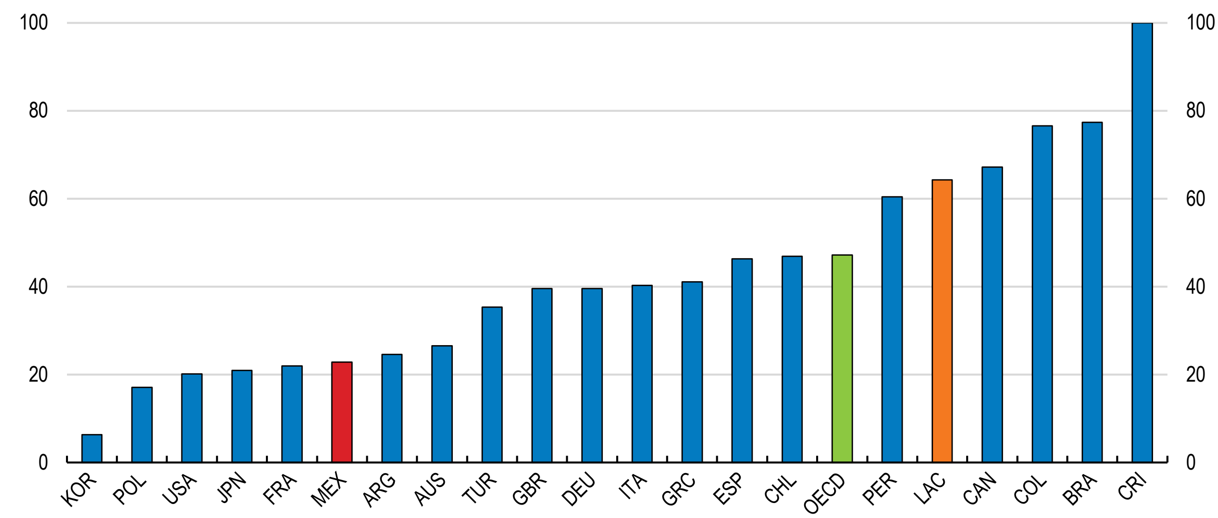
Improving carbon pricing is another key building block of a more forceful decarbonization strategy. Mexico was the first emerging economy to introduce a carbon price in 2014. At 2 EUR per ton of CO_2, the federal carbon tax is well below the low-end estimate of climate-related costs of carbon emissions of around 60 euros per tonne (Marten and Dender, 2019[13]). It covers road fuels, but not fuels used in other sectors, such as natural gas, and coal is taxed at a reduced rate. Broadening the carbon tax base and gradually increasing the rate would induce further emission cuts. It also implies significant political economy challenges. Phasing in 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. Besides higher carbon taxes, non-price measures will also be needed to address climate change (OECD, 2022[4])].

Mexico piloted in 2020 and 2021 an emissions trading scheme, the first in Latin America, covering 300 large entities in the energy and industry sector. During the pilot phase emission allowances were freely allocated. The pilot phase was planned to be followed by a transition to a fully-fledged emission trading scheme in 2023 with several hundred companies expected to participate. Pursuing these plans would be a significant step ahead to reduce emissions.

Despite the strong renewables potential, about 90% of primary energy supply comes from fossil fuels and the share of electricity generated from renewable sources remains low in comparison with OECD and peer regional countries (Figure 3.15). By law at least 35% of electricity generation should come from clean energy sources by 2024, including hydroelectric, however, this share stood at 26.1% in 2022 down from 27.5% in 2021 (IMCO, 2023[14]) and both wind and solar generation fell during 2022 for the first time since there are registers.

Figure 3.15. The share of electricity generated from renewable sources is low

% of total electricity generation from renewable sources, 2021 or latest year



Note: LAC is a simple average of Chile, Colombia, Costa Rica, Argentina, Brazil, and Peru.
Source: OECD Green growth indicators.

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While recent government initiatives, including the Sonora Plan to build the largest solar plant in Latin America and new projects executed by the public utility company aim at increasing renewables generation, more will be needed to convert Mexico's renewables potential into a competitive advantage. Critically, it will require regulations that promote private sector investment in renewables projects and regulatory and legal certainty. Since 2018 private sector renewable generation has been subject to large uncertainty. In 2019 long-term auctions for renewable energy generation were suspended. In 2021 a constitutional reform proposal established a guaranteed market share for the state-owned electricity company of at least 54% and eliminated independent regulators overseeing competition and granting permits (OECD, 2022[4]). Once regulations promoting private sector investment get in place, ongoing efforts to develop sustainable financing instruments (see Chapter 2) can make an important contribution to greening the electricity matrix, by facilitating that private sector projects get financing at better terms.

Improving transmission and distribution infrastructure will also be essential. Transmission and distribution grids have suffered from underinvestment for some time. Saturation and congestion in several corridors have increased (Carrillo et al.;, 2022[15]), and will increase further, as electricity demand is expected to grow significantly. Since 2013, the state company in charge of the grids has not spent the resources allocated in the federal budget for physical investment in transmission. Ensuring that budget allocations are used to improve the grids, and gradually increasing investment, will be essential to ensure a reliable and cost-effective availability of clean electricity around the country.

The shift to renewable energies could have a marked impact on workers in regions highly dependent on oil, such as Campeche or Tabasco. Deploying comprehensive training programs for displaced workers, equipping them with the necessary skills to access job opportunities in new sectors, is key to minimise the social impact of job displacements. It can also facilitate addressing skill shortages in thriving sectors, such as those related to new manufacturing activities getting relocated to Mexico or those related with the deployment of renewable energy parks.

3.4. Improving water management

Ensuring sustainable water management is paramount to leverage nearshoring opportunities effectively. Efficient water management would not only safeguard the country's limited water resources but also enhance the reliability of water supply for businesses, reducing operational risks and costs. It should also be a key building of Mexico's climate change adaptation strategy and, by promoting environmental sustainability and compliance with international standards, would make Mexico an even more appealing destination for nearshoring.

Over the past decades, the amount of water available for each person has declined drastically due to climate change and population growth and Mexico has one of the lowest shares of the population connected to public wastewater treatment plants in the OECD (OECD, 2017[16]). A key challenge to better water management is improving the accuracy and availability of up-to-date data on water resources, use, and quality. There is also room to strengthen water governance, as responsibilities are highly fragmented, which hampers policy coordination and accountability. There is a mandate from the Supreme Court to issue a General Water Law by August 2024, which is an opportunity to improve water governance and regulations, for example by granting the National Water Commission (CONAGUA) a stronger stewardship role in the sector. The methodology to set water tariffs is heterogeneous, as it is decided at municipal level, and lacks transparency (IMCO, 2023[17]). Prices do not reflect the cost of the provision of water, with the difference being covered trough subsidies from the Federal Government. Mexico needs also to invest in water supply and sanitation infrastructure to reduce leakages – currently around 46% of water is lost due to leakages (Lopet et al., 2017[18]) – and improve water treatment and distribution. Such investments could be supported by enhancing the cost-recovery capacity of tariffs. Affordability issues can be tackled through targeted transfers to low-income households.

Table 3.2. Policy recommendations to boost productivity and fight climate change

MAIN FINDINGS	CHAPTER 3 RECOMMENDATIONS (Key recommendations in bold)
Boosting productivity	
Large infrastructure projects are underway to improve connectivity but there is room to enhance logistics and trade facilitation.	Make a greater use of advanced rulings at customs and improve the availability of information, including by digital means, and appeal procedures. Remove foreign direct investment restrictions in logistics-related services, such as customs brokerage, road transportation, cargo handling or storage.
Certification procedures can facilitate SMEs becoming suppliers to larger firms by demonstrating their commitment to meeting high standards and product reliability. Going through the certification process is costly and lengthy.	Simplify certification procedures and support SMEs, including financially, in achieving certifications in areas such as product quality or environmental impact.
Many parts of the country still lack access to high-speed internet. Regional differences in digital connectivity are large. The telecommunication market remains very concentrated.	**Streamline and harmonize e-communications regulations.** Enforce the sharing of the digital infrastructure. **Maintain an independent and well-resourced telecommunications regulator and ensure that existing regulations to foster competition are fully applied.** Modernise telecommunication regulations by strengthening cybersecurity, establishing regulations for deploying private networks into industrial parks and removing obsolete requirements.
The regulatory framework is complex and imply high compliance costs due to heterogeneous requirements and standards across states and municipalities. Procedures have been established to promote regulatory improvement across states and municipalities. There is room to increase their take-up.	Complete the National Catalogue of Regulations, Procedures and Services. **Continue to deploy e-government platforms at state and municipal level to allow firms to submit and track all regulatory requirements online**. Further promote regulatory improvement certificates and encourage its adoption by providing additional financing to states adopting them.
The competition authority ability to attract and retain skilled staff has been hampered by a budget cut and the application of salary ceilings. The scope of action of some regulators has been limited, as some positions in their boards have remained vacant.	Ensure that the competition authority and regulators in key markets, such as telecommunications or energy, remain independent and operative.
Enforcement of existing legislation is weak. Crime and impunity remain high in many states, hindering economic activity and citizens' well-being, particularly impacting women.	Further advance the digitalization of the judiciary system by providing it with adequate resources and training. Increase the use of out-of-court mediation to settle commercial disputes. Strengthen collaboration between the three levels of government and the respective police and military forces and the interconnection of their IT systems.
Corruption perceptions remain high. The coverage of public procurement is low. Direct awards create opportunities for corruption.	**Continue to strengthen the fight against corruption, including by strengthening the resources, technical expertise, and independence of anti-corruption agencies, including at the state level.** Limit direct awards and increase the use of public procurement. Strengthen e-procurement processes in federal and state governments by covering all the public procurement cycle and adopting internationally accepted standards. Strengthen the professionalization of the public procurement workforce.
Increasing renewables and improving carbon pricing and water management	
The bulk of primary energy use comes from fossil fuels. Mexico's renewable resources potential are large and well distributed throughout the country. Regulation uncertainty undermines renewables generation. Transmission and distribution grids suffer from underinvestment.	**Adopt regulations that promote private sector participation in renewables generation, ensure legal certainty and expand and improve electricity transmission and distribution infrastructure.**
The carbon price is well below the low-end estimate of climate-related costs of carbon emissions	**Gradually increase the carbon tax, broaden its base, and use part of the revenues to offset the effects of higher energy prices on low-income households.**
Water stress is high and being exacerbated by climate change, over-extraction, inefficient water management, and pollution. Policy responsibilities are highly fragmented, hampering coordination and accountability. Forty-six percent of water is lost due to leakages.	Enhance the water information system to ensure it provides accurate and up-to-date data on water availability, use, and quality. Improve water governance and regulations by grating the National Water Commission a stronger stewardship role. Gradually increase investment in infrastructure for water treatment and distribution. Improve the methodology to set water tariffs to enhance their cost-recovery capacity.

References

Aguayo and Dayán (2021), “Defeating Los Zetas. Organized Crime, The State and Organized Society in La Laguna, Mexico, 2007-2014”, *El Colegio de Mexico*. [6]

Alfaro-Urena et al. (2019), “The Effects of Joining Multinational Supply Chains: New Evidence from Firm-to-Firm Linkages”, *Avaiable at SSRN*, https://ssrn.com/abstract=3376129 or http://dx.doi.org/10.2139/ssrn.3376129. [2]

Cárdenas et al. (2021), “Climate policies in Latin America and the Caribbean. Success Stories and Challenges in the Fight Against Climate Change”, *Inter-American Development Bank*. [11]

Carrillo et al.; (2022), “The energy Mexico needs”, *IMCO*. [15]

Climate Action Tracker (2022), *Country Assessments: Mexico*, https://climateactiontracker.org/countries/mexico/ (accessed on 20 October 2021). [12]

EC (2015), “Public procurement – Study on administrative capacity in the EU Estonia Country Profile”. [9]

EU (2023), “Carbon Border Adjustment Mechanism regulation in the Official Journal of the EU”, *European Union, 17 May 2023*. [10]

IMCO (2023), “El costo del agua en México: Un análisis de tarifas y de sus impactos para la sociedad.”. [17]

IMCO (2023), “Se estanca el crecimiento de las energías eólica y solar fotovoltaica en México”, *Nota Informativa*. [14]

Lopet et al. (2017), “El agua en México. Actores, sectores y paradigmas para una transformación social- ecológica”, *Fundación Friedrich Ebert.*. [18]

Marten, M. and K. Dender (2019), “The use of revenues from carbon pricing”*, OECD Taxation Working Papers*, No. 43, OECD, Paris. [13]

Marten, M. and K. van Dender (2019), “The use of revenues from carbon pricing”*, OECD Taxation Working Papers*, No. 43, OECD Publishing, Paris. [20]

OECD (2023), “Follow-up Review on Public Procurement in the State of Mexico. Identifying Critical Reforms for the Future”. [7]

OECD (2022), “OECD Economic Surveys: Mexico 2022”. [4]

OECD (2019), *Supplement to Taxing Energy Use 2019: Country Note - Mexico*, OECD publishing, https://www.oecd.org/tax/tax-policy/taxing-energy-use-mexico.pdf (accessed on 26 October 2021). [19]

OECD (2017), “Improving climate adaptation and water management. Mexico Policy Brief”. [16]

OECD (2016), “Preventing Corruption in Public Procurement”. [8]

SGI (2022), “Sustainable Governance Indicators: Mexico Note”. [5]

Vidal and A. González Pandiella (forthcoming), “A review of Mexico’s participation in Global Value Chains”, *Technical Background Paper*. [1]

World Bank (2022), “Productivity Growth in Mexico. Undestanding main dynamics and key drivers”. [3]

4 Reducing inequalities and bolstering growth

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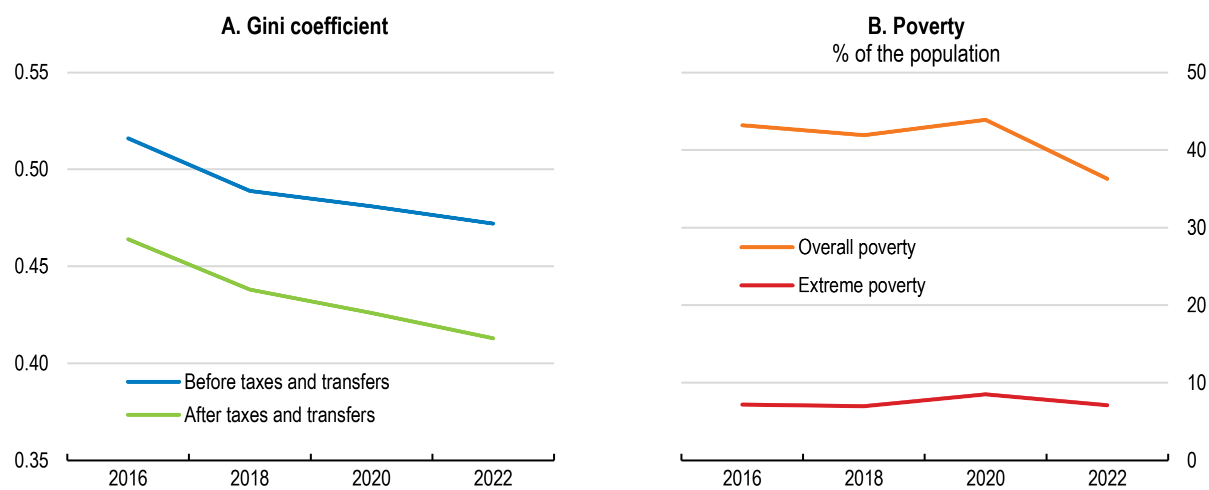
Continuing the recent fall in income inequality and poverty will necessitate stepping up efforts to both address pressing social issues and bolster economic growth. Redoubling efforts to improve education outcomes would help Mexicans gaining the skills needed to participate in an evolving job market and boost Mexico's growth potential. Mexico has much to gain from closing gender participation gaps, as it would lead to stronger growth overall and to a more equitable distribution of income and opportunities. Reducing informality would not only ensure greater job security and social protection for workers but also stimulate economic growth.

Reducing income inequality and poverty are long-standing challenges for Mexico. After increasing during the pandemic, both inequality and poverty rates have recently fallen (Figure 4.1). Increases in minimum wages and in some social transfers, particularly universal non-contributory pensions, contributed to that outcome. Around 34% of Mexican households are receiving support from government social programmes, up from 28% in 2018 (CONEVAL, 2023[1]). Despite this progress, extreme poverty has remained broadly stable around 7%. This chapter discusses the critical long-standing challenges of improving education outcomes and reducing gender gaps and informality, which are key to continue alleviating poverty and inequalities in Mexico and to stimulate economic growth. Besides addressing these challenges, improving the targeting of social programmes is another pending challenge, as discussed in detail in the 2022 Economic Survey. Building a national registry of social programmes beneficiaries, covering programmes run by different levels of government, as recommended in that survey, would be a decisive step to improve targeting and reduce inequality and poverty.

Figure 4.1. Income inequality and poverty have recently fallen but extreme poverty less so



Note: Panel B uses the multi-dimensional indexes of poverty compiled by CONEVAL. The population in (extreme) poverty refers to people with an insufficient monthly income to acquire necessary food, goods and services (food) and with at least one (three) social deficiency.
Source: México cómo vamos; CONEVAL.

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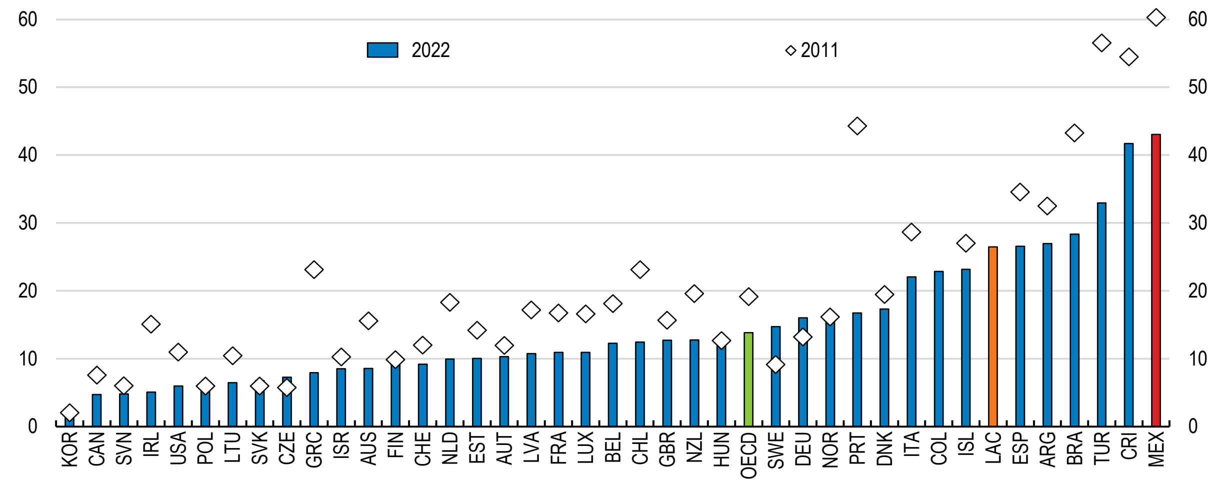
4.1. Redoubling efforts to enhance human capital

Mexico has a relatively young population, with significant potential to adapt to global trends that are reshaping skill needs, such as digitalization or decarbonization. Good skills are also becoming central in strategies to attract foreign direct investment. Realizing this potential requires tackling two challenges. First, while access to education is nearly universal in Mexico, still too many students leave the education system without completing secondary education (Figure 4.2). A second challenge is that there is room to increase education quality (Figure 4.3, panel A) and to reduce regional differences (Figure 4.3, panel B). Moreover, Mexico's education system was severely impacted by the pandemic, which caused one of the longest schools' closures in the OECD and widened educational lags (CONEVAL, 2023[1]). As in other OECD countries, 2022 PISA results were down in Mexico compared to 2018 in mathematics, science and reading. The fall was particularly acute in mathematics, as it reversed most of the gains observed over the 2003-2009 period, and average scores returned close to those observed in 2003 (OECD, 2023[2]).

Figure 4.2. Many students leave the education system before completing secondary education

Percentage of 25-34-year-olds with below upper-secondary education as the highest level attained



Note: LAC is a simple average of Chile, Colombia, Costa Rica, Argentina, and Brazil.
Source: OECD Education Database.

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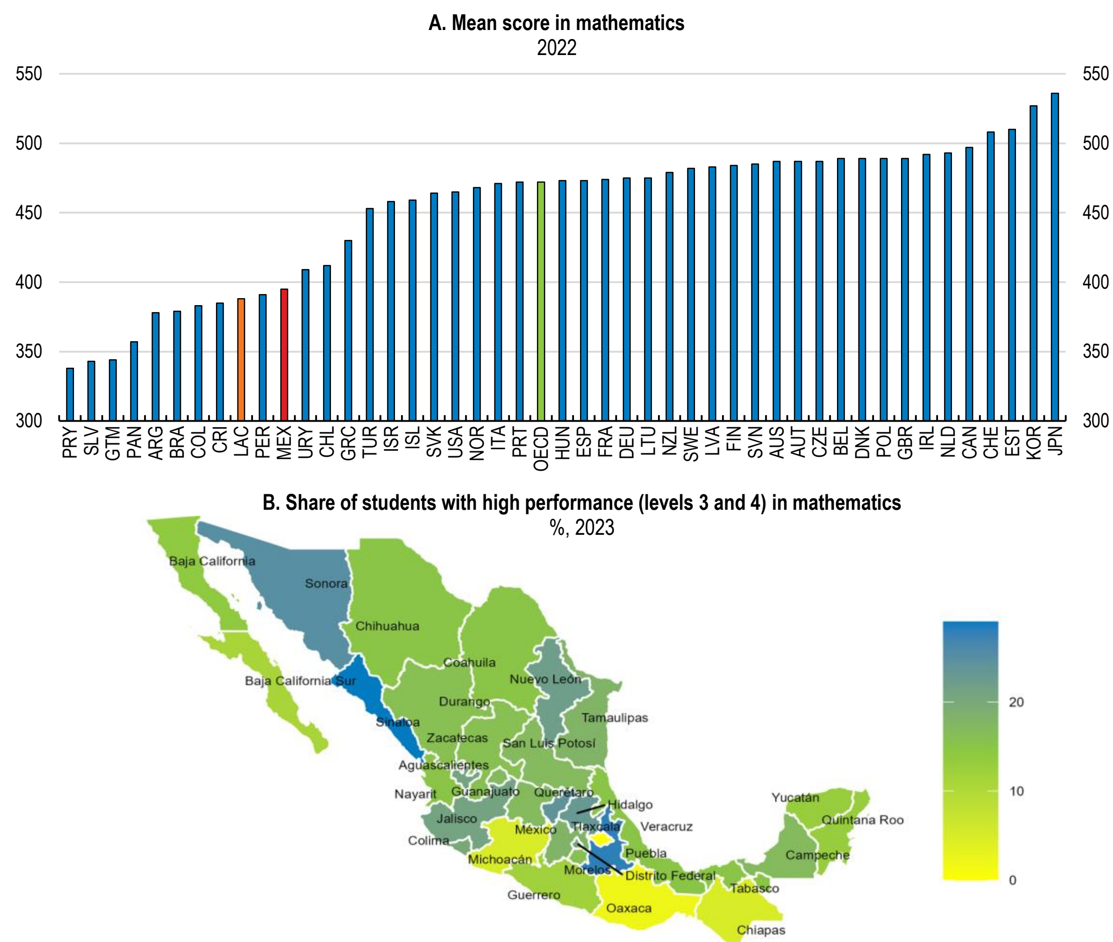
Figure 4.3. Education quality lags and regional differences are large



Note: Panel A: LAC is an unweighted average of Chile, Colombia, Costa Rica, Argentina, Brazil, and Peru.
Source: OECD PISA International Dataset; Instituto Mexicano para la Competitividad.

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Overall, a first worthy step would be to assess the effectiveness of the education system as a whole with a view to design and set up measures to increase graduation rates and quality, as illustrated by positive experiences in several OECD countries (Box 4.1). More comprehensive and homogeneous information about registered students, number of teachers and individual students' trajectories would enable a robust evaluation of education policies, help to adjust its design, and make the most of education spending. It would also allow putting in place early warning mechanisms to identify students in need of targeted tutoring support and assessing and resolving teachers' training needs.

For younger children, extending schedules beyond the current 4.5 hours per day at primary school would have a positive and long-lasting impact on students' performance and decrease delays in schooling completion (Cabrera-Hernández et al., 2023[3]), particularly in schools in more vulnerable areas (CONEVAL, 2018[4]). Strengthening early childhood education and care would also particularly improve education outcomes of children in low-income households. Both lengthening primary schools' schedules and widening the availability of early education would also facilitate female labour market participation, as elaborated in the next section of this chapter.

