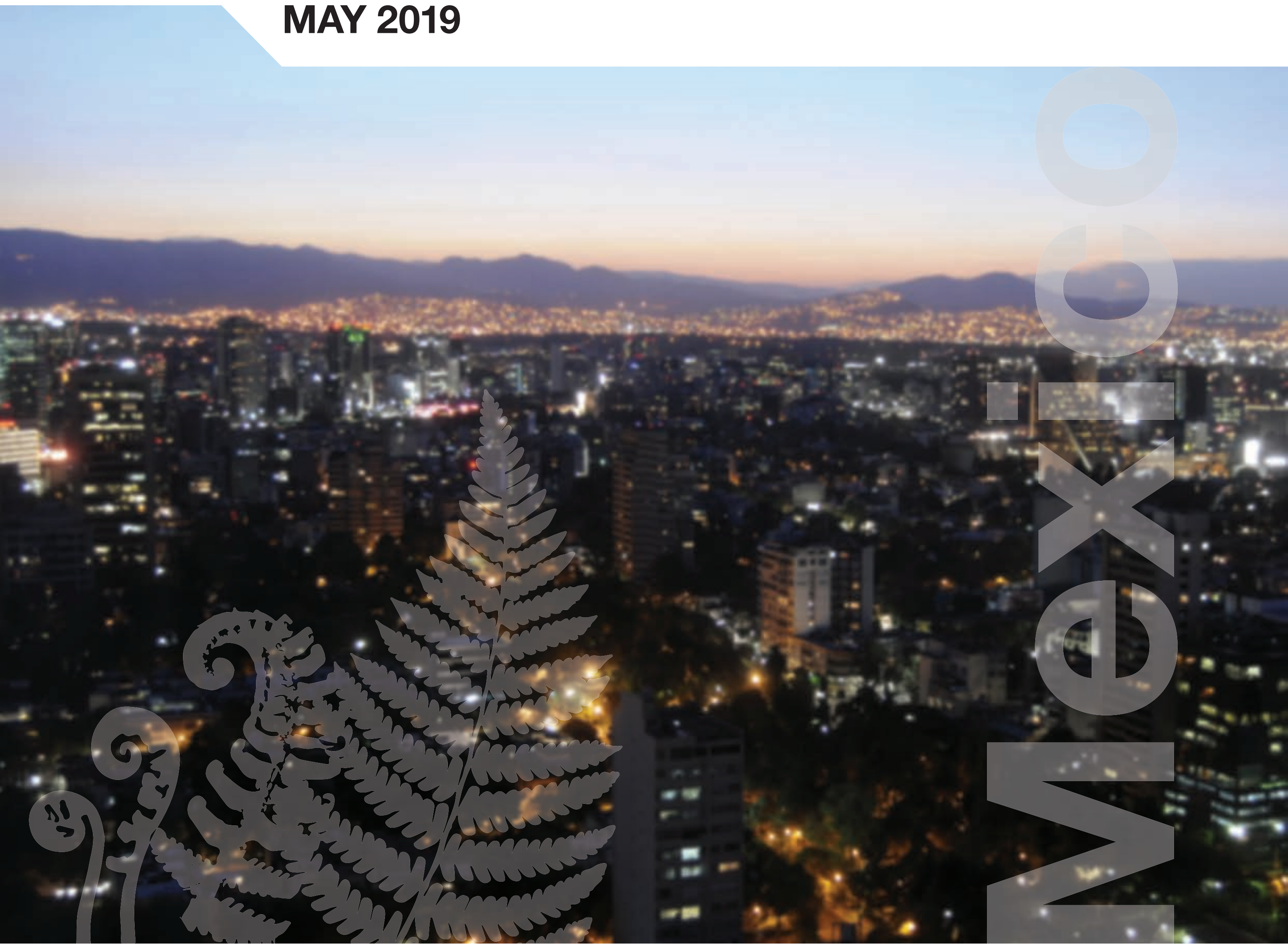
OECD Economic Surveys
MEXICO

MAY 2019



OECD

OECD Economic Surveys: Mexico 2019

BETTER POLICIES FOR BETTER LIVES

Please cite this publication as:
OECD (2019), *OECD Economic Surveys: Mexico 2019*, OECD Publishing, Paris.
https://doi.org/10.1787/a536d00e-en

ISBN 978-92-64-37818-6 (print)
ISBN 978-92-64-33354-3 (pdf)

OECD Economic Surveys
ISSN 0376-6438 (print)
ISSN 1609-7513 (online)

OECD Economic Surveys: Mexico
ISSN 1995-3666 (print)
ISSN 1999-0723 (online)

Photo credits: Cover © iStockphoto.com/M.

Corrigenda to OECD publications may be found on line at: *www.oecd.org/about/publishing/corrigenda.htm*.

Table of contents

Tables

Figures

Boxes

This Survey is published on the responsibility of the Economic and Development Review Committee (EDRC) 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 13 March 2019.

The Secretariat's draft report was prepared for the Committee by Sonia Araujo and Lisa Meehan under the supervision of Piritta Sorsa. Statistical research assistance was provided by Roland Tusz and editorial assistance by Carolina González. The Survey also benefited from contributions from Raúl Ibarra Ramírez, Luis Aranda, Mauricio Hitschfeld Arriagada and Séamus O'Donovan.

The previous Survey of Mexico was issued in January 2017.

Basic Statistics of Mexico, 2017

(Numbers in parentheses refer to the OECD average)*

LAND, PEOPLE AND ELECTORAL CYCLE					
Population (million)	129.2		Population density per km²	66.4	(35.6)
Under 15 (%)	26.7	(17.9)	Life expectancy (years, 2016)	75.2	(80.6)
Over 65 (%)	6.9	(16.8)	Men	72.6	(77.8)
Foreign born (%, 2016)	0.8		Women	77.8	(83.2)
Latest 5-year average growth (%)	1.3	(0.6)	Latest general election	July	2018
ECONOMY					
Gross domestic product (GDP)			Value added shares (%)		
In current prices (billion USD)	1,164.9		Primary sector	3.6	(2.5)
In current prices (billion MXN)	21 936.4		Industry including construction	31.3	(26.9)
Latest 5-year average real growth (%)	2.5	(2.1)	Services	65.1	(70.6)
Per capita (000 USD PPP)	19.2	(43.7)			
GENERAL GOVERNMENT Per cent of GDP					
Expenditure[a]	26.6	(41.0)	Gross financial debt	54.3	(109.5)
Revenue[a]	23.8	(38.8)	Net financial debt[b]	46.0	(70.9)
EXTERNAL ACCOUNTS					
Exchange rate (MXN per USD)	18.8		Main exports (% of total merchandise exports)		
PPP exchange rate (USA = 1)	9.2		Machinery and transport equipment	61.8	
In per cent of GDP			Miscellaneous manufactured articles	10.2	
Exports of goods and services	37.6	(55.4)	Manufactured goods	6.9	
Imports of goods and services	39.4	(51.0)	Main imports (% of total merchandise imports)		
Current account balance	-1.6	(0.4)	Machinery and transport equipment	47.3	
Net international investment position	-47.8		Manufactured goods	13.4	
			Chemicals and related products, n.e.s.	10.5	
LABOUR MARKET, SKILLS AND INNOVATION					
Employment rate for 15-64 year-olds (%)	61.1	(67.7)	Unemployment rate, Labour Force Survey (age 15 and over) (%)	3.4	(5.8)
Men	79.0	(75.4)	Youth (age 15-24, %)	6.9	(11.9)
Women	44.9	(60.1)	Long-term unemployed (1 year and over, %)	0.1	(1.7)
Participation rate for 15-64 year-olds (%)	63.4	(72.1)	Tertiary educational attainment 25-64 year-olds (%)	17.4	(36.9)
Average hours worked per year	2 257	(1 744)	Gross domestic expenditure on R&D (% of GDP, 2016)	0.5	(2.3)
ENVIRONMENT					
Total primary energy supply per capita (toe)[a]	1.5	(4.1)	CO_2 emissions from fuel combustion per capita (tonnes, 2015)	3.7	(9.2)
Renewables (%)[a]	8.4	(10.2)	Water abstractions per capita (1 000 m³, 2016)	678.8	(804.5)
Exposure to air pollution (more than 10 µg/m³ of PM2.5, % of population, 2015)	71.2	(75.2)	Municipal waste per capita (tonnes, 2016)	344.2	(522.9)
SOCIETY					
Income inequality (Gini coefficient)	0.459	(0.317)	Education outcomes (PISA score, 2015)		
Relative poverty rate (%)[c]	16.7	(11.8)	Reading	423	(493)
Median gross household income (000 USD PPP)[d]	5.0	(22.7)	Mathematics	408	(490)
Public and private spending (% of GDP)			Science	416	(493)
Health care	5.4	(8.8)	Share of women in parliament (%)[e]	48.4	(29.1)
Pensions (2015)	1.5	(8.2)	Net official development assistance (% of GNI)[a]	-0.02	(0.38)
Education (primary, secondary, post sec. non tertiary, 2015)	3.9	(3.5)			

* 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 29 member countries.

a. 2016 for Mexico.

b. 2016 for the OECD.

c. OECD refers to the unweighted average based on the latest available data of all its member countries.

d. Data refers to net of tax household income before benefit transfers for Mexico for 2014. Data refers to the median disposable (i.e. net of taxes) household income for the OECD for 2016.

e. Data for Mexico reflect the share of female parliamentarians as of December 1, 2018.

Source: Calculations based on data extracted from the databases of the following organisations: OECD, IEA, IMF UNESCO and the World Bank.

Executive summary

Moderate growth is underpinned by a strong macroeconomic framework

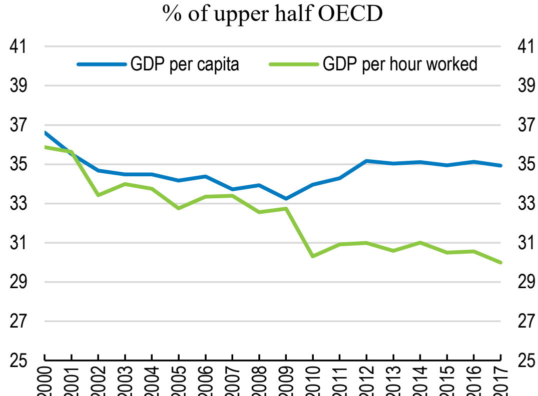
Commitment to fiscal targets, sound debt management, a flexible exchange rate and an appropriate monetary policy stance have supported moderate growth in spite of several headwinds in recent years.

Integration into global value chains is driving robust export growth while a recovery in real wages, strong remittances and credit growth have supported consumption. Declining oil production continues to be a drag on the economy and fiscal revenues. Investment remains subdued, reflecting policy uncertainty domestically as well as abroad, but also fiscal consolidation, which has helped to halt the rise in public debt against a generally weak redistributive role of fiscal policy.

Moderate growth has not improved relative living standards. This reflects low productivity growth, in turn influenced by poor educational outcomes, weak rule of law, obstacles to competition and widespread informality. Many of the recent reforms to open up the economy are yet to bear fruit, as their effects take time to materialise, implementation is still ongoing and institutional reform is lagging behind.

Figure A. Low productivity growth is stalling convergence of living standards

% of upper half OECD

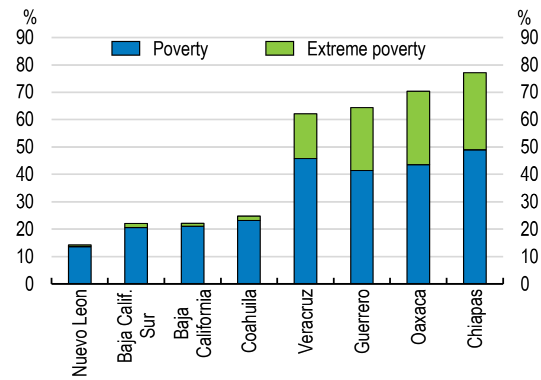


Source: OECD Productivity database.

StatLink http://dx.doi.org/10.1787/888933956014

A growing divide between a more productive and modern economy in the north and centre of the country and a more traditional economy in the south reinforces inequalities. Despite increased social spending, poverty and inequalities loom large. Greater equality of opportunities for women and indigenous people is needed to address high disparities in well-being.

Figure B. Poverty and inequalities across regions remain high



Source: CONEVAL.

StatLink http://dx.doi.org/10.1787/888933956033

Growth will strengthen moderately in the medium term. Investment will recover on the back of planned infrastructure projects complemented with institutions conducive to private investment. Domestic consumption will be supported by increases in the minimum wage, continued low unemployment and strong remittances. Exports will keep supporting the economy, albeit at a lower rate.

Table A. Growth will strengthen moderately

	2017	2018	2019	2020
	% change, volume (2013 prices)			
GDP at market prices	2.3	2.0	1.6	2.0
Private consumption	3.4	2.2	1.3	2.2
Government consumption	1.0	1.4	-0.6	0.3
Gross fixed capital formation	-1.6	0.6	-1.8	2.2
Exports of goods and services	4.0	5.7	2.9	4.9
Imports of goods and services	6.7	6.2	4.2	4.5
Consumer price index	6.0	4.9	3.8	3.6
Current account bal. (% GDP)	-1.7	-1.8	-1.9	-1.8

The outlook is subject to sizeable risks. Fast implementation of investment plans to boost oil production would raise exports and lower the energy trade deficit, but the goal of boosting oil production by the projected magnitude will likely require additional private investment. A firm commitment to fighting crime and widespread corruption could create a more enabling business environment. On the other hand, policy uncertainty, also in the context of the need for all parties to ratify the new trade deal between Canada, Mexico and the United States, a slowdown in the global economy and renewed trade tensions would hinder exports and depress private investment.

The tax and transfer system could support growth and equity more firmly

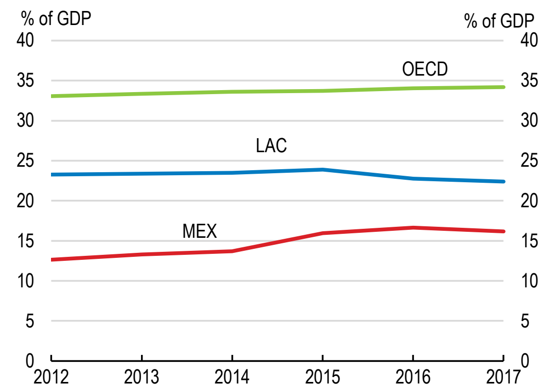
The fiscal stance is appropriate given the high debt level. Over time, debt should be put on a declining path as fiscal space is increased with more revenues.

Tax collection should be raised over time. The 2014 tax reform raised non-oil revenues but tax revenue is still lower than in OECD and LAC countries on average. Furthermore, the reform did little to reduce disposable income inequality. Overall low tax collection limits social spending and infrastructure investment. There is room to raise the tax-to-GDP ratio in an inclusive way, by broadening the tax base, and continuing to fight tax evasion and avoidance, including by reinforcing federal- and state-level tax administrations. Additional VAT revenue could be collected by applying the standard rate more generally, while implementing subsidies targeting the poor. The threshold for the top marginal personal income tax rate is relatively high and many exemptions and deductions benefit those with higher incomes.

Fiscal federal relations affect the quality and efficiency of public service delivery. The current fiscal equalisation mechanisms have not promoted regional convergence nor reduced inequalities across states. Clarifying responsibilities across levels of government and achieving a better match between service delivery and tax collection would improve accountability at the state and municipal level and raise tax collection.

Social programmes are too numerous and do not always reach the poorest. Making use of the beneficiary database (SISI) and matching it with the social census could detect non-entitlement, beneficiary overlaps, material deprivations at the household level and duplications in social programmes. This would free more resources to attend to the needs of the most vulnerable. Reducing fragmentation in the delivery of health services and pension systems would improve service quality and equity, as well as fiscal sustainability.

Figure C. Tax revenue is low



Source: OECD Global Revenue Statistics Database.

StatLink http://dx.doi.org/10.1787/888933956052

Strengthening the quality of institutions

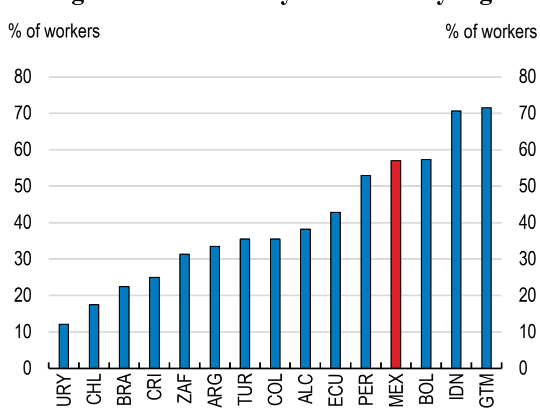
The rule of law and quality of institutions in Mexico is low and has deteriorated, disproportionally hurting the poor. Impunity levels are extremely high, violent crime continues to grow and control of corruption is weak compared not only with OECD countries, but also Latin American and Asian economies. The cost of crime is high and its incidence varies greatly across regions, widening existing regional disparities in well-being.

Improving institutional quality would have the largest growth benefits among all structural reforms and would increase the impact of all other policy reforms. Corruption affects the business environment, public spending efficiency and trust in the public sector. The implementation of the National Anticorruption and Local Anticorruption Systems should be completed. Recent reforms to create independent competition authorities and sector regulators have been positive. The autonomy of these entities should be maintained and resourcing levels should allow them to undertake their mandates effectively and continue to build their capacity.

Unleashing productivity and inclusiveness

Mexico's persistently high informality constrains productivity growth and fiscal capacity to provide public benefits and redistribute. It also feeds inequality of incomes and opportunities. Informality is affected by many complex factors. The expansion of universal protection associated with low benefits of formalisation reduces its attractiveness. Segmentation in the provision of social services according to labour market status should be progressively reduced while benefits associated with formalisation should be strengthened. Reducing the high and uncertain costs of dismissing a formal worker and introducing an unemployment insurance scheme would reduce disincentives to formal job creation while better addressing the personal costs of job loss. Enforcement could be improved by integrating the tax and social security administrations. Social security contributions of low-skilled workers could be reduced.

Figure D. Informality is stubbornly high

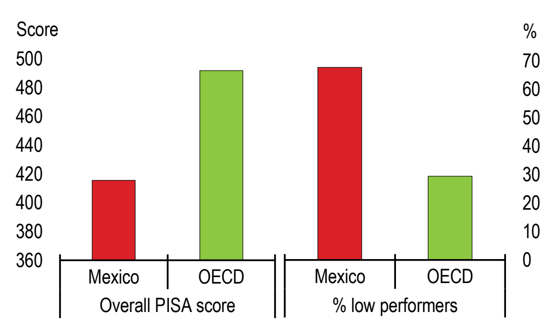


Source: SEDLAC and INEGI.

StatLink http://dx.doi.org/10.1787/888933956071

While education services have expanded, poor educational outcomes hamper productivity growth, contribute to persistent inequalities and job informality. Education spending should be re-focused on pre-primary, primary and secondary education and more should be done to increase the capacity of schools in poor neighbourhoods and to support children from disadvantaged backgrounds. Increasing the quality of early childhood care and access among low-coverage regions and children from disadvantaged backgrounds would be a cost-effective way to boost educational outcomes, and ultimately productivity, while also reducing inequality. It would also increase women's labour market pariticpation, which is one of the lowest in the OECD. School infrastructure and pedagogical material could be improved. Given the high rates of youth not in employment, education or training, particularly among women, the government's plans for a large internship programme are welcome. The programme should ensure strong female participation, and its results in generating stable and formal jobs should be evaluated with a view to further expanding them into a vocational educational and training programme.

Figure E. PISA outcomes are poor



Source: OECD PISA database.

StatLink http://dx.doi.org/10.1787/888933956090

Integrating environmental concerns into policy making has much potential to improve economic and environmental outcomes. Reforms in the governance of the large metropolitan areas would enable local governments to plan land use, public transport and housing in an integrated manner, boosting productivity and lowering congestion and air pollution, which affects low-income households the most.

MAIN CHALLENGES	KEY RECOMMENDATIONS
Maintaining a strong macroeconomic framework and finding resources for more equitable growth	
Public debt is on the high end for an emerging economy.	Maintain a prudent fiscal stance to keep the debt-to-GDP ratio stable and consider lowering it over the medium-term.
Inflation is still above target.	Maintain the current monetary policy stance to curb inflation.
Concentration in the banking sector, the cost of credit and spreads are high. Financial inclusion remains low.	Accelerate the current initiatives to enhance financial inclusion, financial literacy and competition. Monitor outcomes. Move towards making all government transfers to households through bank accounts or electronic means.
Tax collection is low. A narrow tax base and high tax evasion limit the resources to finance needed infrastructure investment and policies to reduce poverty and inequality.	Develop a comprehensive tax reform for implementation in the medium term. Broaden the VAT base by cutting exemptions and abolishing reduced rates while compensating the poor with targeted subsidies. Increase the progressivity of personal income tax by lowering the income threshold for the top rate and further cut back tax allowances or convert them into tax credits. Build a nationwide property register to make more use of recurrent taxes on immovable property.
Social spending is low, while duplications and leakages in social assistance programmes lead to inefficiencies.	Continue to reduce duplication of social programmes, beneficiary overlaps and expand coverage to the poor not receiving social benefits.
The fiscal framework is robust but transparency and accountability could be improved.	Establish a non-partisan, independent and adequately resourced fiscal council, along the principles defined by the OECD.
The fiscal federalism framework limits the incentives of local authorities to increase tax collection and leads to low quality subnational spending.	Revise the Ley de Coordinación Fiscal to redefine and clarify responsibilities of public service delivery across the three levels of government and cut overlaps. Build capacity and professionalise the civil service at the state and municipal levels.
The capacity of the tax administration is low.	Further strengthen the tax administration through adequate staffing and resourcing and improve technological capabilities. Link the tax administration (SAT) and the social security databases to improve tax surveillance and compliance.
Strengthening inclusive growth	
Female labour market participation is low.	Expand access to good quality, affordable childcare. Increase the length of the pre-school day for three- to five-year-olds. Reduce high female drop-out rates in education.
Despite good progress to foster integrity, corruption remains widespread. High crime rates hinder economic activity and citizens' well-being, particularly impacting the poor and women.	Complete the implementation of the National and Local Anticorruption Systems reforms and monitor the results. If needed, consider introducing a specialist, independent anticorruption agency that takes into account the federal structure of the government. Continue efforts to reduce crime and impunity.
Despite wide-ranging reforms, competition remains weak.	Ensure that the competition authorities and sector regulators have adequate resourcing and independence to carry out their mandates effectively.
Informality is high, leading to severe resource misallocation, low productivity and access to social services.	Lower social security contributions for low wage earners. Step up enforcement. Implement a coordinated approach to reduce informality, comprising lower administrative burdens to doing business, including tax compliance costs, and reduced dismissal costs while stepping up social protection. Lead by example and progressively reduce the number of informal workers in the public sector.
Education outcomes are low, contributing to high and persistent inequalities and holding back productivity growth.	Raise the quality and coverage of early childhood education and care programmes and delink them from parents' labour market status. Continue to expand VET coverage, assess the results of the internship programmes and encourage female participation.
High pollution in metropolitan areas raises sickness and mortality, especially among the poor, and reduces productivity and is strongly related to car use.	Allow and encourage municipalities to create joint metropolitan governance arrangements on their own initiative, in particular metropolitan transport authorities. Invest in integrated public transport systems focusing on improving access in low-income areas.
On current policies, Mexico is unlikely to meet its CO2 emission reduction targets. Fossil fuel use contributes to air pollution.	Raise the carbon tax gradually and predictably, eliminate exemptions and reduced rates and compensate the poor. Resume long-term auctions to encourage the supply of renewable energy, linking the remuneration of supply to market conditions.