Box 4.1. Countries experience with improving education outcomes through data and evaluation

Several OECD countries have stepped up efforts to improve educational data systems and to foster robust evaluations to upgrade education policies.

- Collecting comparable data: Australia and the United States, countries with highly decentralized education systems, as Mexico, illustrate the benefits of collecting comparable data and having a shared information system. For example, in the state of Maryland in the United States, whose public school system is among the highest performers nationwide, schools use data to monitor learning progress and student's needs. Australia built a national repository of detailed information on all schools in the country, based on a legal framework established at federal level which ensures regular and mandatory reporting by schools. Funding allocation is dependent upon data reporting, which incentivizes data collection and school buy-in. It has contributed to a data-driven culture with open data access for education stakeholders and a focus on learning of disadvantaged groups (Abdul-Hamid, 2017[5]). Increasing data availability and their timelines help to establish early warning systems, which can prevent students dropping out. In the city of Chicago, a large and diverse education system, they contributed to an increase in secondary graduation rates from 52% in 1998 to above 90% by 2019 (OECD, 2021[6]).
- Evaluation: Several OECD countries have put evaluation at the forefront of efforts to enhance the quality, equity and efficiency of education systems. Norway established a comprehensive evaluation and assessment framework that provides monitoring information at different levels, fosters schools accountability and monitors the equity of education outcomes (OECD, 2011[7]). France, through the IDEE programme, facilitates access for researchers to educational administrative data and seeks to strengthen research partnerships among education professionals, policymakers, and research centers.

Education spending needs to be better targeted to reduce differences in education outcomes across states. The distribution of the main earmarked transfer for education is based on a formula including different criteria, such as the number of students and education quality. The formula could be improved by giving a greater weight to education quality and using a broadly agreed and transparent definition of education quality. Incentives could also be improved by providing additional resources to those states that achieve an improvement in education outcomes. Experience in some countries in the region, such as Brazil, illustrate that an effective mix of increasing resources and introducing incentive mechanisms can lead to significant improvements in education outcomes. The state of Ceará, which, starting from a low level, became one of the states with the best quality education in Brazil (OECD, 2018[8]), attests to that.

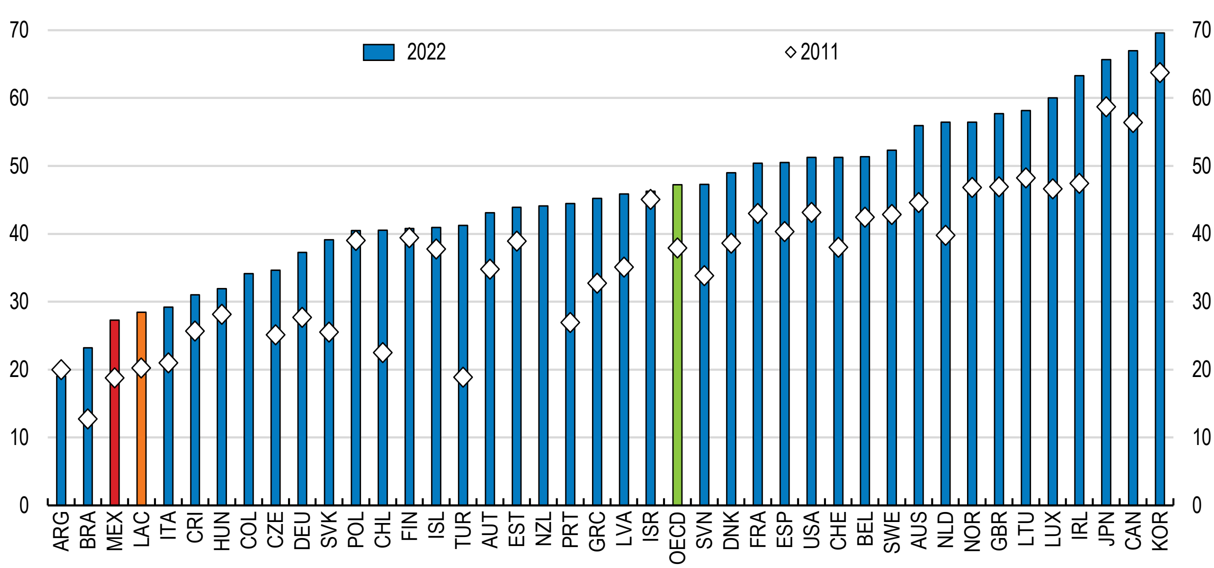
There is also room to further increase the share of tertiary graduates and aligning training supply with labour market needs, particularly as concerns digital skills. Increasing quality in primary and secondary education is a necessary step to continue Mexico’s progress in increasing tertiary graduation rates (Figure 4.4). While Mexico graduates one million tertiary students every year, one third of them in STEM areas, with ongoing changes in skill demand at the global level and nearshoring in Mexico, efforts to align training supply with labour market needs are advisable. Using skill anticipation assessments and systematic consultation with the business sector at the state level, remain important. Some states are moving in that direction and are stepping up efforts to adapt tertiary programmes to increasing demand for more specialised skills.

Redoubling efforts to ensure that all Mexicans, including those that abandoned the education system with low skills, acquire relevant skills would also help to reduce firms’ difficulties in finding the skills they require. 75% of employers report difficulties filling jobs due to lack of the appropriate skills, a proportion that is increasing (IMCO, 2023[9]). Skilled trades, engineers and production operators/machine operators are within the top five jobs employers report having difficulty filling. Scholarship programmes, such as *Becas Benito Juarez,* have become the backbone of social policies and their impact on providing recipients with skills helping to access formal quality jobs should be thoroughly evaluated.

Dual vocational programs, designed and launched in partnership with German authorities and in strong collaboration with the private sector, are being gradually deployed across the country with positive outcomes in terms of acquired skills (SEP, 2023[10]). Efforts to facilitate that more students and firms participate in dual programmes would boost the availability of technical skills and access to formal jobs. This could be achieved by reserving a share of scholarships for dual vocational programmes and by creating institutional arrangements enabling SMEs to participate in training activities. Experience in OECD countries also suggests that vocational programs can be particularly useful to reskill adult workers that left the education system before completing their studies.

Figure 4.4. There is room to further increase the share of tertiary graduates

Percentage of 25-34-year-olds with tertiary education as the highest level attained



Note: LAC refers to Chile, Costa Rica, Argentina, and Brazil.
Source: OECD Education Database.

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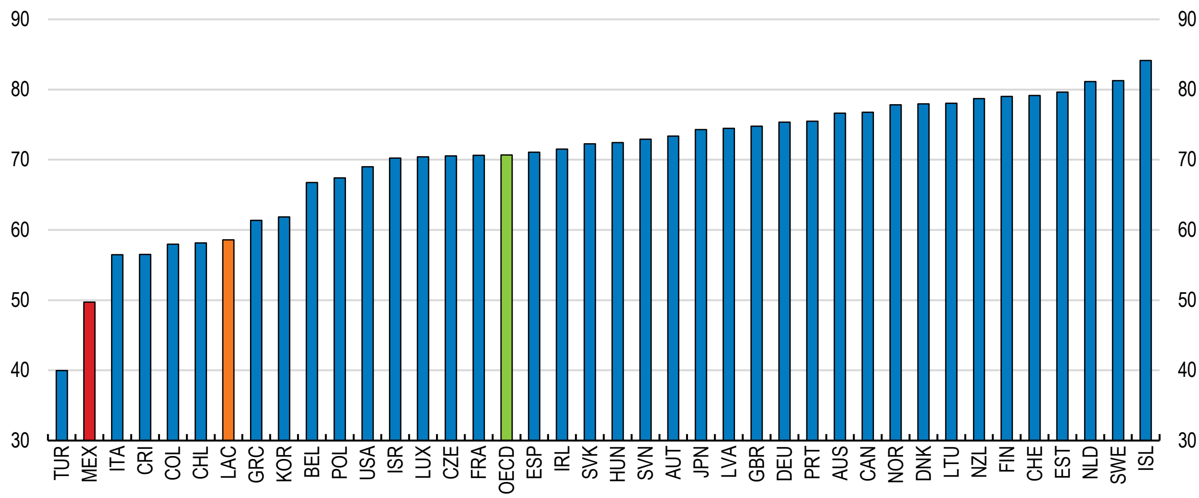
4.2. Increasing gender equality

Gender equality is not only a moral imperative but also translates into higher economic growth and well-being. Female labour force participation in Mexico has recently increased but it continues to significantly lag other OECD and Latin America countries (Figure 4.5). Gains from increasing the integration of women into the labour market are particularly large for Mexico (Figure 4.6). Growth would be boosted by increasing labour input and also by improving productivity, as it would allow a better matching between workers and jobs. Making a more efficient use of the available female talent would also boost Mexico's competitiveness and help to grasp nearshoring opportunities.

Figure 4.5. Female labour force participation is low

% of female population aged 15-64, 2022



Note: LAC is a simple average of Chile, Colombia, Costa Rica, Argentina, and Brazil. Data for Argentina refer to the year 2021.
Source: OECD Labour Force Statistics.

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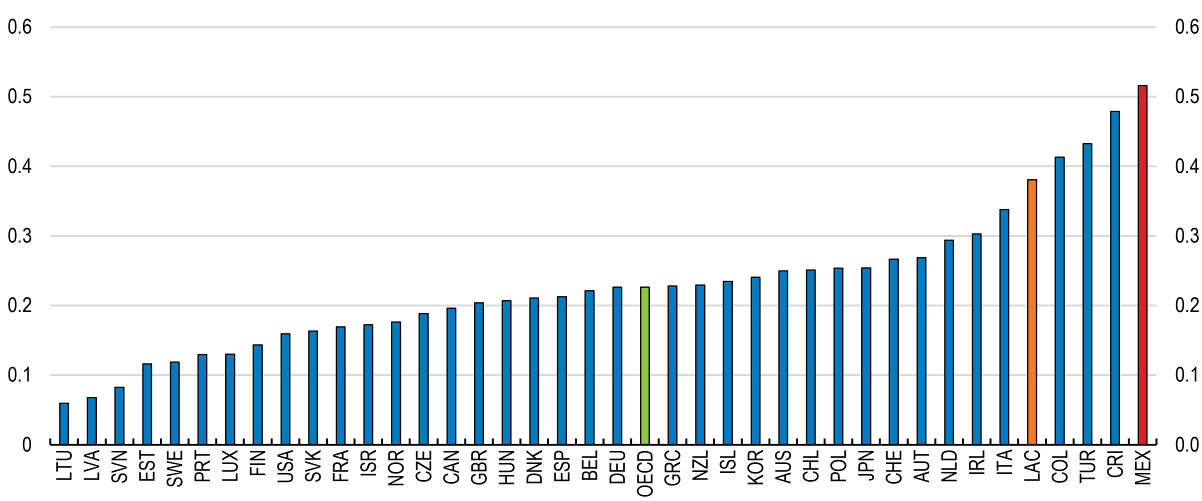
Figure 4.6. Mexico has much to gain from closing gender participation gaps

Difference relative to the baseline in projected average annual rate of growth in potential GDP per capita, percentage points



Note: The projections assume that labour force participation and working hours gaps close by 2060. For labour force participation, this is based on convergence of male and female levels to the highest level for each 5-year age groups in each country, following baseline labour force projections over the period 2022-60. LAC is a simple average of Chile, Colombia, and Costa Rica.
Source: (OECD, 2023[11]).

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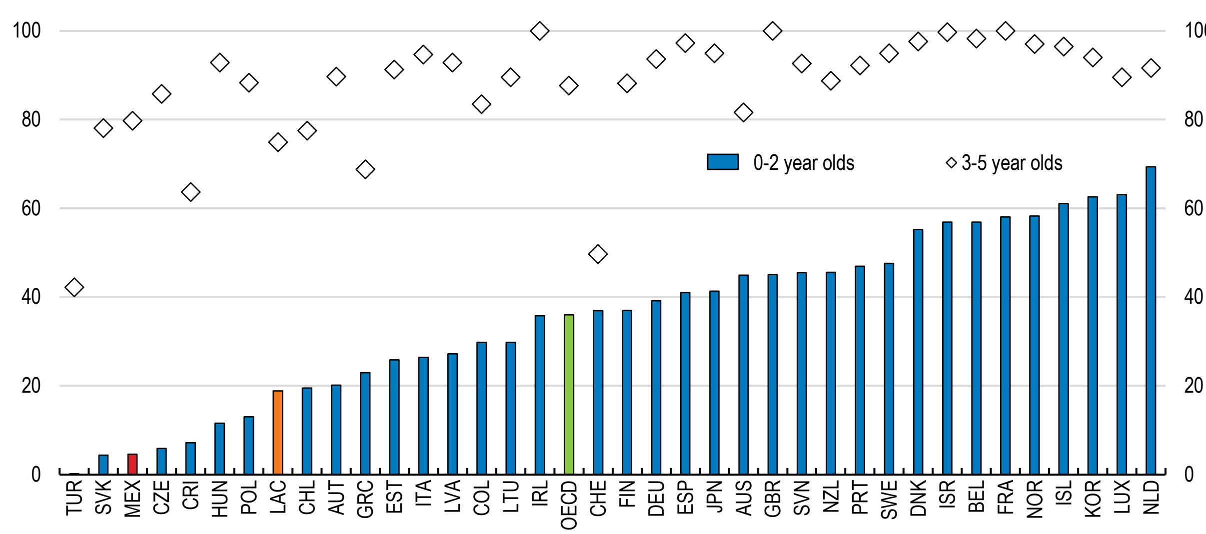
Beyond the gap in participation, gender gaps exist also in the quality of jobs, with informality being more prevalent among women and with women earning less than men. The average monthly gender pay gap for all full-time workers is 17% in Mexico, compared to the OECD average of 12%. Many factors explain wage gender gaps, including women's higher probability of career interruptions, occupational and sectoral segregation, employer discrimination, and women's disproportionate responsibility for unpaid work at home.

Domestic and care responsibilities fall disproportionally on Mexican women, hampering their prospects to complete education or be in the labour force. On average, Mexican women devote 40 hours per week to domestic and care work while men spend 15 hours (INEGI, 2021[12]). The gap is wider in households with children below 6 years old and in rural areas. Women are also more likely to make career breaks around childbirth, contributing to a motherhood penalty in wages. Excessively long working hours, prevalent in Mexico, particularly hinders women. Promoting and encouraging, both in the public and in the private sector, flexible working hours, the temporary use of part-time work for family reasons and remote work can help women and men combine family responsibilities with paid work and help to reduce gender gaps.

A comprehensive early childhood education and care system is key to facilitate women's participation in the labour market and reduce gender gaps. Mexico has made progress in the enrolment of 3-5 years olds but has room to increase enrolment of youngest kids (Figure 4.7). Subsidies put in place to replace the network of childcare facilities (Estancias Infantiles) discontinued by the federal government in 2019 are insufficient to cover the cost, and the number of recipients is relatively small. The Finance Ministry, in cooperation with other ministries and institutions from the federal government, has been for some time analysing different strategies to set up a federal network of childcare facilities, also 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 currently spends 0.5% of GDP (UN, 2020[13]). While the initiative is still in a planning phase (Table 4.1), public-private collaboration is more advanced in some states. Early education facilities can also be a valuable tool for employers and municipalities to attract and retain employees in high demand. To fully grasp the potential benefits of a childcare system, it is fundamental that, while prioritising low-income workers, all households can access the network over time, including informal workers.

Figure 4.7. Enrolment in early education for the youngest is low

Percentage of children enrolled in education services, 2020 or latest available



Note: LAC is a simple average of Chile, Colombia, and Costa Rica.
Source: (OECD, 2023[11]).

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Beyond early education, school schedules in elementary schools also have an important bearing on women employment. Reforms in several OECD countries (Box 4.2) attest that extending primary schools schedules can significantly foster mother's labour force participation, employment and hours worked. Mexico's own experience with full-day schedules is positive (Cabrera-Hernández et al., 2023[3]). After the federal government discontinued the programme in 2022, full-day primary schools remain in place in 6 states.

Table 4.1. Past OECD recommendations on social policies

Past recommendation	Actions taken since the 2022 survey
Establish a network of childcare facilities, giving priority to low-income households.	Planning has started
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.	No action taken
Establish a federal unemployment insurance scheme.	No action taken

Box 4.2. School schedules and mothers' employment: evidence from Chile and other OECD countries

In 1997, Chile began to implement a national education reform in the public school system that increased weekly hours of instruction without extending the number of school days. For most primary schools, the policy meant changing from a system of half-day shifts to continuous full-day schedules. Impact evaluation of the reform signals an important positive causal effects on mother's labour force participation, employment, weekly hours worked, and months worked during the year (Berthelon, Kruger and Oyarzún, 2023[14]). According to the evaluation, increasing the share of full-time schools by 30 percentage points would boost mothers' employment and participation by around 9% during a one-year period. Lower-educated and married mothers benefit the most from the reform. Similarly, after-school programs have also had positive effects on mothers' employment in Switzerland (Felfe, Lechner and Thiemann, 2016[15]) and shorter schedules lead to lower participation of mothers of elementary school children in Japan (Takaku, 2019[16]).

Promoting the take-up of paternity leave entitlements for fathers would also help. The gender division in the use of parental leave in OECD countries has tended to become more even and is even approaching 50/50 in some countries (e.g. Iceland, Portugal and Sweden). Mexico provides 12 weeks of paid maternity leave and 1 week of paternity 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 it is only available to formal workers. Financing the leave entitlement via the social security system, as for mothers in Mexico and for fathers in many OECD countries, could facilitate take-up and break stigmas (OECD, 2017[17]).

Care responsibilities for the elderly also fall disproportionally on women. Gradually expanding elderly formal care services, including both home-based and community-based care, would also contribute to higher female labour market participation. They can also mitigate increases in health spending, as they foster prevention and reduce hospitalizations. The budget impact of covering two million of dependent elderly, out of the 3 million elder dependants existing in Mexico, would be 0.5% of GDP. It would also have a positive impact on job formality, as 800000 formal jobs would be created (UN at al., 2020[18]).

Mexico has made good progress in improving female political representation. The share of women in Congress has been on an increasing trend and now reaches 52%. Conversely, 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[19]). 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[20]). This is currently required in over half of OECD countries (OECD, 2023[21]). Recently adopted initiatives, such as the creation of the interinstitutional committee for gender equality in financial entities, bringing together 20 institutions from the public and private sectors, and the inclusion of gender indicators in the sustainable taxonomy (see chapter 2), are valuable steps to promote higher gender equality.

4.3. Continuing to boost labour market inclusiveness

Mexico has put in place several important labour market reforms which have started to strengthen labour market inclusiveness**.** These reforms include changes underlying the updated North American Trade Agreement to enhance conflict resolution, workers' representation and collective bargaining. 79 new trade unions have been created and more than 30500 collective contracts have been registered, covering more than 7 million workers. A key reform was the creation of new independent and specialized courts, the so-called centres for labour conciliation and registration, to expedite conflict resolution between workers and employers. Four out of five labour conflicts are now resolved in less than 45 days at pre-court level and the average resolution time in courts is now 6.5 months. This implies a resolution of labour disputes that takes 87% less time than with the previous system. The implementation of the reforms also requires efforts by states and municipalities, such as aligning local legislation, strengthening labour inspection, providing legal assistance or collecting and maintaining data on labour-related issues. Progress by states and municipalities is heterogenous and could be facilitated by increasing the use of digital justice tools, which can enable remote access, expedite procedures and reduce costs by standardising and automating processes.

Besides the reforms embedded in the trade agreement, another key reform, agreed with social partners, aimed at reducing fraud in the use of outsourcing. 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 must be officially registered in the Labour Ministry to be able to provide outsourcing services. As a result of the reform, around three million workers shifted employer with an average increase in declared wages of 4.2%. Wage increases were larger in the bottom of the income distribution, with a 42% increase for workers in the first income decile. Other important reforms include a pension reform, also agreed with the private sector, and aimed at widening pensions coverage and entitlements (Box 4.3), a legal change to increase the annual minimum leave entitlement from 6 to 12 days and granting social security rights to domestic workers, which reduces their informality.

Box 4.3. A reform of contributory-pensions is being gradually phased in

Mexico has recently implemented a number of changes to its pension system, as detailed in the 2022 Economic Survey. A key change is the reform of contributory pension system, agreed with the private sector and legislated in 2021. The reform aims at increasing coverage (currently only 30% of the old population gets a pension) and replacement rates. To avoid a detrimental impact on formal job creation for low-wage workers, the reform will be funded with a gradual increase in employers' contributions, phased in from 2023 to 2030, under a progressive scale (i.e. the contribution is higher for workers with higher wages). The federal government also provides funding in a progressive way, covering 60% of contributions for workers at the bottom of the income distribution and 0% at the top. Employee's contribution remains unchanged and flat at 1.13%. According to government estimates 80% of formal workers would get access to a pension once the reform is fully implemented, with replacement rates increasing particularly for low-income workers.

A key pending challenge ahead to boost labour market inclusiveness is to reduce informality, which has recently trended down but still affects around 55% of workers. Almost 40% of people live in completely informal households (OECD et al., 2023[22]). Some of the reforms recently implemented, such as the reform to reduce fraud in the use of outsourcing or the special programme targeted at domestic workers, are helping to facilitate job formalization. *Jovenes Construyendo el Futuro*, an internship programme aimed at aiding unemployed young workers get some working experience, has also good potential to foster formality. Its effectiveness in helping youth to step in and remain in the formal labour market should be part of the ongoing evaluation of the programme. While there is no silver bullet to reduce informality and actions are needed in several areas, as discussed in the 2022 Survey, some of the policy reforms suggested in this Survey could be part of such comprehensive strategy. This includes reducing the regulatory cost and burden of setting up and growing a formal firm (as discussed in chapter 3) and improving human capital (discussed earlier in this chapter). Lengthening school schedules and widening access to early education and childcare would also foster formality, as the reduced schedules and lack of childcare push many women into informal work arrangements, that are often the only solution to combine work and care needs.

Enhancing social protection can also incentivize the transition from informal to formal employment. A good example is the recent reform of contributory pensions, which, by improving the access to more attractive pension benefits, encourage participation in formal employment. In the same vein, improving access and coverage of the social safety net could boost formal employment. This could be achieved by providing income support through the personal income tax system, for example through a negative income tax. For the time being social programmes are fragmented and there is room to improve their coverage of low-income households (OECD, 2022[23]). Channelling the income support programmes run at federal level through the personal income tax would enable better targeting support towards informal and poor workers. It would also foster financial inclusion and reduce the scope for clientelism associated to some social programmes. According to this proposal, all workers would be required to register with the tax authority and file personal income taxes. Those whose revenue is below a defined threshold would be exempt from paying the tax and, conditional on the filing, would instead receive a payment. This payment would decrease gradually as the individual earns more income from work. Mexico's personal income tax system has a larger coverage than in other Latin American countries (e.g. the income threshold to start paying is set at a multiple of 0.6 the average wage, against a multiple of nearly 2 in Costa Rica or 3 in Colombia), making this proposal feasible. Experience from some OECD countries, such as United States with the earned income tax credit, is positive (Hoynes; Patel, 2017[24]), as it has increased formal participation among groups with lower labour market attachment and it reduced poverty. Continuing efforts to strengthen the enforcement of labour and tax regulations and facilitating the formalisation of firms (see Chapter 3) should also be part of a comprehensive strategy to reduce informality.