Key policy insights

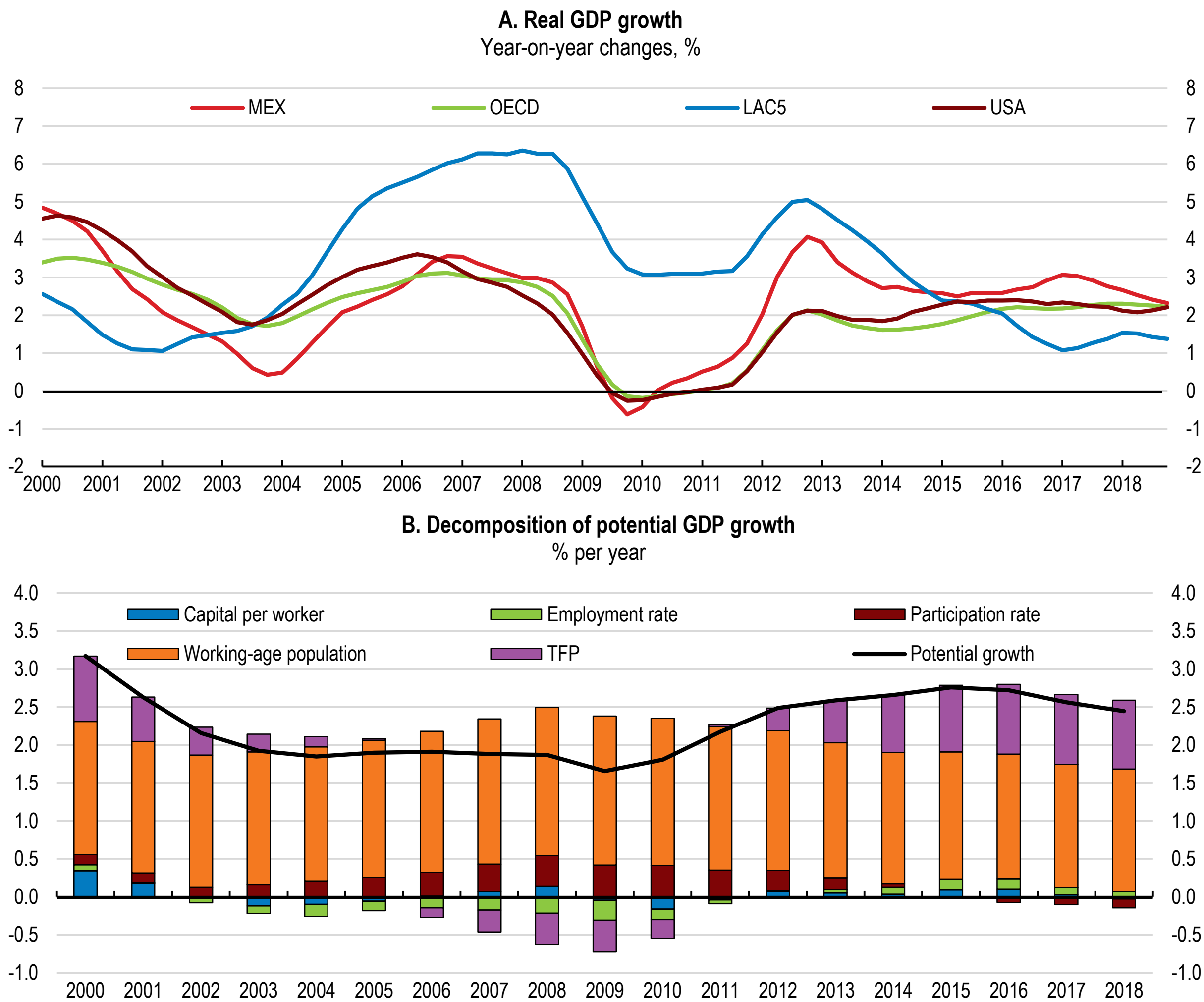
Moderate growth over the past two decades has been supported by oil wealth, working age population growth, and open trade and investment policies. A solid macroeconomic framework has delivered fiscal discipline, abated inflation and enabled Mexico to weather well various commodity price and emerging markets shocks (Figure 1). Oil production has been declining, dropping from 9% to 4% of GDP, and from 16% to 6% of total exports over the last decade.

Aided by NAFTA, Mexico developed into a manufacturing hub by deepening its integration into global value chains and exports' share of GDP climbed from 19% of GDP in 1990 to 38% of GDP in 2017. Manufactured goods account for 80% of exports and go mostly to the United States (Figure 2) despite intense competition from China (Araújo, Chalaux and Haugh, 2018[1]). While medium-technology exports still dominate goods exports, the share of high technology and more complex goods has been increasing over time and export growth has been driven by the expansion of current trade relationships, as in other countries (Araújo and Hitschfeld Arriagada, 2019[2]). Although Mexico is well integrated into global value chains (GVCs) from a backward participation perspective, the share of Mexican value-added embodied in foreign demand (forward participation) remains below that of peer countries. Services' exports are also lagging behind and the share of firms engaging in GVCs is low compared with other countries.

Remittances have been increasing at a robust pace over the past three years providing support to the current account and to private consumption, particularly of low income families. In 2018 remittances totalled about USD 33 000 million, reaching a new historical high. Remittances represent close to 3% of GDP and remittances per capita have grown substantially over time (Figure 3). In 2018, 94% of these flows originated in the United States. Remittances are highly concentrated by destination, with seven states accounting for about half of the flows. In Mexico, remittances have been used to start or support business enterprises (Finkelstein Shapiro and Mandelman, 2016[3]) and evidence suggests that they have been used as part of a households' income generation strategy rather than incentivising a reduction in labour supply (Cox-Edwards and Rodríguez-Oreggia, 2009[4]). Remittances have also been associated with an increase in school attendance and a reduction in child labour (Alcaraz, Chiquiar and Salcedo, 2012[5]).

Despite moderate growth, Mexico has not converged towards higher living standards and the gap in GDP per capita with the OECD average and the United States has not narrowed (Figure 3). Informality remains high, encompassing nearly 60% of formal jobs and about a quarter of GDP. Inequality and poverty declined only moderately, and large gaps prevail between regions while poverty disproportionally affects the indigenous population (Figure 5, Figure 6).

Figure 1. Growth has been driven mainly by demographics



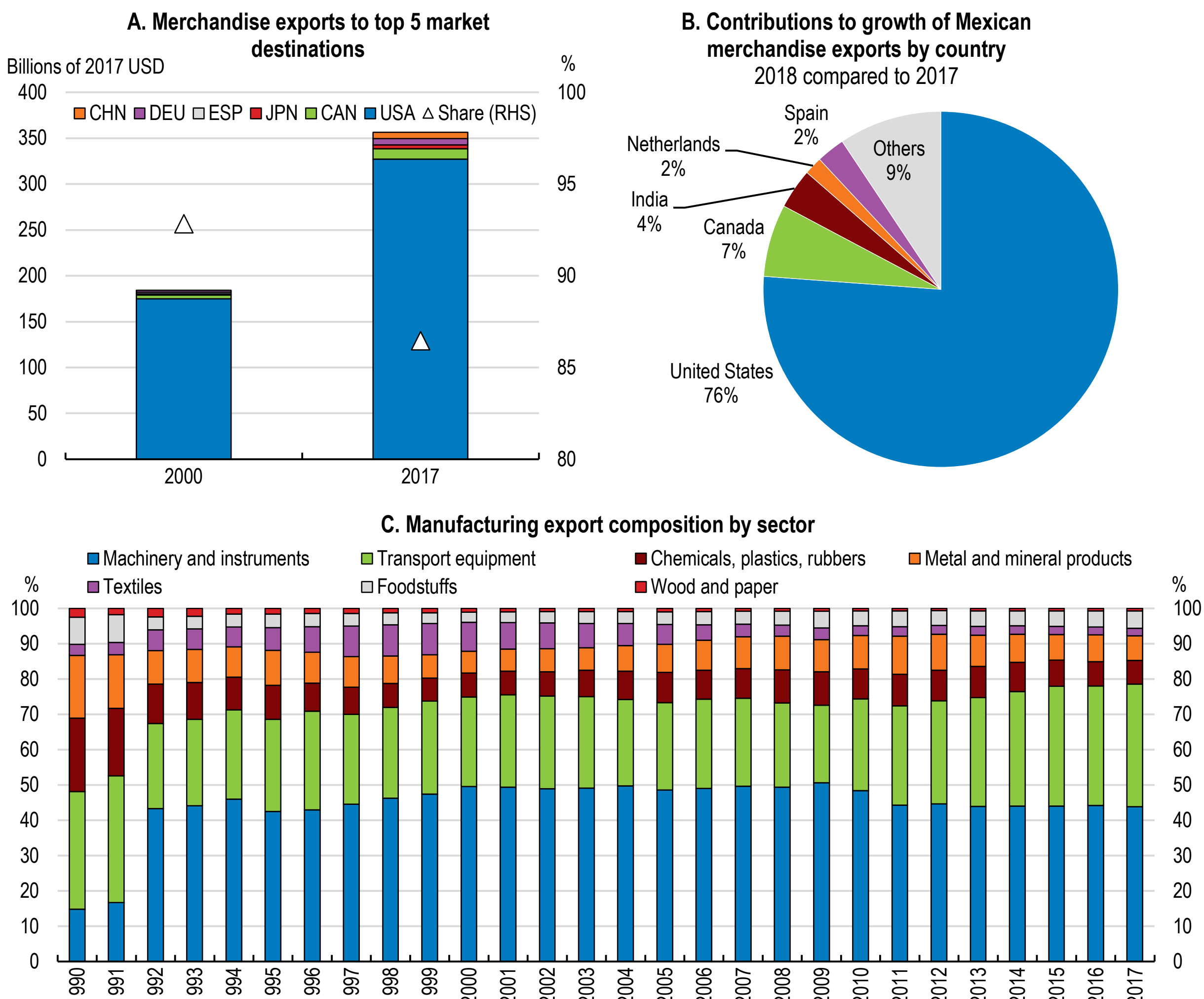
Note: LAC5 refers to the unweighted average of Argentina, Brazil, Chile, Colombia and Costa Rica. Panel A is a 3-year moving average.
Source: OECD Analytical Database; OECD Demography and Population Database.

StatLink http://dx.doi.org/10.1787/888933956109

Gender inequalities remain large in Mexico and low female labour market participation represents untapped potential to lift growth, alleviate poverty and increase women's well-being (Chapter 1). While Mexico has made some progress in increasing women's participation in the labour force since the early 1990s, at 47%, it is one of lowest rates in the OECD (Figure 7) and significantly lower than Mexican men's participation rate of 82%. Many barriers prevent Mexican women from engaging in the labour force. More than one-third of women drop-out of school and are not in employment, education, or training (NEETs), compared with less than 10% of men. This not only impairs women's likelihood of finding good quality, formal jobs but also exacerbates the gender pay gap. Although cultural norms play a role, high insecurity harms women in particular (Figure 8). The participation of mothers in the labour market is low, in part owing to the tradition of long working hours and the lack of quality and affordable early childhood education, especially for children less than three years of age. Expanding access to good quality affordable early childhood education and care for all should be a priority as it entails a double dividend of raising outcomes and equity in education and facilitating women's participation in the labour market.

There are also gender gaps in the usage of financial services, which also hamper women's entrepreneurship (OECD, 2017[6]). Self-employed women tend to be own-account workers more than employers, and start their businesses at a smaller scale and in a limited range of sectors (OECD et al., 2014[7]). Striking differences arise on a wide range of financial inclusion indicators, including asset ownership, usage of insurance services and having a retirement savings account, the latter representing a higher risk of old-age poverty for women relative to men. One of the three horizontal pillars of the National Development Plan is gender equality (Box 1). Going forward, current plans to deepen financial inclusion and literacy should have a gender dimension and progress should be monitored.

Figure 2. Exports to the US are driving total export growth

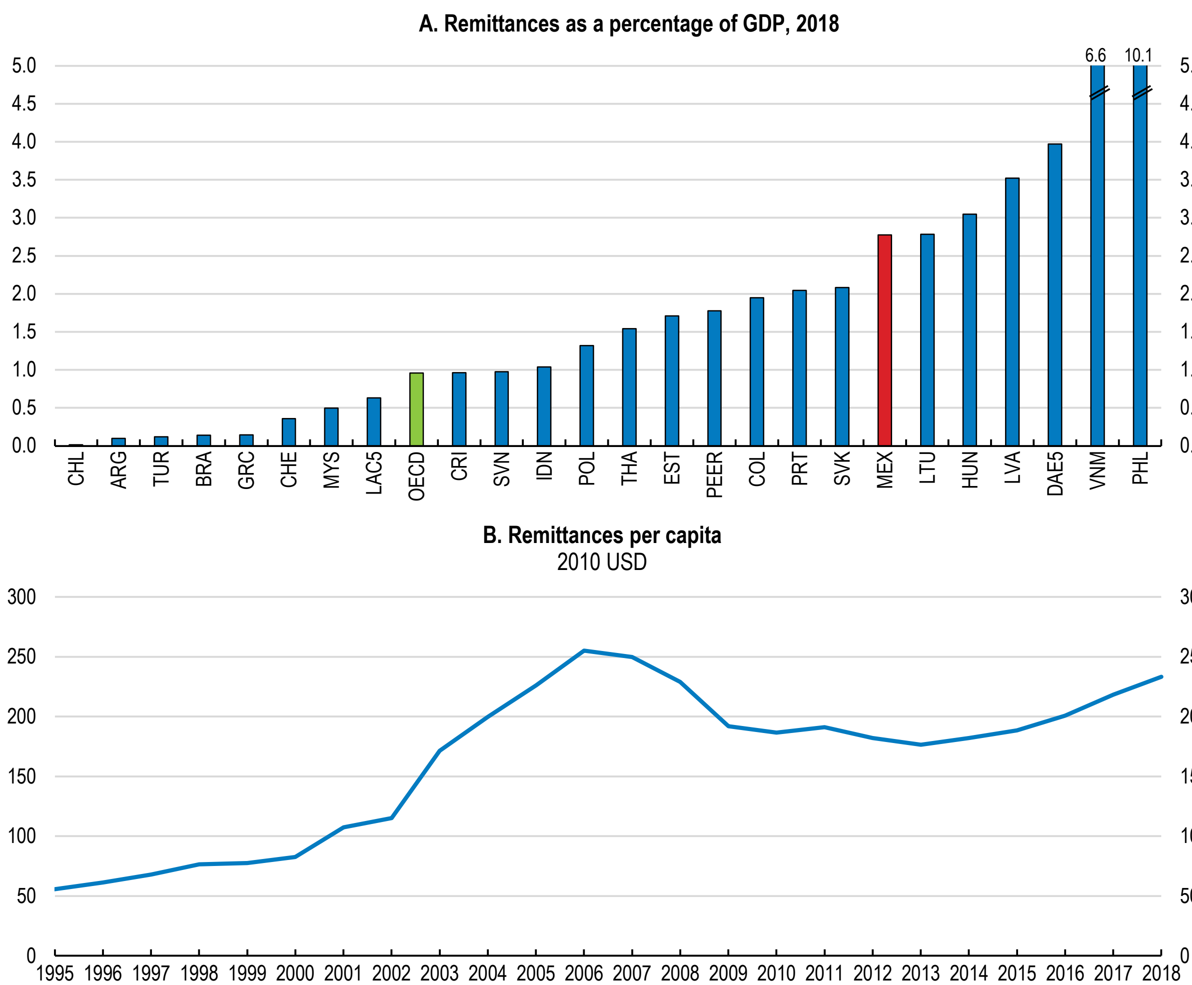


Note: Panel B represent export markets contributions to changes in the merchandise trade balance.
Source: Araújo and Hitschfeld Arriagada (2019[2]); OECD calculations using data from Banco de México and BACI; Bilateral Trade in Goods by Industry and End-use (BTDIxE), ISIC Rev.4.

StatLink http://dx.doi.org/10.1787/888933956128

Other social and well-being indicators show some improvements (Figure 5). The most significant improvements have been made in healthcare by progressing towards universal access via *Seguro Popular*. However, just over 40% of the population with formal jobs have access to social security. Well-being lags behind the OECD average, especially mortality rates, education, perceptions of corruption and broadband internet access (Figure 9). Large differences in well-being also exist across regions, and southern states are largely disconnected from the positive dynamics of North American free trade (OECD, 2015[8]) (Figure 9).

Figure 3. Remittances have been increasing



Note: LAC5 is an unweighted average of Argentina, Brazil, Chile, Colombia, and Costa Rica. PEER is an unweighted average of the 10 non-Latin American OECD countries with the lowest PPP-adjusted GDP per capita: Estonia, Greece, Hungary, Latvia, Lithuania, Poland, Portugal, Slovak Republic, Slovenia, and Turkey. DAE5 is an unweighted average of Indonesia, Malaysia, Philippines, Thailand and Viet Nam.
Source: World Bank World Development Indicators, IMF World Economic Outlook (October 2018), Banco de México.

StatLink http://dx.doi.org/10.1787/888933956147

Figure 4. Growth has not been strong enough to allow for convergence to higher living standards

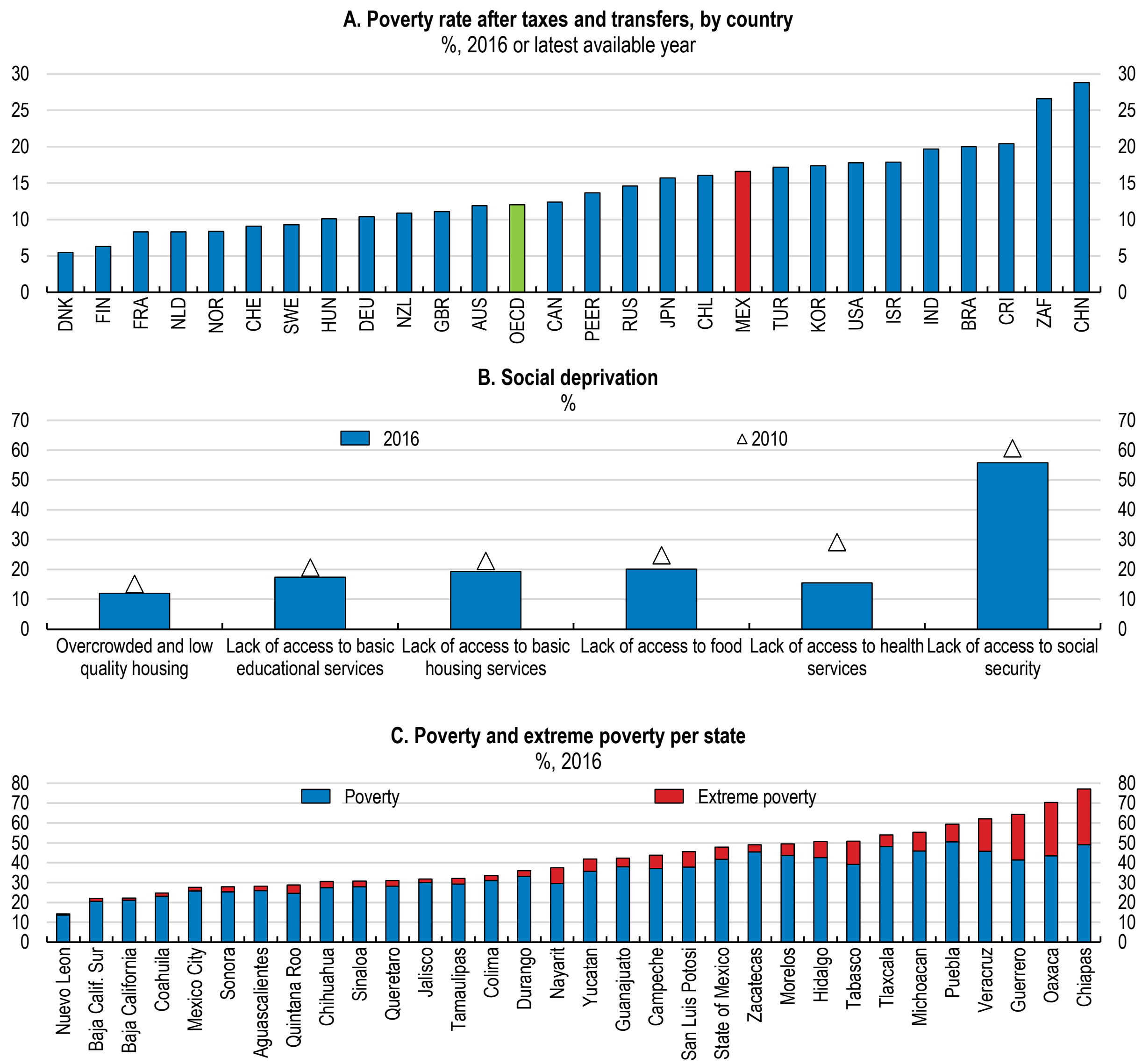
Note: GDP per capita and labour productivity relative to the OECD average in constant PPP-adjusted USD terms. Labour productivity is GDP per hour worked. Labour utilisation is hours worked per capita.
Source: OECD Productivity Database.

StatLink http://dx.doi.org/10.1787/888933956166

Moderate growth reflects low productivity due to largely structural factors: high informality influenced by complex labour and business regulations, resource misallocation, poorly functioning credit markets, low competition in key sectors, poor educational outcomes, and large infrastructure gaps. Huge differences in regional productivity also drag down aggregate productivity and growth (see Chapter 1).

To reignite productivity growth and improve living standards, Mexico has embarked on an ambitious programme of reforms in labour markets, competition, education, anticorruption, financial sector openness and inclusion and judicial reform. Implementation of some of these reforms is completed: independent competition authorities were established, telecommunications and energy sectors were opened to competition, and justice reforms advanced to implement oral adversarial trials. In some, such as energy and education, reforms will be modified (Annex A, Box 1). The new policies and programmes of the government, including the modifications to previous reforms, should be subject to best practice tools, including cost-benefit analysis and regulatory impact assessment.

Figure 5. Poverty rates are still high but differ greatly across states



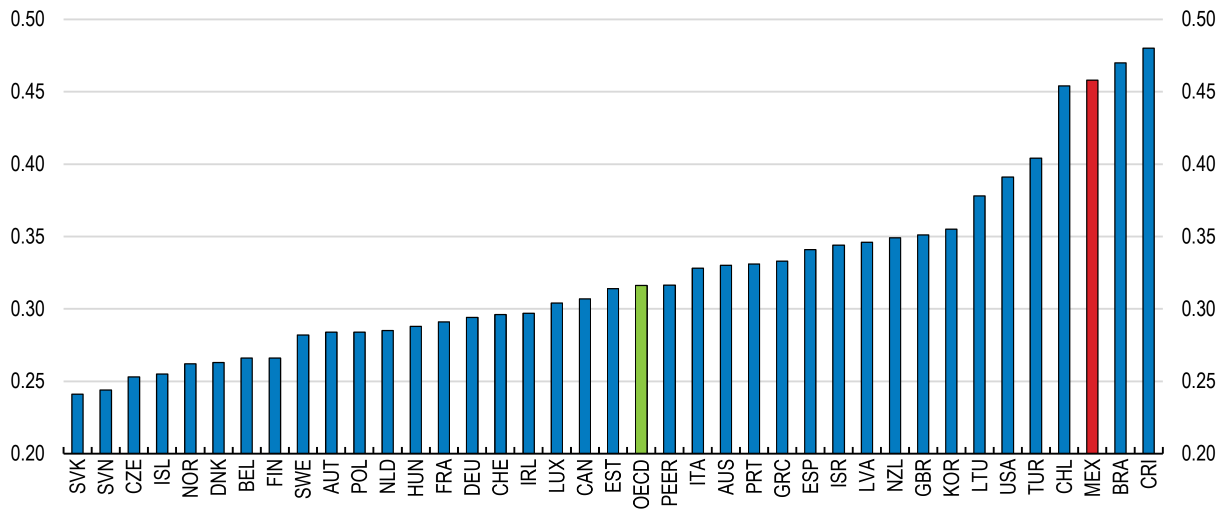
Note: Panel A: the poverty rate is the share of people whose income falls below 50% of the median income. Panel C: CONEVAL's multi-dimensional poverty measure considers income plus six social dimensions of well-being (as presented in Panel B). The population in extreme poverty is the group whose income cannot ensure adequate nutrition and who is deprived in at least three of the six social indicators. The population in poverty includes those whose income cannot ensure adequate access to nutrition and basic services and who are deprived in at least one of the social indicators.

Source: OECD, Income Distribution and Poverty database; CONEVAL (Consejo Nacional de Evaluación de la Política de Desarrollo Social).

StatLink http://dx.doi.org/10.1787/888933956185

Figure 6. Inequality is high

Gini index after taxes and transfers, 2016 or latest year

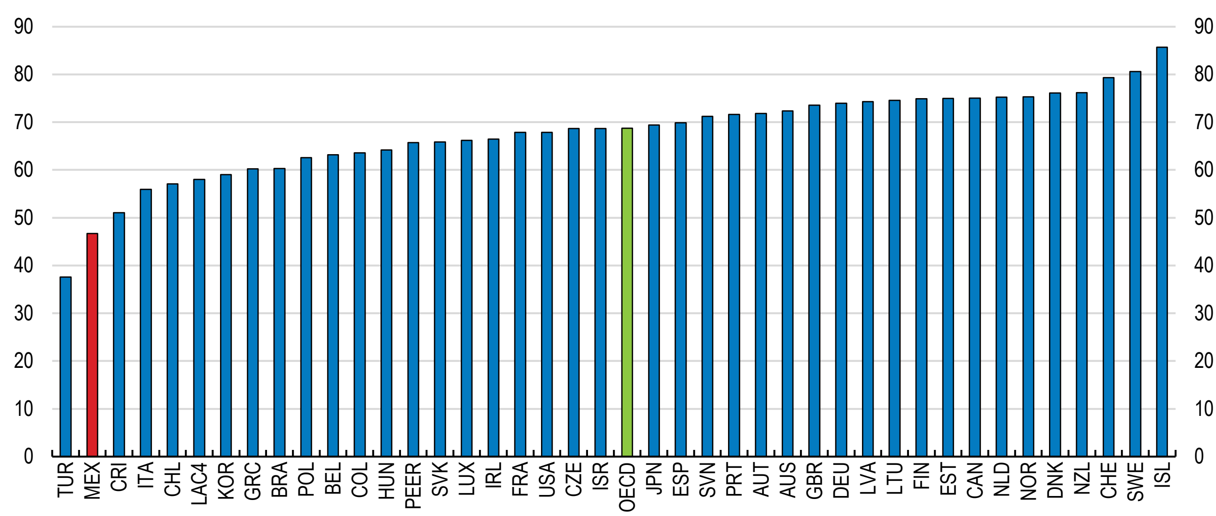


Note: Data for Mexico refer to 2014. PEER is an unweighted average of the 10 non-Latin American OECD countries with the lowest PPP-adjusted GDP per capita: Estonia, Greece, Hungary, Latvia, Lithuania, Poland, Portugal, Slovak Republic, Slovenia, and Turkey.
Source: OECD Income Distribution and Poverty Database.

StatLink http://dx.doi.org/10.1787/888933956204

Figure 7. Female labour market participation is low

Percentage of 15-64 year olds, 2017

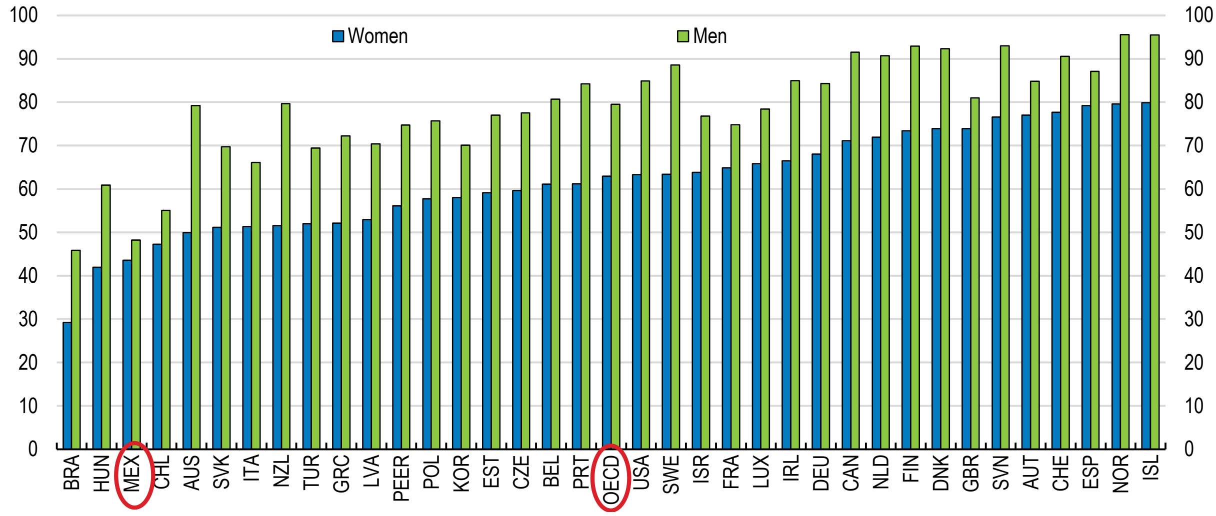


Note: LAC4 is an unweighted average of Brazil, Chile, Colombia, and Costa Rica. PEER is an unweighted average of the 10 non-Latin American OECD countries with the lowest PPP-adjusted GDP per capita: Estonia, Greece, Hungary, Latvia, Lithuania, Poland, Portugal, Slovak Republic, Slovenia, and Turkey.
Source: OECD Social Protection and Well-Being Database.

StatLink http://dx.doi.org/10.1787/888933956223

Figure 8. Security is low, hurting women in particular

Percentage of people who report feeling safe walking alone at night

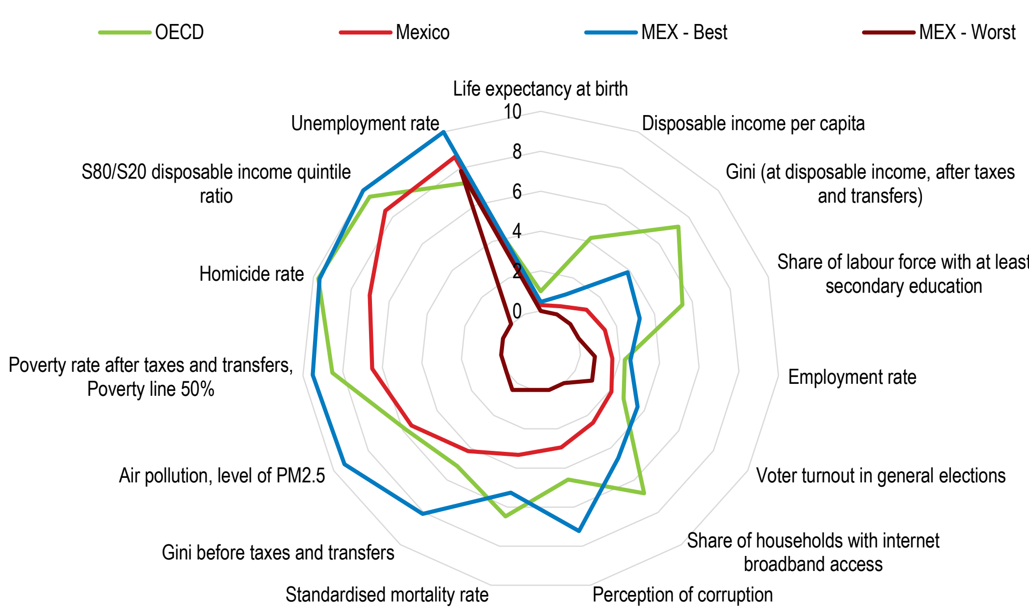


Note: PEER is an unweighted average of the 10 non-Latin American OECD countries with the lowest PPP-adjusted GDP per capita: Estonia, Greece, Hungary, Latvia, Lithuania, Poland, Portugal, Slovak Republic, Slovenia, and Turkey. The reference period is the 3-year average 2014-2016 for all countries.
Source: OECD Better Life Index, 2017.

StatLink http://dx.doi.org/10.1787/888933956242

Figure 9. Well-being varies greatly across states

Well-being indicators for Mexico and OECD countries, 2014 or latest available year

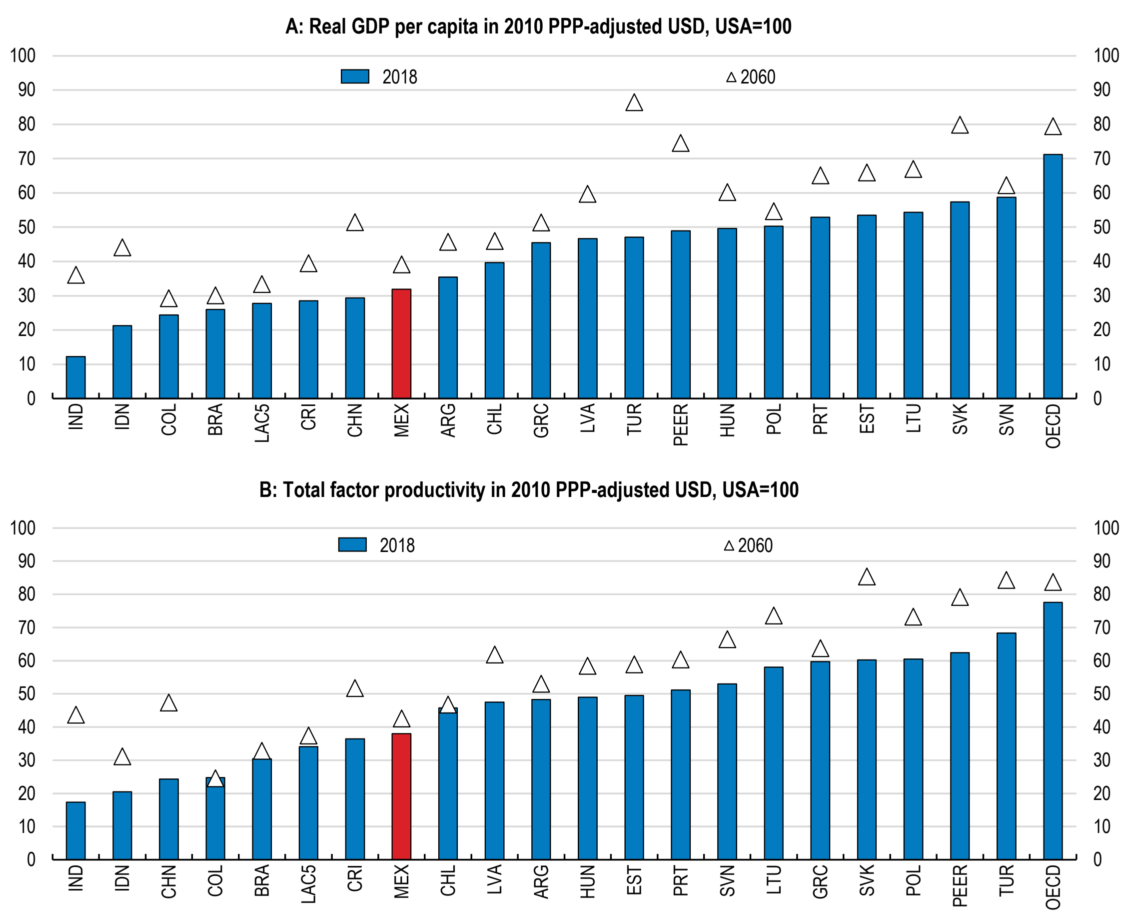


Note: Indicators are normalised to a range of 0 (worst) to 10 (best) computed over OECD countries and Mexican states.
Source: OECD Regional Well-being database.

StatLink http://dx.doi.org/10.1787/888933956261

Many of these reforms have helped Mexico to improve legislation and regulatory frameworks. While the gains in productivity, growth and reduced inequality will take longer to materialise, several reforms have already produced concrete and important results. For example, the telecommunications reform spurred competition, promoted investment, significantly increased access to services, increased quality and contributed to a remarkable drop in the prices of these services, benefiting low-income households disproportionately (Ennis, Gonzaga and Pike, 2017[9]). For mobile broadband, the price decrease ranged from 69% to almost 81% for all OECD communication baskets over the past five years. In 2013, only 9% of households with fixed internet could surf at advertised speeds in the range of 10 to 100 Mbps. In June 2018, around 80% of all fixed household connections were in this speed tier. However, the full implementation of the reforms has been a challenge and a renewed comprehensive strategy is needed to raise productivity and living standards for all Mexicans. Beyond completing the implementation of past reforms, Mexico needs a new wave of reforms focused on well-being and inclusion creating equal opportunities for all. Without reforms, Mexico will converge only slightly towards US living standards by 2060 (Figure 10).

Figure 10. Without policy reforms, Mexico's convergence to higher living standards will be limited



Note: Based on the "baseline" scenario of the "OECD Long-term Scenarios for the World Economy" database. PEER is the weighted average of Estonia, Greece, Hungary, Latvia, Lithuania, Poland, Portugal, Slovak Republic, Slovenia and Turkey. LAC5 is a weighted average of Argentina, Brazil, Chile, Colombia and Costa Rica.
Source: OECD Long-term Scenarios for the World Economy database.

StatLink http://dx.doi.org/10.1787/888933956280

Box 1. Key features of new government's programme

In Mexico, the National Development Plan (NDP) is the key planning document to establish the national public policy priorities. The 2019-2024 NPD has as a general objective to "*Transform the country's public life to achieve greater well-being for everyone*". To attain this objective the Plan has three main pillars that are a thematic division to group identified problems and identify the broad objectives of public policy, and three horizontal pillars than include those public problems that are transversal and should be included in the design of public policy.

The main pillars are:

- **Justice and rule of law**: Policies for guarantying the construction of peace, the full exercise of human rights, democratic governance and the strengthening of Mexico's political institutions.
- **Welfare** (*Bienestar*): Policies for guarantying the effective exercise of economic, social, cultural and environmental rights, with emphasis on the reduction of inequality and vulnerability conditions of populations and territories.
- **Economic Development**: Policies aimed at increasing productivity and promoting an efficient and responsible use of resources to contribute to balanced economic growth that guarantees equitable, inclusive and sustainable development throughout the entire territory.

Most public problems are multidimensional and require coordinated efforts by several ministries and public entities. Nonetheless, for some problems, their solutions would benefit from a transversal perspective and from its consideration in the design of all public policies. For that purpose, three horizontal pillars have been defined:

- Gender equality, non-discrimination and inclusion
- Fight against corruption and improve public management
- Territorial and sustainable development.

To date, some main policy actions and targets that have been announced by the government include:

- Modernise road infrastructure.
- Expand the train network (Maya train and Istmo train projects): the 2019 budget allocates MXN 6 000 million to the Maya train project (about 0.14% of total budgetary spending) which will be spent on repairing existing railroads that integrate the Maya train project. The expansion of the rail network will require cost-benefit analysis, as defined in the legislation (Diario Oficial de la Federación, 2015[10]) and in agreement with the Federal Law on Budget and Treasury Responsibility (2015[11]). The participation of the private sector will require a value-for-money assessment, as defined in the Public-Private Participation Law (Diario Oficial de la Federación, 2012[12]). The total estimated cost of the Maya train project is MXN 150 billion.
- Rehabilitate strategic ports in the south (Coatzacoalcos in Veracruz, Salina Cruz in Oaxaca and Ciudad Hidalgo in Chiapas).

- Increase oil production and refining, by reinforcing PEMEX's budget and reducing its taxation, initiating production in 20 newly discovered oil fields (16 shallow water and four onshore) in the region of the Gulf of Mexico, rehabilitating six refineries and constructing a new refinery in Dos Bocas. PEMEX's business plan includes restoring financial health, in particular achieving a positive cash-flow before interest payments and improving corporate governance. Ongoing contracts signed with the private sector for oil exploration as part of the 2013 energy reform have been evaluated and are going forward. Planned oil auctions have been delayed to review the results of the private sector involvement thus far. Negotiations with the private sector are ongoing. Boosting oil production by the projected magnitude will likely require additional private investment. (See Box 2, Table 2 and Table A.1.)
- Modernise hydroelectric plants.
- Improve urban infrastructure.
- Expand and improve housing quality.
- Promote tourism.
- Expand microcredit (see Table A.1.).
- Create the "Northern Border Zone" (see Table A.1).
- Raise pensions (doubling of PAM old-age pensions) (see Table 6).
- Raise disability subsidies.
- Increase provision of student scholarships (see Chapter 1 and Table A.1.).
- Expand and unify healthcare.
- Raise the minimum wage.
- Expand and improve educational quality, including a large VET programme "Youths Building the Future", aiming to reach about 2.3 million youths aged 18-29 not in education, employment or training (see Box 1.2 in Chapter 1).
- Introduce guaranteed minimum prices for small producers of five agricultural products.
- Adopt and implement a new anti-drug policy.
- Step up security by raising the number of police staff and army.

A renewed strategy to boost growth and well-being is needed

The new government took office on December 1 2018. Raising growth and fighting corruption, and reducing poverty and inequalities feature high in its agenda for 2019-2024 (Box 1). It plans to re-allocate spending towards new priority areas, without increasing taxes in the first half of its term nor raising the public-debt-to-GDP ratio.

To aid in the formulation of this agenda, this Survey provides analysis and recommendations in several of these areas (Box 1) and in other recent reforms (Table A.1), including institutional quality. The latter is not only important in itself, but is also key for the success of all other reforms as it improves governance and a rules-based system increases certainty.

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

- Maintaining macroeconomic stability is key to smooth adjustment to shocks and to provide confidence to economic agents in the medium term.
- Implementing a comprehensive strategy to boost productivity and inclusiveness by improving incentives to job and business formalisation, improving regulations to spur competition, boosting infrastructure, raising educational outcomes, further enhancing trade and participation in global value chains and strengthening the redistributive role of fiscal policy.
- Increasing equity and providing opportunities for all, including women, indigenous population, and lagging regions should be an integral element of the reform agenda. Institutional reform would deliver stronger growth and increase fairness and opportunities for all. Reducing corruption, insecurity and crime would boost economic activity and especially benefit the poor and underprivileged.

Reform complementarities are important. While each individual policy reform is important in itself, due to policy interactions and complementarities, a package of reforms will have a greater positive impact on economic outcomes (Hanson, 2010[13]). For example informality, which contributes to low productivity, is influenced by many factors. Furthermore, low productivity itself may keep companies informal. This highlights that causation tends to run in both directions (Andrews, Caldera Sánchez and Johansson, 2011[14]) which calls for a comprehensive programme including all other productivity-enhancing policies. Improving simultaneously the quality of institutions, reducing corruption and increasing the efficiency of the judicial system would strengthen contract enforcement and incentives to firm formalisation, investment and growth (Sukiassyan and Nugent, 2005[15]; Laeven and Woodruff, 2007[16]; Sukiassyan and Nugent, 2008[17]). Infrastructure needs are extensive, and are holding back greater integration into global value chains and the delivery of public services, but also highlight that better institutional arrangements could increase public spending efficiency and provide greater certainty for private investment.

A robust macroeconomic policy framework underpins moderate growth

Aided by a strong macroeconomic policy framework, the economy continues to show resilience amid several headwinds. Fiscal and monetary policies have been prudent in a credible framework. Vulnerabilities were reduced by decreasing the reliance on external public debt financing, increasing the use of fixed rates and cutting the public debt-to-GDP ratio (OECD, 2017[6]) (Figure 11). External private and public debt have remained fairly constant in recent years while sovereign bond spreads have risen somewhat in the last months of 2018 (Figure 11, panels E and F). Foreign reserves are comfortable (IMF, 2018[18]) (Figure 12). The Flexible Credit Line (FCL) was renewed in November 2018, allowing access to about USD 74 billion (600% of Mexico's SDR; about 20% of external debt). It is a testament to Mexico's robust macroeconomic policies, and has been an effective complement to international reserves, providing an important buffer against tail risks and bolstering market confidence. Authorities continue to treat the FCL arrangement as precautionary and plan to phase it out gradually, subject to a winding down of external risks.

Despite a sharp fall in oil prices and the protracted decline in Pemex's oil production since 2004 (Box 2), a small current account deficit has been maintained due to declining public deficits and a flexible exchange rate. The current account deficit remains entirely financed by FDI inflows, which have remained broadly stable.

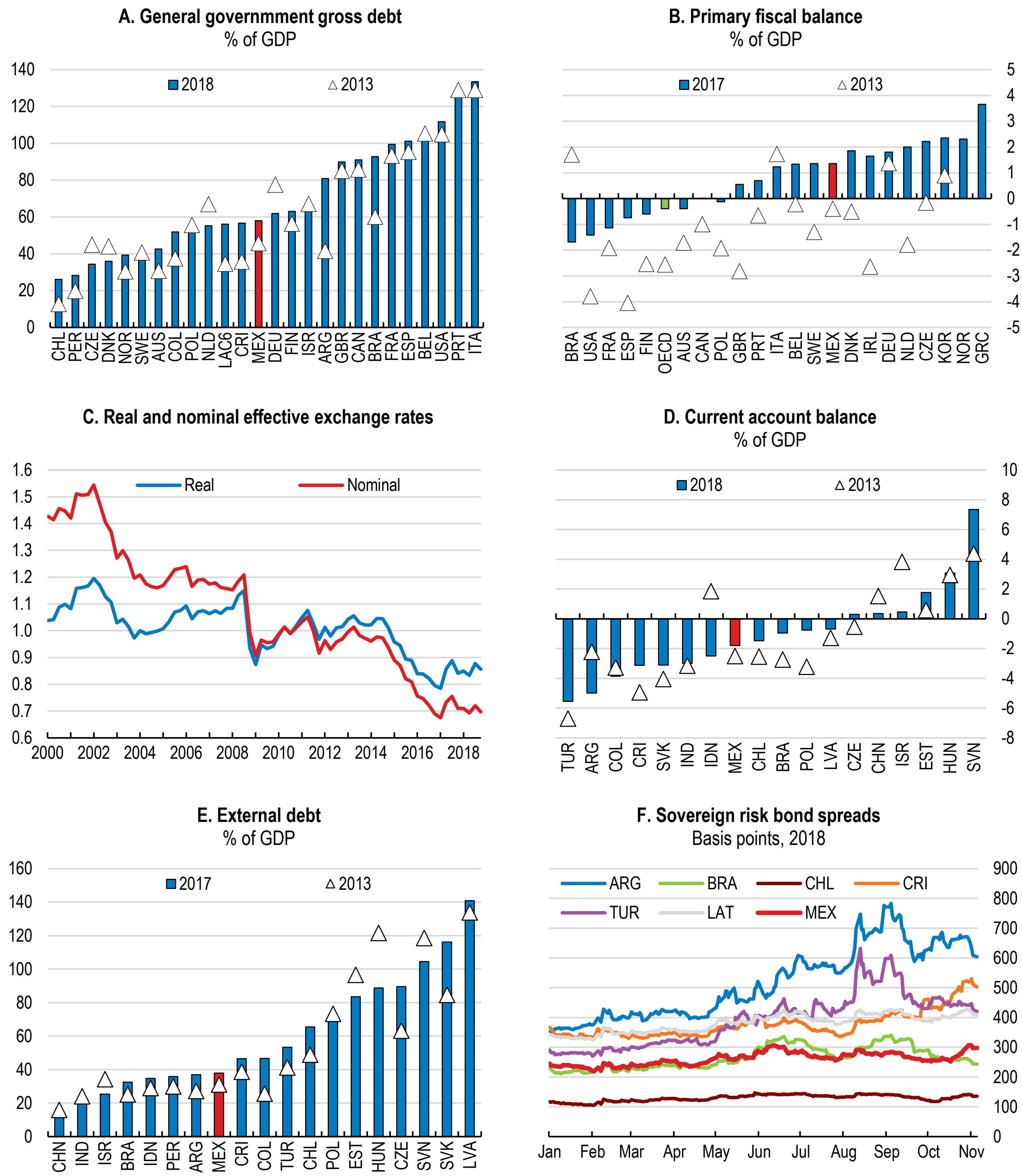
Box 2. PEMEX

Pemex - Petróleos Mexicanos - is the largest company in Mexico. A state-owned company, Pemex has become one of the few fully integrated oil companies, developing the entire productive chain: exploration, production, industrial processing/refining, logistics and marketing. Pemex's governance is not in line with the OECD Guidelines on Corporate Governance of State-Owned Enterprises, despite the improvements that were made as part of the 2013 energy reforms (OECD, 2015[19]; Meehan, 2019[20]), and it is recommended that reforms to increase adherence to the Guidelines are made.

Efficiency problems, alleged corruption and over-taxation (currently at 65% of the company's operational revenues) have led to underinvestment and declining output. Production peaked in 2004 at an average of 3.383 million barrels per day, declining to 1.833 million barrels a day in 2018.

Currently, Pemex is the world's most indebted oil company, owing about USD 105 billion, or about 9% of Mexico's GDP. The government intends to restore PEMEX's financial health, and increase oil production. The recapitalisation of PEMEX of an amount of USD 1.3 billion was approved in the 2019 budget and aims at reducing its liquidity needs in the short term and supporting the company's investment plans. Additional plans to restore the company's financial health include the monetisation of USD 1.8 billion of debt related to the company's pension liabilities. Additionally, to reduce the tax burden, the government is increasing the cost deduction cap to levels similar to contracts with the private sector for 5% of the production platform (USD 0.75 billion) each year from 2019 to 2024. In the meantime, the government has put on hold planned auctions for oil exploration by the private sector. The high levels of Pemex´s debt limits its access to external financing. PEMEX needs to refinance more than USD 6 billion of payments due in 2019. Therefore, announced plans have been deemed insufficient by investors, given the company's investment plans to increase oil production and simultaneously rehabilitate the existing six refineries and construct a seventh one in Dos Bocas (Box 1). As a consequence, one rating agency has lowered the outlook of Pemex from stable to negative while another has lowered by two notches the rating of the company's debt, changing also the outlook of sovereign debt from stable to negative. The government is currently evaluating options to reduce the cost of rolling-over PEMEX's debt this year.

Figure 11. The Mexican economy benefits from strong economic fundamentals

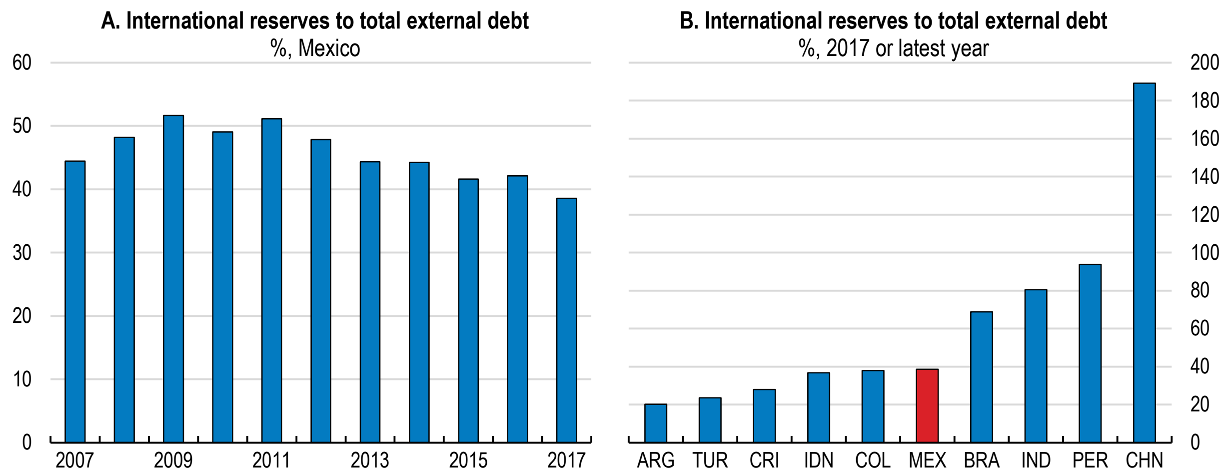


Note: Nominal and effective exchange rates are calculated against a basket of currencies using constant trade weights. A depreciation indicates an improvement in competitiveness. LAC6 refers to the unweighted average of Argentina, Brazil, Chile, Colombia, Costa Rica and Peru.