Table 4.2. Policy recommendations to reduce inequalities and bolster growth

MAIN FINDINGS	CHAPTER 4 RECOMMENDATIONS (Key recommendations in bold)
Redoubling efforts to enhance human capital	
Too many students leave the education system without completing secondary education. There is room to increase education quality and to reduce regional inequalities.	**Identify students in need of support, provide them with targeted tutoring and assess and resolve teachers training needs.** Establish robust and systematic mechanisms to evaluate education programmes based on comprehensive and homogeneous statistics. Give a higher weight to education quality in the formula underlying the basic education transfer to states and provide additional funding to states succeeding in improving quality. Use skill anticipation assessments and consult systematically businesses at state level to align university and vocational education and training with labour market demand. Identify which training programmes are most effective in equipping workers with relevant skills and strengthen them. Evaluate scholarships to assess if recipients access formal quality jobs.
Dual vocational programs are being gradually deployed across the countries with positive outcomes in terms of acquired skills.	Reserve a share of scholarships for dual vocational programmes and set up institutional arrangements enabling SMEs to participate in training activities.
Increasing gender equality	
Despite a recent increase, female labour force participation, at 50%, lags participation in OECD and other Latin America countries. Domestic and care responsibilities fall disproportionally on women	**Establish a federal network of early education and care facilities giving priority to low-income households.** Increase the number of primary schools providing full-day schedules. **Expand elderly formal care services, including home-based and community-based care.**
Excessively long working hours hinder female access to the job market.	Promote the use of flexible work hours, temporary part-time work for family reasons and remote work.
Mexico provides 12 weeks of paid maternity leave and 1 week of paternity leave. The take-up of paternity leave is low. The leave is fully paid by employers.	Lengthen fathers' paid leave entitlement and finance it via the Social Security System.
Female political representation has improved notably but there is room for increasing female participation in private company boards.	Introduce a mandatory reporting of pay-gap for listed companies. Ensure the requirement for listed companies to report on progress to reduce gender imbalances is met.
Continuing to boost labour market inclusiveness	
Mexico has implemented labour reforms to enhance conflict resolution workers representation and collective bargaining. Reforms are paying off. Implementation efforts at state and municipal level are heterogenous.	Fully implement the labour reforms at state and municipal level, for example by increasing the use of digital justice tools.
55% of workers are informal, hindering well-being and productivity.	**Pursue a comprehensive strategy to reduce informality, including by providing income support to low-income households through the personal income tax or reducing firms registration and licensing costs at state and municipal level.**

References

Abdul-Hamid, H. (2017), “Data for Learning: Building a Smart Education Data System. Washington, World Bank Group.”, *Washington, World Bank Group.*. [5]

Berthelon, M., D. Kruger and M. Oyarzún (2023), “School schedules and mothers’ employment: evidence from an education reform”, *Review of Economics of the Household*, Vol. 21/1, pp. 131-171, https://doi.org/10.1007/s11150-022-09599-6. [14]

Cabrera-Hernández et al. (2023), “Full-time schools and educational trajectories: Evidence from high-stakes exams”, *Economics of Education Review*, Vol. 96, p. 102443, https://doi.org/10.1016/j.econedurev.2023.102443. [3]

CONEVAL (2023), “Medición de Pobreza 2022”. [1]

CONEVAL (2018), “Impacto de Programa Escuelas de Tiempo Completo 2018.”. [4]

Felfe, C., M. Lechner and P. Thiemann (2016), “After-school care and parents’ labor supply”, *Labour Economics*, Vol. 42/C, pp. 64-75, https://EconPapers.repec.org/RePEc:eee:labeco:v:42:y:2016:i:c:p:64-75. [15]

Hoynes; Patel (2017), “Effective Policy for Reducing Poverty and Inequality?””, *Journal of Human Resources*. [24]

ILO (2020), *Women in business and management: improving gender diversity in company boards (voluntary targets vs quotas)*. [19]

IMCO (2023), “El panorama de las vacantes y la población disponible en México”. [9]

INEGI (2021), *Encuesta para la Medición del Impacto COVID-19 en la Educación (ECOVID-ED) 2020*, Instituto Nacional de Estadística y Geografía. [12]

OECD (2023), *Joining Forces for Gender Equality: What is Holding us Back?*, OECD Publishing, Paris, https://doi.org/10.1787/67d48024-en. [11]

OECD (2023), “PISA 2022 Results: Factsheets. Mexico Country Note”. [2]

OECD (2023), *Reporting Gender Pay Gaps in OECD Countries: Guidance for Pay Transparency Implementation, Monitoring and Reform*, OECD, Paris. [21]

OECD (2022), “OECD Economic Surveys: Mexico 2022”. [23]

OECD (2021), *OECD Digital Education Outlook 2021: Pushing the Frontiers with Artificial Intelligence, Blockchain and Robots*, OECD Publishing, Paris, https://doi.org/10.1787/589b283f-en. [6]

OECD (2021), *Show me the Money : Pay Transparency Policies to Close the Gender Wage Gap*, OECD Publishing. [20]

OECD (2018), “OECD Economic Surveys: Brazil 2018”. [8]

OECD (2017), “Building an Inclusive Mexico: Policies and Good Governance for Gender Equality”, *OECD Publishing, Paris*. [17]

OECD (2011), “OECD Reviews of Evaluation and Assessment in Education: Norway”. [7]

OECD et al. (2023), “Latin America Economic Outlook”. [22]

SEP (2023), “Consolidación y escalamiento del sistema de educación dual en México. Resultados de la Encuesta de Monitoreo y Evaluación 2022-2023”, *Secretaria de Educación Pública; Sistema de Educación Dual Superior; Cooperación Alemana; GIZ*. [10]

Takaku, R. (2019), “The wall for mothers with first graders: availability of afterschool childcare and continuity of maternal labor supply in Japan”, *Review of Economics of the Household*, Vol. 17/1, pp. 177-199, https://doi.org/10.1007/s11150-017-9394-9. [16]

UN (2020), *Costos, retornos y efectos de un Sistema de cuidado infantil universal, gratuito y de calidad en México*, ONU Mujeres and CEPAL, https://www2.unwomen.org/-/media/field%20office%20mexico/documentos/publicaciones/2020/diciembre%202020/twopager_cepal_onumujeres_esp.pdf?la=es&vs=2542 (accessed on 11 October 2021). [13]

UN at al. (2020), “El cuidado de las personas mayores en situación de dependencia en México: propuesta de servicios, estimación preliminar de costos e identificación de impactos económicos.”, *United Nations Mexico, Joint SDG Fund, INMUJERES, CEPAL and United Nations Women*. [18]

5 Improving housing and urban development policies in Mexico

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Access to adequate housing remains challenging in Mexico as many low- and middle-income households cannot afford purchasing a house because of high housing prices and limited access to credit. An underdeveloped housing rental market and insufficient supply of social and affordable housing force many households to resort to self-build or to reside in informal settlements. Administrative fragmentation and lack of coordination across levels of government favours a disordered urban development that provokes residential segregation, with vulnerable groups often living in peripheral areas with limited access to jobs, transport and urban services. Housing policies have recently become more targeted towards low-income households, which is commendable. Expanding the range of housing subsidies and fostering the development of a social rental housing sector would be valuable additional steps to improve access to housing for low-income households. Reforming the fiscal and legal framework to encourage private investment into rental housing and promoting public-private partnerships could boost the supply of affordable housing. Tasking states with ensuring that municipalities comply with federal and state urban and housing legislation and improving coordination across, urban, housing and transport infrastructure could ease the implementation of national policies and reduce residential segregation.

5.1. Introduction

The Mexican constitution recognizes since 2019 the right to a dignified house as a human right and over the past decades Mexico has successfully increased the supply of dwellings to face the increasing housing demand that came along with population growth and rising urbanisation. However, access to adequate housing remains challenging for many Mexicans. Housing supply remains insufficient to meet the demand. The quality of the housing stock has room for improvement, with a dwelling out of four being inadequate. Most low- and middle-income households cannot afford purchasing a house because of high housing prices and limited access to credit. An underdeveloped housing rental market and insufficient supply of social and affordable housing force many households to resort to self-build or to reside in informal settlements.

The design and implementation of the national housing policy is hindered by coordination issues across different agencies and level of governments, with administrative fragmentation preventing local policies from aligning with national targets. Lack of coordination between housing policy and transport and urban development planning has negative repercussions on housing location and provokes a disordered urban development that fuels spatial segregation. This has a negative impact on the well-being of millions of Mexicans, with vulnerable groups often living in peripheral areas with limited access to jobs, transport and urban services. Unfavourable living conditions in marginalised areas cause widespread house vacancy.

Public authorities recognise the importance of these challenges in shaping a new approach to housing policy in the National Housing Programme 2019-24, which sets important objectives such as improving the quality of the housing stock, assisting the production of social housing, extending finance mechanisms and promoting coordination across all levels of governments. However, Mexico should scale up its efforts to guarantee adequate housing also by promoting a more inclusive, compact, connected and sustainable urban development.

This chapter describes the main challenges that Mexico faces to increase the quality and efficiency of the housing market, strengthen the supply of social and affordable housing, ensure a better coordination of housing policy with urban development and transport policy, and discusses policy options to tackle them. It covers alternatives for amplifying the supply of social and affordable housing to address the needs of low-income households without requiring large direct public spending and involving the private sector. A housing taxation reform is discussed that might help increase the supply of private rental housing, ease access to housing finance and increase local resources for financing public investment in urban infrastructure. The chapter argues for tasking states with ensuring that municipalities comply with federal and state urban and housing law to prevent irregularities and favour the achievement of national housing policy targets. Promoting coordination between urban development and transport infrastructure planning at the metropolitan level could reduce transport infrastructure cost, and facilitate the transition towards an affordable, efficient and sustainable public transportation system.

5.2. The challenges of the Mexican housing market

Access to good-quality and affordable housing remains challenging for many Mexicans and too many households, especially among vulnerable groups, live in inadequate dwellings that require improvements, including in energy efficiency standards. Affordability is limited by high housing prices and restricted access to credit. In addition, the housing rental market is underdeveloped and the supply of social and affordable housing is insufficient. Against this background, in the past many families have been forced to resort to build their own homes (self-build), often without receiving technical assistance, or to reside in informal settlements. Lack of coordination among housing, urban development and transport policy leads to disordered, sprawling cities that generate socioeconomic segregation, with vulnerable groups living in settlements located in disconnected peripheral areas without access to affordable public transport.

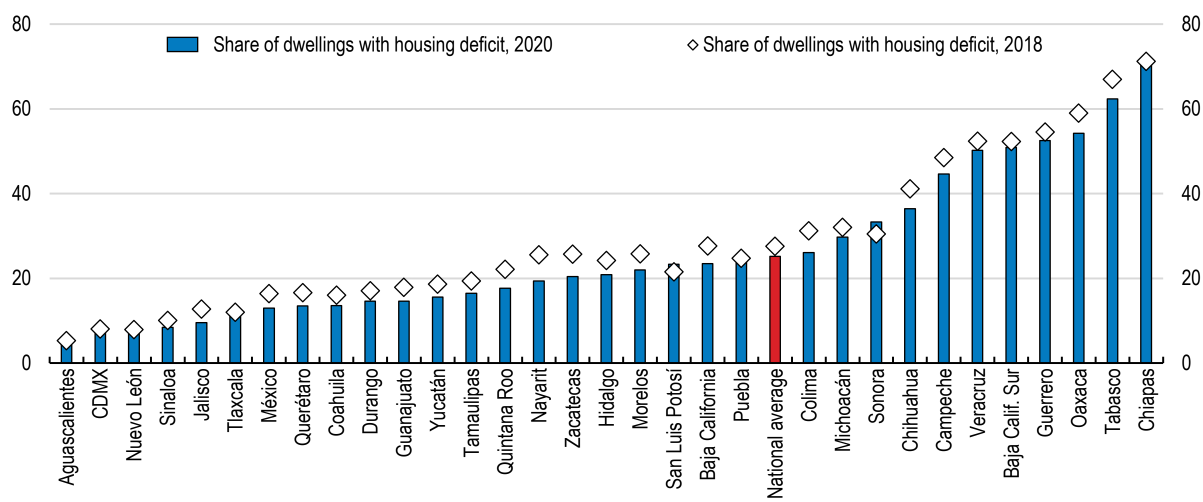
5.2.1. Housing quality is low

A significant part of the housing stock in Mexico is inadequate because substandard (*rezago habitacional*). Around one dwelling out of four has poor construction material (roof, walls or floor), is overcrowded or lacks basic facilities. In the three poorest states of the country (Chiapas, Guerrero and Oaxaca) more than half of private housing units is substandard (Figure 5.1). Mexico continues to have one of the highest rates of housing overcrowding among OECD countries (Figure 5.2), and around 40% of private dwellings have structural issues and would need home improvements (INEGI, 2020[1]) (Figure 5.3).

Inadequate housing affects disproportionally vulnerable groups (women, young, low-income, immigrant and indigenous groups) living in rural and peripheral areas (Box 5.1). In cities, around half of the population lives in areas with inadequate urban infrastructure, because of insufficient street lighting (40%) or paved road (51%) (SEDATU, 2019[2]). One sixth of the families searching for a new house are motivated by lack of urban infrastructure and inadequate characteristics of the dwelling (INEGI, 2020[1]).

Figure 5.1. More than half of private houses in the poorest regions are substandard

Share of private dwellings with housing deficit, by state, %, 2018 and 2020



Note: Housing deficit include dwellings with no durable material for floors, walls or roof; overcrowded (more than 2.5 people per room); or lacking basic facilities (no access to running water or sanitation). "México" refers to the state of México and not to the whole country.
Source: CONAVI.

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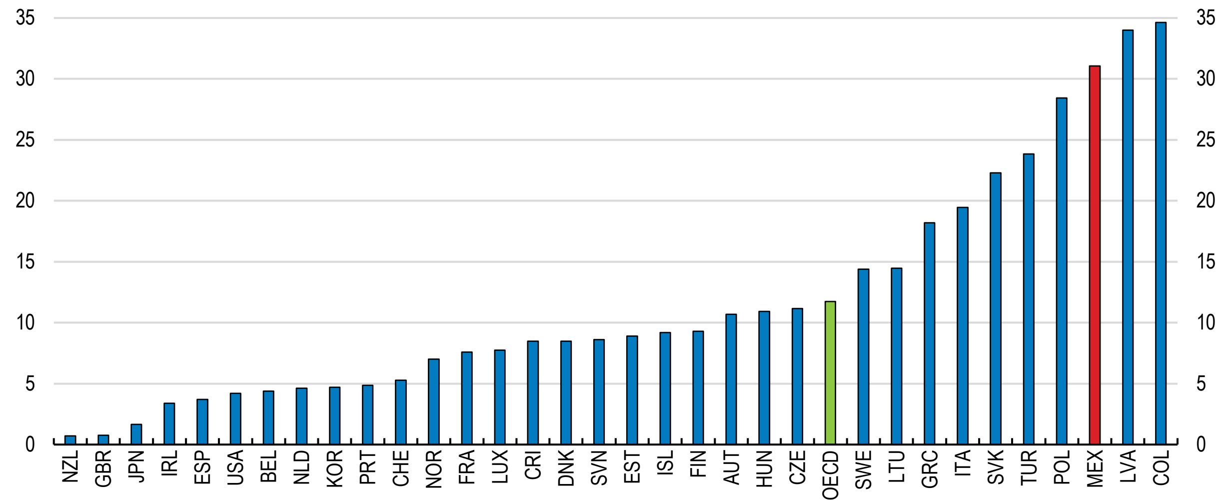
Figure 5.2. Housing overcrowding is prevalent

% of households, 2020 or last year available



Note: A household is considered as living in overcrowded conditions if less than one room is available in each household: for each couple in the household; for each single person aged 18 or more; for each pair of people of the same gender between 12 and 17; for each single person between 12 and 17 not included in the previous category; and for each pair of children under age 12. Rooms refer to bedrooms, living and dining rooms and, in non-European countries, also kitchens.
Source: OECD (2023), Housing overcrowding (indicator).

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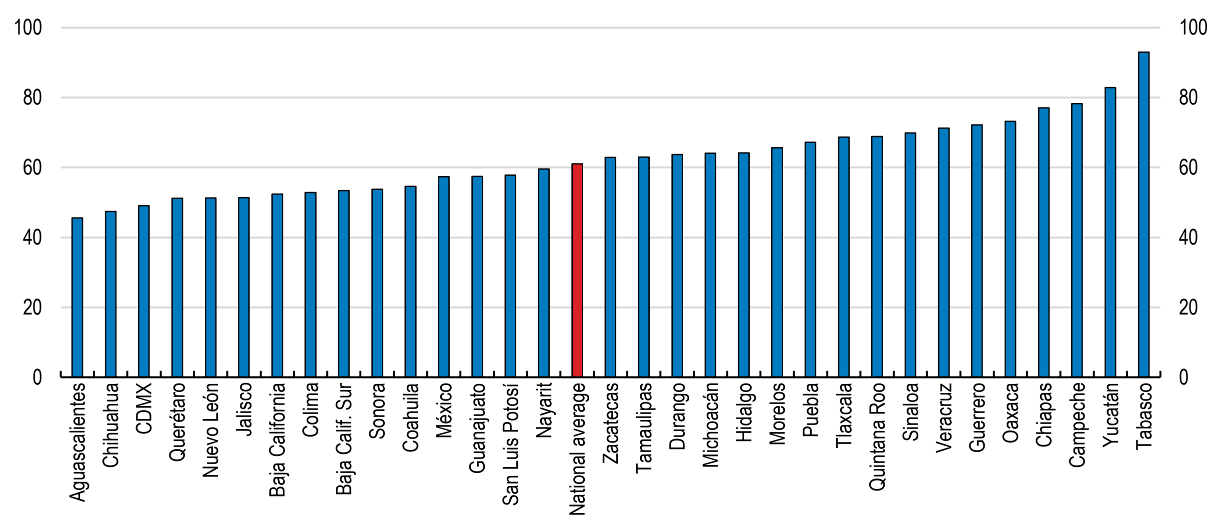
Figure 5.3. A large share of the housing stock needs home improvement

Share of regional private housing stock with structural problems, %, 2020



Note: Structural problems include at least one of the following issues: cracks in the walls or ceiling; deformation in door or window frames; soil subsidence; cracks or deformation in beams or pillars; water leaks or deteriorated water and drainage pipes. "México" refers to the state of México and not to the whole country.
Source: ENVI 2020.

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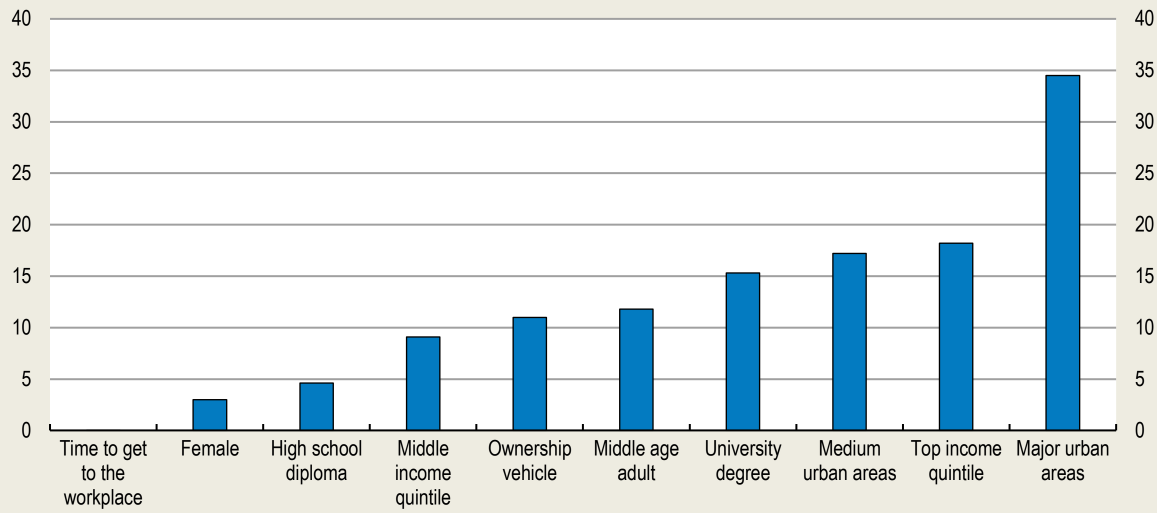
Box 5.1. Main socioeconomic factors associated with access to adequate housing in Mexico

Using micro data from the Census of Population and Housing 2020 (*Censo Nacional de Población y Vivienda 2020*) Maravalle and Gonzalez Pandiella (*forthcoming*) estimate a Probit model to assess the main socio-economic characteristics shaping the probability of a worker to live in an adequate house. By focusing on workers, it is possible to take into account access to jobs as a relevant aspect of housing. by considering how long it takes for a worker to get to the workplace.

Figure 5.4. Access to an adequate house is associated with location, income and education

Average marginal effect on the probability of living in an adequate house, %



Note: The average marginal probability measures the average change in the probability of living in an adequate house for an individual who belongs to a category of a socio-economic variable different from the benchmark category. The benchmark categories of the variables reported in the chart are: living in a rural area (less than 2500 inhabitants); Bottom income quintile (income variable); having completed primary education (education attainment variable); male (gender variable); young adults (15-24 years old). The category "Middle age adults" refers to adults between 55 and 65 years of age. Medium urban areas have between 15 and 50 thousand inhabitants and major urban areas have more than 100 thousand inhabitants. A house is categorised as adequate according to the criteria set by the National Housing Commission (CONAVI) to identify substandard dwellings (*rezago habitacional*).
Source: Maravalle and Gonzalez Pandiella (forthcoming).

StatLink https://stat.link/qrsal2

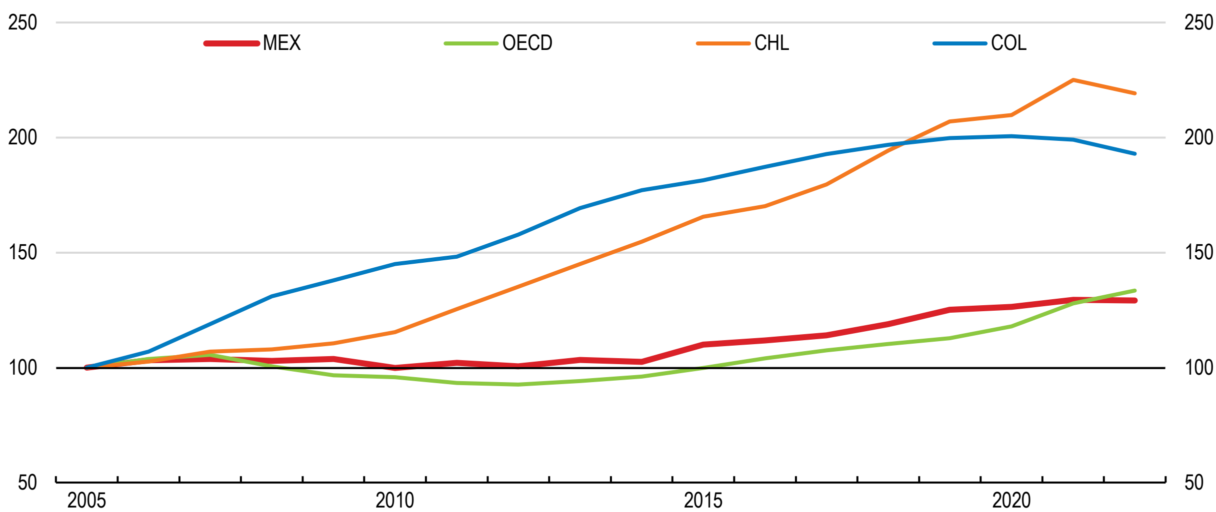
Mexican workers living in major urban areas (more than 100 thousand inhabitants) have a higher probability of living in an adequate house that is 35 percentage points higher than a worker living in rural areas. Other factors that are positively associated with the probability of living in an adequate house are a high level of education, the age and the income level. A middle-aged worker (55-64 year old) has a probability of living in an adequate house that is 10 percentage points higher than a young worker. Earning an income in the top quintile of the income distribution increases the probability of living in an adequate house by 15 percentage points with respect to a earning an income in the bottom quintile. These results highlight the extent to which inadequate housing disproportionately impacts youth, individuals with low incomes and those residing in rural and peripheral areas.

5.2.2. House prices are high and housing costs are excessive for low-income households

Purchasing a house is a challenge especially for low- to middle-income households. Low supply and high demand for housing have pushed up real housing prices by 31% between 2005 and 2020, in line with the average OECD country but less than in some regional peers (Figure 5.6). House prices have increased 1.5 times faster than the average income over the same period. It would take around 30 years' worth of salary for a poor household (1st income decile) and 9 years' worth of salary of a middle-income household (5th income decile) to purchase an average dwelling (INEGI, 2022[3]).

Figure 5.5. Real housing prices in Mexico increased but less than in some regional peers

Index, 2005 = 100



Source: OECD Analytical house prices indicators.

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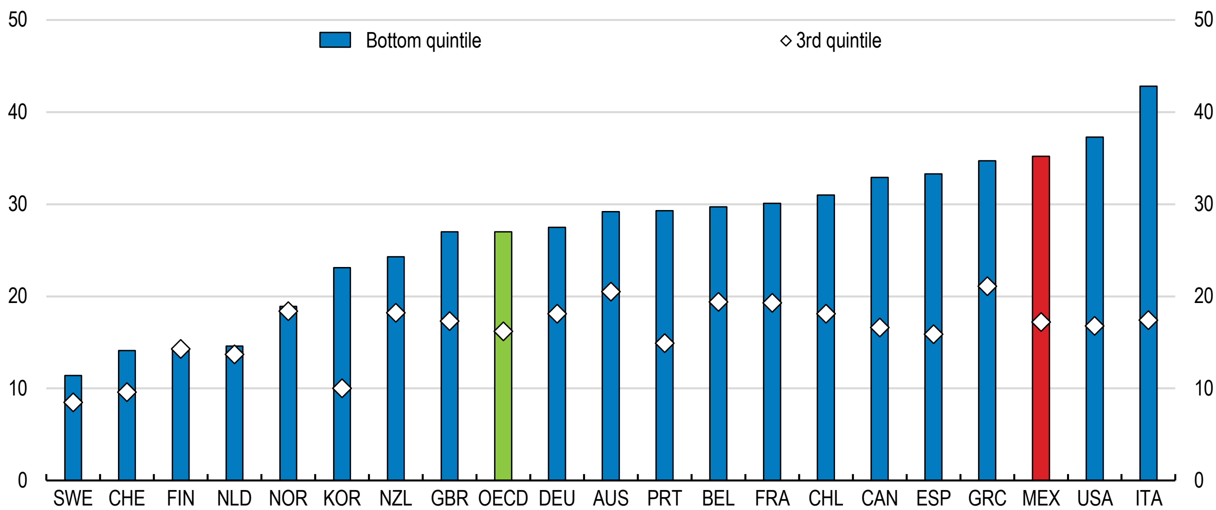
Housing costs (rent or mortgage) represent around 17% of the average income, in line with OECD countries. However, housing costs are far higher for low-income households (Figure 5.6), and can reach around 60% of the gross income of households in the lowest income decile when utilities costs are included (SEDATU, 2019[2]). Mexico is the third country with highest housing costs.