Source: OECD; Secretaría de Hacienda y Crédito Público; IMF World Economic Outlook October 2018; Thomson Reuters.

StatLink http://dx.doi.org/10.1787/888933956299

Figure 12. External debt has declined and foreign exchange reserves are adequate



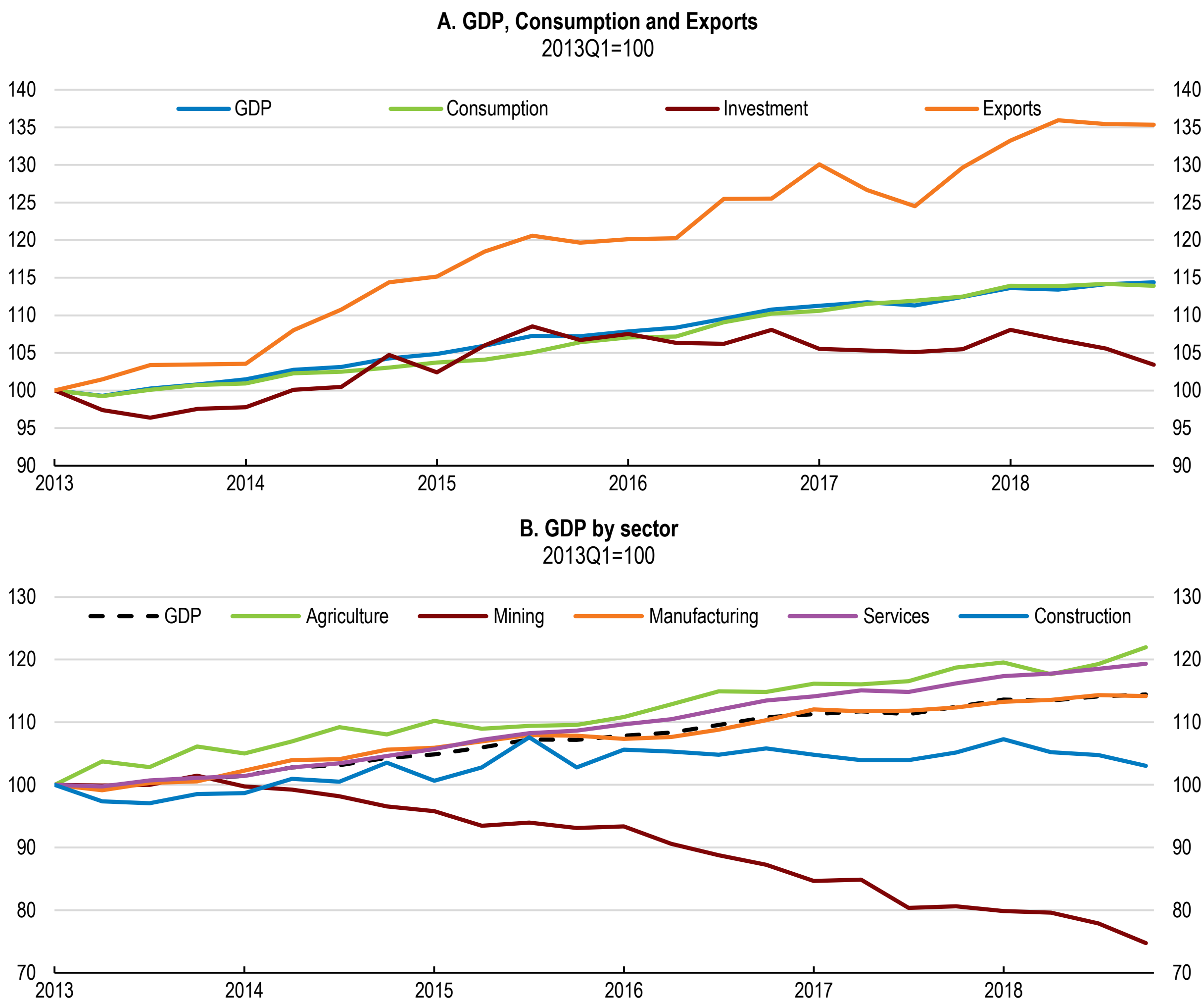
Note: Total external debt is debt owed to non-residents and is the sum of public, publicly guaranteed, and private nonguaranteed long-term debt, use of IMF credit, and short-term debt. Short-term debt includes all debt having an original maturity of one year or less and interest in arrears on long-term debt.
Source: World Bank, World Development Indicators database; IMF.

StatLink http://dx.doi.org/10.1787/888933956318

External demand has been sustained by strong US growth and the real depreciation of the peso, while lingering economic uncertainty and substantial fiscal consolidation have taken a toll on investment (Figure 13, Figure 16). The prolonged contraction in oil production has partially offset the modest but broad expansion of the other sectors in the economy. Private consumption has benefitted from the on-going expansion of the employment-intensive services sector, strong remittances and credit expansion following recent reforms to boost financial liberalisation and inclusion. After a prolonged deceleration followed by a decline in 2017, real wage growth in the formal sector, comprising little more than 40% of workers, increased mildly in 2018, which is also supporting domestic consumption.

Growth has decelerated markedly in the last quarter of 2018, owing to weak investment and lower export growth, as the US economy slowed down and trade tensions and policy uncertainty, domestic as well as external, remained, denting business confidence. Some continuing concerns about Mexico's business climate among investors, reflecting policy uncertainty due to external as well as internal factors, may also have led to a delay in projected investments. Economic activity stayed subdued in the first months of 2019 as disruptions in gasoline supply, strikes in northern and midwest Mexico and railroad blockades negatively affected urban areas and supply chains. However, these effects are likely to have only a temporary effect on economic activity, and some planned production in the first quarter is likely to be shifted to the second quarter.

Figure 13. Investment and oil production are weighing on the economy



Source: INEGI.

StatLink http://dx.doi.org/10.1787/888933956337

Output growth is projected to accelerate driven by private consumption and government plans to boost infrastructure investment and raise energy production by 2020 (Box 1, Table 1). Private investment will also add to growth as uncertainty subsides and the economy more firmly reaps the benefits of past structural reforms. However, export growth will lose steam in line with the projected slowdown in US growth and the strong level of correlation between US and Mexican manufacturing production (Banco de México, 2015[21]; Banco de México, 2018[22]; OECD, 2018[23]).

Table 1. Macroeconomic indicators and projections

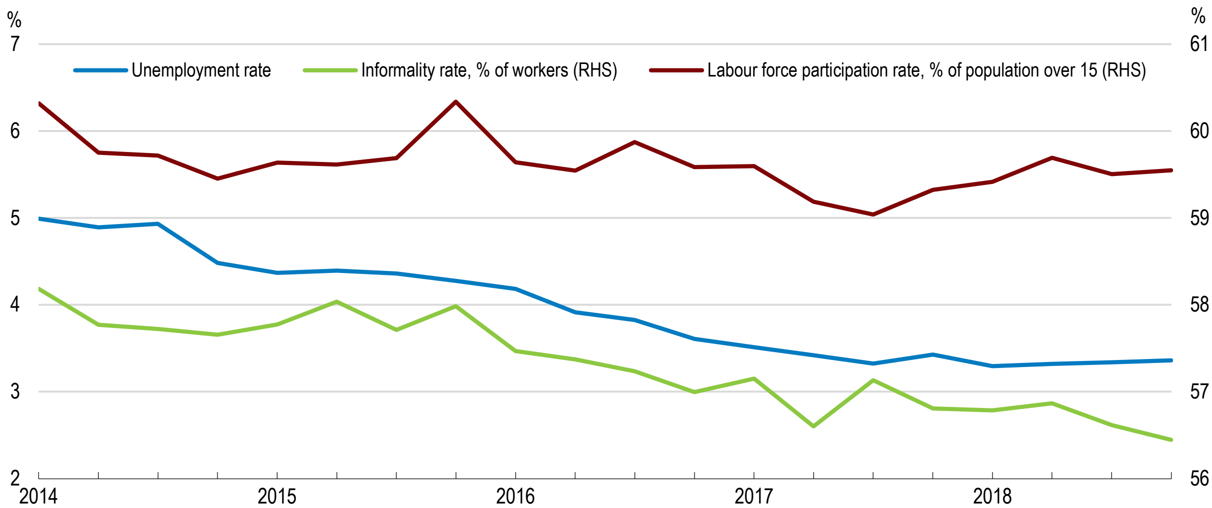
	2015	2016	2017	2018	2019	2020
	Current prices MXN billion	Percentage changes, volume (2013 prices)				
GDP at market prices	18562.7	2.7	2.3	2.0	1.6	2.0
Private consumption	12167.5	3.5	3.4	2.2	1.3	2.2
Government consumption	2288.3	2.6	1.0	1.4	-0.6	0.3
Gross fixed capital formation	4179.4	1.1	-1.6	0.6	-1.8	2.2
Final domestic demand	18635.2	2.8	2.0	1.7	0.4	2.0
Stockbuilding[1]	308.7	0.1	0.0	0.1	0.0	0.0
Total domestic demand	18943.9	2.9	1.9	1.8	0.4	1.9
Exports of goods and services	6410.3	3.7	4.0	5.7	2.9	4.9
Imports of goods and services	6791.5	2.4	6.7	6.2	4.2	4.5
Net exports[1]	-381.2	0.4	-1.1	-0.3	-0.6	0.1
Memorandum items						
GDP deflator	–	5.5	6.7	5.3	4.7	5.1
Consumer price index	–	2.8	6.0	4.9	3.8	3.6
Core inflation index[2]	–	3.0	4.7	3.8	3.5	3.4
Potential growth	2.8	2.7	2.6	2.4	2.3	2.3
Output gap (% of GDP)	-0.1	-0.1	-0.4	-0.8	-1.6	-1.8
Unemployment rate[3] (% of labour force)	–	3.9	3.4	3.3	3.5	3.4
Current account balance (% of GDP)	–	-2.2	-1.7	-1.8	-1.9	-1.8
Public sector borrowing requirement[4]	–	-0.5	-1.1	-2.5	-2.5	-2.2
Public sector primary balance (% of GDP)	-3.2	-0.7	0.4	0.6	0.9	1.4
Fiscal impulse (% of GDP)	-0.3	-0.5	-2.2	0.1	–	–

1. Contributions to changes in real GDP; actual amount in first column. 2. Consumer price index excluding volatile items: agriculture, energy and tariffs approved by various levels of government. 3. Based on National Employment Survey. 4. Central government, development banks and public enterprises. The public sector borrowing requirement is the broadest measure of public sector balance used by the government, but it does not fully take into account the position of the overall public sector. In 2016 and 2017, it includes the operating surplus of the central bank.
Source: OECD Economic Outlook Database; Fiscal impulse estimates from the International Monetary Fund.

The rise in the minimum wage, at about 40% of the median wage, should boost incomes and consumption of lower skilled workers in the formal sector, but may push others into informality (Figure 14, Figure 15). The impact on inflation is mitigated by the removal of minimum wage indexation from 2 413 legal provisions in 2016. In the border zone, where the minimum wage was raised by 100%, there is some early evidence that other wages are rising as well. The government intends to monitor the effects on the economy before considering further rises.

Boosting investment to raise productivity will be a challenge going forward, as investment levels are low compared with peers (Figure 16). The signing of the new US-Mexico-Canada trade agreement (USMCA) has eased some of the uncertainty that has been dampening investment, but uncertainty about ratification remains. Going forward, clear communication on the path and aims of future government policy will reduce uncertainty for investment. Reducing crime, improving the rule of law, and boosting competition (Meehan, 2019[20]), including by removing remaining barriers to trade and foreign investment, would also strengthen investment (Araújo and Hitschfeld Arriagada, 2019[2]; Araújo, 2019[24]).

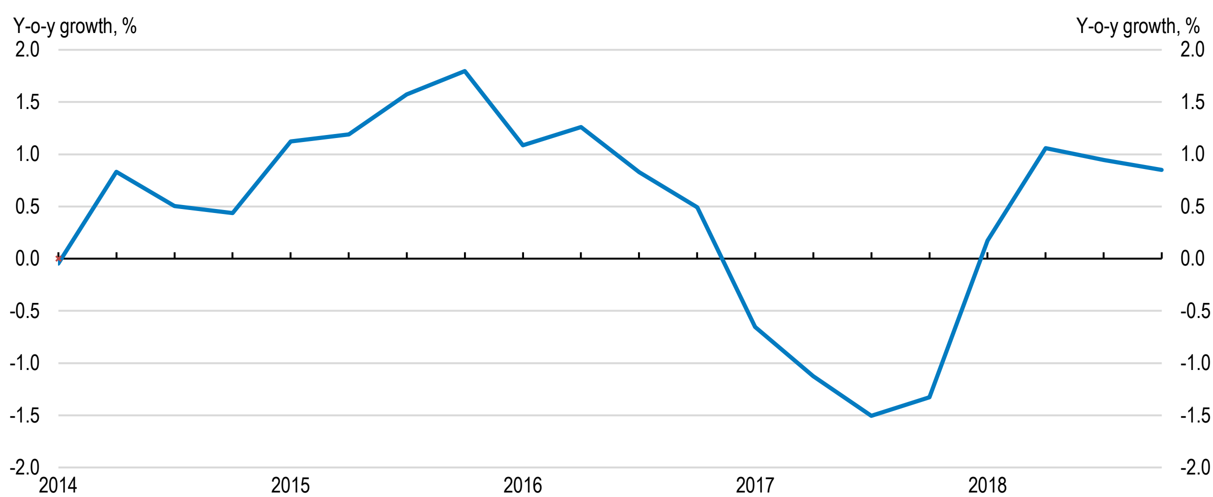
Figure 14. Unemployment is low but informality remains elevated



Note: Data are quarterly averages based on monthly data.
Source: INEGI.

StatLink http://dx.doi.org/10.1787/888933956356

Figure 15. Real wages are recovering



Note: Average daily salary of (formal) workers insured through IMSS.
Source: INEGI.

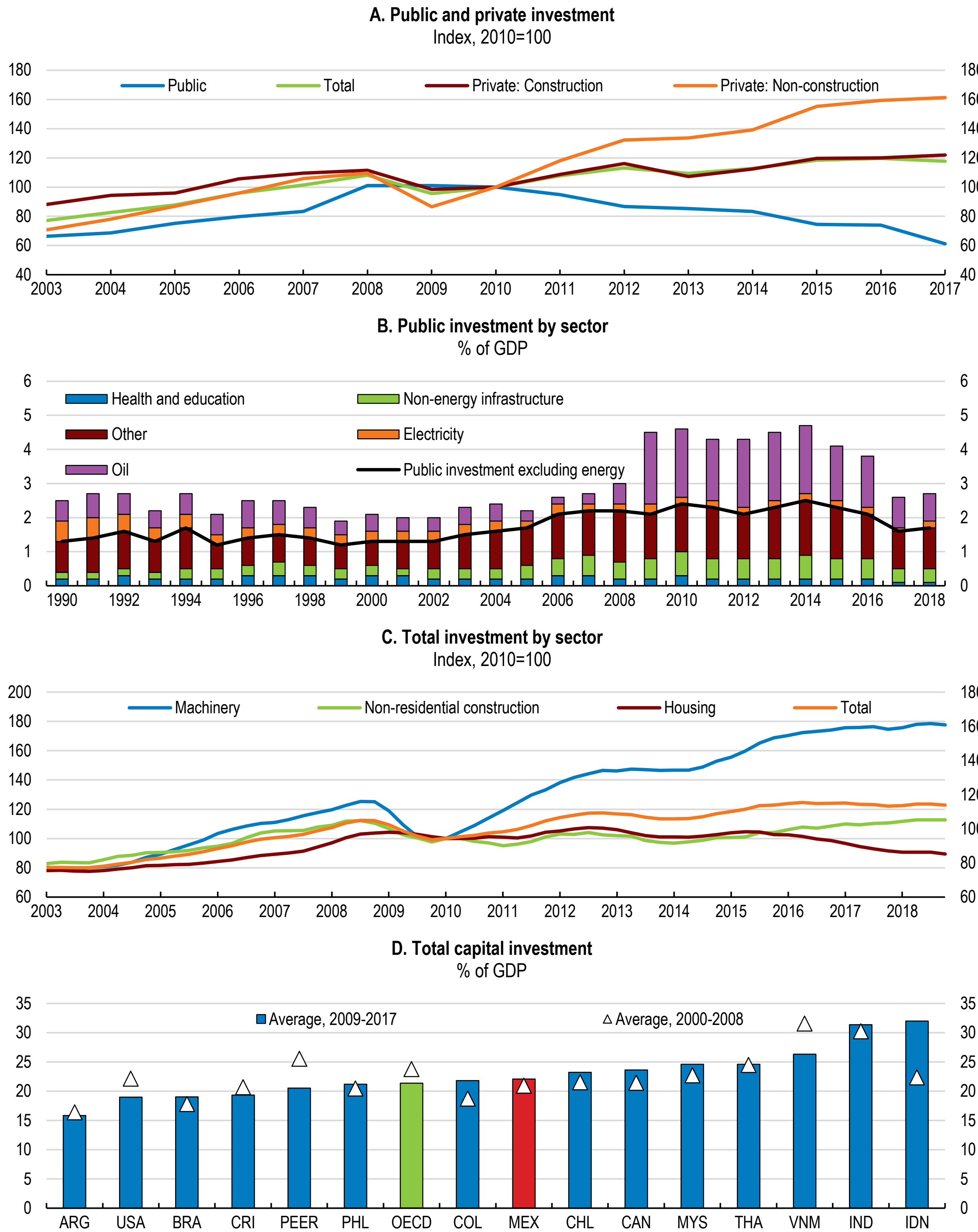
StatLink http://dx.doi.org/10.1787/888933956375

The main risks to growth include weaker-than-projected growth of the world economy, especially the United States, and an escalation in protectionism, including non-ratification of the USMCA, which would dent exports and lead to heightened uncertainty hurting investment and GDP growth (Table 2). Emerging market turbulence could lead to capital outflows, asset repricing and higher interest rates, which would increase sovereign debt financing costs and deteriorate the fiscal balance. A rise in crime and violence would continue to delay investment. The latter would also put the government's plans to expand tourism activities at risk, which would contribute to broadening growth and reducing regional disparities. A weakening of the business environment would affect investment and growth. Declines in oil production and a deterioration in PEMEX's financial situation would deteriorate the fiscal outlook. Maintaining fiscal discipline in the context of lower growth is also key to preserving stability and confidence.

Table 2. Possible shocks to the Mexican economy

Vulnerability	Possible short-run outcome	Possible policy action
Rising protectionism	Reduction in exports, heighten uncertainty leading to lower investment and GDP growth.	Allow the exchange rate to depreciate. Accelerate reforms to boost productivity growth, the competitiveness of service exports and diversify trade partners.
Lower oil prices and oil production. Deterioration of PEMEX's financial situation.	Reduction in public revenues. Reduced projected profitability of energy sector investments. Improvement in the current account deficit in the event of lower oil prices and worsening in the event of a reduction of oil production.	Continue to reduce dependence on oil fiscal revenues by increasing non-oil tax revenue collection. Maintain fiscal prudence.
Natural disasters	The Mexican territory is exposed to natural disasters such as earthquakes, droughts, cyclones, hurricanes and floods. Such events entail a loss of human lives, and bring down GDP and tax revenue collection.	Strengthen fiscal buffers by adequately funding and appropriately activating the National Fund for Disasters (FONDEN) as well as the Catastrophic Bond Instrument. Adequately fund initiatives to prevent and mitigate natural disasters (FOPREDEN).
An escalation of crime and drug-related violence.	Decline in investment prospects, GDP and citizens' well-being. It would also compromise the government's aim to boost tourism.	Accelerate reforms to fight crime, corruption and strengthen the rule of law.

Figure 16. Investment is low



Note: PEER refers to the unweighted average of Estonia, Greece, Hungary, Latvia, Lithuania, Poland, Portugal, Slovak Republic, Slovenia and Turkey.

Source: INEGI; Dirección General de Estadística de la Hacienda Pública; and World Bank Development Indicators.

StatLink http://dx.doi.org/10.1787/888933956394

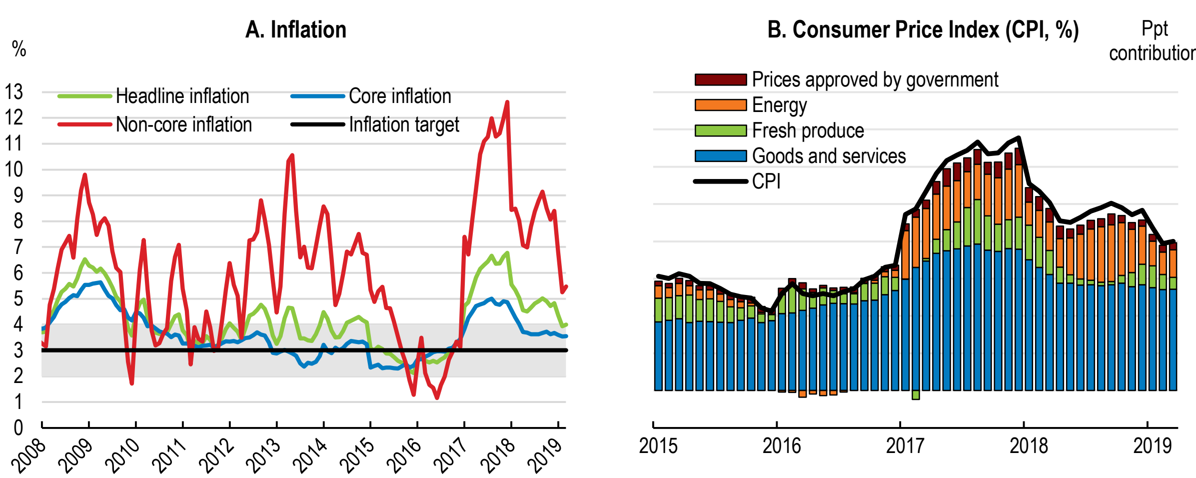
Monetary policy remains tight in response to an upsurge in inflation

The strong and independent central bank has kept inflation low and stable, which is associated with lower poverty and inequality rates (Martínez Trigueros, 1998[25]; Romer and Romer, 1999[26]; Easterly and Fischer, 2001[27]; Alcaraz, 2019[28]; Alcaraz, 2019[29]). The central bank made inflation the main target of policy in 1995, and in 2001 adopted an inflation targeting regime. In 2003, the target was established at 3% annual inflation within a variability interval of +/-1 percentage point.

The central bank raised the benchmark interest rate from 5.75% to 8.25% between January 2017 and December 2018 to contain second-round effects of several internal and external price shocks, including the large depreciation of the peso and increases in energy prices, in an economy close to potential growth (Figure 19). Inflation was contained during the first half of 2018, but since June 2018 headline inflation increased again after hikes in energy prices, perishable agricultural goods and services (Figure 17) (Banco de México, 2018[30]). Headline inflation has declined since December and, at 4.0% annual in March, is now just within the variability interval while core inflation remains stable. Short-term inflation expectations deteriorated in the last quarter of 2018 but have improved since (Figure 18).

Inflation is projected to subside gradually and converge towards the central bank's target in the first half of 2020. However, the balance of risks is tilted to the upside in an environment of high uncertainty, which includes risks such a further depreciation of the domestic currency due to external or internal factors, price pressures in agricultural goods and energy, and tariffs on some goods imports from the United States. Downside risks include a deceleration in economic activity. The authorities should remain vigilant to the evolution of core inflation, expectations and the balance of risks and adjust the policy rate at a level consistent with reaching the inflation target.

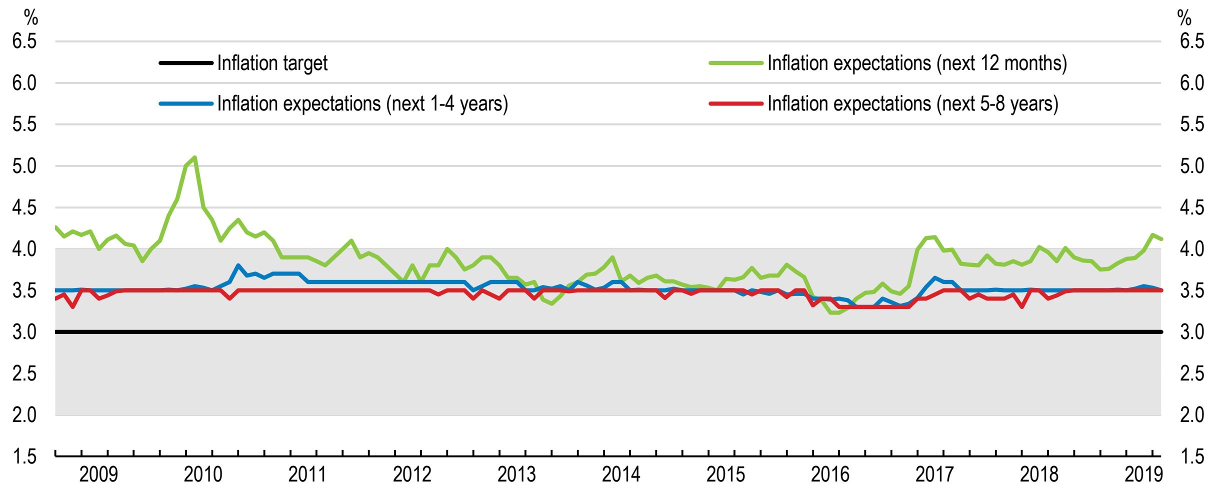
Figure 17. Headline inflation is still above target



Note: The grey area in Panel A represents the inflation target range. Figures in Panel B are calculated using 2010 weights.
Source: Banco de México.

StatLink http://dx.doi.org/10.1787/888933956413

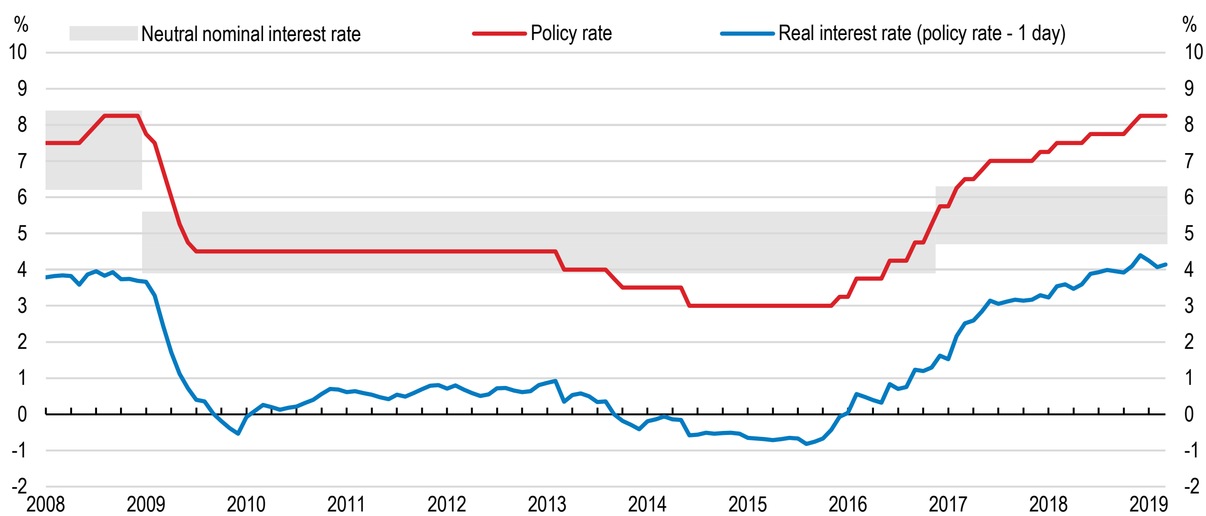
Figure 18. Inflation expectations



Note: The grey area represents the inflation target range.
Source: Banco de México.

StatLink http://dx.doi.org/10.1787/888933956432

Figure 19. The monetary policy stance is tight



Note: The (ex-ante) real interest rate is calculated as the policy rate minus inflation expectations for the next 12 months. The grey area represents the neutral nominal interest rate range.
Source: Banco de México.

StatLink http://dx.doi.org/10.1787/888933956451

The central bank is improving the quality of monetary policy communication

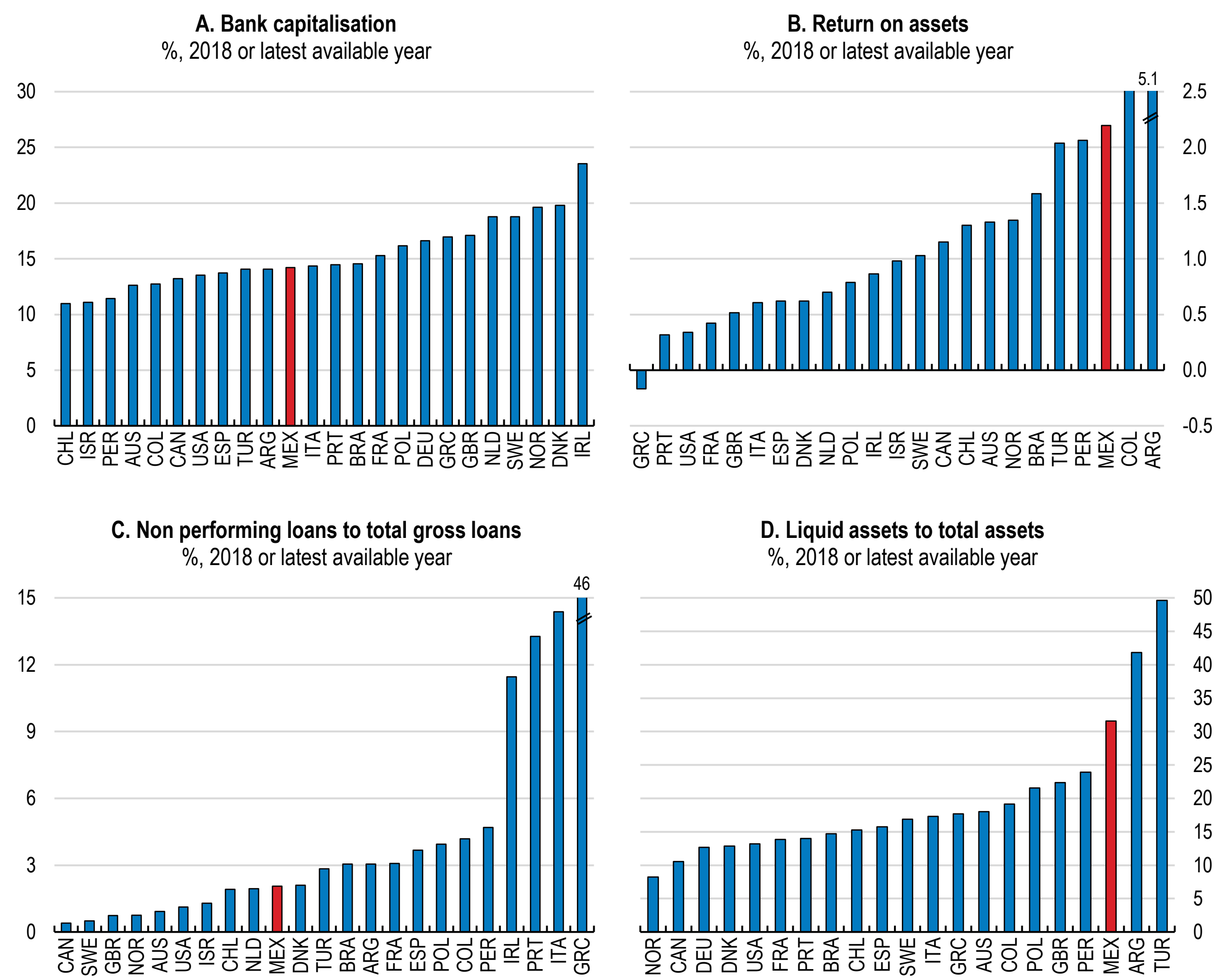
Transparent communication of policy objectives, past policy oversights, inflation outlook and determinants and associated likely responses reduces policy uncertainty and improves the ability of central banks to manage expectations (Blinder et al., 2008[31]). Integrating more forward-looking communication could also help in guiding market expectations.

During 2018 Banxico implemented several improvements to its communication strategy, in line with the mechanisms followed by other inflation-targeting central banks. The minutes of the monetary policy decisions now include the identity of voters and the reasons for dissent. Transcripts of the Governing Board meetings are now published three years after each meeting. Also, the press release of monetary policy decisions and the corresponding minutes are now simultaneously published in Spanish and English. Going forward, it should continue to monitor the effects of its enhanced communication strategy.

The financial sector would benefit from more competition and inclusion

According to authorities, the banking sector remains sound and well capitalised (Figure 20). The non-performing loans to total loans ratio is low and financial institutions have the appropriate liquidity and capitalisation to face adverse shocks according to stress tests (including interest rates, exchange rates, inflation and GDP shocks) (Banco de México, 2018[32]). IMF tests of large non-financial corporations also show that their balance sheets seem resilient to a combination of exchange rate, earnings and interest rate shocks and that spillovers to the banking sector are low (IMF, 2018[18]).

Figure 20. Selected banking sector indicators



Note: Bank capitalisation refers to the capital adequacy, regulatory tier 1 capital to risk-weighted assets.
Source: IMF Financial Soundness Indicators database.

StatLink http://dx.doi.org/10.1787/888933956470

The main risks to financial stability are the potential impact of a rise in trade protectionism in major economies, high volatility episodes in international financial markets, a deceleration of global economic activity, which could impact the exchange rate and affect balance sheets of non-hedged entities. However, these risks are reduced by regulatory limits on banks' foreign exchange positions, and natural or synthetic hedges, through derivatives operations, by most of the firms receiving funding in foreign currency.

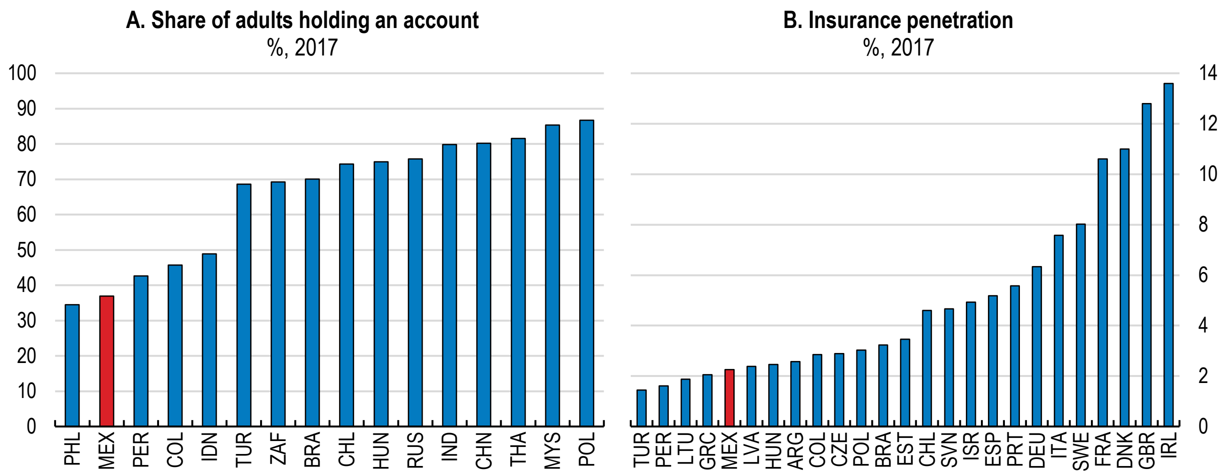
Going forward, authorities could strengthen their crisis management framework by undertaking simulation exercises for systemic crisis events, designing a formal contingency plan for dealing with one, and assessing the effectiveness of coordination and communication among authorities (IMF, 2016[33]; IMF, 2018[18]). Assigning the responsibility for identification and mitigation of potential systemic risks would be a step in the right direction. The independence of supervisory authorities, including their budget autonomy and the legal protection of the banking and securities supervisors should also be strengthened.

Making progress in increasing competition and boosting financial inclusion

The main challenges to the Mexican financial sector remain increasing financial depth, inclusion and competition, which would also help to enhance the effectiveness of monetary policy (Gali, Lopez-Salido and Valles, 2004[34]; Di Bartolomeo and Rossi, 2007[35]; Bilbiie, 2008[36]; Colciago, 2011[37]; Bilbiie and Straub, 2013[38]). While domestic credit to the private sector has increased (CONAIF, 2018[39]; Meehan, 2019[20]), it remains well below what would be expected based on Mexico's level of development (Herman and Klemm, 2017[40]). Only 35% of adults had a bank account in 2017 (Figure 21a), although the number of municipalities with at least one access point has increased over time in some regions (CONAIF, 2017[41]). The insurance penetration rate is also low compared with other emerging markets (Figure 21b). The number of bank branches has been stable since 2008 and is unevenly distributed (Figure 22).

Returns on assets, spreads and interest rates are high compared with OECD countries, potentially reflecting weak competition. High financing costs for SMEs hamper investment and productivity growth (Figure 23). Bank concentration is high, even compared with other emerging markets. The three largest banks hold more than 50% of total bank assets, and the (risk-adjusted) spread between lending and deposit rates is high in international comparison (Figure 24). Competition is reduced by high barriers to entry and risk of collusion and low availability and quality of information to consumers (COFECE, 2014[42]). Stepping-up competition in the financial sector is a priority and the Federal Economic Competition Commission's (COFECE) strategic plan to do so should be implemented without delay (COFECE, 2018[43]). The 2018 FinTech law will also help promote innovation and competition while protecting consumers and financial stability (OECD, 2018[44]). However, there are concerns about potential barriers to entry in the initial secondary regulation. Competition considerations should be taken careful account of in the development of the next tranches of secondary regulation, and the FinTech regulatory framework monitored and reviewed going forward (OECD, 2018[44]).

Figure 21. Financial inclusion remains low



Note: Insurance penetration is the ratio of direct gross premiums to GDP.
Source: World Bank, Global Findex database (2017); OECD Insurance statistics.

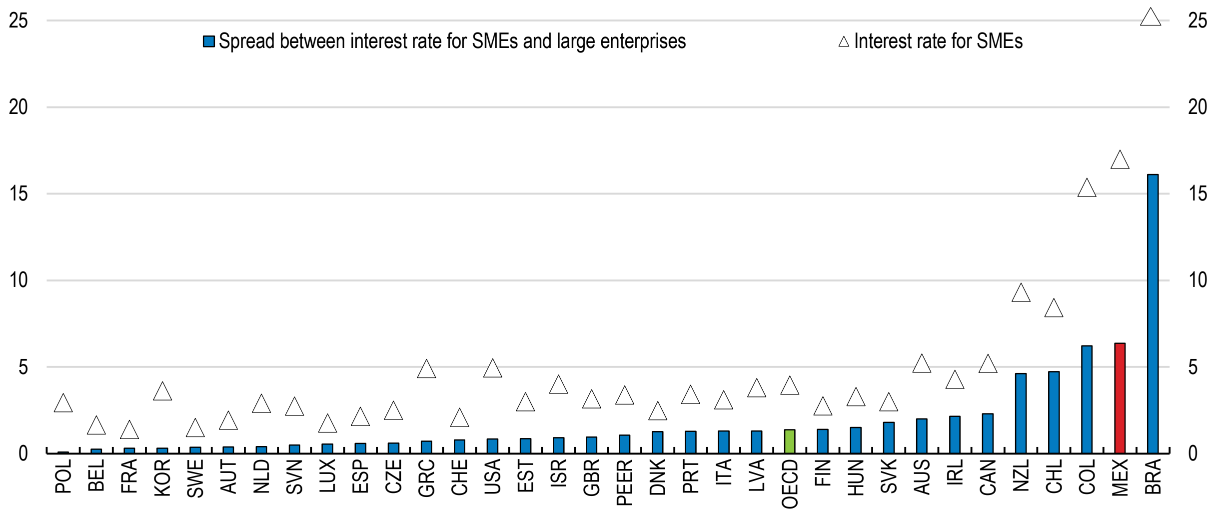
StatLink http://dx.doi.org/10.1787/888933956489

Figure 22. Bank branches are unevenly distributed

Source: Consejo Nacional de Inclusión Financiera, Financial Inclusion database, June 2018.

StatLink http://dx.doi.org/10.1787/888933956508

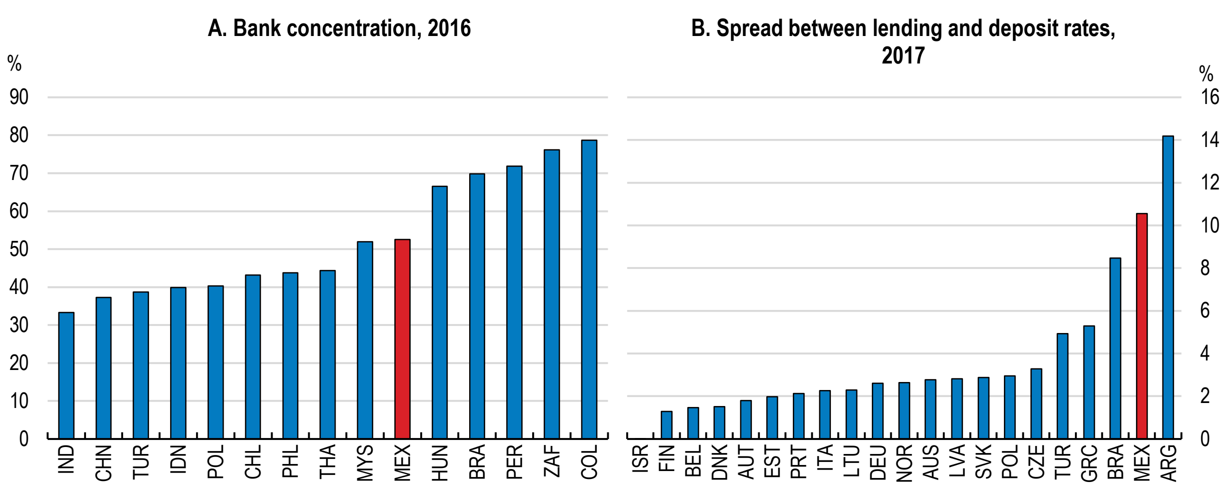
Figure 23. Mexican SMEs face high borrowing costs



Source: OECD (2018[45]), *Financing SMEs and Entrepreneurs 2018: An OECD Scoreboard*.

StatLink http://dx.doi.org/10.1787/888933956527

Figure 24. Competition in the banking sector is low



Note: Bank concentration is measured as the assets of the three largest commercial banks as a share of total commercial banking assets.
Source: Bankscope and Orbis Bank Focus, Bureau van Dijk (BvD); IMF, Financial Soundness Indicators database.

StatLink http://dx.doi.org/10.1787/888933956546

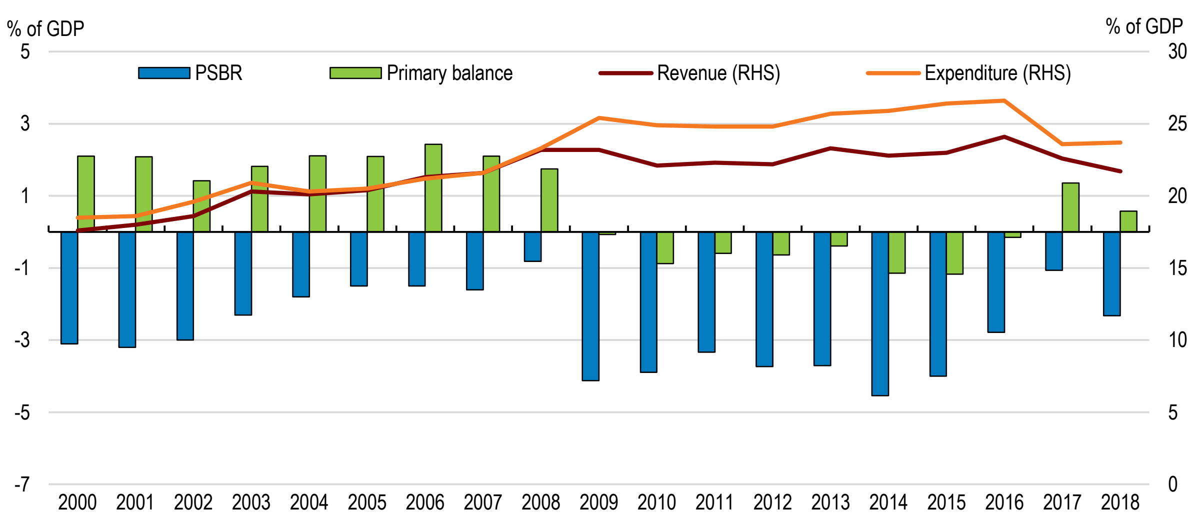
In January 2019 the government announced a package of reforms to deepen the banking sector and stock market and increase financial inclusion. It includes the development of a new smartphone platform to allow phone-to-phone electronic payments at no cost, the possibility to open a bank account for salary payments and associated credits with any bank, granting 15-17 year olds the ability to open their own bank accounts, and a refocus of development banks' activities towards supporting clients in rural zones, marginalised municipalities and semi-urban areas not served by commercial banks. The 2019 Budget also assigns approximately MXN 6 billion for a credit programme providing interest-free loans to microenterprises. These measures will improve inclusion and raise opportunities for those living in under-served areas. These measures complement other current initiatives, such as the new FinTech regulations. Going forward, the government should explore making all federal transfers to households through bank accounts or by electronic means. This would also reduce the likelihood of fraud or corruption associated with government transfers.

Fiscal policy: Ensuring fiscal space to finance higher social and infrastructure spending

Maintaining fiscal prudence remains a key priority. Public debt soared rapidly after 2012 as the economy slowed and oil revenues declined while spending pressures persisted (Figure 25, Figure 26). A fiscal consolidation plan consisting of a mix of tax reforms (Annex A) and cuts in spending has halted the rise in to the debt-to-GDP ratio. The rigid nature of the budget meant that spending cuts were achieved via cuts to infrastructure investment and social expenditure which can be detrimental to growth and poverty alleviation (Table 3).

The new government's commitment to fiscal prudence is welcome. The 2019 budget aims to achieve a primary surplus of 1% of GDP, which is consistent with a stable debt-to-GDP ratio (Figure 27). The budget, which is underpinned by conservative macroeconomic assumptions, prioritises public investment by reducing financing of inefficient social spending programmes, except for those targeting youth and old-age pensions. However, the slowdown in economic activity in early 2019 may require additional measures to meet the fiscal targets.

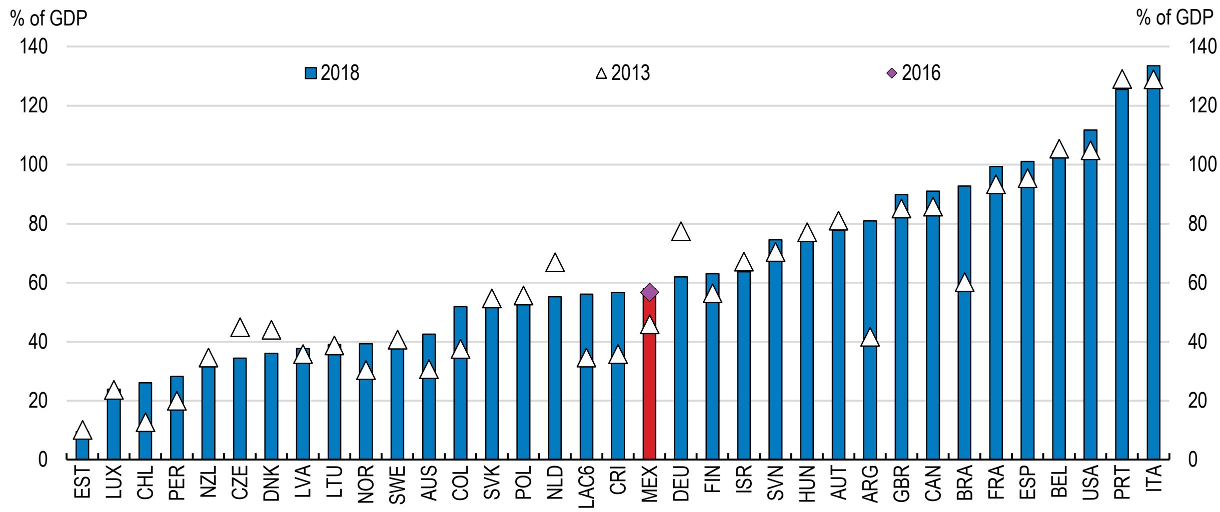
Figure 25. Fiscal performance has improved



Note: The primary balance in 2017 is net of one-offs. PSBR: Public sector borrowing requirement.
Source: Secretaría de Hacienda y Crédito Público.

StatLink http://dx.doi.org/10.1787/888933956565

Figure 26. Public sector debt has been contained



Note: Gross general government debt includes debt of state-owned enterprises. LAC6 refers to the unweighted average of Argentina, Brazil, Chile, Colombia, Costa Rica and Peru.
Source: IMF, World Economic Outlook October 2018.