Figure 5.6. Housing costs for low-income households are very high in Mexico

Median of mortgage burden (principal repayment and interest payments) as a share of disposable income in the bottom and the third quintiles of the income distribution, %, 2020 or latest year available



Note: In Chile, Mexico, Korea and the United States gross income instead of disposable income is used due to data limitations.
Source: OECD Affordable Housing Database.

StatLink https://stat.link/wytajr

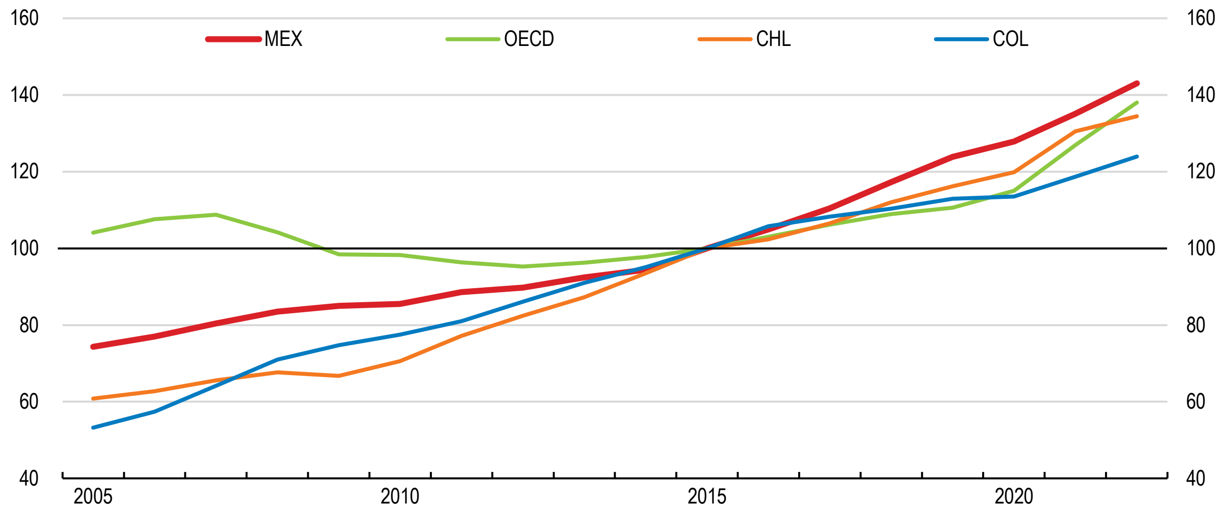
5.2.3. The rental market is underdeveloped

The size of the housing rental market in Mexico is too small to provide an alternative to homeownership for low- and middle-income households, even if rental prices have increased far less than housing prices (Figure 5.7). Only around 16% of the housing stock is used for rental, though it is higher in urban areas where it reaches a maximum of around 30% in the metropolitan area of the Mexico Valley, which is nonetheless far below the 50% recorded in some large OECD metropolitan areas (Los Angeles, New York and Paris). A strong preference for homeownership over renting and a housing policy biased towards housing acquisition have contributed, among other factors, to the limited development of the rental market in Mexico in the past (Figure 5.8) (INFONAVIT and ONU-Habitat, 2018[4]; OECD, 2015[5]).

The rental market is also characterized by widespread informality (40%) (SEDATU, 2019[2]), which often concerns properties under foreclosure. Around 67% of the tenants, mostly low-income, allocate more than 30% of their income to pay the rent (CONEVAL, 2018[6]).

Figure 5.7. House prices have increased faster than rents

Price to rent ratio, index, 2015 = 100



Source: OECD Analytical house prices indicators.

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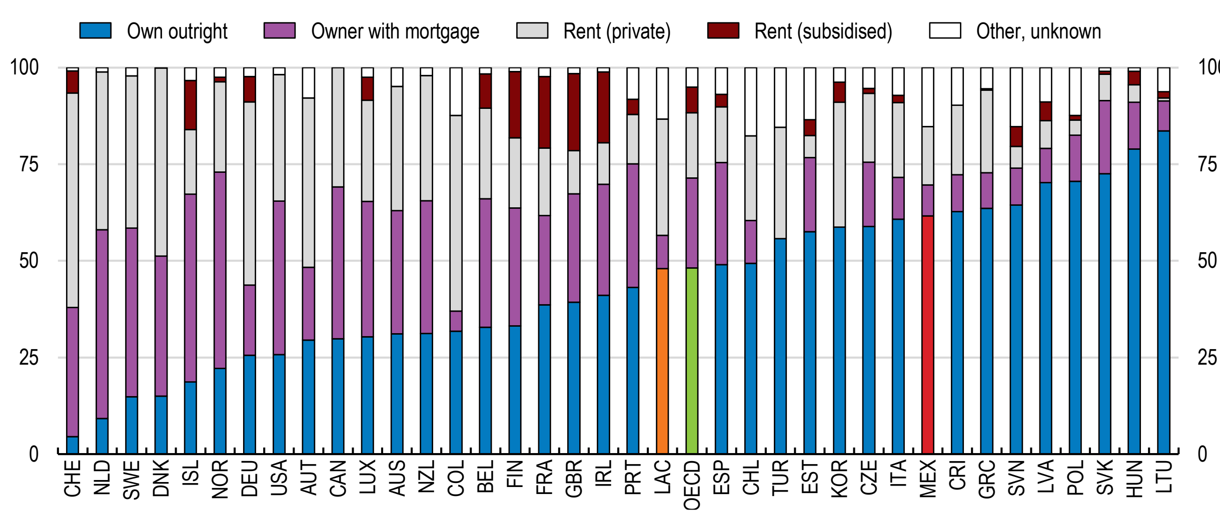
Figure 5.8. Most Mexicans are homeowners

Share of households in different tenure types, %, 2020 or latest year available



Note: LAC is a simple average of Chile, Colombia, and Costa Rica.
Source: OECD Affordable Housing Database.

StatLink https://stat.link/cblzw6

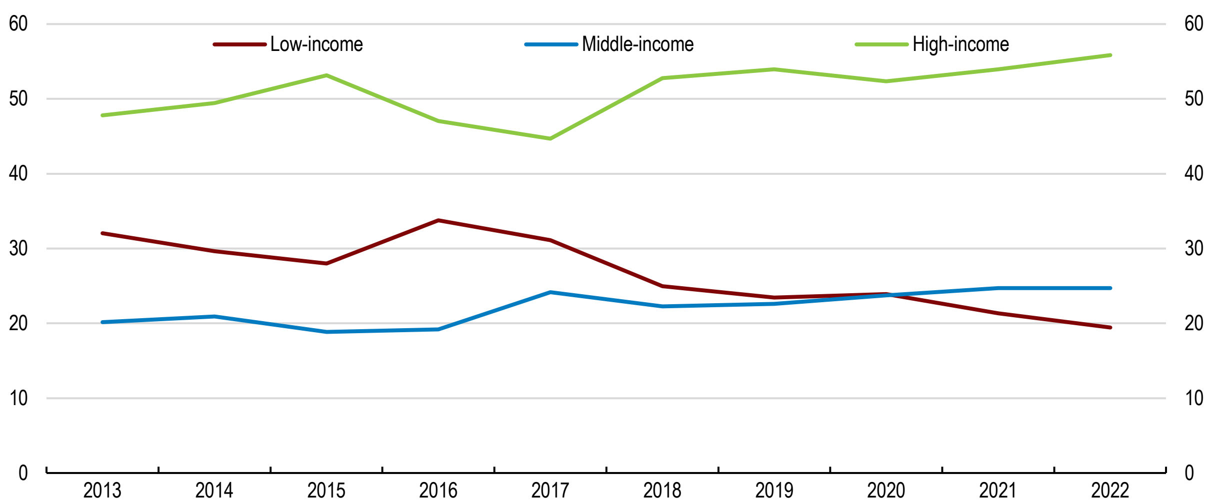
5.2.4. Low-income households have limited access to housing credit

Access to housing credit is limited, particularly for low- and middle-income households, and most homeowners must rely on own-resources to purchase their house, especially in poor regions. More than half of all housing credit (56%) goes to the top 20% high-income households, with middle-income and low-income households, representing 80% of all households, receiving, respectively, one fourth and less than a fifth of all housing credit (Figure 5.9). Housing credit is also concentrated in states with a high GDP per capita, such as Baja California, Baja California Sur, Nuevo León or Ciudad de Mexico, and is scarce in poor states, such as Chiapas, Oaxaca, Tlaxcala and Guerrero,

The share of credit to low-income households has also been diminishing in recent years despite the increase in the volume of housing credit (2.1% y-o-y). This dynamic is related to two factors: the increasing weight of commercial banks in the mortgage market, which provide financial services mostly to high-income households. Second, a lower weight of low-income households in the credit portfolio of the Institute of the National Fund for Workers' Housing (INFONAVIT), which traditionally provides mortgages to low- and middle-income formal workers and charges below market interest rates. The share of INFONAVIT's credit portfolio for low-income households has fallen from 52% in 2013 to 29% in 2022. INFONAVIT's non-performing loan rate (18.6% in March 2023) remains high with respect to commercial banks (2.6%).

Figure 5.9. Low-income households have limited access to housing credit

Distribution of housing credit flow by household income level, %



Note: High-income households have monthly earnings above 9 UMA and are 20% of all households; middle-income households have monthly earnings between 4 and 9 UMA and are 40% of all households; low-income households have monthly earnings below 4 UMA and are 40% of all households.
Source: SNIIV and OECD calculation.

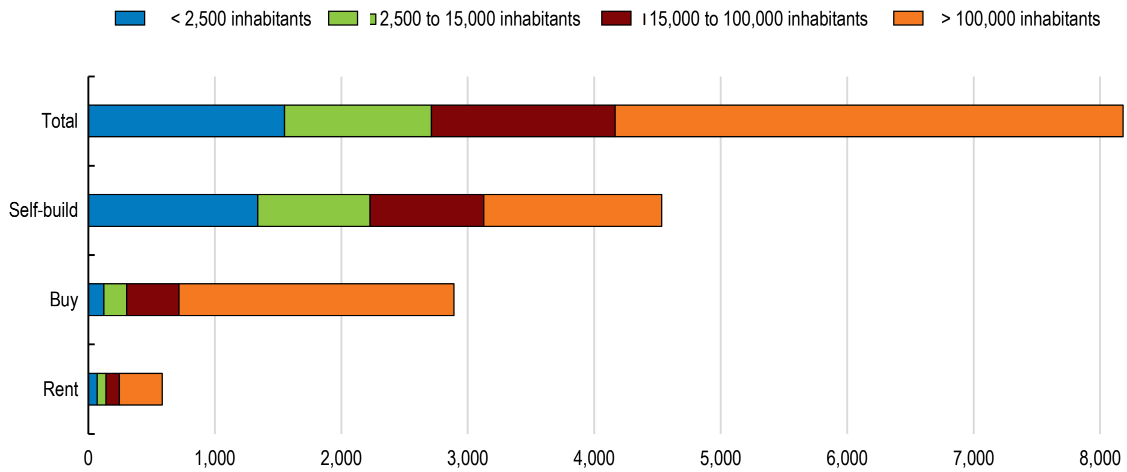
StatLink https://stat.link/jux5v8

5.2.5. Land for urban development is insufficient to face the high demand

Demand for housing is high and amounts to around 8 million dwellings (Figure 5.10), or one fifth of the current supply of private housing units (35 million), and is projected to increase. Even if the rate of population growth is expected to decline, at least 5 million additional dwellings will be required by 2050 if the average household size is the same as in 2020. However, if the household size keeps falling, say as much as it did between 2000 and 2020, the demand for new houses could increase up to 13 million by 2050.

Figure 5.10. The demand for dwellings is high, especially in urban areas

Total number of households that need to rent, buy or build a home independent of the one they live in, thousands, 2020



Note: Rural areas are those with less than 1500 inhabitants. The demand for housing is based on households' self-reported needs for a new dwelling.
Source: Encuesta Nacional de Vivienda 2020.

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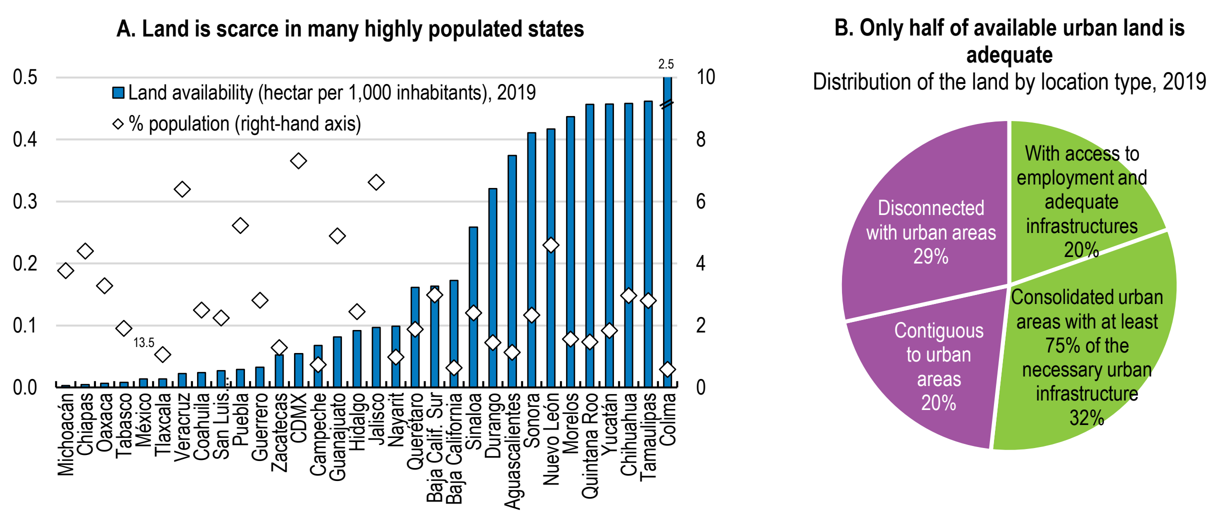
Figure 5.11. Land for increasing housing supply is scarce



Note: Adequate lands are classified as U1 and U2. U1 lands are located in areas with access to employment and adequate infrastructures. U2 lands are located in consolidated urban areas with at least 75% of the necessary urban infrastructure; U3 lands are located in areas contiguous to the urban area; FC lands are located in areas disconnected with the urban areas. "México" refers to the state of México and not to the whole country. Probabilities in panel B may not sum to total due to rounding.
Source: SNIIV.

StatLink https://stat.link/gyhkvi

Land for urban development is scarce especially in highly populated states in the Centre and in the South (e.g., the state of México, Chiapas, Veracruz) (Figure 5.11, panel A) and decreased by 6.5% between 2014 and 2019 (RENARET, National Registry of Land). Moreover, only around 20% of the land reserved for future developments has good access to infrastructure and job opportunities (Figure 5.11, panel B) and could be considered as adequate (in terms of location, geology and water availability) according to requirements set in the National Urban Development Program and Land Use Policy (SEDATU, 2019[2]).

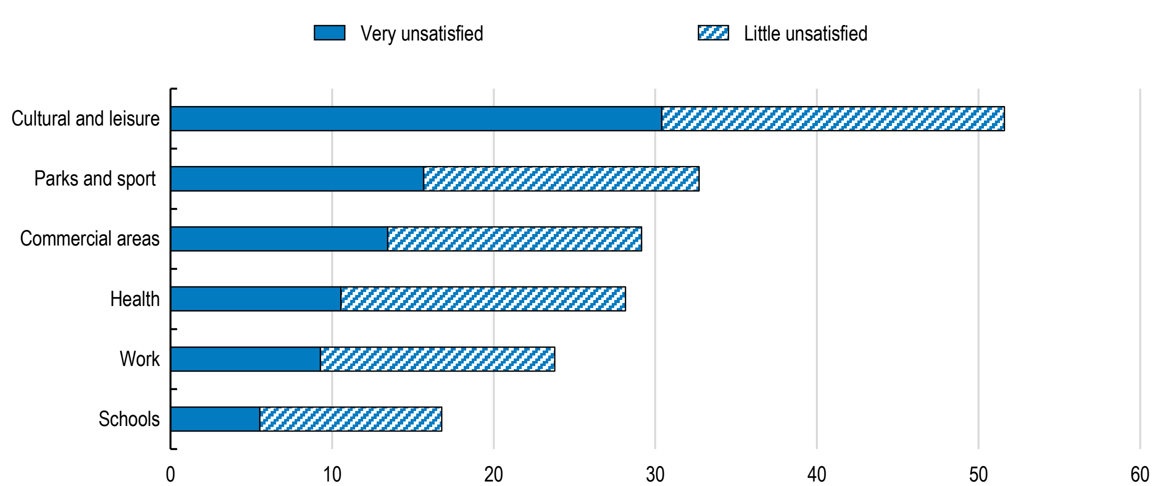
5.2.6. Many houses are badly located because of widespread urban sprawl

Many households, especially in the South and in the Centre, struggle to access essential urban services (Figure 5.12) because of unfavourable housing locations. For example, in case of a health emergency it takes on average 40 minutes to get to a hospital in Mexico, but it takes almost an hour in Guerrero, Chiapas and Oaxaca (INEGI, 2022[3]). Housing location is a key feature of good housing, affecting access to jobs, education and health, as well as recreational and cultural services, thus contributing directly to the well-being of people and to shaping equality of opportunities.

A key determinant of poor housing location in Mexico is the disconnection among housing, urban and transport policy that has favoured urban sprawl (INFONAVIT and ONU-Habitat, 2018[4]). Between 1980 and 2017, the growth rate of urban built-up areas was more than twice (5.4% yearly) that of the urban population (2.4% yearly) (INFONAVIT and ONU-Habitat, 2018[7]), causing a significant fall in population density (from 272 to 100 inhabitants per hectare against an optimal standard of 150 inhabitants per hectare) (INFONAVIT and ONU-Habitat, 2018[7]). Low-density urban areas lead to disconnection between central and peripheral areas, higher cost for the provision of public services and higher criminality and poverty.

Figure 5.12. Many Mexicans are unsatisfied with the time-distance to access urban services

Share of households unsatisfied with the time-distance required to access a service, %



Source: Encuesta Nacional de Vivienda (ENVI) 2020.

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Urban sprawl continued between 2010-18, mostly through a fast increase in built-up area in rural localities within metropolitan areas (Zubicaray et al., 2021[8]) supporting the hypothesis that new housing continued developing in low-density areas disconnected from the urban centres (Figure 5.13). As a consequence, Mexico is currently characterised by low-density residential-only areas, with prevalence of single-family dwellings (Figure 5.14), and increased reliance on private vehicle for transportation (Montejano et al., 2023[9]). Mixed land use, which can host residential dwellings, industrial units and public equipment, is not widespread (8.5% at the national level) (Table 5.1).

Table 5.1. Most land in Mexico is used for low-density residential purposes

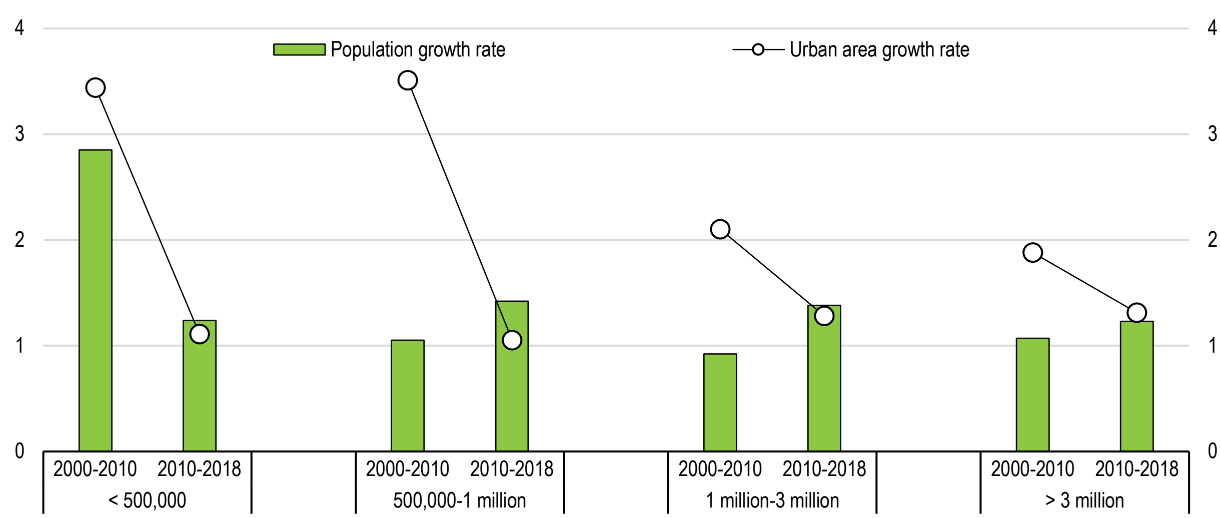
Composition of use of land by type in metropolitan and rural areas

Type of land use	Metropolitan areas	Rural areas	National
Residential use, high density (%)	1.1	0.1	0.6
Residential use, medium density (%)	2.6	0.1	1.6
Residential use, low density (%)	**72.2**	**86.6**	**77.1**
Mixed use, high density (%)	3.8	0.9	2.9
Mixed use, medium density (%)	5.2	5.4	5.6
Mixed specialized (%)	1.0	0.2	0.7
Services and commercial (%)	2.2	0.3	1.6
Urban Equipment (%)	7.6	5.9	7.0
Industrial (%)	3.2	0.2	2.0
Green and recreational areas (%)	1.1	0.4	0.8

Note: "Residential use, high density" have more than 150 dwelling per hectare; "Residential use, medium density" have between 100 and 150 dwelling per hectare; "Residential use, low density" have less than 100 dwellings per hectare; "mixed use, high density" have a ratio of economic units (industry, commerce and services) to residential dwellings higher than 2; "mixed use, medium density" have a ratio of economic units (industry, commerce and services) to residential dwellings below 2; "mixed specialised" is land with economic units and urban equipment; "Services and commercial" is land with only commercial and services; "Urban Equipment" is land with urban equipment (schools, hospital, public square, urban infrastructure, transport infrastructure, etc.); "Industrial" is land with industrial economic units.
Source: Monteano et al. (2022).

Figure 5.13. Many urban areas still grow faster than population

Growth rate of urban area and population, by urban area population, average 2000-2009 and 2010-2018, %



Note: Over 2000-10 (130 cities) and 2010-18 (133 cities).
Source: Zubicaray, G., et al. (2021).