StatLink http://dx.doi.org/10.1787/888933956584

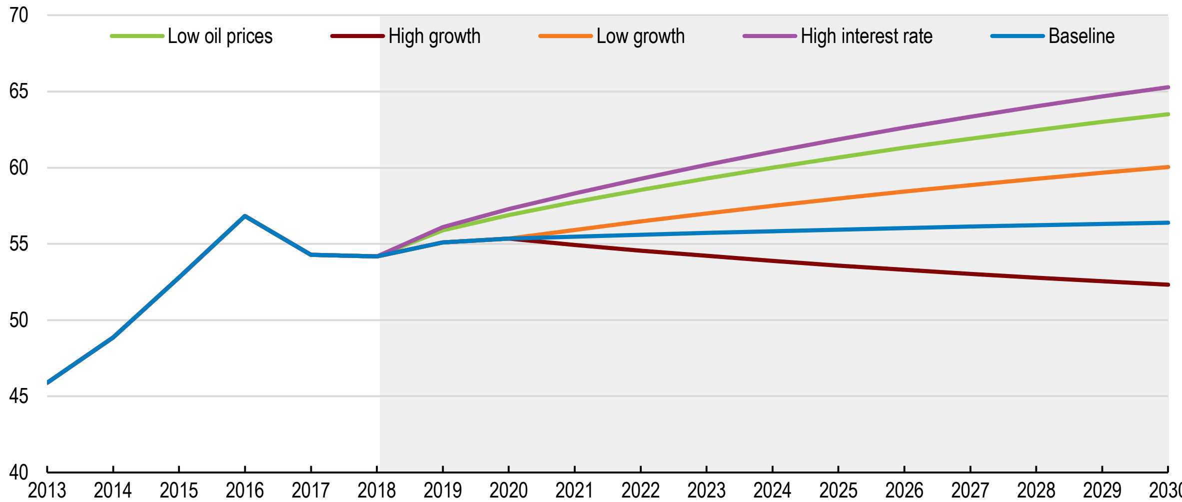
Debt sustainability scenarios suggest a high sensitivity of debt to oil prices in the medium term, and an increase in the risk premium of sovereign debt. These scenarios would increase the debt ratio to above 60% of GDP, a level that is considered high in various studies of vulnerabilities in emerging markets (Fournier and Fall, 2015[46]). However, Mexico's fiscal rule, which stipulates a non-increasing path for net public debt, would contain this increase. On the other hand, if growth were one percentage point higher, debt would decline to close to 50% (Figure 27). These projections illustrate the need to maintain fiscal prudence.

Recent downgrades of PEMEX's debt by two notches and a change to negative outlook from stable by one rating agency and a change of the outlook from stable to negative by another represent an important negative risk to debt sustainability via increases in debt servicing costs. In particular, it is difficult to reconcile current fiscal austerity with PEMEX's needs for resources to simultaneously increase oil production, rehabilitate the existing six refineries and build a seventh one. Negative developments on the fiscal outlook would in turn constrain the government's objectives to boost needed growth-enhancing infrastructure and education spending and poverty-alleviating social spending.

PEMEX's weak credit ratings increase the cost of external debt financing. The government is considering options to improve the financial health of PEMEX without compromising the fiscal targets.

Figure 27. Current policies are consistent with stable debt

Public debt scenarios, % of GDP



Note: Public debt is general government gross debt. Projections assume an unchanged exchange rate of less but close to 20 MXN per USD and oil prices, consistent with the OECD Economic Outlook Database. The "Baseline" scenario assumes Economic Outlook projections for real GDP growth of 1.6% in 2019, 2.0 in 2020, and 2.5% thereafter and a budget balance of -2.5% GDP. Interest payments on government bonds are set at 3.0% GDP. Oil revenues as a share of GDP stay constant at 2017 values. Scenario 1 (low oil prices) lowers the contribution of oil revenues as a share of GDP by 0.8pp. In Scenario 2 (high growth) potential growth is lifted by 1pp to 3.6%. Scenario 3 (low growth) lowers potential growth to by 1pp to 1.6%. Scenario 4 (high interest rate) increased interest payments as a share of GDP by 0.5pp to 4% GDP.
Source: OECD Secretariat estimates based on data from SHCP (Secretaría de Hacienda y Crédito Público).

StatLink http://dx.doi.org/10.1787/888933956603

Mexico has a solid fiscal framework, including several buffers to deal with macroeconomic shocks (OECD, 2017[6]). A fiscal rule foresees saving extraordinary revenues, including those from oil, in stabilisation funds to avoid revenue volatility during the fiscal year. The government intends to strengthen the rule by capitalising and using the stabilisation funds in a more counter-cyclical way. It has also eliminated the practice of underestimating revenues, which in the past was linked with less transparent discretionary transfers to states under the Ramo 23 budget line.

The government will also start implementing IMF recommendations to improve fiscal transparency (IMF, 2018[47]). Medium-term budgeting, an independent assessment of fiscal policy, validation of compliance with fiscal targets and forecasts could boost confidence. To enhance fiscal transparency and accountability, Mexico could also benefit from a non-partisan, independent and adequately resourced fiscal council, along the principles defined by the OECD (OECD, 2014[48]) Authorities acknowledge the importance of having a non-partisan independent fiscal institution and are considering establishing one along the lines of the US Congressional Budget Office, which produces technical analysis on fiscal issues and provides documentation and methodologies for all their estimations, and whose employees are non-partisan and selected for their expertise and technical capabilities in public finance. The independent fiscal authority could also contribute to improving transparency and fiscal management at the subnational level, as in Spain (OECD, 2017[6]).

Table 3. The budget is rigid

As a % of GDP

	2011	2012	2013	2014	2015	2016	2017
Largely mandatory							
Financial cost of debt	14.0	14.0	14.3	14.4	14.9	15.1	15.3
Pensions and retirement	1.9	2.0	2.0	2.0	2.2	2.4	2.7
Wage bill	2.7	2.7	2.9	3.0	3.2	3.3	3.4
Participations	5.9	5.9	6.0	5.9	5.9	5.7	5.5
Adefas and others	3.3	3.2	3.3	3.4	3.4	3.6	3.6
Largely inflexible	0.2	0.2	0.1	0.1	0.2	0.1	0.1
General services and others	6.2	6.3	6.2	6.5	6.5	6.1	5.3
Subsidies	4.1	4.2	4.0	4.0	4.1	3.8	3.6
Largely discretionary	2.1	2.1	2.2	2.5	2.4	2.3	1.7
Physical investment	4.9	4.8	5.5	5.2	5.2	6.1	3.3
Financial investment and others	4.5	4.4	4.6	4.8	4.3	3.8	2.8

Note: "Aportaciones" are included in "General services and others" and "subsidies. Participations (*participaciones*) are automatic revenue-sharing transfer from the federal government to subnational governments. Data for 2017 is provisional. Partial sums may not add up due to rounding.
Source: Criterios Generales de Política Económica 2018, Secretaría de Hacienda y Crédito Público (SHCP).

Table 4. Tax revenues are low

As a % of GDP

	MEX		OECD	LAC
	2013	2017	2017	2017
Non-renewable resource revenue	8.0	5.0	-	2.1
Other revenue	15.6	19.8	-	23.9
Total tax revenue	13.3	16.2	34.2	22.4
Personal income tax	2.6	3.5	8.2	2.1
Corporate income tax	2.4	3.5	2.9	3.7
SSCs	2.2	2.1	9.2	3.4
Property taxes	0.3	0.0	1.9	1.0
VAT	3.4	3.7	6.8	6.6

Note: LAC equals unweighted average of Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Jamaica, Peru, Dominican Republic, and Trinidad and Tobago. LAC average for personal and corporate income tax excludes Ecuador.
Source: OECD Global Tax Revenue Database; ECLAC; and IMF World Economic Outlook, October 2018.

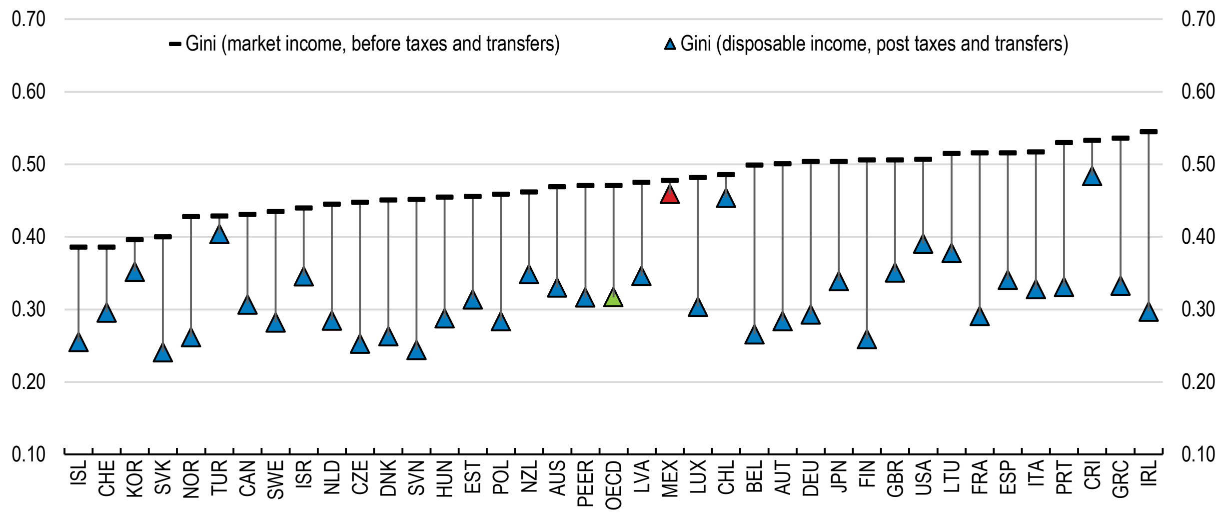
Moving towards a growth- and equity-friendly tax mix

The tax system collects relatively little compared with the OECD and LAC averages (Table 4), limiting resources available to finance pro-growth education and infrastructure spending, and extend and raise the quality of healthcare provision (a priority of the new government). A key challenge is to raise tax revenues and reduce reliance on oil-related taxes. The 2014 tax reform broadened tax bases by reducing a number of exemptions, and introduced a new tax bracket for upper incomes in the personal income tax (PIT), among other reforms (Annex A). However, it did little more than compensating for the decline in oil-related revenues (Table 4).

The tax system could also be more progressive. Although the 2014 tax reforms improved the redistributive impact of the tax and transfer system somewhat, it remains among the lowest in the OECD (Figure 28). Tax reform could also reduce the high rates of informality

(Chapter 1). Overall, Mexico would benefit from an in-depth review of its tax system that would take all these objectives into account. The government acknowledges these challenges and is working on strategies to address them. In the near term this involves improving the tax administration and reducing regulatory loopholes which facilitate tax evasion and avoidance. In the second half of the Executive's term, the government intends to undertake a comprehensive tax reform aimed at increasing the progressivity of tax policy, enhancing tax revenue and reducing price distortions.

Figure 28. The tax and transfer system does little to reduce income inequality



Note: Data are for 2017 or latest available year. PEER refers to the unweighted average of Estonia, Greece, Hungary, Latvia, Lithuania, Poland, Portugal, Slovak Republic, Slovenia and Turkey. The Gini coefficient for market income refers to income before taxes and transfers; however, data for Greece, Hungary, Mexico and Turkey refer to income after taxes and before transfers.
Source: OECD Income Distribution and Poverty Database.

StatLink http://dx.doi.org/10.1787/888933956622

Corporate Income Tax (CIT)

At 30%, the statutory corporate tax rate is high by international standards and well above the OECD average of 24%. However, effective tax rates are lower due to accelerated depreciation on investments in buildings and machinery, and below the median in a sample of OECD and G20 economies (Hanappi, 2018[49]; OECD, 2018[50]). Exemptions are still high, accounting for lost revenue of 0.9% of GDP. They cover tax reductions or special regimes for specific sectors such as the agroindustry or SMEs under the *Régimen de Incorporación Fiscal* (RIF), designed to stimulate formalisation. International experience shows that these sector- and size-contingent policies tend to hamper resource reallocation and firm growth.

In January 2019, the government introduced measures to stimulate economic activity along the US border: eligible taxpayers can apply for a refund that lowers their CIT rate to 20% and VAT rate from 16% to 8%. Foregone tax revenues are estimated at 0.2% of GDP, while the impact on stimulating productivity and growth is unclear. Although the authorities have enacted a number of measures to prevent tax planning, recent experiences with tax differentials in Mexico show that foregone revenue from tax arbitrage was substantial. Although this is intended to be only a temporary measure lasting two years, authorities should monitor the evolution of revenues, assess the extent of tax avoidance (e.g., by measuring the extent to which transactions are channelled through the border region) and analyse the impact of these measures on boosting economic activity.

Personal Income Tax (PIT)

Reforming the current PIT system could raise revenue and lower disposable income inequality. The income threshold for the top PIT rate is high and could be lowered (Figure 29). At the same time, the bottom statutory rate is low and could be raised. However, these changes should be done along with a comprehensive assessment of the drivers of high and persistent informality and the role of tax policy in driving resource misallocation.

Generous tax allowances and exemptions substantially narrow the PIT base and are regressive. They include medical expenses (0.04% of GDP); complementary contributions for certain retirement accounts, payments of insurance premiums of pension plans and for the acquisition of shares in societies below MXN 152 000 annually (0.06% of GDP); education expenditures (0.013% of GDP) and real interest expenditure of mortgage loans. They could be eliminated or scaled back, or converted into tax credits.

Value-added Tax (VAT)

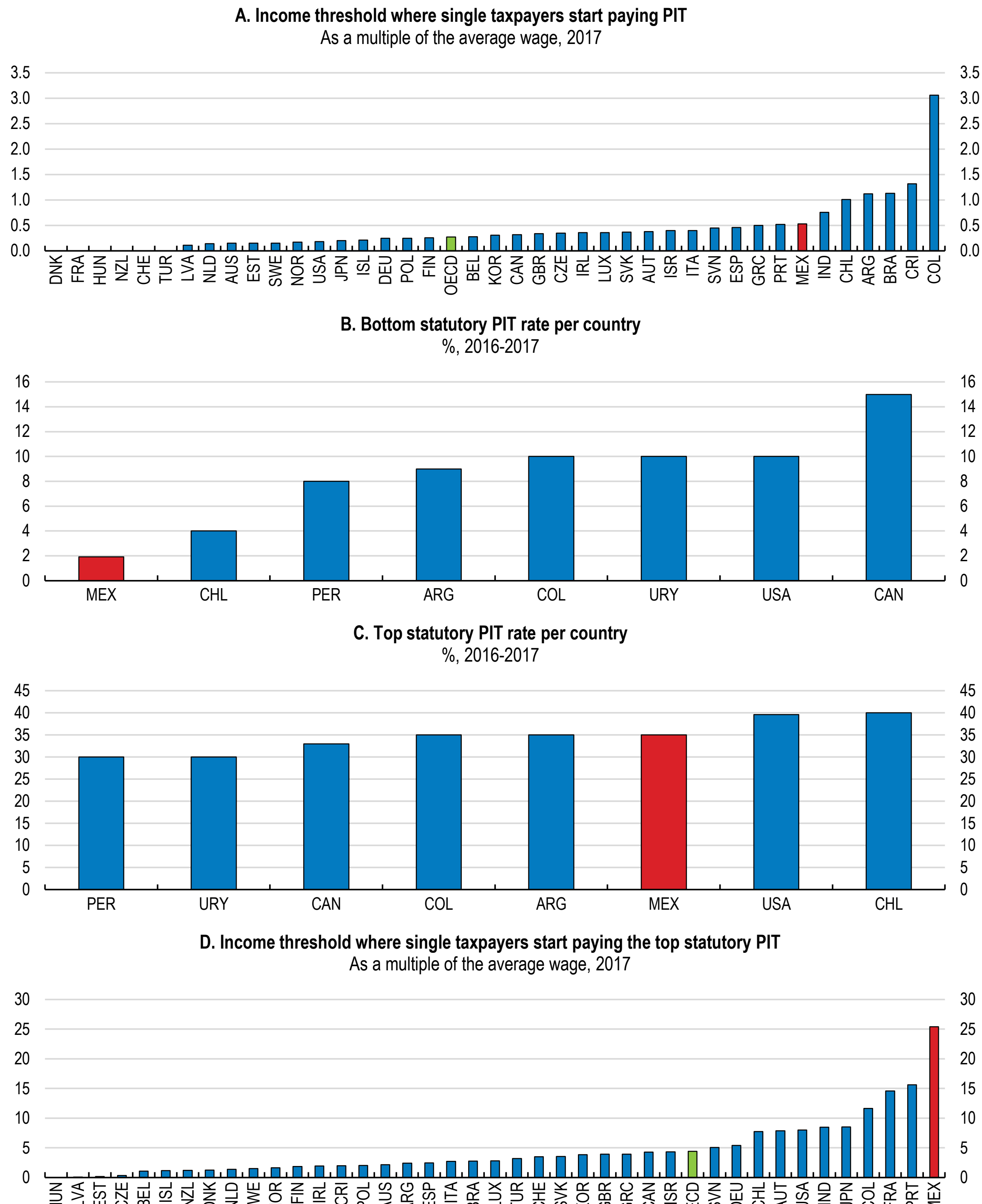
The standard VAT rate in Mexico is 16%, slightly above the average in Latin America (15.4%) but lower than the OECD average of 19.3%. However, the revenue from VAT compared to its theoretical revenue (the VAT Revenue Ratio) is the lowest among OECD countries due to a narrow VAT base - only around 40% of domestic consumption is subject to the standard rate – as well as low compliance and fraud (Figure 30).

Shifting the tax mix towards taxes on consumption and property would be more growth friendly (Akgun, Bartolini and Cournède, 2017[51]). A shift towards taxes on less mobile tax bases can also make the system more resilient and less vulnerable to globalisation (O'Reilly, 2018[52]). Mexico should consider cutting back exemptions and limiting the number of reduced VAT rates, while compensating the poor through targeted subsidies. Applying the standard rate to a wider range of products would help fight informality and tax evasion. Evidence shows that misreporting to the tax administration (SAT) is particularly high when there are VAT exemptions, which also reduces CIT collection (Ahmad, Best and Pöschl, 2012[53]). The government has taken important steps to raise compliance by suppressing universal compensation in VAT, which allowed taxpayers to automatically compensate other tax credits against VAT (OECD, 2018[50]).

Tax administration

Further strengthening the tax administration with adequate staffing and funding would also raise revenues (Figure 31). This would allow for an increase in the number of audits (IMF, 2018[47]). Adopting a Compliance Improvement Plan for VAT and other taxes is another important step towards reducing tax evasion. The Plan should include, *interalia*, better audit coordination and data sharing between tax administrations. In particular, the income tax and social security administrations should be linked as part of the plan to fight tax evasion, as firms tend to understate labour costs to the social security system (IMSS) and overstate to the tax administration (SAT) (OECD, 2017[6]).The government acknowledges the merits of this recommendation and has already started cross-checking the information on social security and income tax.

Figure 29. There is room to increase revenues and the progressivity of PIT



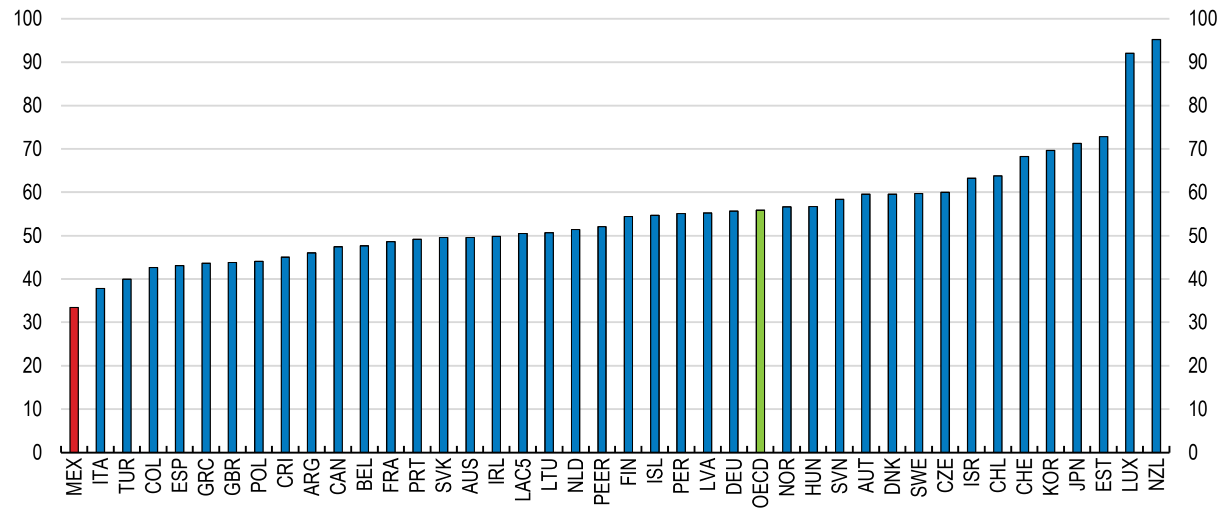
Note: PIT stands for personal income tax. Panel A: for Denmark, France, Hungary, New Zealand, Switzerland and Turkey, PIT is levied on the first earned currency unit. For India, the average worker income is for the organised manufacturing sector as reported in the Annual Survey of Industries. OECD refers to an unweighted average.

Source: OECD calculations based on the Taxing Wages models; OECD Taxing Wages in Latin America and the Caribbean (OECD/IDB/CIAT, 2016[54]), OECD Taxing Wages (OECD, 2018[55]), OECD Tax database.

StatLink http://dx.doi.org/10.1787/888933956641

Figure 30. The VAT revenue ratio is the lowest among OECD countries

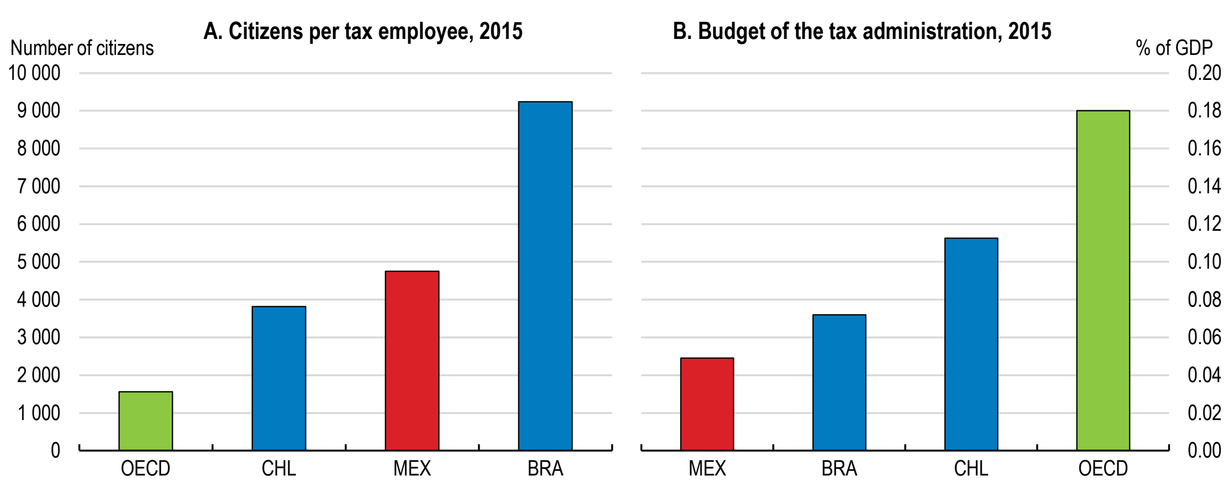
As a % of potential VAT revenues, 2016 or latest available year



Note: A VAT Revenue Ratio of 100% suggests no loss of VAT revenue due to exemptions, reduced rates, fraud, evasion or tax planning. The OECD aggregate is an unweighted average of data shown (excluding Latvia) and data for Canada cover federal VAT only. LAC5 refers to the simple average of Argentina, Chile, Colombia, Costa Rica, and Peru. PEER refers to the simple average of Estonia, Greece, Hungary, Latvia, Lithuania, Poland, Portugal, Slovak Republic, Slovenia, and Turkey.
Source: OECD Consumption Tax Trends; OECD Revenue Statistics in Latin America and the Caribbean.

StatLink http://dx.doi.org/10.1787/888933956660

Figure 31. The tax administration needs to be strengthened



Source: OECD Consumption Tax Trends; OECD Revenue Statistics in Latin America and the Caribbean.

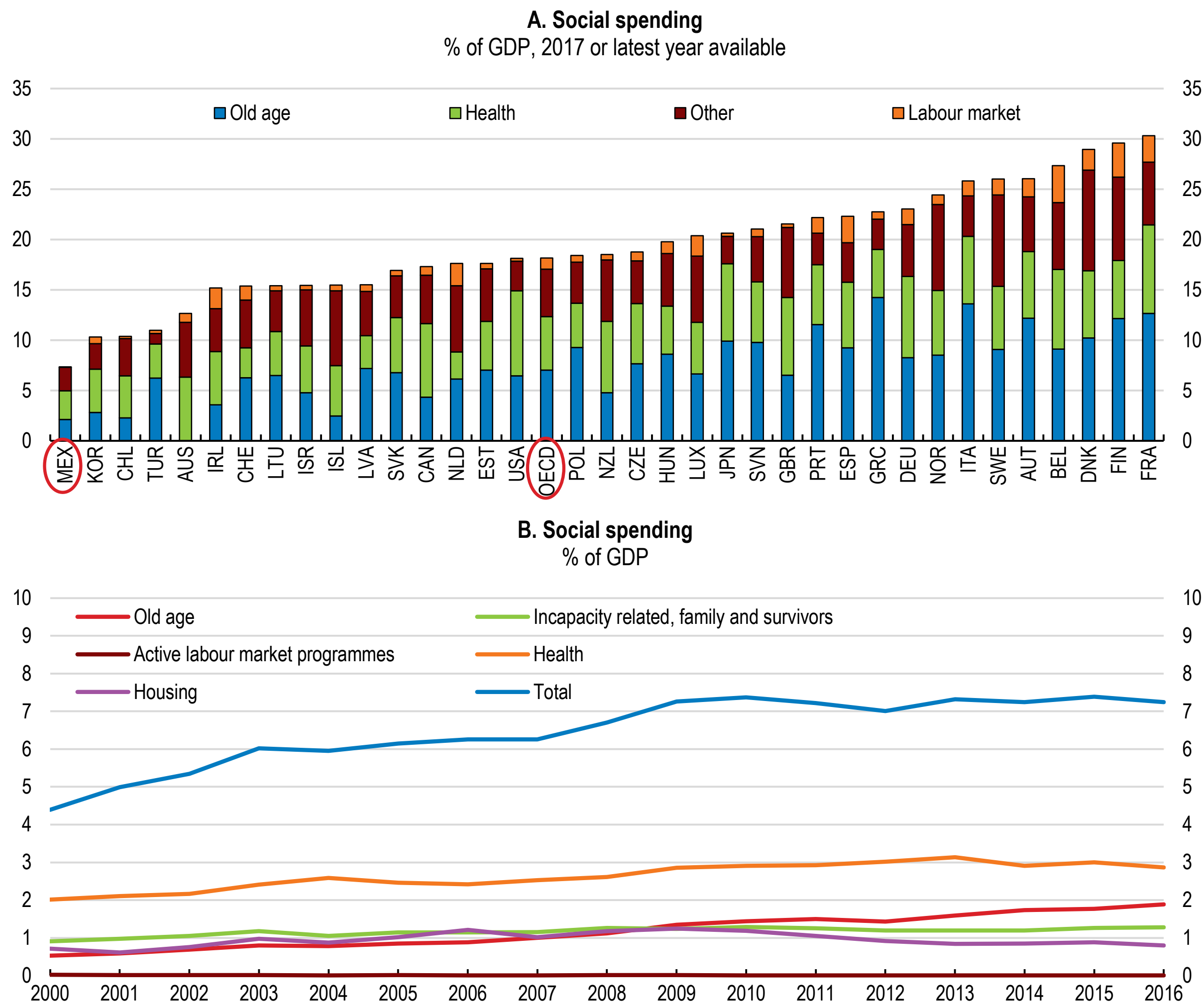
StatLink http://dx.doi.org/10.1787/888933956679

Improving the quality of social spending

Social spending is still comparatively low, despite significant progress in past decades (Figure 32). Mexico spent roughly three times more on social programmes in 2016 than in

1988. However, much remains to be done to reduce existing inefficiencies and raise the quality of social services.

Figure 32. Social spending has increased but remains low



Source: OECD Social Expenditure Database.

StatLink http://dx.doi.org/10.1787/888933956698

Mexico's main social programmes for the poor are large both in coverage and expenditure. PROSPERA, the primary anti-poverty programme, covered almost 6.8 million families in 2016 or 23% of Mexico's population. The *Pensión para Adultos Mayores* (PAM) programme, providing social pensions for individuals aged 65 and above benefited 5.4 million people in 2017 (60% of the population aged 65 and above). These and other innovative programmes like *Programa de Estancias Infantiles para Apoyar a Madres Trabajadoras* (day-care centres, PEI) have helped reduce extreme poverty, while increasing school attendance, extending health care to poor families and fighting malnutrition. The 2019 budget increased social spending from 0.6% of GDP in 2018 to 1% of GDP, although the composition changed markedly, with an almost 14% reduction in PROSPERA, a 17% increase in youth programmes and a doubling of PAM.

Social spending is fragmented into more than 5 000 programmes at the federal, state and municipal levels, which greatly reduces the efficiency of spending and thereby poverty alleviation (CONEVAL, 2016[56]). A few programmes were eliminated or scaled down in January 2019 based on the National Council for the Evaluation of Social Development Policy's (CONEVAL) evaluations. It is important to ensure good evaluation of the programmes and that needy beneficiaries are not excluded from support. This includes an evaluation of recent changes in spending across programmes, as the impact on coverage, targeting and poverty alleviation is not known.

To improve targeting of social programmes, the authorities conducted a social census covering all households to identify those in poverty and special needs. This census is also being used to clean the existent beneficiary database by cross-checking information with data in the *Sistema de Información Social Integral* (SISI) a platform assembling data from social programmes at all levels of government. Making more use of the linking of both data sources would allow the detection of overlaps and duplications across programmes, as well as material deprivation at the household level, and the linked data should be used in this way. The complementary use of both databases will also facilitate the identification of poor households that currently do not receive their social benefits entitlements, either because they have not been identified nor their needs, or because their transfers have been misdirected (around 52% of those individuals living below the poverty line prior to government transfers in urban areas and 40% in rural areas) (OECD, 2019[57]).

Another way to reduce exclusion errors is to lower conditionality which is being undertaken by replacing PROSPERA with other programmes involving less conditionality. Recent research shows that conditionality, although useful in some circumstances, might not always be needed and it could result in adverse effects on participation in the programmes for the poorest individuals (OECD, 2019[57]). Blockchain and other technologies could assist in the creation of secure digital identities for citizens, thereby helping ensuring that social transfers reach the right beneficiaries (Aranda, 2019[58]).

While disability subsidies have increased, the 2019 budget reduces social spending for other vulnerable groups such as poorer children and informal working mothers, via cuts to PEI which affected funding for childcare centres. Although the aim to remove segmentation in the provision of early childhood education and care (ECEC) according to the labour market status of parents is welcome to improve quality and equity, it is not clear that all children in the programme currently have access to care. This will also affect incentives for women to enter and stay in the labour market, albeit informal.

Mexico should also consider establishing a public system of unemployment benefits so that displaced workers can afford a lengthier search for a suitable job. Developing active labour market programmes focused on re-training and upskilling could also help informal workers, who receive on average much less training than formal workers, to move into formal jobs.

At 5.8% of GDP, Mexico allocates a relatively low share of its national resources to health, compared with the OECD average of 9% though it is similar to countries with comparable GDP levels (OECD, 2018[59]). Spending remains concentrated in the richest states, resulting in disparities in care quality and access. Investment in rural areas needs to be accelerated, including by increasing the overstretched workforce (OECD, 2018[59]).

Another element resulting in the unequal access to healthcare is the multiplicity of insurance schemes, each with its own provider network, funding and administrative structures. Three main subsystems exist, according to labour market status: private-sector formal workers, public-sector formal workers and *Seguro Popular*. The latter was introduced in 2003 and designed to universalise health insurance by extending coverage to the over 50 million Mexicans not covered by any scheme, including informal workers. In addition, some government agencies and state-owned enterprises operate their own schemes. Affiliates are typically limited to in-network facilities, resulting in duplications and inefficiencies in the use of public resources.

The lack of coordination leads to high administrative costs of almost 10% of total health spending, the highest in the OECD (OECD, 2016[60]). Aligning these costs with the OECD average of 3% would generate savings of at least 0.15% of GDP (World Bank, 2016[61]) (Table 5). This practice, along with non-portability, disrupts the continuity of care dampening health outcomes (OECD, 2016[60]). To reduce inefficiencies, improve health outcomes and equity, Mexico should reduce existing fragmentation and increase portability of health insurance by allowing the maintenance of insurance affiliation after changes in employment (OECD, 2018[59]). The government acknowledges the need to move to a universal health care system and is taking steps in this direction. It is currently merging the operations of *Seguro Popular* and formal workers' healthcare. Later, this merge will be extended to all federal health provision.

Table 5. Illustrative fiscal impact of some OECD recommendations

Measure	Change in fiscal balance (percentage points of GDP)
Rebalancing the tax mix	
Reduce exemptions in CIT	Up to 0.52
Reduce exemptions in PIT	Up to 0.97
Broaden the VAT tax base	Up to 1.36
Raise property taxes to the LAC average (0.6%)	0.30
Reduce exemptions and subsidies in the state tax on motor vehicles (*tenencia*)	0.05
Raise the efficiency of state payroll tax collection (*nómina*)	0.15-0.20
Potential increase in fiscal revenues of implementing all tax recommendations	3.4
Social spending	
Reduce administrative and insurance costs in the health sector from 9% of total current expenditures to the OECD average of 3%	-0.15
Eliminate beneficiary overlaps across the different health insurance schemes	-0.15
Eliminate leakages in social assistance programmes benefiting the top 40% of the income distribution	-0.10
Potential reduction in spending of implementing all social spending recommendations	0.4
Potential fiscal impact of implementing all recommendations	3.8

Source: World Bank (2016[61]) and Secretaría de Hacienda y Crédito Público (SHCP, 2018[62]).

The poverty rate among people over 65 is very high, at more than 30%. The pension system is fragmented and multiple pension systems cover private sector employees, different categories of public sector employees at different government levels, SOEs, public universities and military personnel. There is no coordination across the various plans nor across the federal and local levels, even for non-contributory schemes.

Two main schemes cover the majority of formal workers. Reforms in 1997 for private sector workers (IMSS) and 2007 for public sector workers (ISSSTE) replaced the defined-benefits (DB) PAYGO system by a defined-contribution regime (DC) with individual retirement accounts. These reforms have improved the capacity to finance pensions but important challenges remain. First, the reform allowed transitional workers in the private sector to choose whether to move into the DC regime or stay in the PAYGO, which will place pressure on the budget by mid-2030. Second, low contributions to the mandatory pension system in both schemes do not guarantee pension benefits of more than 50% of final salary. A contribution rate of 6.5% (the average in IMSS) in the DC scheme may lead to, in the best case scenario, a replacement rate of only 26% for a full career average earner, the second lowest replacement rate among OECD countries (OECD, 2017[63]).

Recent legislation, which ensures all remaining funds in the housing account (INFONAVIT) at the point of retirement are transferred to the pension system and annuitised, rather than being taken as a lump-sum, will help increase future pensions. However, as the housing account can be withdrawn during working life, there will be considerable variation in its future value. Another issue is that high rates of transition into and out of informality lead to low density of contributions, and many workers will not have contributed the minimum amount to be entitled a pension (1 300 and 1 250 weeks in the public and private sectors, respectively).

To contain liabilities associated with transition workers in the PAYGO system, a pro-rated mechanism could be implemented, preserving acquired rights and transitioning to the new DC system at a predefined date as recommended by the OECD (OECD, 2016[64]). Another option is putting a ceiling on top DB pensions. Contributions to the DC system should gradually increase to improve pension adequacy and provide room to shorten the required contribution period to qualify for a pension, thereby raising incentives for job formalisation.

Improving the old-age safety net is also a priority. The new government aims to move in the direction of a universal pension and, in January 2019, raised the eligibility age to 68 years old for the non-indigenous population and doubled the minimum old-age income support PAM to slightly above the extreme poverty line in rural areas, but below the value for urban areas (CONEVAL, 2018[65]). This is in line with OECD recommendations (Table 6) (OECD, 2017[6]). In spite of the large increase, it is insufficient to lift old-age people above the poverty income line, which is about double the minimum pension in both areas.

Strengthening fiscal federalism

Fiscal decentralisation reforms in the latter half of the 1990s and beginning of 2000s increased the spending role of the states in education and health for which the national government provides transfers. Subnational governments are responsible for 52% of total public expenditure and 80% of total public investment. States account for the bulk of subnational investment, around 57%. This policy aimed at fiscal equalisation across states. Resources are gathered at the federal level and then distributed to states and municipal governments to implement a similar level of local public goods. Yet, this system has neither promoted regional convergence nor reduced inequality (Diaz-Cayeros, 2016[66]). The fiscal imbalance - i.e., the difference between own resources and spending responsibilities – is large, compared with both the OECD and LAC, reducing the incentives for states and municipalities to provide good quality services in an efficient way. This is because as states and municipal governments do not participate in tax collection they are not held fully responsible for policy outcomes.

This arrangement reduces local incentives to provide services and collect taxes in a more efficient way, and is burdened by overlapping competences, which further reduces accountability and creates room for free riding by local governments. For instance, the federal government is responsible for financing the construction of schools and local streets, while their maintenance is the responsibility of municipalities. As a result, infrastructure does not always reflect the needs of local communities and tends to quickly deteriorate for lack of maintenance, due to low local tax collection and accountability (OECD, 2018[67]).

Experience in other OECD countries shows that revenue decentralisation reduces regional disparities (Bartolini, Stossberg and Blöchliger, 2016[68]). Mexico should revise the *Ley de Coordinación Fiscal* (LCF) to give more fiscal independence to state governments, and reform the intergovernmental transfer system to address possible fiscal imbalances across states. There is also scope to increase transparency of subnational transfers, including on their use and outcomes. These reforms would increase the quality of service provision, contribute to regional development, and strengthen the sustainability of state and municipality finances, in line with the objectives of the Federal Discipline Law for States and Municipalities.

Increasing fiscal responsibilities of the state governments would improve their incentive to use available resources in a more efficient way to address income inequality and poverty. At the same time, the intergovernmental transfer system should target states that fall below a certain level of fiscal capacity, while not fully compensating for the fiscal difference to provide an incentive to the subnational government to catch-up with the other states. Increasing the retention of tax revenues generated by economic activities at the state and municipality level would also serve as an incentive to improve local business conditions which are strikingly different across Mexico (Chapter 1).

Increased tax autonomy would provide an incentive for subnational governments to exploit their own revenue-collection potential and strengthen their administrative capacities (OECD, 2015[69]). Revenues from property taxes amount to only 0.3% of GDP against the OECD average of 1.9%. However, Mexico lacks a comprehensive nation-wide property register with updated market valuations. Building one is a priority and it should connect state-level property registers as such information is not currently being shared across states and municipalities (OECD, 2018[50]). Blockchain could help improve land and property registers in a cost effective way (Aranda, 2019[58]).

More revenue could also be raised from the state tax on the use or ownership of motor vehicles (*tenencia*), which would also improve the redistributive power of the tax system. A number of states apply exemptions or subsidies that erode the tax base by about 0.05% of GDP (World Bank, 2016[61]).

State-level payroll tax collection, which varies between 0.5% and 3% across states, could be raised by improving efficiency, without increasing the tax rate. This tax impacts on labour costs, and could therefore deter labour supply, job creation and formalisation. However, tax collection efficiency varies greatly between states and is related to limited technical capacity, incomplete information and outdated payment methods. Information sharing between tax administrations and linking of databases would help to detect tax evasion. With this aim, some states have already signed information exchange agreements with IMSS to compare data on formal workers.

The use of modern information technologies and best practices in tax collection and the delivery of public services is hampered by weak and uneven capacities of the civil service at the state and municipal levels. The principles of the professional career service could be included in local administrations' public employment regulations (*Servicio Profesional de Carrera*) and encourage the development of merit-based human resources policies.

Table 6. Past OECD recommendations on fiscal policy

Past recommendations	Actions taken since the 2017 survey
Co-ordinate the collection of income taxes and social security contributions.	No actions taken.
Make greater use of property taxes.	No actions taken.
Further broaden income tax bases and remove inefficient tax expenditures.	As of 2019 the corporate income tax has been reduced from 30% to 20% in 43 municipalities along the border with the US.
Strengthen social expenditure on programmes to eradicate extreme poverty such as *Prospera*.	The 2019 budget has increased the share of social spending. A new social census allows for better targeting.
Simplify administrative procedures for accessing cash transfers.	The conditionality of social transfers has been reduced.
Raise and broaden the minimum pension to expand the old-age safety net.	In January 2019 the government doubled the minimum monthly PAM pension to MXN 1275 and introduced universal eligibility. Indigenous elderlies living in native communities qualify at 65 years old, instead of the standard 68 years old.

Strengthening institutional quality and the rule of law

The quality of Mexico's institutions is low

Institutions are a major determinant of economic performance (Chang, 2006[70]; Acemoglu and Robinson, 2008[71]). Improving the rule of law would have a large growth payoff in Mexico (Box 3). Improving institutional quality will also bring more fairness, and increased opportunities, especially for the poor and underprivileged, who bear disproportionally the consequences of crime and corruption.

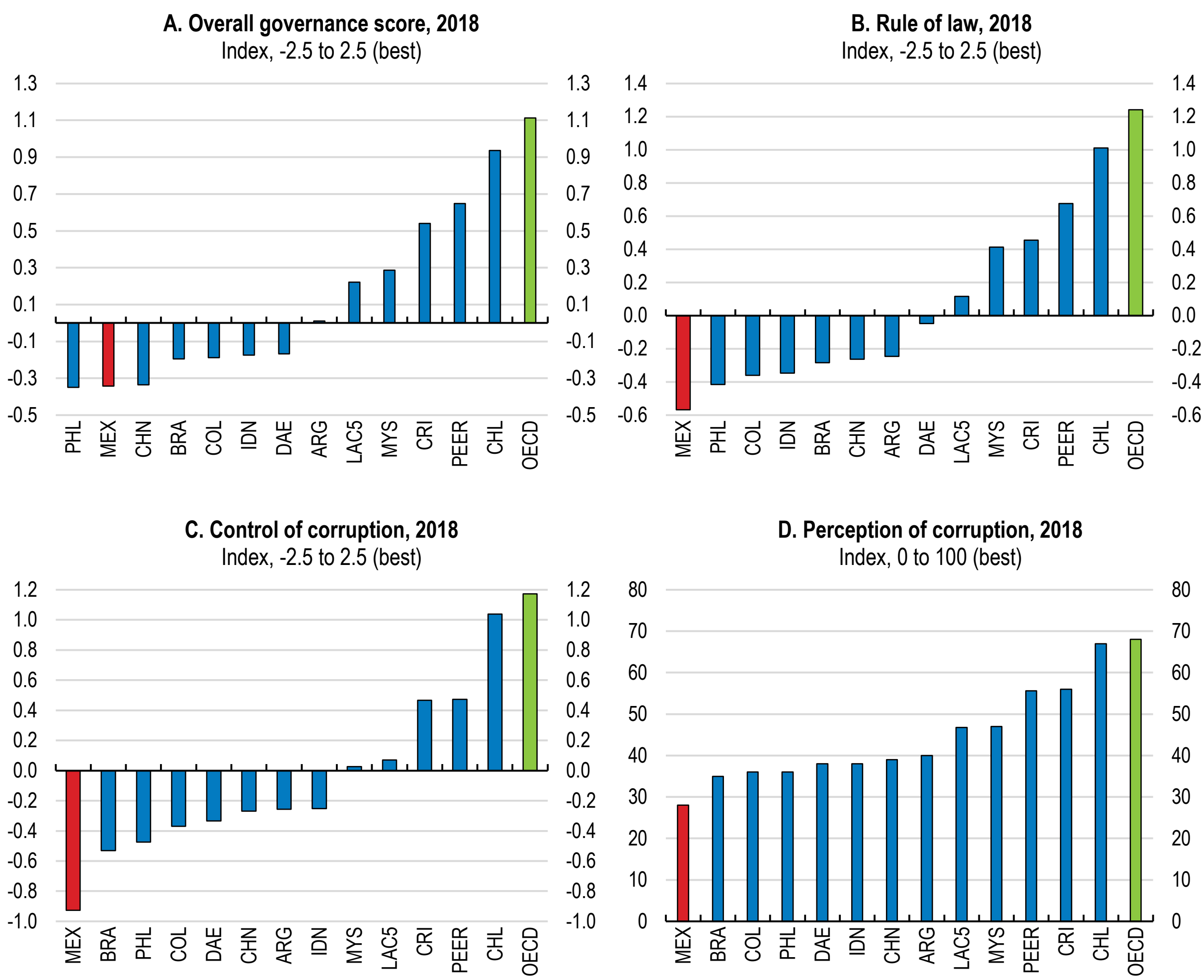
There are several channels through which institutions influence economic outcomes. Weak rule of law can increase the costs and uncertainty of contract enforcement (OECD/IMCO, 2013[72]). High levels of corruption and crime can lower investment levels, including foreign investment (Daude and Stein, 2007[73]; Javorcik and Wei, 2009[74]; Kurul and Yalta, 2017[75]). Institutional quality also has important implications for the allocation of resources. Firms in Mexican states with more effective legal systems are substantially larger and more productive (Dougherty, 2014[76]; Gann, 2016[77]). Moreover, corruption can divert entrepreneurial efforts from productive value-creating activities to unproductive and destructive activities (Baumol, 1990[78]; Sobel, 2008[79]; Wasilczuk and Stankiewicz, 2017[80]) and hampers the efficient and effective allocation of government resources (Shleifer and Vishny, 1993[81]; Liu, Moldogaziev and Mikesell, 2017[82]). There is also evidence that high crime rates in Mexico have led to reduced economic diversification, higher sector concentration and lower economic complexity (Ríos, 2017[83]). By increasing tax evasion, limiting equitable access to public service and perpetuating the unequal distribution of wealth, corruption also contributes to inequality (Gupta, Davoodi and Alonso-Terme, 1998[84]; OECD, 2017[85]).

Mexico's institutions compare poorly against not only other OECD and Latin American countries, but also against dynamic Asian economies (Figure 33). Symptomatic of weak institutions, perceived corruption is the highest in the OECD (Figure 33d) and the homicide rate is higher than all OECD countries (Figure 35a). Moreover, Mexico's performance has stagnated over time. For example, the perception of corruption index was slightly worse in 2017 than in 2000 (Figure 34) and the number of murders has risen sharply in the last decade (Figure 35b). The vast majority of crimes also go unrecorded (93.2% in 2017), and only 11% of reported cases result in an investigation sent to the court system, and less than 4% result in a conviction and sentence (Le Clercq and Rodríguez Sánchez Lara, 2016[86]).

Moreover, differences in crime and impunity rates across regions are significant (Le Clercq and Rodríguez Sánchez Lara, 2016[86]) (Figure 9).

Somewhat more positively, Mexico scores well among Latin American countries on the World Bank's Ease of Doing Business Indicator. However, it ranks the second lowest in the OECD (Figure 36).

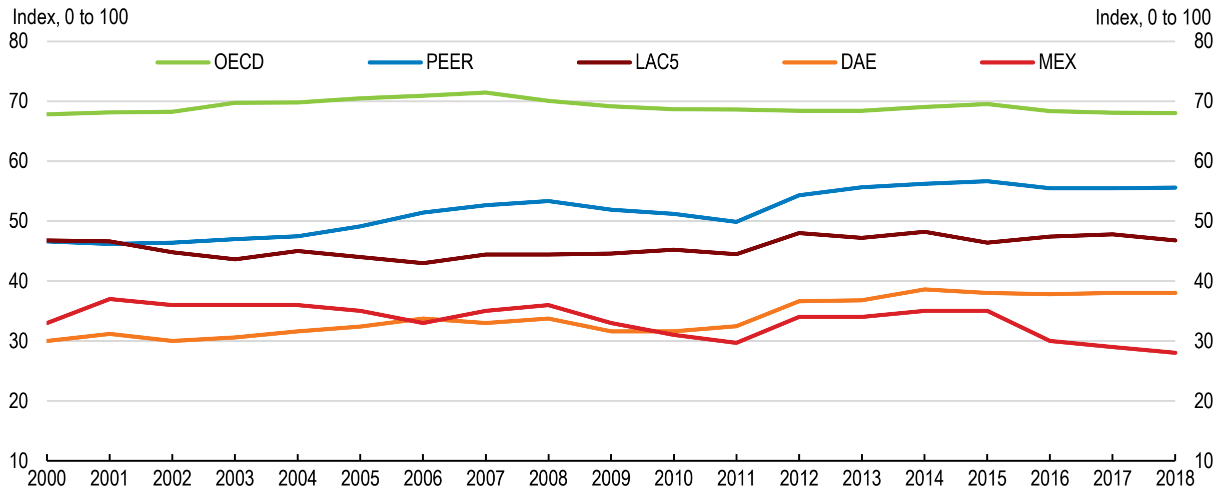
Figure 33. The quality of Mexico's institutions is low



Note: Panel B: Simple average of the six World Governance sub-indicators: control of corruption, government effectiveness, political stability and absence of violence/terrorism, regulatory quality, rule of law, and voice and accountability. Panel B: Rule of Law captures perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence. Panel C: Control of corruption captures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests. PEER is a simple average of the 10 non-Latin American OECD members with the lowest GDP per capita: Estonia, Greece, Hungary, Latvia, Lithuania, Poland, Portugal, Slovak Republic, Slovenia and Turkey. LAC5 is a simple average of Argentina, Brazil, Chile, Colombia and Costa Rica. DAE is a simple average of People's Republic of China, Indonesia, Malaysia, Philippines, Thailand and Viet Nam.
Source: World Bank World Governance Indicators; Transparency International Corruptions Perception Index.