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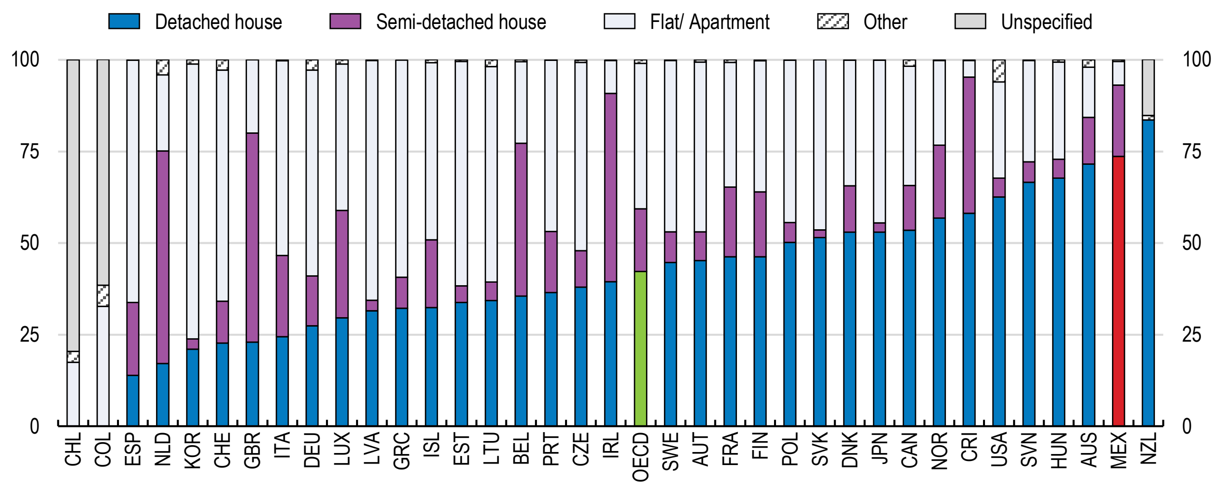
Urban sprawl, by increasing administrative fragmentation, reduces the productivity benefits from urban agglomeration. In Mexico, a city with twice the number of municipalities within its functional boundaries is on average 3.4% less productive (Ahrend et al., 2014[10]). Urban sprawl limits social mobility that has a positive impact on labour productivity and innovations (Heeckt and Huerta Melchor, 2021[11]). Urban sprawl is associated with increasing socioeconomic segregation, with usually low- and middle- income households living in settlements located in disconnected peripheral areas, while high-income households concentrate in closed-shape urbanizations (*urbanizaciones cerradas*) in central areas (INFONAVIT and ONU-Habitat, 2018[7]). By raising the number of households unfavorably located, urban sprawl increases the cost of developing transport infrastructure, water and electricity distribution systems, and wastewater treatment plants (Rojas and Medellin, 2011[12]).

Figure 5.14. Most houses are single-family

Occupied residential dwelling types, % of the total occupied residential dwelling stock, 2020 or latest available year



Note: The classification and terminology on types of dwelling may differ slightly from country to country. In general, detached houses refer to dwellings having no common walls with another unit. Semi-detached houses refer to dwellings sharing at least one wall or a row of (more than two) joined-up dwellings. Flats/apartments refer to dwelling units in a building sharing some internal space or maintenance and other services with other units in the building. Other refers to mobile homes, such as caravans and house-boats.
Source: OECD Regions and Cities at a Glance 2022; OECD Affordable Housing Database.

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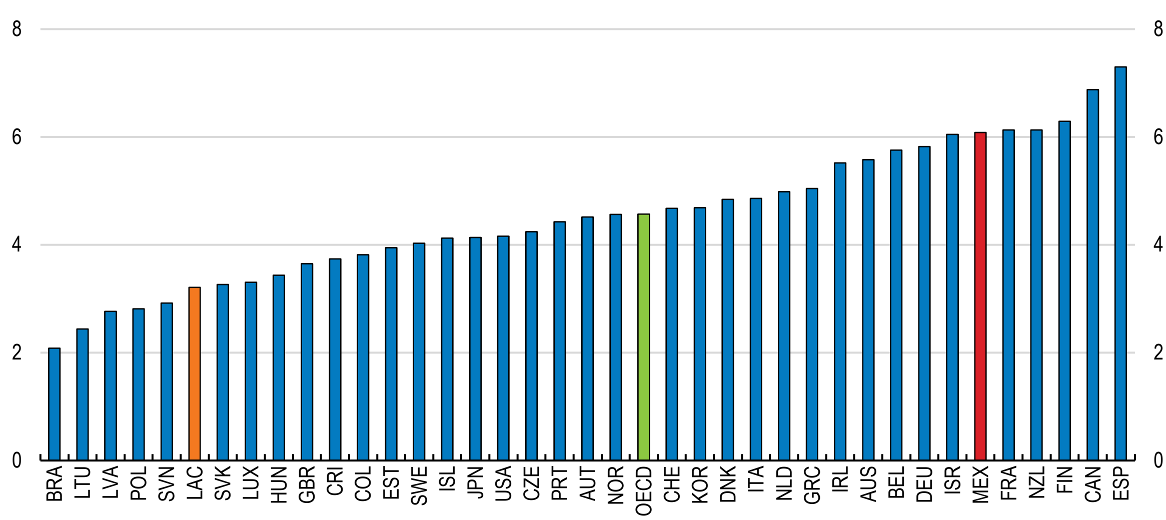
5.3. Mexico's new housing policy

The government recently reformed the national housing policy and its governance to facilitate access to adequate housing to all Mexicans (Box 5.2). The National Housing Programme 2019-24, and the National Housing Programme 2021-24, set a series of ambitious objectives including improving the quality of the housing stock, extending finance to low-income households and informal workers and enhancing policy coordination. The new housing policy includes a larger support for home improvements and the purchase of existing homes, abandoned home recovery and a focus on assisted self-build to provide housing to low-income households. The goal is also to coordinate infrastructure investment at the metropolitan level and reforming zoning policies to encourage mixed land use, including housing and public services. The General Law of Human Settlement stipulates that governments at any level must provide tools to generate land for housing for low-income and vulnerable groups.

The new policy puts a stronger emphasis on providing support to low-income households than past ones via means testing. This is a welcome change of direction, as in the past the main strategy to increase access to housing was to facilitate mortgage lending to formal workers, mostly in the highest income deciles, via federal institutes. This strategy, successfully increased residential investment (Figure 5.15), also including a significant part of self-built housing, but failed to grant access to housing to low-income households and contributed to large developments in cheap lands in peripheral areas disconnected from jobs and urban services (OECD, 2015[5]). Expanding the range of housing subsidies for low-income households and supporting the creation of a social rental housing sector would be valuable additional steps to improve access to quality housing. Tasking states with ensuring that municipalities comply with higher level legislation would help the implementation of national housing and urban development policy. Setting quality standards and promoting an integrated transport system in metropolitan areas would contribute to make public transport more efficient and affordable especially for vulnerable people living in peripheral disconnected areas. All these policies are analysed in detail in the rest of this chapter.

Figure 5.15. Residential investment is high in Mexico

Investment in dwelling, % of GDP, 2000-2021 average



Note: LAC is a simple average of Colombia, Costa Rica, and Brazil.
Source: OECD Economic Outlook, Investment by asset (indicator).

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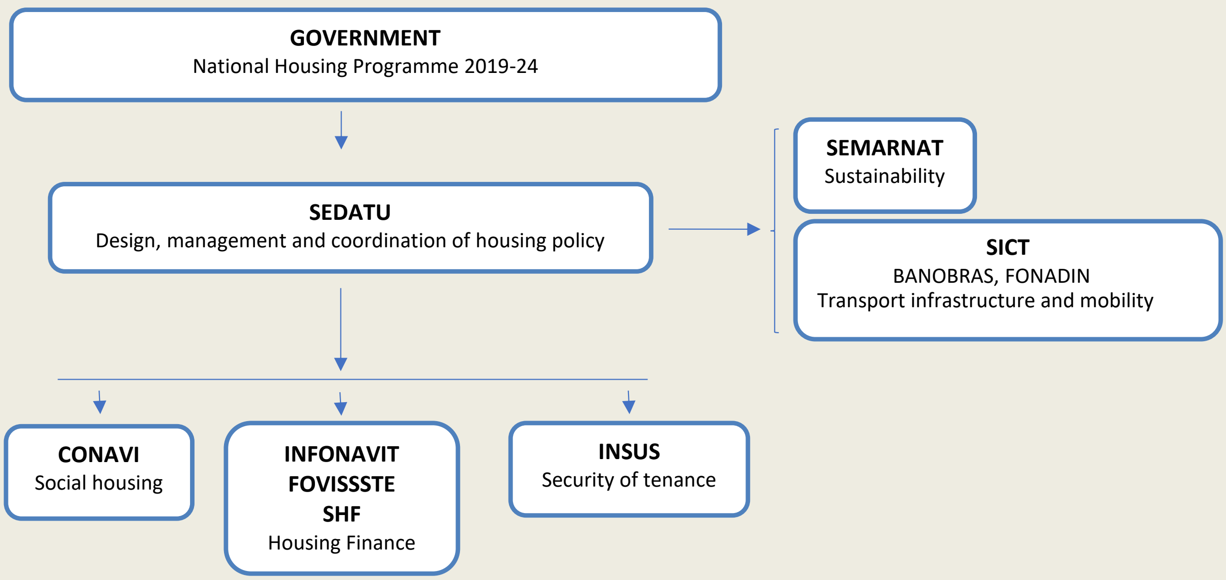
Box 5.2. Housing policy in Mexico: governance and main programs

The bodies and agencies that hold responsibilities for the design, funding and implementation of the housing policy in Mexico (Figure 5.16) are:

Figure 5.16. A stylised map of the housing policy framework



- The Ministry for Agrarian, Territorial and Urban Development (*Secretaria de Desarrolo Agrario, Territorial y Urbano*, SEDATU) is since 2019 charged with leading and coordinating housing, transport and land use policy and overseeing all aspects of urban development. SEDATU is responsible for drafting and implementing the National Housing Programme and contributes to draft the National Land Policy and The National Strategy of Territorial Planning.
- The National Housing Commission (*Comisión Nacional de Vivienda,* CONAVI) is the Federal Agency charged with the implementation of the social housing policy. CONAVI provides subsidies for house improvements or enlargement, land purchase or self-build, giving priority to vulnerable households with housing deficits.
- The National Institute for Sustainable Land (*Instituto Nacional de Suelo Sostentable*, INSUS) since 2019 focuses on security of tenancy, the regularization of informal settlements and the generation of affordable land.
- The Institute of the National Fund for Workers' Housing (INFONAVIT) is the Mexican federal institute for private sector worker's housing that provides its affiliates (private sector workers) with housing-related mortgage products for buying, remodeling or building a home. The Housing Fund of the Social Security and Services Institute for Public-Sector Workers (FOVISSSTE) provides housing-related mortgage products to public sector workers.
- The Federal Mortgage Society (*Sociedad Hipotecaria Federal*, SHF) is state-owned development bank that grants loans and guarantees to mortgage intermediaries in Mexico and acts as market maker in the mortgage market.

- The Ministry of Environment and Natural Resources (*Secretaria de Medio Ambiente y Recursos Naturales*, SEMARNAT) issues environmental regulation for urban development and assesses the environmental impact of urban development projects.
- The Secretariat of Communications and Transportation (*Secretaria de Infraestructura, Comunicaciones y Transportes,* SICT) is responsible for transport and mobility infrastructure.
- The National Bank of Public Works and Services (*Banco Nacional de Obras y Servicios Públicos,* BANOBRAS) is a state-owned development bank that finances public and private investment in infrastructure and public services. BANOBRAS operates the National Infrastructure Fund (*Fundo Nacional de Infraestructura*, FONADIN) which provides credit, loans and guarantees for planning, designing and implementing infrastructure projects with public and private participation in cities with more than half a million inhabitants in transport, communication, water, environment and tourism. FONADIN promotes investment in public transport and sustainable mobility through the Federal Support Program for Massive Transport Infrastructure (*Programa Federal de Apoyo al Transporte Masivo*, PROTRAM).

The National Housing Policy Framework currently consists of four programmes that are aligned with the National Development Plan 2019-24. Among its objectives it aims to reduce the number of substandard dwellings by 2.2 million units by 2024 (from 9.4 million to 7.2 million) and to promote more compact, connected and sustainable cities.

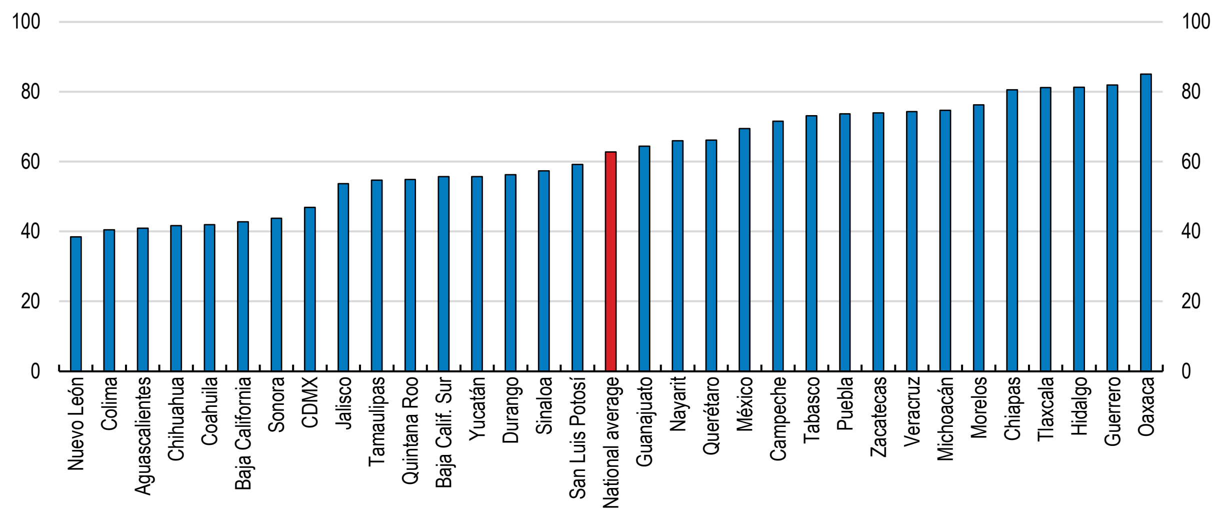
- The National Housing Programme (*Programa Nacional de Vivienda,* NHP) aims to provide affordable high-quality houses to all Mexican through a mix of policies including improving the quality of existing housing units, promoting the rental market and housing cooperatives, extending finance mechanisms to people not eligible for a credit via INFONAVIT and FOVISSTE, and providing assistance to self-build in marginalised areas. The NHP also aims to simplify and harmonise the housing policy framework and promote coordination across all levels of government and between them and the private and social sector.
- The Urban Improvement Programme (*Programa de Mejoramiento Urbano*, UIP), coordinated by SEDATU, aims to enhance access to urban services and urban infrastructure in the peripheral areas of 100 Mexican cities. The UIP covers a large set of interventions including the rehabilitation of public spaces, the enhancement of existing infrastructure or the construction of new ones, the promotion of social production of housing, the provision of security of tenure and property rights, the promotion of urban planning and land use policy at the metropolitan level.
- The National Reconstruction Program (*Progama Nacional de Reconstrucción,* PNR), operated by SEDATU and CONAVI together with the Ministries of Health, Education and Culture, provides the population affected by earthquakes in 2017 and 2018 with a subsidy for housing reconstruction or relocation.

5.4. Promoting good quality and affordable housing

Many low- and middle-income households cannot afford purchasing a house because of the high price of houses and land, the difficulty in mobilising developable land, the limited access to credit as well as the resistance of existing neighbors against densification (INFONAVIT and Fundación-IDEA, 2018[13]). A rental market insufficiently developed is another factor that fails to provide alternative housing solutions. Against this background, many households, mostly from vulnerable groups, have been left with the only option of self-build given the inability of public policies to directly provide affordable housing (Kunz-Bolaños and Espinosa-Flores, 2017[14]) (Figure 5.17).

Figure 5.17. More than 60% of housing is self-build in Mexico

Self-build homes, % of total private housing stock



Note: Only households who own the dwelling they live in are considered. Self-build includes dwellings built by the owner or by others hired by the owners and excludes purchases of already built dwellings or inheritance. “México” refers to the state of México and not to the whole country.
Source: Encuesta Nacional de Ingresos y Gastos de los Hogares (ENIGH) 2022.

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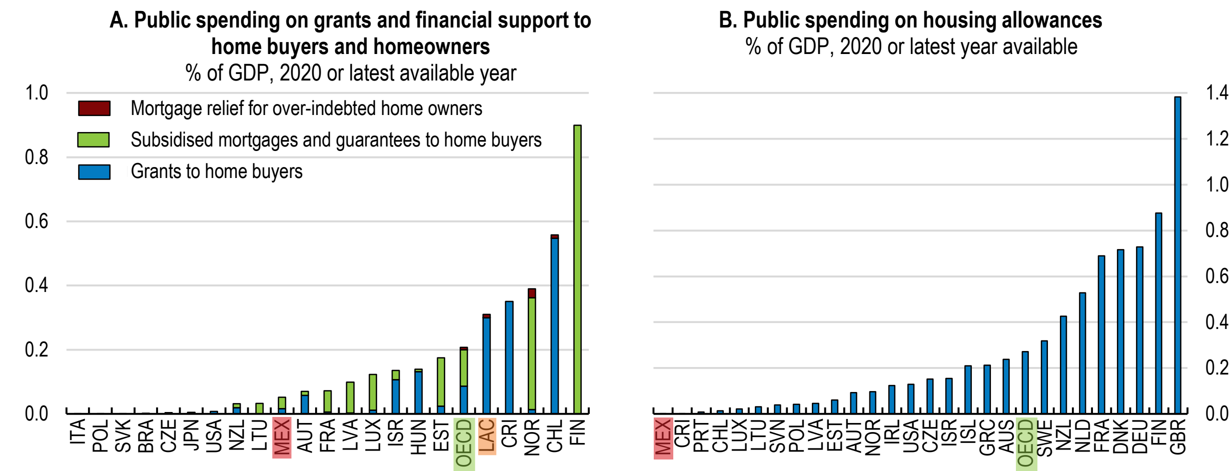
5.4.1. Refocusing public spending on housing

The new housing policy focuses on providing housing subsidies to the low-income population with substandard housing (*rezago habitacional*) (Box 5.2). The task is immense. The target population is one fifth of Mexican households (7.4 million low-income households or around 25.8 million people) that needs either a new home (three hundred thousand households) or housing improvements (around 7.1 million households) (CONAVI, 2021[15]). However, the National Housing Commission (CONAVI) has limited staff (around 400 people, 348 with a temporary position) and financial resources (0.024% of GDP in 2022) to reach this target. Between 2019 and 2022, it only reached 300 thousand households. At this pace it would take 97 years to reach the entire target population. In addition to being too small, the budget allocation is subject to large shifts across social housing programs.

Public spending on housing support is low in international comparison (Figure 5.18, panel A), and aimed at supporting the purchase of a home or housing improvements, but not other housing-costs such as rents or utilities, as in other countries where such housing allowances are significant (Figure 5.18, panel B).

Figure 5.18. Public spending on housing support is low in Mexico



Note: Panel A: for Finland, Israel, Mexico, New Zealand, and the United States, information is missing on one programme, and the reported amount is therefore a lower-bound estimate. Panel: B: Housing allowances are a form of demand-side support generally provided to low-income households who meet the relevant eligibility criteria to help meet rental and other housing costs, temporarily or on a long-term basis.
Source: OECD Affordable Housing database.

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The main housing subsidy scheme (Social Housing Program) suffers from several shortcomings. A welcome development is that it has become more targeted and favours subsidies for dwellings located in dense urban areas with minimum infrastructure standards. However, the scheme does not take sufficiently into account the difference in the price of land or housing across different metropolitan areas and between central, which are typically more expensive, and semicentral areas (INFONAVIT and ONU-Habitat, 2018[4]). Another issue, is that it favours the purchase of low-value new dwellings or self-build over the purchase of existing dwellings, by giving lower subsidies for the purchase of older dwellings, or renting. The government should expand the range of housing subsidies for low-income households to include renting and recurrent costs, such as utility bills, and align incentives between buying (new or old) and self-build. Subsidies provided via co-financing that benefit households with access to credit that are typically better-off should continue being reduced, as they divert limited funds from poor towards better-off households.

Box 5.3. The main housing subsidies programs

The National Housing Commission (CONAVI) provides housing subsidies mainly through the Social Housing Program (*Programa de Vivienda Social*, PVS) and the Emerging Housing Project (*Proyecto Emergente de Vivienda, PEV*).

- The Social Housing Program targets low-income households (with incomes up to around 15 768 MXC pesos in 2023 or around 900 USD) living in substandard housing (*rezago habitacional*) identified through households survey data and Census. Priority is given to households living in highly marginalized areas, in risk areas, and vulnerable groups (e.g. indigenous groups, very low income or female headed households). Subsidies may be used to purchase a dwelling (old or new) or for self-build (new construction, enlargement or improvement of existing dwelling), relocation (e.g., located in risk area or in areas interested by priority federal infrastructure projects), reconstruction (after natural disaster), sustainable integral improvement (including energy efficiency measures such as solar panels, biodigestors, water collectors) or adaptation of an existing dwelling. Subsidies for self-build are provided via the Assistance to Social Self-Build Process (*Proceso de Producción Social de Vivienda Asistida*) that includes both financial and technical assistance. Households not necessarily build the house by themselves but receive technical support via certified professionals who operate locally to guarantee the adequacy of building standards. The subsidy is only disbursed conditional on CONAVI's approval of the final project. The amount of the subsidy varies depending on whether the beneficiary receives a credit (co-financing modality) or not (100% CONAVI modality), the cost of the project, and the characteristics of the project. The support depends on housing location (it is higher in an urban consolidation zone, in areas close to urban services and public transport, and in high density areas) and its environmental standards. Eligibility also requires each project to respect local urban planning regulation and not to be in risk areas. Subsidies for home improvement interventions (enlargements, rehabilitation) appear sufficient to cover the totality of the costs and are in line with the average cost for housing interventions (ENVI 2020).
- The Emerging Housing Project started in 2020 as a reaction of the COVID-19 pandemic and targets low-income population living in marginalized areas in priority municipalities and provides subsidies only for enlargement or improvement of an existing dwelling. Between 2020 and 2022 CONAVI provided 165 thousand subsidies.

CONAVI provides housing subsidies also via other programs of smaller size, including the National Reconstruction Program (*Programa Nacional de Reconstrucción*) targeting the 180 thousand dwellings damaged by the 2017 and 2018 earthquakes; subsidy programs promoting the resettlements of local communities living in high-risk areas or the relocation of residents from areas affected by major infrastructure projects (e.g., Tren Maya); and social housing projects involving indigenous people (e.g. Yaqui population).

Source: REGLAS de Operación del Programa de Vivienda Social para el ejercicio fiscal 2023; CONAVI.

A significant part of support in the housing subsidy scheme promotes self-build through the Assistance to the Social Self-Build Program, which represented around two thirds of CONAVI budget in 2022. Despite strong efforts, the strategy has some limitations. Firstly, single households do not benefit from economies to scale in the construction process. Secondly, individual self-build projects are mostly low-density buildings, such as single-family houses, thus hardly a solution against urban sprawl. The self-build program should be thoroughly evaluated to assess its effectiveness in improving access to quality housing and public services among vulnerable populations, including its impact on urban sprawl and densification.

An alternative could be to encourage self-build housing cooperatives where a group of people join forces to buy land to build housing. As cooperatives are more likely to access credit, the cost might be lower than for individual self-build. Additionally, a cooperative is more likely to opt for large-scale vertical construction, limiting urban sprawl. A successful self-build housing cooperative requires legal and organisational skills (Oviedo-Gonzalez, 2014[16]) as its members participate in many activities and decision-making processes including selecting the land where to build, designing and approving the development project, applying for a credit or a building permit. CONAVI could provide financial, technical, legal and organisational support for cooperatives as legal and organisational skills might not be widespread among its members. Support could be provided both directly or via certified professionals or non-profit organisations. Mexico could also follow the example of Chile where groups of vulnerable households may receive housing subsidies for a collective self-build project via the *Fondo Solidario de Elección de Vivienda*.

5.4.2. Improving access to credit for low-income households and informal workers

The National Housing Program sets the goal of increasing the volume of credit to low-income households and informal workers but does not provide clear guidelines on how to achieve it. Informal workers have almost no access to credit as a formal job is a key requirement to access credit in Mexico (Cassimon et al., 2022[17]). Moreover, affiliation to the social security remains a key requirement to receive a credit from the federal institutes INFONAVIT or FOVISSTE, even if recent products have started to extend credit to people who don't have a formal job but did so in the past (e.g. *MejOraSí*).

The federal Institute (INFONAVIT) could contribute to improve access to credit for low-income households and informal workers. To do that, INFONAVIT could improve its assessment of the creditworthiness of informal and low-income workers by, for instance, using alternative information such as regular payment of utilities or mobile phone bills, which are increasingly used in several countries to assess the creditworthiness of informal workers (Maravalle and González Pandiella, 2022[18]). The Federal Mortgage Society is planning the securitization of mortgages issued by fintechs that use innovative credit scoring techniques to provide housing finance to customers that are not served by commercial banks or are not affiliated to social security. This very welcome initiative might be scaled up.

The Federal Mortgage Society is planning to provide direct mortgages on a small scale (around 2000 credits per year) through a new financial product (*hipoteca digital*). This initiative would target households with incomes from formal and informal jobs, though prevalently from a formal source, to help them purchase houses below 1.5 million Mexican pesos. This financial product targets a segment of the population estimated at around 2 million households that is currently uncovered by other federal agencies or commercial banks.

INFONAVIT could also further contribute to improve housing quality. Despite recent increases, it only allocates a marginal share of its credit portfolio (around 2.4% of the amount of credit issued over 2019-2022) to housing improvements. Even a small increase in the share of the credit amount dedicated to housing improvements would translate into a substantial increase in the number of credits, as the average amount of credit for housing improvements is far smaller than that for purchasing a dwelling.

Mexico could reintroduce public mortgage guarantee schemes to facilitate access to credit to low-income informal workers. Between 2012 and 2021 the National Fund for Social Housing Guarantees (*Fondo Nacional de Garantías para la Vivienda Popular*, FONAGAVIP) provided public guarantees that allowed around 10 thousand low-income households with informal jobs to receive mortgages from commercial banks at favourable conditions. Public guarantees were rarely invoked (0.4% of the cases). The elimination of FONAGAVIP in 2021 further reduced access to credit for informal workers.

Mexico could also promote the development of green mortgage financial instruments to support access to energy-efficient housing. The Federal Mortgage Society provided credit and technical assistance to adopt ecotechnology to only 70 thousand dwellings between 2013 and 2020 (program Ecocasa). The new sustainable taxonomy (see chapter 2) has large potential to facilitate that the public and private sector define investment strategies conducive to more energy-efficient housing solutions. This is exemplified by the recent launch of green mortgages by two private banks. Through a green mortgage, homebuyers who are purchasing energy-efficient homes or making energy-efficient upgrades to existing homes can access a lower rate on their mortgage, facilitating access to more affordable and environmentally-friendly housing.

5.4.3. Expanding the rental market

Mexico could increase the supply of rental housing through three main channels. A reform of housing taxation and landlord-tenant regulation could help expand the supply of private houses for rent and support the formalisation of rental contracts. Fiscal and administrative incentives could be provided to further promote the involvement of the private sector in increasing the supply of rental affordable housing targeting middle-income households. Last, developing a social rental housing sector would particularly benefit low-income households.

Reforming landlord-tenant regulation

In Mexico the legal process of lease dispute resolution is lengthy and costly. Tight rent controls and high tenure security reduce rental supply by lowering the expected return from rent (OECD, 2023[19]) and favours informal rental contracts. The regulatory framework for rental housing could be reformed to strike a better balance between tenancy protection and the interest of the landlords. This could be achieved by allowing for reasonably short-term lease duration and clear termination rights and standardised regulation across states. Alternative out-of-court dispute resolution mechanisms could be introduced to facilitate the resolution of conflicts between landlords and tenants regarding the lease agreement (INFONAVIT and ONU-Habitat, 2018[4]). Following the example of Mexico City, specialised tribunals could be extended to the whole country to expedite the resolution of lease dispute.

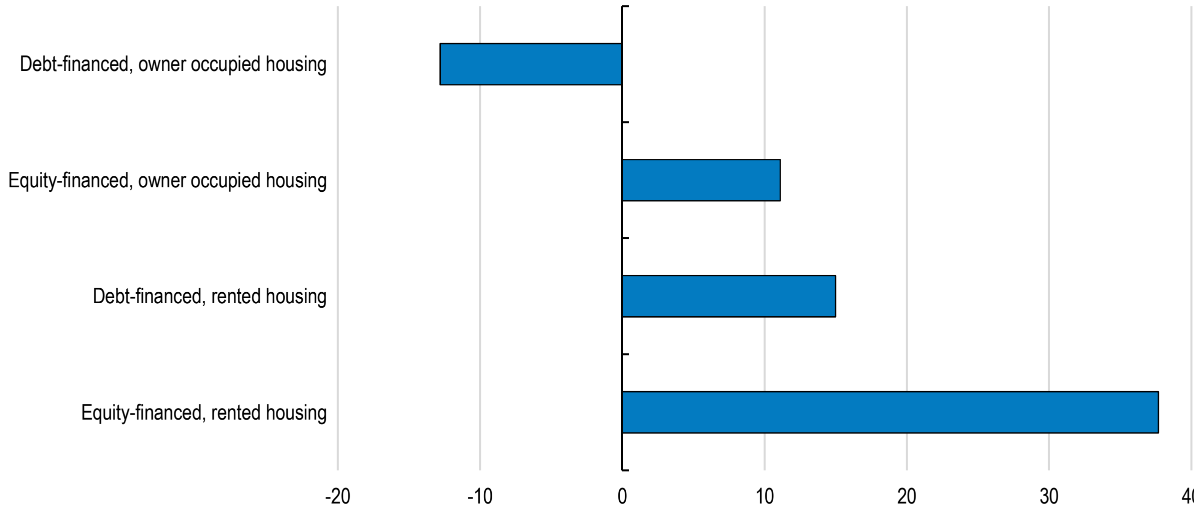
A public guarantee of timely rental payment could be provided to landlords (INFONAVIT and ONU-Habitat, 2018[4]) (e.g., *dispositif visale* in France) in favour of vulnerable groups (youth, seniors, immigrants, only mothers) who are often discriminated (INFONAVIT, 2022[20]). A past housing policy initiative aimed to improve formal rental market (*Arrendavit*) did not prove effective also for not offering sufficient guarantees against non-rent payment (OECD, 2015[5]). The National Workers' Housing Fund Institute (INFONAVIT) should allow workers with an INFONAVIT account to use it as a guarantee for rental payment. This would be a valuable initiative worth putting into place swiftly, as it would help to expand the size of the rental market and reduce the number of informal rental contracts. It would particularly benefit young workers and workers transitioning between formality and informality periodically.

Reforming housing taxation

Housing taxation in Mexico encourages homeownership, especially if debt-financed, over investing for rental housing, especially if equity-financed. This occurs mostly because of a preferential tax treatment of debt-financed homeownership via mortgage interest relief. The marginal effective tax rate, which measures the tax incentive to housing investment across tenure types (owner-occupied or rental property) and financing sources (debt or equity), shows that the minimum return to make investing in debt-financed owner-occupied housing worthwhile is actually negative (-13%), while it is 11% for an equity-financed owner occupied housing investment (Figure 5.19) (Millar-Powell et al., 2022[21]).

Figure 5.19. Mexico applies a preferential tax treatment to debt-financed homeownership

Marginal Effective Tax Rates by investment scenario, 100% average wage taxpayer, %, 2016



Note: Results assume inflation at the OECD average level; with a 20-year holding period; and the returns stemming 50% from capital gains and 50% from rent or imputed rent.
Source: Millar-Powell, B. et al. (2022).

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Phasing out mortgage interest relief would reduce the disincentive to invest in rental housing and imply further advantages, such as producing a fiscal gain (0.1% of GDP) and reducing inequality, as mortgage interest relief benefits relatively more high-income households. Reducing it gradually would avoid financial difficulties for households repaying their loans and limit its potential impact on housing prices (OECD, 2022[22]). To maintain the benefit for low-income households its eligibility could be restricted via a threshold on household's personal income or the property value. Alternatively, a cap could be introduced on the total interest deduction to be claimed as a tax credit. Mortgage interest relief could be permitted on secondary residences that are rented, for example by taxing the rental income net of mortgage interests. As an alternative, Mexico could introduce a tax relief on paid rent for tenants (such as in Hungary and Ireland), also in exchange for rental contracts at below market level and longer duration (e.g. *contratti convenzionati* in Italy) (Salvi del Pero et al., 2016[23]), though this should be accompanied by measures that disincentivise the use of informal rental contracts and make emerge rental income. Reducing mortgage interest relief could also moderate house price growth in markets where housing supply is constrained and where tax subsidies tend to be fully capitalised in housing prices.

Moreover, Mexico could follow the example of several OECD countries that shifted from transaction taxes to recurrent taxes on real estate as taxing the income produced by an asset is more efficient than taxing their purchase or sale. Transaction taxes on housing purchases (*Impuesto sobre adquisición de inmuebles y derecho de registro*) in Mexico range between 2% and 6% of the transaction price, depending on the state and the purchase price. They reduce housing market efficiency by discouraging housing transactions, and hinder worker mobility via higher transaction costs for owner-occupants than renters. Shifting housing taxation away from transaction to recurrent taxes should be done gradually (e.g., as in Australia) to increase its public acceptability (OECD, 2023[19]). This reform could increase access to credit, especially for low-income people, by reducing the initial amount necessary to purchase a dwelling.

Increasing the supply of affordable rental housing through the private sector

Incentives could be provided to further promote the involvement of the private sector in increasing the supply of rental affordable housing. Policy tools may include public-private partnerships (Box 5.4) or well-designed tax regimes, such as a tax credit for developers (e.g., the Low Income Housing Tax Credit in the Unites States). However, these incentives need to be well designed to be effective. In France, the Loi Pinel sets a maximum rent per square meter at the regional level for affordable rental housing, but in regions with a tight housing market it is only marginally below market price in the absence of rent control. Another problem with these initiatives is that they encourage building new flats where rental prices are low, typically in places where there is little demand resulting in empty dwellings and little effect on rents in places where rents are high. As an alternative, refundable tax credits or direct subsidies for developers tend to be more effective but imply higher fiscal costs (OECD, 2022[22]). Other options include a preferential administrative regime to promote affordable housing provision, such as a reduction in the number of authorizations and/or the time necessary to obtain them or a density bonus. Developers could also be required to build affordable housing as a share of new constructions. This could be achieved through the use of cross-subsidies, which allow developers to earn profits from selling or renting housing units at market-rates to subsidise the costs of building affordable housing.

Box 5.4. Promoting affordable housing via the private sector: the case of Italy and France

Italy established a model of affordable housing based on public private partnership via a system of real estate funds established in 2009. This system of funds aims to increase the supply of affordable housing for a specific segment of households, mostly low- and middle-income households who are not poor enough to access standard social housing but are unable to meet the market price. The system of real estate funds is composed of a large national fund, funded by the Cassa Depositi and Prestiti (49.8%), the Ministry of Infrastructure and Sustainable Mobility (6.9%) and private capital (43.8%), that participates into a series of smaller local funds to finance affordable housing projects. The system incorporates an incentive mechanism to promote the quality of affordable housing. Each housing project is subject to a quality assessment that is performed twice, before and after the buildings have been handed over to the tenants, and covers aspects such as environmental sustainability, accessibility, green areas and quality of the dwelling. According to the result of the assessment, a social performance fee may be paid to the asset management company running the project.

France created the “affordable housing” status in 2014 halfway between social housing and the private market. Affordable housing are defined as accommodation for households that are too well-off for social housing but are unable to pay private-market prices. To attract capital from institutional investors the government created a specific financial framework and set a favourable taxation regime (a reduced VAT rate of 10% and an exemption to property taxes on developed land for a maximum of 20 years), in exchange for a minimum rental commitment of 15 years with rents 20% lower than market prices. To qualify as affordable housing, projects must be located in a “challenged” area defined by law, target middle-income occupants under a revenue threshold, and have a capped price or rent.

Source: (AVANZI, 2021[24]).

Developing a social rental housing sector

Social rental housing is an important alternative to the private rental sector in many OECD countries, accounting for around 7% of the housing stock on average, and reaching 21% in Denmark, 24% in Austria and 34% in the Netherlands (OECD, 2023[25]). There are also positive experiences among emerging countries, such as in Chile and South Africa, where the provision of rental housing for low- and middle-income households is related to urban regeneration policies (OECD, 2022[26]). In Mexico, instead, social rental housing is marginal, consisting of a small-scale pilot project targeting low-income workers in the army (*Vivienda en Renta*) and running discontinuously since 2014, and some state initiatives (e.g., the *Instituto de Vivienda de la Ciudad de México* provides a partial support to rents ranging between 1500 and 4000 Mexican pesos).

Due to limited public resources, social rental housing also represents a better option than housing subsidies for Mexico. Moreover, most evidence from OECD countries shows that subsidies, to homeownership or renting, end up inflating house prices and rents when housing supply is tight, which is often the case in most Mexican metropolitan areas.

To encourage the development of a social rental housing sector, Mexico could support private non-profit or limited-profit organisations to supply social housing, such as Community Land trust in the United States (Box 5.5) or social rental housing associations in Europe (Heeckt and Huerta Melchor, 2021[11]; Salvi del Pero et al., 2016[23]; INFONAVIT and ONU-Habitat, 2018[4]). For-profit providers can also participate, as in Germany where the social housing stock is predominantly private and the public sector provides housing allowances to social tenants (OECD, 2023[25]).

Encouraging the involvement of non-profit or limited profit private housing associations would have several advantages. It could promote vertical buildings and multifamily dwellings and help reduce urban sprawl and make a more efficient use of lands, especially in urban areas. It could reduce economic costs thanks to economies of scale related to a larger scale of social housing projects than individual self-build. Due to their established relationship with tenants, some social housing providers could also deliver additional services such as community development, employment generation, training and youth projects (such as in Austria). A fourth advantage is that a social rental housing sector does not necessarily imply a high fiscal cost. The level of public support to social rental housing is usually below 0.1% of GDP (Salvi del Pero et al., 2016[23]), and in most cases is represented by indirect subsidies (tax reliefs and state guarantees) rather than direct spending (CECODHAS, 2009[27]). The possibility of relying on indirect subsidies would suit Mexico, whose fiscal stance is characterised by a constrained spending capacity and a limited ability to ensure stable long-term direct public spending.

Box 5.5. Promoting affordable housing for low-income households in the United States

Community land trusts (CLT) in the United States, are community-based non-profit organizations that provide permanently affordable housing for lower-income households through resale restrictions. Members of a CLT are housing and human service providers, community activists and citizens who engage with lawmakers and city planners to preserve and expand the supply of affordable housing. CLTs are enabled to receive funds for property acquisition, rehabilitation, and the sale or rental of housing units. By statute a CLT determines the use of the land to pursue community needs. CLTs retain ownership of the underlying land and the resale restriction forces CLTs homebuyers to resell their homes at a price calculated to keep homes affordable for future generations of income-eligible buyers. CLTs’ funding for land and property purchases is usually provided either via taxation (increase in property transaction tax in Ohio), issuance of general obligation bond or land value capture instrument (the Tax Increment Redevelopment Zones in Houston).

Collaboration between land banks and CLTs may strengthen the supply of affordable housing over the long-term with land banks holding land and properties to recirculate into use and CLTs needing them for increasing the supply of affordable housing. The collaboration between land banks and CLT often is instrumental to the implementation of city's or county's housing plans. Experience highlights that widespread and protracted political support and adequate public funding are key elements for CLT-Land Bank collaborations to successfully address the need for affordable housing, especially in urban areas where demand for housing is structurally higher than supply. In the absence of public funding, land banks typically would sell their properties to privates, with the market driving their end-use, which reduces their ability to achieve more equitable outcomes in the housing market that are consistent with community needs.

In Houston, CLT homebuyers could afford a $180,000 house for $75,000 against traditional affordable housing units selling for approximately $140,000.

Source: (Lowe, Prochaska and Keating, 2022[28]).

Mexico would need to elaborate a financing strategy to underpin the development of the social rental sector and its ability to effectively pursue its social goal. The experience of European countries provides interesting options as in the past decades they shifted towards a market-oriented social housing policy and started relying on private finance to maintain the existing stock and continue the production of new social housing (Box 5.6). Social rental housing providers may raise funds via special financial institutions (e.g., Housing Bank in Norway, Caisse d'Epargne in France) that raise capital through the issuance of specific and standardised financial instruments, such as social housing bonds (Box 5.7), self-sustaining financing-mechanisms (Austria and the Netherlands), including revolving funds (e.g., Denmark and Slovenia) or directly accessing financial markets relying on their equity as collateral (United Kingdom and Finland). In Mexico a federal institute (e.g., INFONAVIT), could play the role of special financial intermediary that supports the financing of the social housing sector. Over time, as the social housing sector grows, equity contributions from selling assets (land, dwelling stock) or from their tenants (e.g., in Austria social tenants provide an initial deposit) and the rent paid by social tenants might become available funding options.

Box 5.6. Funding strategies for social rental housing

The funding of the social rental sector encompasses a variety of sources that include public funding (direct and indirect subsidies, public loans), debt finance, equity contributions and rents paid by social tenants. Public support may include direct provision of social rental housing (transfers to the local authorities that own the stock) and subsidies to non-government social rental housing providers (supply-side subsidies in the form of grants, public loans from special public credit institutions and government-backed guarantees).

France created a dedicated circuit of investment and savings to promote social housing investment, the "Livret A" fund, which represents around 70% of social housing funding. The "Livret A" is a special savings deposit that can be opened in any commercial bank and pays a tax-free interest rate. These short-term savings deposits are pooled and converted into low-interest long-term loans for social housing by the state-owned financial intermediary (*Caisse des Dépôts et Consignations*) in exchange for a fee remunerating the banks for collecting the funds and paying the interest.

The system of home loan savings (*Bausparen*) is a saving scheme widespread in Austria and Germany addressing housing investment. It consists of a savings contract with a specialised credit institution, in which the customers accumulate savings up to reach a given amount, usually around 40% of the housing project, before qualifying for a loan on prearranged terms (maturity and interest rate). The Bausapern system is a closed credit system that transforms saving deposits into long-term loans, and is funded only by savings and amortisation payments. This saving scheme is attractive for customers because it benefits from a state contribution to the interest rate.

In the Netherlands a strong security structure facilitates the financing of the social housing sector by reducing credit risk for banks. This mechanism grants financial independence to the Dutch social housing system where housing associations are private, non-profit enterprises who receive no direct public subsidies. Housing associations access bank loans at a favourable interest rate thanks to the guarantee provided by the Fund for Social Housing, whose capital acts as collateral. This Fund is established by housing associations that contribute to its capital via regular payments (the guarantee fee). The Fund grants guarantees to housing associations after an assessment of its creditworthiness, thus affecting its borrowing ability. A supervisory body monitoring governance, integrity and financial management of housing associations (Housing Association Authority) represents the second level of security, and Dutch State and municipalities are the guarantor of last resort.

Denmark provides a successful example of a two-pillar financing mechanism for the social housing sector. The first pillar are State guarantees that allow housing association to access bank credit. State-guarantee commercial bank loans account for almost 90% of the financing for new social housing investment. The second pillar is the National Building Fund, which provides housing association with the financing for renovation, development and investment in existing residential stocks. The National Building Fund is an independent institution that operates outside the state budget as a private fund. It is financed by a share of the rents of social housing tenants and operates as a revolving fund, serving as a savings account for the entire social housing sector.

In South Africa financial sustainability of social rental housing projects is based on cross-subsidisation (higher-income tenants subsidise the rents of lower-income tenants) and government grants, but rents paid by tenants play a larger role. Potential beneficiaries of social rental housing must demonstrate regular income.

Source: (OECD, 2023[25]; OECD, 2022[26]; CECODHAS, 2009[27]).

Box 5.7. Social Housing Bond Financing

Housing Banks in Austria are an example of housing bond financing. They raise private capital through the sale of Housing Construction Convertible Bonds. These bonds are a specific financial tool whose sale is entirely allocated for social rental housing investment. The sale of these bonds provides around 45% of the financing requirements of housing associations for new housing and refurbishment. These bonds bear an interest rate that is 1 percentage point lower than capital market bonds, which reduces costs for housing providers. Despite the lower interest rate, they are an attractive long-term low-risk investment due to a favourable tax treatment, which includes waiving the capital income tax for the first 4 per cent of the coupon rates and a tax deductibility of the purchasing price (Deutsch and Lawson, 2012[29]). It has been estimated that for every euro of foregone tax revenue these bonds generate around 20 euros of investment in affordable housing production (OECD, 2023[25]).

Another example of financial intermediary is the Bond Issuing Cooperative for Limited Profit Housing in Switzerland that raises capital by issuing state-guaranteed bonds. This capital is used to provide cheap loans for non-profit housing construction. Loans from the revolving fund contribute up to 70 percent of the cost of the total project.

The Australian Affordable Housing Bond Aggregator (AHBA) is a financial intermediary that facilitates the financing of affordable housing through the issuance of housing bonds in Australia. The AHBA provides long-term loans on favourable terms to Australian community housing providers (CHPs) by issuing housing bonds. CHPs can use the loans to build and purchase new dwellings, maintenance of existing housing stock and the refinancing of outstanding debt. Loans from the AHBA helped CHPs increase the stock of affordable housing by around 13000 dwelling units between 2018 and 2021.

This financing model also may benefit from issuing social bond. On February 2020, Cassa Depositi e Prestiti S.p.A. ("CDP") issued its first Social Housing Bond worth 750 million of euro that were allocated to 235 social housing projects that will produce 4226 social housing units for around 11 thousand beneficiaries. A potential issue with this model is that might not suit objective of social housing for the very poor, nor it is clear if the level of rent in these social housing is sufficiently below the market level as to provide an effective alternative.

Source: (AVANZI, 2021[24]; Deutsch and Lawson, 2012[29]; OECD, 2023[25]).

A social housing sector requires a strict regulatory framework for housing providers and a tight monitoring of the sector, in exchange of the advantages it receives (different type of subsidisation) in recognition of its social function. The regulatory framework should ensure operational efficiency and financial prudence of social housing associations, thus contributing to build up high levels of confidence to all stakeholders. Adequate financial supervision is key to help avoid financial and operational mismanagement and excessive financial risk, especially if housing associations are allowed to invest in activities beyond social housing, which should be avoided. Ensuring prudent financial management is especially important to build up credibility in financing mechanism relying on access to financial markets or commercial bank loans (OECD, 2023[25]; CECODHAS, 2009[27]).

Supervisory authorities could be established at the federal level to control governance, integrity and financial management of the whole sector (housing associations, financial intermediaries), and should be provided with sanctioning powers (financial penalties, appointment of a supervisor). Special financial institutions could also be charged with controlling the financial health of housing associations (e.g., the Fund for Social Housing in the Netherlands). Housing associations might be subject to self-monitoring rules and administrative review that is periodically verified by an auditor set by the housing organisation (e.g., Denmark), thus introducing a first internal layer of monitoring, or produce an annual report in which determine the value of their property on the basis of market value to facilitate greater transparency.

The regulatory framework should ensure that social housing associations provide good-quality housing for the most disadvantaged households. In this respect, the level of the rent paid by social tenants should be based on effective construction costs (e.g., Austria, Denmark, Finland or Switzerland) rather than on tenants' income (Australia, Ireland, New Zealand, Japan) or dwelling characteristics and location (the Netherlands and Estonia). Financial and fiscal incentives as well as administrative facilities that reduce the costs of rental housing projects would help lower the level of rent. Setting a fixed term tenancy with renewal subject to reassessment of eligibility, would avoid that tenants whose situation improved might have no incentives to find a different housing solution. In alternative, tenants whose situation had improved and did not fulfill anymore eligibility requirements could remain and pay market rent. Increasing equity in access to social rental housing needs to be weighed against the advantages of social diversity, disincentives effect for economic advancement in case of insecurity of tenure, administrative costs linked to periodic reviews of tenancies.

5.4.4. Reinforcing formalisation and avoiding the formation of informal settlements

The lack of affordable and social housing is the main cause of irregular settlements, that are widespread in Mexico. Irregular settlements are illegal if they occupy specific areas (risk areas, areas with a right of way, natural protected areas), irregular if they do not comply with urban regulation and informal if there is no property title. In Mexico around 25% of the population lives in informal dwellings, of which there are between 4 and 7 millions (IMCO, 2011[30]; OECD, 2015[5]).

The regularization of informal settlements has been one of the main strategies to provide land to low-income households, together with subsidies and the purchase of land for urban development (*reservas territoriales*) (CONEVAL, 2018[6]). However, this strategy has a high cost for inhabitants and the public administration. Inhabitants face insecurity of tenure (vulnerable to eviction and expropriation), lack access to public services and can be located in areas that are unsafe or exposed to natural risks. Municipalities do not always enforce construction standards in informal settlements and while they may tolerate informal settlements out of political interest they may be prone to corruption during the process for their regularisation. Providing services to informal settlements is estimated to cost between 3 to 8 times more than infrastructure provision to a planned development (Aristizabal and Ortiz, 2002[31]). Informal settlements do not pay property taxes.

Mexico should reinforce title formalisation. The National Institute for Sustainable Land (*Instituto Nacional de Suelo Sustentable*, INSUS) provides a subsidy for the regularization of land tenure and the property registration. Around 42 thousand property regularisations were achieved between 2019 and 2022, against a target population of at least 4 million. A large majority of the population reports problems in the housing registry process (83%) (CONEVAL, 2018[6]).

Box 5.8. Increasing the supply of land for affordable housing the case of Bogotá

The city of Bogotá set up a land bank in 1999 (Metrovivienda) to reduce the price of land and boost the supply of affordable housing for low-income families, thus preventing the spread of informal settlements. The land bank would ensure a low land price by buying cheap land in unserviced areas before zoning changes (change in the use of land) or granting planning permission. The land would then be resold to private developers, thus recovering the initial cost of buying and servicing the land. The demand for the new affordable housing was ensured by housing subsidies and credit facilities.

MetroVivienda faced several challenges that slowed its action and partially reduced its effectiveness. The inability of public utilities of quickly servicing the land, lengthy disputes over legal ownership of some plots of land, and hesitation of private developers contributed to delay its action thus lengthening the period of time between purchasing, servicing and reselling the land from the initial estimate of two years to eight years.

The use of housing subsidies led landowners to increase the price of land anticipating the development project, thus preventing from selling cheap urbanised plots to builders, who in turn could not provide affordable housing to the very poorest. To partially address these barriers some changes occurred over time, including a major emphasis on vertical construction to increase densification, the freezing of the price of land at the level of the moment the development project was approved and the involvement of housing associations other than private builders. Over time Metrovivienda stopped acting as a bank land and limited its action to establishing projects in association with local landowners.

Metrovivienda successfully provided high quality infrastructure in its serviced lands and promoted a more widespread densification. However, it failed to provide good and affordable housing for all and reduced but did not stop the spread of informal settlements. External factors heavily hampered its activity, including different political alignment between the city and the national government, structural problems that made it difficult the distributions of housing subsidies, extremely legalistic judicial and planning systems that lengthened the time for its operation and hostility from the construction sector reluctant to develop social housing projects within the city possibly to avoid more intense controls and higher taxes than in less well organised municipalities outside.

Source: (Gilbert, 2009[32]).

Mexico could follow the experience of several OECD countries and use land banks to improve access to cheap land for affordable housing, especially in urban areas, promote a well-ordered urban development and prevent new informal settlements. A land bank usually buys rural land before it is transformed into urban land to secure a part of the increase in value that otherwise would be seized by private landowners and building developers. Thus, land banks are less effective in increasing land supply in central urban areas where the price of land is already high. The example of the city of Bogotá in Colombia (Box 5.8) could be especially relevant for Mexico.

5.5. Addressing urban sprawl

With around 80% of the Mexican population living in urban areas, a share that is projected to increase in the future (Zubicaray et al., 2021[8]), housing and urban policies need to be aligned. However, in Mexico, housing policy is often defined in isolation from transport infrastructure and urban planning. This contributes to urban sprawl that fuels spatial segregation, with vulnerable groups often living in peripheral areas with limited access to jobs, transport and urban services. Unfavourable living conditions in these marginalised areas, in turn, cause widespread house vacancy.

5.5.1. Enhancing coordination on housing and urban policy

Horizontal and vertical coordination across institutions remains problematic, also because relevant federal agencies bear different visions of urban development (Zubicaray et al., 2020[33]), complicating the task of translating national urban and housing policy into concrete actions. Urban policy is fragmented across levels of government. By law local policies should align with national targets but there is currently no mechanism to actually enforce it. When a new administration takes over (federal, state and municipal), it should produce a new urban development plan that integrates higher-level legislation, but it is not obliged to do so. In addition, environmental and urban planning regulation do not share homogeneous criteria, which leads to further inefficiencies in land management. To obtain a building permit only the environmental or urban planning regulation needs to be met, not both.

Recent changes in governance have positively streamlined the institutional landscape. Since 2018 the Ministry for Agrarian, Territorial and Urban development (SEDATU) has been given authority to lead and coordinate all public agencies involved with housing, transport and urban development and is responsible for achieving the targets set by national housing and urban development policies. Adopting a national common code for urban development, zoning and housing would also help to promote an ordered development. However, to carry out these tasks and its increasing responsibilities SEDATU may need additional funding. Its budget dropped by around one third in real terms between 2019 and 2023.

Strengthening municipalities' capacity to implement urban development policies

Municipalities often lack the technical capacity to meet the complex challenges implied by urban development. A key factor explaining the structural weakness of housing and urban planning governance resides in the disparity between resources and responsibilities of municipalities. Municipalities by constitution are responsible for land administration within their jurisdiction and decide on land use (secondary zoning), oversee the cadastral management, set property taxes, and provide public services and infrastructure. However, financial, technical and staff resources available to most municipalities are insufficient to cope with these responsibilities. A large majority of municipalities does not have an urban development plan (INFONAVIT and Fundación-IDEA, 2018[13]) or a modern cadastral system. This implies that, when issuing a building permit, they may be unable to quantify obligations (e.g., conditions, impact fees) imposed upon the developers to offset the extra pressure on urban infrastructure and services.

Municipalities undermine the implementation of national policies as typically they forego updating regulation to integrate higher level government guidelines. For example, few municipalities have integrated environmental criteria in urban planning despite national legislation requiring it. However, federal and state bodies have little control over it. A development project that violates federal or state regulation cannot be prosecuted if the federal/state regulation has not been integrated into municipal legislation on urban planning.

The distribution of urban planning powers across levels of government could be reformulated to prevent irregularities and enforce intergovernmental cooperation. This could be achieved via a new legal framework that clearly defines competence allocation at each level of government. For example, states could be tasked with ensuring that municipalities comply with federal and state urban and housing law. Municipalities could retain the power of proposing secondary zonification that should however be validated by states. This might require a constitutional reform. Alternatively, establishing a federal agency with sanctioning power could help prevent municipalities from violating federal and state legislation when issuing building permits or changing the use of land. Such an agency could follow the model of the Federal Attorney Office for Environmental Protection (*Procuraduria Federal de Protección al Ambiente*). SEDATU should complete a revision of urban planning legislation across levels of government to identify and resolve contradictions.

To facilitate the enforcement of housing and urban legislation at the local level, the elaboration of urban development plans could be carried out by an Urban Planning Institute endowed with the necessary staff and technical resources. Several small municipalities outside a metropolitan area could be served by a single Municipal Urban Planning Institute (Instituto Municipal de Planeación, IMPLAN) to benefit from economies of scale. Currently, only around 70 municipalities (out of 2456) have an IMPLAN. The successful model followed in Monterrey (the Metropolitan Development Centre of Monterrey), supported by a high-level academic institution to provide analysis and technical advice, could be extended to more municipalities. Metropolitan areas, which concentrate most of the population (63%) and economic activity (76%) (SEDATU, 2021[34]), should instead charge a Metropolitan Planning Institute (*Instituto Metropolitano de Planeación*, IMEPLAN) with planning urban development and transport infrastructure to overcome a lack of coordination at the metropolitan level. Currently only three IMEPLAN exist, as the legal framework for establishing metropolitan area decision making structures is weak (no binding instruments) and political misalignments often represent a major obstacle to inter-municipal coordination (ICAM, 2015[35]). State legislation could make compulsory the establishment of metropolitan planning institutes, following the example of Jalisco. Municipalities should also gradually build up competences on urban planning to complement the technical assistance received by an urban planning institute (IMPLAN or IMEPLAN).

Improving the institutional design of municipalities

Municipalities are short-term institutions with long-term responsibilities. The 3-year mandate of the municipal government, with the possibility of having a second mandate, implies a high staff turnover, which makes it difficult to ensure human capital accumulation in its administration. It also reduces political incentives to undertake projects that go beyond the three-year term (OECD, 2015[5]), such as long-term investment in urban development.

To create incentives to maintain personnel with technical skills in municipalities, the allocation of federal funding (budget and federal programmes) could be conditional on civil servants having certified knowledge of urban planning regulation, for example by having attended courses in management of urban development and territorial ordering organized by the National Institute for Federal and Municipal Development (INAFED). Introducing in large municipalities the figure of the city manager would provide continuity in public service despite changes in the administration and insulate administrative duties from the political cycle (OECD, 2015[5]). Its position should have a legal back up at the state level that ensures a duration longer than the municipal term so that the contract cannot be terminated at the arrival of a new elected authority, clearly defined responsibilities and powers, including that of hiring and firing municipal personnel.

Increasing the revenues of municipalities

Municipalities should increase their own fiscal revenues to be able to implement public investments to reduce social segregation, strengthen access to housing or boost public transport infrastructure. Municipalities currently often lack staff and the technical knowledge to use efficiently their municipal tax power, which includes setting and collecting property taxes and tariffs associated with the provision, maintenance, and management of public services (street lighting, water and sewage services, solid waste disposal, local police, green area and markets). Political interests and legal limitations impede municipalities from charging for waste collection (ICAM, 2015[35]), which in turn prevents them from implementing national regulations on recycling. Having a modern, complete and updated cadastral system is key for strengthening municipal taxation via tax property collection (see the Macroeconomic developments and policy challenges chapter). However, a fourth of Mexican municipalities in 2020 did not have a cadastral system, another third (32.4%) had a cadastral system with incomplete property information, and in almost all cadastral systems the value of properties was severely undervalued (IMCO, 2022[36]). Finally, a cadastral system should be completed by valuation rules and a valuation approach on how immovable property are valued. Both should be defined by the central government to allow Mexico to have a coherent and consistent land value taxation.

5.5.2. Addressing urban sprawl and vacant housing

Promoting densification and urban regeneration

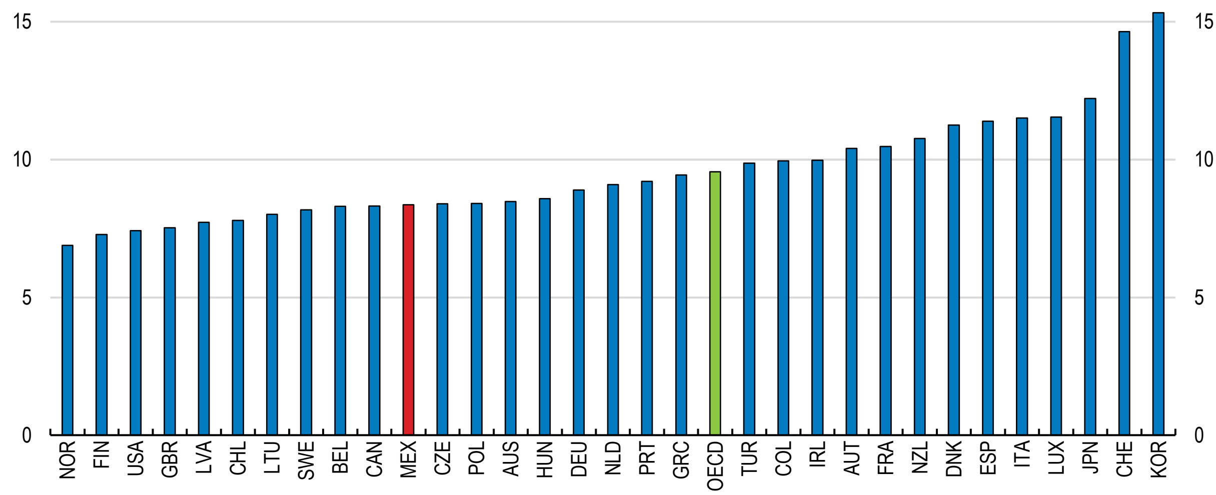
Mexican cities have the potential to increase density. The average building height in large cities is below the OECD average (Figure 5.20). Increasing building height in underused intraurban areas could help curb urban sprawl (INFONAVIT and ONU-Habitat, 2018[4]).

To constrain urban sprawl, the design of urban planning tools could be strengthened to better consider environmental and transport connectivity. Urban planning tools aimed at providing land for increasing urban density exist in Mexico but are rarely used. Expropriation is difficult and too costly given the limited resources of local governments. Financial and administrative incentives promote urban densification in specific urban areas disposing of adequate urban infrastructure (so called urban growth perimeters or *zonas de contención urbana*), and since 2022 the credit allocation of the Institute of the National Fund for Workers' Housing is restricted to properties within urban growth perimeters. However, there is room to improve the design of urban growth perimeters by better taking into account transport connectivity and existing infrastructure capacity (SEDATU, 2019[37]), as accessibility to urban services is determined via linear distance, which may be misleading depending on geological characteristics (e.g., if a cliff separates two contiguous areas).

Densification may be promoted through urban regeneration programs that include a high-density mixed use of land for residential and other uses. Ideally, these would include different types of residential units (high- and low-value, as well as areas for self-built homes) and provide key urban services (e.g., schools and hospital), jobs and transport infrastructure. Such urban densification and high-density mixed-use areas could also help recover productivity benefits from agglomeration.

Figure 5.20. The average height of buildings is low

Average building height in cities (functional urban areas of more than 500,000 inhabitants), metres, 2021



Source: OECD Regions and Cities at a Glance 2022.

StatLink https://stat.link/nwqr1m

A recent collaboration among INSUS, local housing institutes and state governments aims to provide affordable housing through redevelopment projects that adopt a mixed use of land. Cheap land and residential units for low-income households would be funded by selling commercial and high-value residential units (cross-subsidies). The National Infrastructure Fund (FONADIN) and loans from international institutions would provide funding for infrastructures. Potential beneficiaries of these projects will be selected on the basis of existing lists held by local housing institutions. This is a welcome initiative that could be scaled up.

Box 5.9. The Urban Improvement Program

The Urban Improvement Program (*programa de mejoramiento urbano, PMU*) aims to reduce inequality in marginalized urban areas characterised by lack of urban infrastructure and equipment and with widespread insecurity of tenure.

It includes three types of interventions: the Neighborhood Improvement Program (NIP), which offers federal subsidies for supplying basic (e.g. water infrastructure, electricity, public lights, underground cables for energy and fata) green, and mobility infrastructure (road, pavement, bike path); the Subsidy for Private Land Property Regularization (*Vertiente de Regularización y Certeza Jurídica de la Propriedad*), under the responsibility of the National Land Institute (INSUS), which provides technical and financial support to regularize and obtain property title of plots in areas that are categorized as of residential use; and the Financing Program for Municipal Planning (FPMP), under the responsibility of the Ministry for Development of Agricultural and territorial Ordering (SEDATU), which provides financial and technical aid to municipalities and metropolitan areas to elaborate urban plans to promote urban consolidation.

Source: (Heeckt and Huerta Melchor, 2021[11]).

The Neighborhood Improvement Scheme (*Mejoramiento Integral de Barrios*) of the Urban Improvement Program (*programa de mejoramiento urbano, PMU*) (Box 5.9) provides federal subsidies to Mexican municipalities for requalifying marginalised areas. The budget of the NIP has been volatile between 2019 and 2022, ranging between 0.014% of GDP in 2022 and 0.038% of GDP in 2021 (CONEVAL, 2022[38]). Early assessment finds that the urban improvement interventions funded via the NIP increased citizens' satisfaction with the urban environment, though results are less clear on a positive impact on safety or mobility conditions. The PMU could be strengthened to ensure that the infrastructure provided receives maintenance over time, which is key to permanently improve living conditions in marginalized areas.

Large municipalities could opt for densification by converting underused or vacant commercial buildings located in central urban areas into residential use, following the example of the city of Paris (Box 5.10). It could be an opportunity to improve the urban infrastructure, legalise informal settlements or foster mixed-income housing developments with some units for low-income residents to reduce socioeconomic segregation. Densification and urban regeneration strategies should, however, ensure that low- and middle-income households are not priced out, as the experience of Mexico City shows (Box 5.10).

Box 5.10. Densification and reurbanisation strategies: the case of Paris and Mexico City

The City of Paris in its 2023 local urban plan, which set the urban strategy for the next 10-15 years, set a social housing goal of 40% of the city housing stock, above the threshold set by the Urban Solidarity and Renewal law. This goal includes 30% social rental housing and 10% affordable housing (around 20% below market price), by 2035. In 2021 social housing was 24.8% of the city housing stock.

The main strategy to achieve this target is the reconversion of existing commercial property (office buildings, aerial garages, hotels) to residential use (rental housing, either social or affordable). This will increase the supply of residential units without consuming urban land, strengthen the urban social mix, and improve the quality of the buildings (e.g., energy improvement). This strategy is supported by the 2018 Elan Law that allows for derogation from local urban planning in case of conversion of commercial property to residential, namely allowing for a density bonus of 30% with respect to the size of the original building and by reducing parking slot requirements. The increase in the use of distance working, which accelerated during the pandemic, is likely to augment the surface of vacant commercial property that is susceptible to reconversion in central urban areas. To increase the supply of housing the new local urban plan will impose on any new development project of more than 5,000 square meters (about 80% of building permits granted) to have a minimum share of 10% of its built area dedicated to residences. The cost of this policy will be financed through an increase in the recurrent tax on residential property (*taxe foncière*).

The Special Program for Urban regeneration and Affordable Housing 2019-24 of Mexico City sets guidelines and strategies to generate land for social housing aimed to low-income and vulnerable groups, such as focusing on multi-family housing (*conjunto urbano en regimen de propriedad en condominio*) in low density urban areas with adequate urban infrastructure (water, massive public transport network).

The program defines fiscal benefits and administrative streamlining, including virtual one-stop shop, to incentivise the production of affordable housing in selected priority areas (*23 corridors and 7 zones*). It includes developing new regulations and infrastructure standards for more transit-supportive built environment and setting new standards for areas where urban development is occurring (e.g., width of streets and sidewalks, the distance between buildings and the street, number of parking spaces). Administrative benefits include changes in the use of land, land assembly tools and a legal framework that facilitates agreement among public, private and social actors to voluntarily pool together properties involved with a redevelopment project. For private developers to benefit from these advantages a share of 30% of new built-up area must be affordable housing. Public investment would complement private investment by improving urban area infrastructure.

Source: (Urban Institute, 2021[39]; Chocron, 2022[40]; INFONAVIT, 2021[41]; Delgadillo, 2016[42]).

Promoting the reuse of vacant housing through taxation and land banks

Around one seventh of the Mexican housing stock is vacant (between 5 and 6 million units) mostly in urban areas (CONEVAL, 2018[6]; INEGI, 2020[43]). Vacant housing is widespread in all states, though the states of México, Veracruz and Jalisco rank the highest in terms of number of abandoned houses (INEGI, 2020[43]). Lack of urban services, distance from workplaces and rising violence are the main reasons for abandoning a house.

Mexico could promote the reuse of vacant housing to increase the supply of housing without consuming further land, but on-going experiences suggest that this is not that easy. Several strategies have been adopted with modest results as they are mostly small-scale projects and it is difficult and time-consuming for public institutions to reclaim vacant properties. For example, the program Rent your House (*Renta tu Casa*) by the municipality of Tlajomulco (in the state of Jalisco) allows homeowners to rent a vacant dwelling to the municipality at market price, that rents it to low-income households for a below-market rent and a few hours of social work. In three years only 90 dwellings were rented out of a stock of 17 thousand vacant housing units (INFONAVIT, 2022[20]). Often abandoned houses or houses under foreclosure are occupied illegally, thus streamlining property dispute resolution could facilitate municipalities reclaiming abandoned properties to increase the effectiveness of the program.

Another example is the Housing Regeneration Program to improve urban and transport infrastructure in distressed areas with high vacancy rates. Between 2020 and July 2023 13 cooperation agreements have been signed by the Institute of the National Fund for Workers' Housing (INFONAVIT), the Ministry for Agrarian, Territorial and Urban Development (SEDATU) and several municipalities aimed to recover around 131 thousand abandoned dwellings, mostly located in the Northern frontier and outskirts of main metropolitan areas. If successful, these cooperation agreements could be extended to other municipalities. However, challenging coordination with municipalities because of their limited technical and financial resources and political interest in projects beyond their 3-year municipal mandate, is slowing the implementation of the program.

Mexico could use taxation to incentivise the use of land and housing. OECD experience shows that recurrent taxes on vacant dwellings, or even a split rate taxation where land is taxed at a higher rate than structures, can discourage vacant and underused land and property in suburban areas (OECD, 2022[22]). In France, a tax on vacant housing (*taxe sur les logements vacants*) is estimated to have reduced the vacancy rate by 13% between 1997 and 2001 (Segú, 2020[44]) (Box 5.11). In Mexico, taxing vacant housing would first require municipalities to establish a modern cadastral system and a public registry of property, as discussed in Chapter 2. In addition, the property dispute resolution mechanism would need to be streamlined.

Box 5.11. The tax on vacant housing in France

A tax on vacant housing is currently applied in French municipalities with more than 50 thousand inhabitants and where there is a "substantial disequilibrium" between supply and demand. An unfurnished dwelling unoccupied without justifications for more than one year is considered as vacant.

The tax base is the yearly rental income that the property could produce had it been rented that is determined at the local level and regularly updated considering rental market prices and inflation. The tax rate is set at 17% of the yearly rental income in the first year of vacancy and at 34% in the following years. The incentive to rent or sell a vacant unit increases with its size and with the rental price of the area where it is located. Since 2006 municipalities that cannot apply the tax on vacant dwellings may opt for setting a less-onerous version of the tax on vacant housing (*taxe d'habitation sur les logements vacants*).

Source : Ministère de l'Économie des Finances et de la Souveraineté Industrielle et Numérique.

Mexico could use land banks to deal with existing vacant houses following the example of the United States (Box 5.12). Land banks acquire problematic properties (abandoned homes, vacant lots, commercial buildings, industrial sites), renovate them, either directly or by selling them to rehabbers, and then sell them on the private market. Such banks exist in some Mexican states but they do not redevelop housing. Mexico could allow not-for-profit land banks corporations to acquire and redevelop vacant or abandoned properties (also tax delinquent or tax foreclosed) and return them to productive use. This would require clear statutory authority to acquire properties, reliable revenues (e.g., bond issuance), clear guidelines of the type of properties that can be acquired and the uses to which can be converted (OECD, 2015[5]).

Box 5.12. Using land banks to address vacant housing in the United States

In the United States many states created land banks via local legislation to address issues caused by abandoned properties (e.g., safety and neighborhood deterioration). Land banks acquire problematic properties (abandoned homes, vacant lots, commercial buildings, industrial sites), renovate them, either directly or by selling them to rehabbers, and then sell them back to the private market. Land banks are granted special powers including obtaining vacant property at low or no cost through the tax foreclosure process and benefiting from preferential tax treatment on the properties purchased (e.g., land tax-free and extinguished back taxes). These powers permit land banks to strongly reduce the costs associated to the lengthy procedure for obtaining a clean title (title free of claims or disputes about the ownership) over these properties, which can take two years or more. Such a lengthy amount of time scares off private developers that, differently from land banks, would have to pay taxes and interest during the time they own the property.

Land banks in the United States are designed to pursue local land use goals and community needs and engage frequently with community stakeholders. To build and maintain trust with the public land banks ensure complete transparency about their operations, programs and policies. Funding sources are usually revenues from the sale of properties and public transfers (local, county and federal government).

There are over 170 land banks in 22 states across the U.S., and their number increased as a response to the 2007–2010 foreclosure crisis. In many states land banks were successful in returning abandoned property to a productive use thus contributing to decrease crime rates, increase property value and improve the overall quality of life of community members. For example, in Ohio land banks between 2013 and 2017 demolished more than 1600 blighted structures and facilitated the re-use of 1300 vacant lots.

Source: (Reed, 2017[45]).

5.6. Improving urban mobility

One key problem in many cities is connecting developable land to infrastructure. Many Mexicans spend a long time travelling from home to work because of an inefficient and costly public transport system. Massive transport remains a marginal mode of transport. Long and expensive travelling time affects mostly vulnerable people living in peripheral disconnected areas. At the same time federal funding for mobility largely favours road infrastructure projects, as opposed to public transport.

5.6.1. Enhancing the public transport system

An efficient urban public transport system, by making it easier for people to move throughout the city, can facilitate access to jobs and urban services to the whole of population, contributing to improve equality of opportunities. The public transport system is inefficient and obliges many Mexicans to spend a long time travelling from home to work or to school. The average travel time by public transportation is highly heterogeneous between central and peripheral areas but can be twice as much as that of private vehicles (INFONAVIT and ONU-Habitat, 2018[7]). Massive transport remains a marginal mode of transport in

Mexico, except for Mexico City, where massive transport is used by 25% of workers to get to their workplace (INEGI, 2020[43]). Recent efforts to diversify transport modes towards massive transport (e.g. Optibus in Leon; Macrobus in Guadalajara) and active mobility (public bike sharing and bike parks close to massive public transport areas) have not yet produced relevant results, apart from a few exceptions such as Mexico City (IMCO, 2019[46]).

Public transport is also expensive. The share of households' income spent on transport is among the highest among OECD countries (Figure 5.21), with households spending 19.4% of their total expenditure on transport. Such high costs reflect, among other factors, inequality in access to mobility. In the absence of an integrated transport system, residents of disconnected peripheral areas, mostly vulnerable groups (poor, children, youth, senior, women) (SEDATU, 2018[47]), need to pay for several trips to reach their destination.

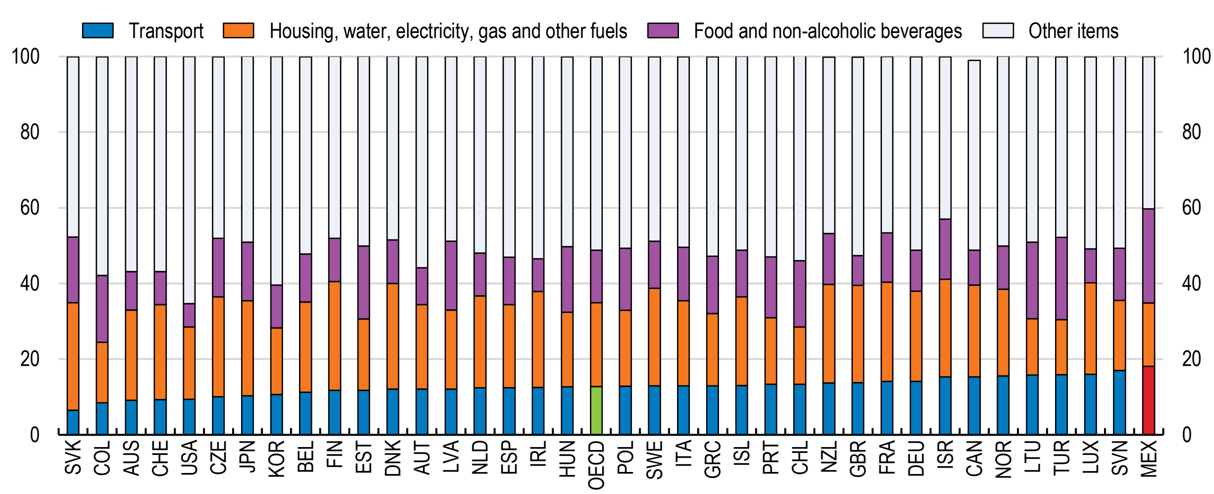
The public transport system is also polluting. It is based on a weakly-regulated model with many small private concessionaires that run low capacity and old-technology minibuses. Around half of the fleet is more than 15 years old and has low-energy and low-environmental standards (SEDATU, 2018[47]). Moreover, it is dangerous, with around 10% of the population in 2017 having been victim of an assault or theft crime on the street or in public transport (*Encuesta Nacional de Victimización y Percepción sobre la Seguridad Pública*).

In the short term, Mexico could introduce standardised contracts that set clear criteria on the quality of the service and clear environmental standards for the fleet. Affordability could be improved by ensuring an integrated transport system where customers pay once for using different transport modes.

Over time, Mexico should continue its efforts to promote efficient, multi-modal transport through infrastructures that integrate public transportation, bike-sharing services, and car-sharing programs. The use of digital technologies would help transform mobility by facilitating multimodal travel, improving the synchronization between different transport modes and facilitate access to greener alternatives. To allow for a wider range of urban mobility options and reduce incentives for using cars, road surface should be redistributed away from cars and towards massive public transport and bikes (reducing parking spaces, road space to be dedicated to public transport and bike routes). This transformation of the public transport model would provide many benefits, including reducing traffic congestion and pollution, cost and time spent on travelling, and improving public health and well-being.

Figure 5.21. Transport is expensive in Mexico

Share of final household consumption expenditure by item, 2019 or latest year, %



Source: OECD Annual National Accounts Database; Eurostat Annual national accounts database.

StatLink https://stat.link/o70fc4

5.6.2. Re-focussing federal funding for mobility projects

Federal funding for mobility is biased in favour of road infrastructure projects (74% of federal transfers between 2007 and 2017) and only a fifth of all federal funding goes to urban sustainable mobility projects (public space 3%, walking infrastructure 10%, bike infrastructure 1.5%, public transport 7%) (ITDP, 2017[48]; SEDATU, 2018[47]; Guerra et al., 2018[49]). Operational rules for the allocation of funds for mobility could prioritize sustainable mobility projects (e.g. public transport, walking infrastructure, bike infrastructure) and ensure multi-year funding, as already occurs with the Metropolitan Fund and the Fund for Public Space and Walking Network in the "ramo 21 Tourism".

Box 5.13. Funding for sustainable urban mobility in Mexico: PROTRAM

The Federal Support Programme for Massive Transport (*Programa Apoyo Federal al Transporte Masivo*, PROTRAM) managed by the National Infrastructure Fund (*Fondo Nacional de Infraestructura*, FONADIN) provides financial support (grants, guarantees, loans) for urban sustainable mobility projects involving states, large municipalities (with a population above 500 thousand inhabitants) and the private sector (public-private partnership) as well as to strengthen subnational institutional capacity for planning and regulating the public transport system.

Most funding is devoted to projects including integrated multimodal transport systems, massive public transport infrastructure (Rapid Transit bus, subway, roads, station terminals) and active transport infrastructure (e.g., pavements, bike path). A municipality to apply for financing a mobility project must elaborate a Sustainable Urban Mobility Plan (*Plan Integral de Movilidad Urbana Sustentable*, PIMUS) and provide a cost-benefit analysis of the project including social, environmental and financial aspects.

PROTRAM can cover costs related to the design and implementation of the project (roads, stations, terminals, preferential lanes), other than providing loans and guarantees for credit. Stations and terminals of the transport infrastructure are funded via public-private partnership with the private sector getting concessions (commercial activity and advertising) and providing transport services (participation in the tariff).

Most projects involve massive public transport (Bus Rapid Transit, light train or metro) and optimal route design of transport integrated system. The average time to design and implement a project is of 4.2 years, though delays are due to changes in planning caused by changes in the administration or local government not meeting their financial obligations.

Source: (SEDATU, 2018[47]).

The governance and operational rules of the urban sustainable mobility program (*Programa Apoyo Federal al Transporte Masivo*, PROTRAM) (Box 5.13) that provides financial support (grants, guarantees, loans) could be improved. The program is currently under revision. Expected changes aim to extend PROTRAM's support to municipalities between 250 and 500 thousand inhabitants, include transport electrification projects and adopt environment, social and governance criteria in projects assessment. Projects assessment is planned to be carried out by an Advisory Working Group, chaired by a representative of the Ministry of Finance and composed of financial and technical experts, also from the Ministry of Infrastructure, Telecommunication and Transport, the National Banks of Public Works and Services, the Ministry of Environment and Natural Resources and the Ministry for Agrarian, Territorial and Urban Development.

Investment in urban mobility at the local level is restrained by insufficient local revenues and the complexity of procedures to access federal financing for mobility projects. Many municipalities lack the institutional and technical capacity to apply to one of the 14 federal funds, each subject to different operational rules. The structure of federal funds for mobility projects could be streamlined, and its access simplified. Municipalities could set local taxes earmarked to sustainable urban mobility (parking fare; car property taxation; congestion taxes; local tax on fuel).

5.6.3. Better coordinating mobility and urban development planning

Mexico recently made important efforts to strengthen coordination between urban development and transport and to establish a national urban policy that aims at developing a massive and sustainable public transport system. These efforts materialised in a series of laws including the 2020 constitutional reform that recognises the right to an efficient, affordable, accessible, and sustainable mobility. Moreover, the national strategy on urban mobility (ENAMOV) sets very ambitious objectives to be reached gradually between 2023 and 2042, including promoting an integrated and sustainable transport system; ensuring a high-quality, affordable, efficient, safe and sustainable public transport system; promoting active mobility; increasing road safety; and eliminating gender gap in access to transport.

These are very welcome initiatives. However, to implement this new vision and the national strategy on urban mobility, coordination and governance needs to improve. Municipalities will need to strengthen their financial and technical capacity and all levels of government will need to coordinate planning and implementation, as for example did the city of Medellín in Colombia (Box 5.14). Urban development and transport policies evolve separately in Mexico. Municipalities and, to a lesser extent, states have competencies on urban planning and the design of road network within their jurisdictions, while the federal government and states have most competencies on transport policy (planning and funding).

The implementation of the national policy on mobility requires several actions. First, its implementation might struggle as two ministries, the Ministry for Agrarian, Territorial and Urban Development (SEDATU) and the Ministry of Infrastructure, Communication and Transport, alternate in taking the lead for its implementation every year. The governance could be improved by setting a stable and clear allocation of responsibilities across institutions and promoting the creation of special units within each institution charged with institutional coordination. Second, aligning state and federal legislations will be needed, as few states have integrated mobility into urban planning and many still lack a legal framework for mobility. Developing guidelines on mobility priorities and responsibilities would help align local government regulation and help avoid discontinuity in the implementation of projects due to changes of administration.

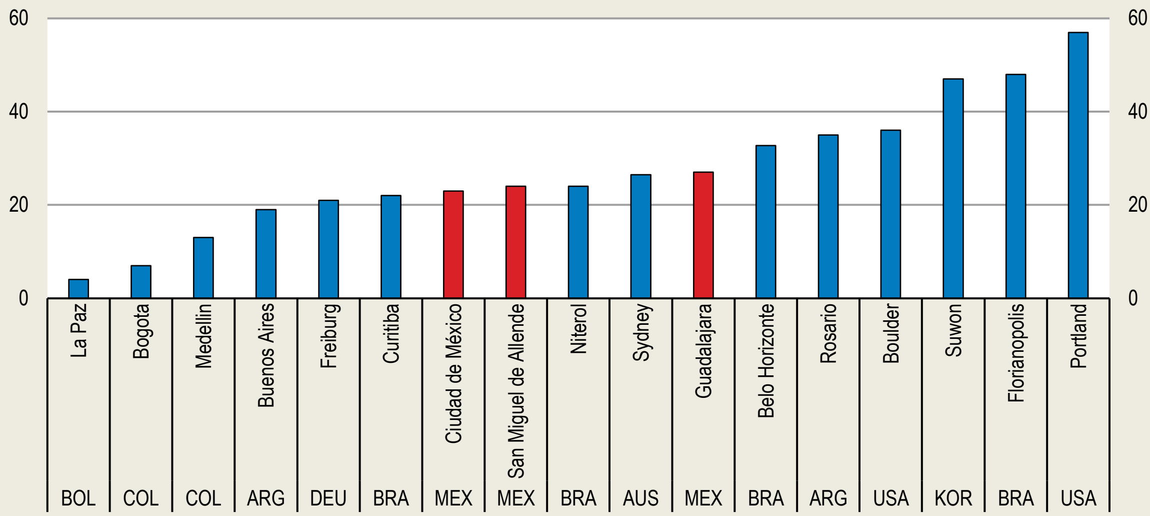
To overcome coordination challenges, as it recently happened between the State of Mexico and Mexico City in the implementation of the Rapid Bus Transit project (Métrobus), planning of urban development and transport infrastructure for metropolitan areas should take place at the metropolitan level. This would reduce costs by taking advantage of economies of scale and help overcome coordination challenges across subnational governments.

Box 5.14. Reforming mobility for a more inclusive and sustainable city: the case of Medellín

Medellin in Colombia is a successful example of city that moved towards a model of more compact, connected and inclusive city by establishing an integrated public transport system. Historically, poor and informal settlements were located on the hillsides in Medellin and were poorly connected to the city center located in the valley. The creation of an integrated public transport system, comprised of a metro, cable car system, bus rapid transit, bus services and bicycle-sharing system, increased inclusivity and connectivity by making it easier for people to move throughout the city.

Figure 5.22. The use of private cars is low in Medellín

Share of total trips by private cars, %



Source: ICLEI (2017).

StatLink https://stat.link/ep0782

The integrated public transport system (bus, BRT, Metro, Tram and various private bus services) has reduced the average travel time from 90 to 30 minutes thus highly reducing the need for using private cars (Figure 5.22). The five-line aerial cable-cars system (MetroCable) built between 2004 and 2015 is an innovative solution for providing public transportation across Medellín's challenging topography and connects difficult to-service neighborhoods with a reliable transportation connection.

Three key factors allowed the city of Medellín to transform its public transport system: its capacity to establish a fruitful cooperation with public and private entities at the metropolitan level, facilitated by the creation of the Agency for Cooperation and Investment for Medellín and Metropolitan Area; the use of principles of participatory budgeting to decide together with local residents the destination of public investment; the strengthening of local revenues (tax base widening and profit transfers from municipally owned utilities company) that ensured a strong and stable source of revenues (Dávila, 2013[50]; ICLEI, 2017[51]). The increase in mobility in conjunction with other social and infrastructural investments -including social housing, new schools and libraries, economic support to local residents in the form of training and employment in public works, micro-enterprise, additional lighting in public spaces, pedestrian bridges and street paths - brought an overall improvement in the quality of life of residents in previously marginalized areas and a reduction of crime rates.

Table 5.2. Recommendations

MAIN FINDINGS	CHAPTER 2 RECOMMENDATIONS
Promoting good quality and affordable housing	
Many low and middle-income households cannot afford purchasing a house at market price. Housing subsidies have become more targeted but they give greater incentives for purchasing new dwellings (or self-build) over old ones and they cannot be used to pay rents.	Reform housing subsidies for low-income households to align support between buying (new or old) and self-build and to include renting. Evaluate the effectiveness of the housing subsidy program, especially the self-build program.
Many low- and middle-income households living in substandard dwellings lack access to credit. Credit for home improvements is still marginal in federal institutes credit portfolios.	Continue expanding federal institutes' credit for home improvement, including for informal workers. Ease access to credit for low-income and informal workers through federal institutes also by using alternative information to assess creditworthiness (e.g., usage and payment of utilities). Reintroduce a public mortgage guarantee scheme for low-income informal workers.
The new sustainable taxonomy has large potential to facilitate that the public and private sector develop environmentally-friendly housing solutions. Green mortgages have recently been launched by some private banks.	Promote the expansion and use of green mortgage financial instruments to support access to energy-efficient housing.
The housing rental market is underdeveloped, the legal process of lease dispute is lengthy and costly and housing taxation discourages rental property investment. **Social rental housing is marginal.**	Allow for reasonably short-term lease duration with clear termination rights. Introduce out-of-court dispute resolution mechanisms or expand specialized tribunals to facilitate the resolution of tenant and landlord conflicts. Gradually phase out mortgage interest relief, target it to low-income owners only or introduce a cap on the total interest deduction that can be claimed. Shift housing taxation from transaction to recurrent taxes on real estate. **Support the creation of a social rental housing sector by setting up an adequate funding strategy and strong legal and regulatory frameworks.**
Around one fourth of the population, mostly vulnerable groups, lives in informal settlements and does not hold a property title.	Reinforce title formalization. Improve access to cheap land for affordable housing and contain the proliferation of informal settlements (e.g using land banks).
Addressing urban sprawl	
Coordination and cooperation across levels of government is weak, hampering the implementation of national urban and housing policy and contributing to urban sprawl.	**Task states with ensuring that municipalities comply with federal and state urban and housing law.** Revise urban planning legislation across any government level to identify and resolve contradictions and inefficiencies.
Administrative fragmentation complicates cooperation at the metropolitan level on urban planning, transport and infrastructure investment. Many municipalities lack financial, technical and staff resources to attend the complex challenges implied by urban development.	Strengthen urban planning coordination by making compulsory the establishment of municipal and metropolitan planning institutes and by building up technical competences within municipalities. Allocate federal funding conditional on municipal staff having certified knowledge of urban planning regulation.
Financial incentives to increase densification do not properly consider transport connectivity and existing infrastructure capacity.	Provide financing to areas that are not well connected by considering transport connectivity and existing infrastructure capacity.
Widespread low density urban areas cause higher cost for provision of public services, socioeconomic segregation, and higher criminality and poverty.	Encourage urban regeneration programs that promote a high-density mixed use of land, including by converting underused buildings located in central urban areas into residential use for low-income households.
Around one seventh of the Mexican housing stock is vacant and the current procedure to reclaim abandoned properties is complex and time-consuming.	Streamline the property dispute resolution mechanism to facilitate municipalities reclaiming abandoned properties and scale up efforts to improve urban and transport infrastructure in distressed areas with high vacancy rates.
Improving urban mobility	
Public transport is expensive, inefficient, and polluting, commutes are long and access to basic services difficult.	**Set quality standards and environmental criteria for public transport and promote an integrated transport system in metropolitan areas.**
Federal funding for mobility is biased towards road infrastructure projects. Rules to access federal funding are diverse.	Streamline federal funds for mobility and simplify access, prioritizing urban sustainable mobility projects.
Few states integrate mobility criteria into urban planning and many lack a legal framework for mobility.	Align local government legislation with federal policy on mobility to avoid discontinuity in implementing transport projects when administrations change.

References

Ahrend, R. et al. (2014), "What Makes Cities More Productive? Evidence on the Role of Urban Governance from Five OECD Countries", *OECD Regional Development Working Papers*. [10]

Aristizabal, N. and A. Ortiz (2002), *Are services more important than titles in Bogotá in G.Payne (ed.), Land, Rights and Innovation: Improving Tenure for the Urban Poor*, ITDG Publishing, London. [31]

AVANZI (2021), *Primo rapporto sulla performance del social housing in Italia*. [24]

Cassimon, S. et al. (2022), "DETERMINANTS OF AND BARRIERS TO PEOPLE'S FINANCIAL INCLUSION IN MEXICO", *OECD Economics Department Working Paper N. 1728*, https://doi.org/10.1787/73e9341b-en. [17]

CECODHAS (2009), *Financing social housing after the economic crisis*. [27]

Chocron, V. (2022), *Lessons from France for Creating Inclusionary Housing by Mandating Citywide Affordability | Urban Institute*. [40]

CONAVI (2021), *Nota metodológica : cuantifiación de la población potencial y objetivo*. [15]

CONEVAL (2022), *Estudio sobre los efectos de la veritente mejoramiento integral de barrios del programa de mejoramiento urbano*. [38]

CONEVAL (2018), *Estudio daignóstico del derecho a la vivienda digna y decorosa*. [6]

Dávila, J. (2013), "Going up in Medellín: What Can We Learn from the City's Aerial Cable-car Lines?", *DPUNEWS*, Vol. 55. [50]

Delgadillo, V. (2016), "Ciudad de Mexico, quince años de desarrollo urbano intensivo para la gentrificación percibida", *invi*, Vol. 31/88. [42]

Deutsch, E. and J. Lawson (2012), "International measures to channel investment toards affordable rental housing: Austrian case study", *Ahuri Research Paper*. [29]

Gilbert, A. (2009), "The rise (and fall?) of a state land bank", *Habitat International*, Vol. 33/4, https://doi.org/10.1016/j.habitatint.2009.01.003. [32]

Guerra, E. et al. (2018), "Urban form, transit supply, and travel behavior in Latin America: Evidence from Mexico's 100 largest urban areas", *Transport policy*, Vol. 69, https://doi.org/10.1016/j.tranpol.2018.06.001. [49]

Heeckt, C. and O. Huerta Melchor (2021), *Compact, connected, clean and inclusive cities in Mexico: An agenda for national housing and transport policy reform.*. [11]

ICAM (2015), *Case study metropolitan governance Guadalajara metropolitan area, Mexico*. [35]

ICLEI (2017), "City of Medellín, Colombia: improving inclusivity thorugh connectivity and mobility", *ICLEI Case Study 203*. [51]

IMCO (2022), *Catastros municipales:hacia una mejor gestión de la propiedad y la recaudación*. [36]

IMCO (2019), *Indice de Movilidad Úrbana*. [46]

IMCO (2011), *Índice de Competitividad Municipal en Materia de Vivienda*. [30]

INEGI (2022), *Encuesta nacional de ingresos y gastos de los hogares*. [3]

INEGI (2020), *Censo y Conteo de Población y Vivienda*. [43]

INEGI (2020), *Encuesta Nacional de Vivienda*. [1]

INFONAVIT (2022), *Vivienda No. 2*. [20]

INFONAVIT (2021), “Gestión del suelo para la producción de vivienda incluyente en la Ciudad de México”, *Vivienda*, Vol. 5/1, pp. 98-104. [41]

INFONAVIT and Fundación-IDEA (2018), *¿Qué funciona y qué no en vivienda? : Identificación y documentación de buenas y malas prácticas en el desarrollo de vivienda*. [13]

INFONAVIT and ONU-Habitat (2018), *Housing and SDGs in Mexico*. [4]

INFONAVIT and ONU-Habitat (2018), *Informe CPI extendido: aglomeración urbana de la ciudad de México*. [7]

ITDP (2017), *Invertir para movernos: diagnóstico de inversión en movilidad en las zonas metropolitanas 2011-2015*. [48]

Kunz-Bolaños, I. and A. Espinosa-Flores (2017), “Elements of success in the social production of housing in Mexico”, *Economía, Sociedad y territorio*, Vol. 17/52, pp. 683-707, https://doi.org/10.22136/est2017875. [14]

Lowe, J., N. Prochaska and D. Keating (2022), “Bringing permanent affordable housing and community control to scale: The potential of community land trust and land bank collaboration”, *Cities*, Vol. 126, https://doi.org/10.1016/j.cities.2022.103718. [28]

Maravalle, A. and A. González Pandiella (2022), “The pass-through of the monetary policy rate into lending rates in Mexico”, *OECD Economics Department Working Papers, No. 1734*, https://doi.org/10.1787/acf23bc6-en. [18]

Millar-Powell, B. et al. (2022), “Measuring effective taxation of housing: Building the foundations for policy reform”, *OECD Taxation Working Papers, No. 56*, https://doi.org/10.1787/0a7e36f2-en. [21]

Montejano, J. et al. (2023), “Land Use estimation based on open data for urban planning in MExico”, *REALITY, DATA AND SPACE INTERNATIONAL JOURNAL OF STATISTICS AND GEOGRAPHY*, Vol. 14/1. [9]

OECD (2023), *Brick by Brick (Volume 2): Better Housing Policies in the Post-COVID-19 Era*, OECD Publishing, Paris, https://doi.org/10.1787/e91cb19d-en. [19]

OECD (2023), *Strengthening Latvia’s Housing Affordability Fund*, https://doi.org/10.1787/84736a67-en. [25]

OECD (2022), “Housing Taxation in OECD Countries”, *OECD Tax Policy Studies No. 29*, https://doi.org/10.1787/03dfe007-en. [22]

OECD (2022), “National Urban Policy Review of Colombia”, *OECD Urban Studies*, https://doi.org/10.1787/9ca1caae-en. [26]

OECD (2015), *OECD Urban Policy Reviews: Mexico 2015: Transforming Urban Policy and Housing Finance*, OECD Publishing, Paris, https://doi.org/10.1787/9789264227293-en. [5]

Oviedo-Gonzalez, J. (2014), *EL proces de acceso a la vivienda para familias de bajos recursos económicos. EL caso de la Cooperative de Viivenda de San Rafael Chamapa UCP, Naupalcan, Estado de México (1980-2013)*. [16]

Priego (2019), *El papel de la banca de desarrollo en la implementación del acuerdo de Paris: opciones de financiamiento para la movilidad urbana baja en emisiones*. [52]

Reed, K. (2017), *Land Banks: A Viable Solution for Revitalizing Abandoned, Derelict Properties*. [45]

Rojas, E. and N. Medellin (2011), *Housing policy matters for the poor*. [12]

Salvi del Pero, A. et al. (2016), "Policies to promote access to good-quality affordable housing in OECD countries", *OECD Social, Employment and Migration Working Papers, No. 176*, https://doi.org/10.1787/5jm3p5gl4djd-en. [23]

SEDATU (2021), *Estrategia Nacional de Ordenamiento Territorial: versión ejecutiva*. [34]

SEDATU (2019), *Programa Nacional de Vivienda 2019-24*. [2]

SEDATU (2019), *Sexto informe de labores*. [37]

SEDATU (2018), *Anatomía de la movilidad en México: hacía dónde vamos*. [47]

Segú, M. (2020), "The impact of taxing vacancy on housing markets: Evidence from France", *Journal of Public Economics*, Vol. 185, https://doi.org/10.1016/j.jpubeco.2019.104079. [44]

Urban Institute (2021), *Lessons from France for Creating Inclusionary Housing by Mandating Citywide Affordability*. [39]

Zubicaray, G. et al. (2021), *Las ciudades mexicanas: tendencias de expansión y sus impactos*. [8]

Zubicaray, G. et al. (2020), *Acciones federales para la planeación urbana: hacia mejores ciudades para todos.*, Londres, UK, y Washington, DC, https://urbantransitions.global/publications/. [33]

OECD Economic Surveys

MEXICO

After a slow recovery from the pandemic, the Mexican economy has navigated well the global environment of tightening financial conditions and heightened uncertainty. Fiscal policy has a robust track record in attaining fiscal targets and keeping public debt low. Higher tax revenues would allow to maintain fiscal prudence and to address important spending needs in productivity enhancing areas, such as education, infrastructure, the digital and green transitions, and the fight against corruption and crime. Mexico has large potential to attract investment from companies looking to relocate their operations to North America. This is also a significant opportunity to spread the benefits of trade throughout the country and to create more and better value chain linkages. Fully harnessing these opportunities will require addressing long-standing challenges related to transport and digital connectivity, regulations or the rule of law, and shifting to renewables. Improving education outcomes and reducing gender gaps and informality would help to continue the recent fall in income inequality, while also strengthening the country's growth potential. Improving access to adequate housing and more coordination across, urban, housing and transport infrastructure policies would enhance Mexicans' living conditions, reduce urban sprawl and improve urban mobility.

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