StatLink http://dx.doi.org/10.1787/888933956717

Figure 34. Perceived corruption continues to be a substantial problem

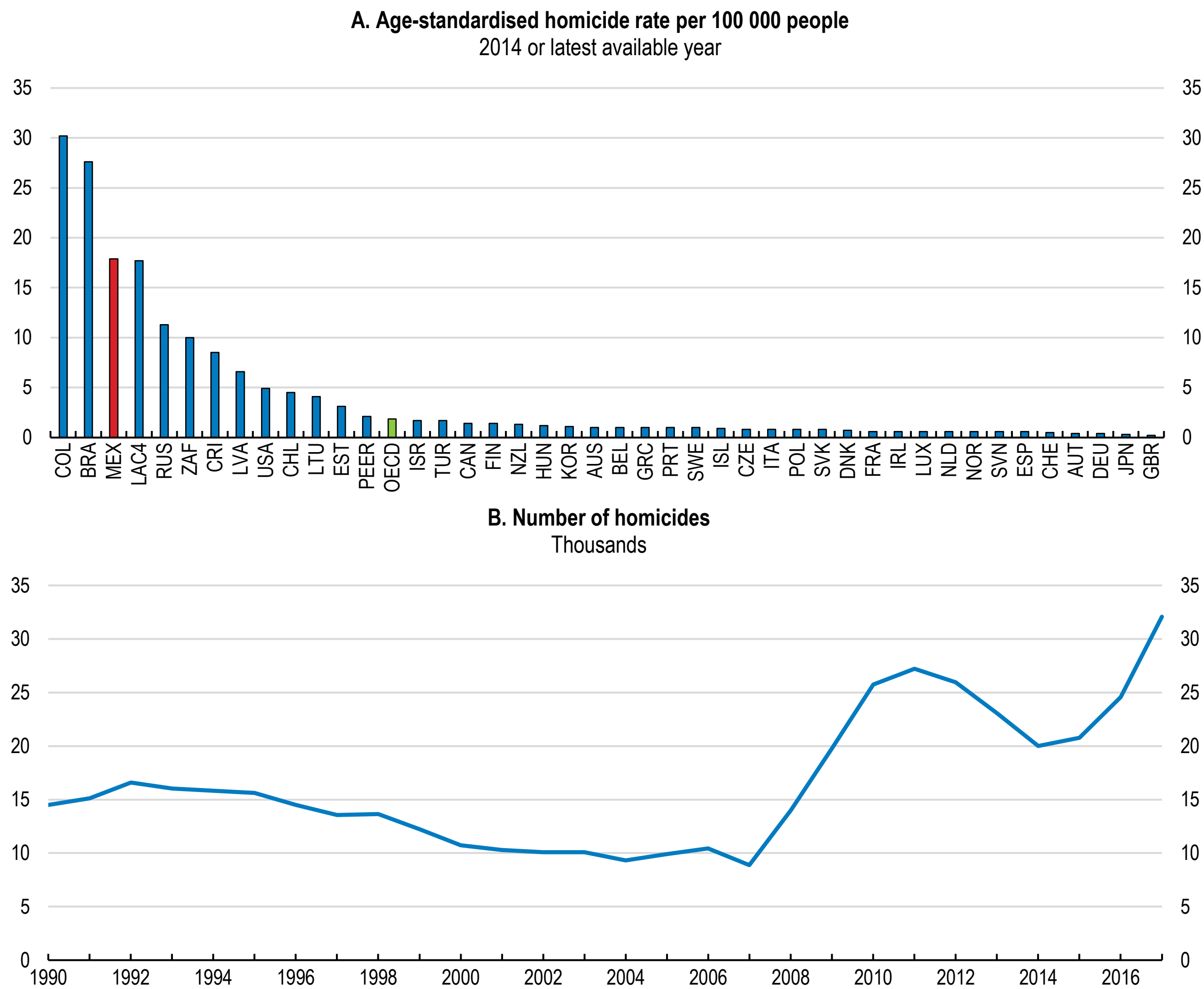


Note: PEER is a simple average of the 10 non-Latin American OECD members with the lowest GDP per capita: Estonia, Greece, Hungary, Latvia, Lithuania, Poland, Portugal, Slovak Republic, Slovenia and Turkey. LAC5 is a simple average of Argentina, Brazil, Chile, Colombia and Costa Rica. DAE is a simple average of the People's Republic of China, Indonesia, Malaysia, Philippines, Thailand and Viet Nam.
Source: Transparency International Corruptions Perception Index.

StatLink http://dx.doi.org/10.1787/888933956736

These institutional issues are pervasive, occurring in general terms (for example, in the effectiveness of the judiciary), but also in multiple specific sectors. Infrastructure offers a specific example. While Mexico's National Infrastructure Plan provides an integrated inter-sectoral plan, it is limited to a six-year time horizon which matches the presidential electoral cycle. A long-term planning framework supported by a robust institutional architecture to improve project selection, planning and implementation and provide greater certainty and reduced political risk would help in addressing Mexico's extensive infrastructure needs by providing value-for-money and encouraging long-term financing (Meehan, 2019[87]). While this is difficult to achieve in practice, internationally, the establishment of an independent statutory body, as has been done in the UK and Australia, is seen as a promising way forward to anchor spending to a long-term funding commitment that is independent of the election cycle and, ultimately, to increase spending efficiency (ITF, 2017[88]).

Figure 35. The high levels of crime and violence continue to grow

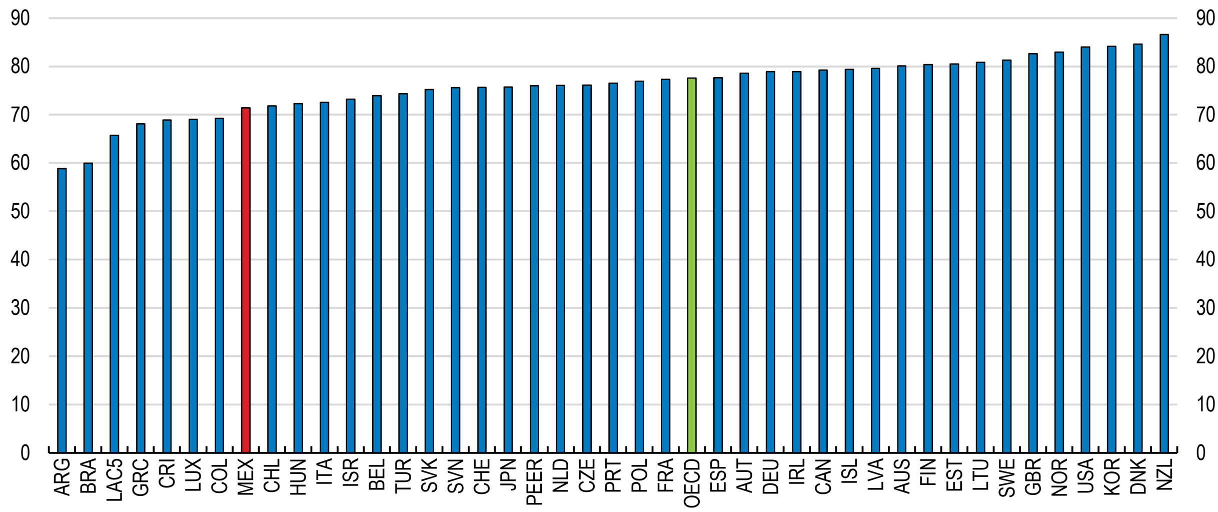


Note: Panel A: OECD is a population-weighted average of member countries. PEER is a weighted average of the 10 non-Latin American OECD members with the lowest GDP per capita: Estonia, Greece, Hungary, Latvia, Lithuania, Poland, Portugal, Slovak Republic, Slovenia and Turkey. LAC4 is an unweighted average of Brazil, Chile, Colombia and Costa Rica.
Source: OECD Better Life Index, November 2017 update; INEGI.

StatLink http://dx.doi.org/10.1787/888933956755

Figure 36. Mexico is behind most other OECD countries on the ease of doing business

Ease of doing business score, 0 to 100 (best)



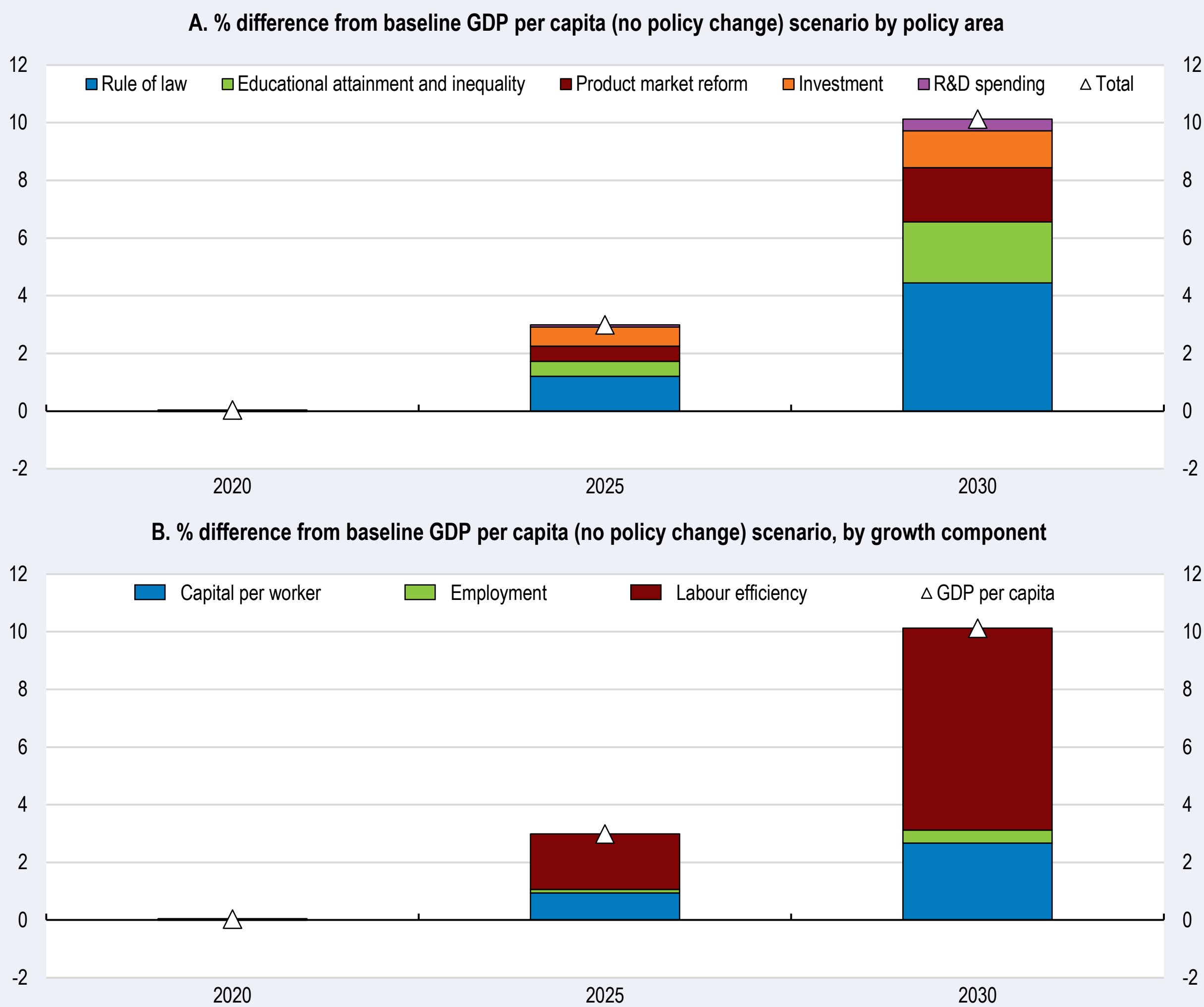
Note: PEER is a simple average of the 10 non-Latin American OECD members with the lowest GDP per capita: Estonia, Greece, Hungary, Latvia, Lithuania, Poland, Portugal, Slovak Republic, Slovenia and Turkey. LAC5 is a simple average of Argentina, Brazil, Chile, Colombia and Costa Rica.
Source: World Bank Ease of Doing Business Indicator, 2019.

StatLink http://dx.doi.org/10.1787/888933956774

Box 3. Quantification of the impact of structural reforms

The OECD long-term model comparing projections based on different policy scenarios with the baseline "no policy change" scenario (Guillemette and Turner, 2018[89]) suggests that improving institutional quality would significantly boost GDP per capita levels given Mexico's quality of institutions, which is the lowest in the OECD, and that better governance has a large impact on productivity (Guillemette and Turner, 2018[89]) (Figure 37). Although policy complementarities are not explicitly modelled, better governance could also have important flow-on effects, as quality institutions create positive incentives for business investment, technology adoption and human capital accumulation, and can have a large impact on the successful implementation of other enabling policies, such as product market reforms (Ríos, 2018[90]). A more detailed discussion of the quantification of structural reforms is provided in Annex B.

Figure 37. There is a large potential for policy reforms to raise living standards



Note: The following scenarios were modelled: improve rule of law to the OECD median by 2060; increase educational attaining to leading OECD countries by 2040 and reduce the Gini coefficient to the OECD median by 2060; improve product market regulations to leading OECD countries by 2030; increase R&D spending to the OECD median by 2030; increase public investment by 1.3 percentage points of GDP from 2025.
Source: Estimates based on "OECD Long-Term Scenarios for the World Economy" database.

StatLink http://dx.doi.org/10.1787/888933956793

The resourcing of key independent institutions has been significantly decreased

The 2019 budget presented a reduction in expenditures for all government ministries and public entities aimed at increasing spending efficiency and reallocating resources to social programmes and infrastructure investment. This austerity measure implied a reduction in the amount of spending allocated to autonomous entities, many of which have roles central to anticorruption and integrity priorities. This includes the judicial branch, the National Electoral Institute, the National Institute of Statistics and the National Institute of Transparency. This reallocation also implied significant budget reductions for the competition authorities and sector regulators. Moreover, some of the ministries and other entities that have a key role in public sector integrity also face reduced budgets, such as the Ministry of Public Administration and the Federal Tribunal of Administrative Justice.

Much of the savings are expected to come from decreases in remuneration. In particular, a law has been approved that would mean that no public sector employee can be paid more than the President, whose salary has recently been lowered by about 40% to MXN 108 000 a month (about USD 5612). This law implies a reduction in the salaries of high-level officials and a compression of the salary distribution. This raises concerns about whether the autonomous entities are sufficiently resourced to attract and retain skilled staff and deliver on their mandates. Moreover, lower public sector wages may make the fight against corruption more difficult. While it is important to strive for greater spending efficiency, it is also crucial to ensure that ministries and autonomous entities that are relevant to institutional quality have adequate resources and support to be able to attract and retain highly skilled staff and maintain strong autonomy to carry out their functions effectively. As a specific example, competition is weak in Mexico but positive reforms have been made in recent years to strengthen competition policy and, in particular, the institutional framework for the enforcement of competition law via the creation of two independent competition authorities and specialist courts (Meehan, 2019[20]). Ensuring the independence and adequate resourcing of these entities will be crucial for continued strengthening of competition.

Mexico's high level of impunity highlights issues with the security and justice systems

Mexico's high level of impunity highlights weaknesses in the judicial system that contribute to high rates of crime. International experience demonstrates the importance of an impartial and efficient justice system in fighting a culture of corruption (Rothstein and Teorell, 2015[91]; Quah, 2017[92]). A conservative estimate is that direct crime-related costs in Mexico amounted to 1.9% of GDP in 2014 (Jaitman and Torre, 2017[93]). As a specific example, in 2018, 58.2 million barrels of oil were lost to fuel theft along the oil supply chain on average per day costing MXN 66.3 billion (about 0.3% of GDP). A broader measure of the impact of violence in Mexico that also takes account of indirect costs gives a much higher estimate of 21% of GDP in 2017 (Institute for Economics & Peace, 2018[94]). Moreover, the costs of crime tend to impose a greater burden on poorer households (Ajzenman, Galiani and Seira, 2015[95]).

An evidence-based approach to security with greater accountability is needed

The rising rates of violent crime are therefore concerning, particularly as this has occurred despite a general trend of rising security spending (World Bank, 2016[61]). This highlights the need for evidence-based reforms to effectively and efficiently tackle crime (OECD/IMCO, 2013[72]). While data collection on crimes and victimisation have improved, data gaps remain. Moreover, these data still need to be transformed into actionable evidence on which to base sound polices and reforms (OECD/IMCO, 2013[72]). Also, the institutional oversight and accountability to incentivise the use of evidence needs to be strengthened and evidence dissemination and stakeholder involvement improved (OECD/IMCO, 2013[72]).

The required periodic reports published by the Ministry of the Interior is an example of a positive initiative to improve available evidence. The latest report (SEGOB, 2018[96]) highlights that there are less than half the number of police required due to a combination of staff shortages and existing staff who fail the required competency evaluations. While this provides valuable information, there is no clear mechanisms nor accountability for turning this evidence into actions to improve the situation. The government strategy to address these shortfalls involves the creation of a new national police framework which includes the creation of the national guard and an improved coordination between the various police forces across levels of government.

While reforms have been positive, significant issues remain in the justice system

Recognising the need to improve the efficiency of the justice system, in June 2008 Mexico launched a major reform of its criminal justice system, which involved moving from a written, inquisitorial judicial process to an oral, adversarial one. The transition period was completed in mid-2017. This is a significant step towards increasing the transparency and efficiency of the justice system, although implementation issues remain. The implementation of the new criminal justice system was coordinated by SETEC, an autonomous body established specifically for this purpose. However, at the end of the eight-year implementation period in 2016, SETEC was disestablished, despite estimates that the new system would not be fully operational until 2024. Given the need for ongoing training and capacity building within the new criminal justice system, and the underdevelopment of some features of the new system such as mediation services, it is recommended that the monitoring and evaluation of its implementation continue. In this respect, the government is designing an institutional mechanism for the coordination and consolidation of the penal justice system. As a first step, a unit responsible for this is being established in the Ministry of the Interior.

Additionally, significant scope remains to improve the efficiency and impartiality of the justice system. In 2014, the Constitution was amended to replace the Attorney General's Office with a more autonomous prosecutor general. However, the constitutional amendment has not been implemented, and Congress has not approved additional constitutional and legislative reforms needed to officially establish it (Suárez-Enríquez and Indacochea, 2018[97]). In January 2019, the first Prosecutor General was appointed by the Senate. The designation complied with the new regulation, with Senate proposing 10 candidates, and the President narrowing the list to three candidates from which Senate selected the Prosecutor General. Nonetheless, the designation has been questioned by some civil society organisations, who presented a proposal to further strengthen the independence of the Prosecutor from the executive power. In this proposal, civil society would have a more active participation in creating the list proposed by the Senate and limits would be imposed on the Prosecutor General in terms of holding political positions immediately prior to or on leaving the office. Moreover, under some serious violations of the law, the President may still remove the Prosecutor General unless the majority of the Senate objects to the removal. The civil society proposal also suggests that the ability of the president to remove the Prosecutor be ceded to Senate.

Establishing and implementing an integrated approach to anticorruption and integrity

The government recognises that corruption is a serious problem that is a drain on fiscal resources and undermines its ability to supply public goods and services. Corruption also has an adverse effect on political stability, the business environment, private investment and inclusive growth. The government is therefore accelerating the implementation of the ambitious National Anticorruption System (NACS). In addition, it is proposing five lines of action. Box 4 provides a description of NACS and the government's five priority action areas. These reforms are an extremely positive step.

Box 4. Mexico's National Anticorruption System and additional priority actions to tackle corruption

Mexico's National Anticorruption System (NACS) is a coordination structure between the federal- and state-levels, and for the three branches of government (the executive, legislative and judiciary) for the prevention, detection and sanctioning of administrative liabilities and acts of corruption, as well as the surveillance and control of public resources. Its purpose is to establish principles, public policies, and the general basis and proceedings for the coordination between authorities involved in the fight against corruption. This fight requires a homogenous policy framework to ensure a consistent application of principles and policies across the whole country.

Such a system is a challenge for a federal country like Mexico. After a broad discussion between political forces, academics, the federal- and state-level powers and civil society, instead of a single institution with national powers, the final decision was to strengthen existing institutions, and complete the institutional framework with a specialised anticorruption prosecutor, and the establishment of a broad governance arrangement for all public entities related to the fight against corruption. This structure would be replicated at the state level to ensure homogeneity of the system.

In May 2015, several provisions of Mexico's Constitution were amended, added or repealed, enshrining the National Anticorruption System into law. Secondary laws were passed in July 2016, and included:

- The **General Law of the National Anticorruption System** (*Ley General del Sistema Nacional Anticorrupción*), which establishes the institutional and governance arrangements. As a general law, it also requires states to establish their own systems along similar lines.
- The **Organic Law for the Federal Public Administration** (*Ley Orgánica de la Administración Pública Federal*), which strengthens the attributes of the Ministry of Public Administration (SFP). SFP is now responsible for integrity policies in the federal public administration, as well as retaining its previous mandate of internal control and audit, human resources management, public procurement, transparency and the administrative disciplinary regime.
- The **Organic Law of the Federal Tribunal of Administrative Justice** (*Ley Orgánica del Tribunal Federal de Justicia Administrativa*), which sets out the duties and responsibilities of public officials (including the disclosure of private interests) and administrative disciplinary procedures for misconduct, with serious offences now falling under the jurisdiction of the Federal Tribunal of Administrative Justice.
- The **Organic Law of the Attorney General's Office** (*Ley Orgánica de la Procuraduría General de la República*), which creates the position of Specialised Anticorruption Prosecutor, outlines the responsibilities of this office and consolidates its role within NACS. The Criminal Code was also amended accordingly to clarify procedures for prosecuting corruption-related crimes.
- The **General Law of Administrative Responsibilities** (*Ley General de Responsabilidades Administrativas*), which establishes the duties and responsibilities of public officials (including the disclosure of private interests) and

sets out administrative disciplinary procedures for misconduct, differentiating between less serious and serious offences (the latter now falls under the jurisdiction of the Federal Tribunal of Administrative Justice).

- The **Law of Auditing and Accountability** (*Ley de Fiscalización y Rendición de Cuentas de la Federación*), which extends the remit of the Supreme Audit Institution (ASF) and permits real-time audits and oversight over federal transfers to subnational governments (*participaciones*). It also requires timelier audit reporting to Congress.
- The **Law of Fiscal Coordination** (*Ley de Coordinación Fiscal*), which has regulated the distribution of tranfers to states (*participaciones*) and tax-sharing arrangements since 1978, was amended to align the new provisions of NACS, particularly those concerning the role of the Tribunal in disputes and the expanded remit of the ASF.
- The **General Law on Government Accounting** (*Ley General de Contabilidad Gubernamental*), which amends financial reporting requirements for states and municipalities as per the extended auditing jurisdiction of the ASF over participaciones funds.

The description of the institutional arrangements of the NACS is as follows:

- The **Coordination Committee**, charged with developing national anticorruption policies and monitoring and evaluating progress in annual reports, as well as directing and overseeing the work of the Executive Secretariat and Executive Commission. It is presided over by the President of the Citizens Participation Committee, and members include: the Minister of Public Administration (executive); the Supreme Auditor-General of the Federation (technically autonomous but supervised by the Chamber of Deputies); the President of the National Institute for Transparency, Access to Information and the Protection of Personal Data (INAI, an autonomous entity); the Specialised Anticorruption Prosecutor (autonomous); the President of the Federal Tribunal of Administrative Justice (judicial branch) and representative from the Federal Judicial Council (judicial branch).
- The **Executive Secretariat to the Coordination Committee**, which provides technical support to the Coordination Committee and oversees the development of the national digital platform. It has a governing board led by the President of the Citizens Committee and comprised of members of the Coordination Committee and a technical secretariat.
- The **Executive Commission to the Coordination Committee**, which provides technical support in the design and implementation of the Coordination Committee's activities, including annual reports and coordination with local systems.
- The **National System of Supervision**, which coordinates all levels of government to assure transparency of public expenses. It also improves state capabilities, assures common practice and facilitates information sharing across all institutions.
- The **Citizen Participation Committee**, which channels input from civil society into the work of the NACS and oversees progress and results. It can also conduct its own programme of work (investigations, research etc.). It has five members,

including the President, who are chosen by a selection committee of nine experts chosen by the Senate for a term of three years. The Committee is presided over by a President, with a one year term that is allocated on a rotating basis among the five members. Members must have made "an outstanding contribution to transparency, accountability and combating corruption".

- **Local Anticorruption Systems** (LACS), whose responsibilities and activities should mirror those of the federal NACS, with analogous governance structure and procedures.

Further details of the reforms are discussed in OECD (2017[85]).

In addition to accelerating the implementation of NACS, the government has proposed five lines of action areas:

- Promote the participation of the private citizens to denounce acts of corruption, monitor public matters and refrain from participating in corruption.
- Incorporate new technologies to detect misconduct, prevent the unintended usage of resources, increase transparency and manage a centralised procurement system.
- Protect whistle-blowers with laws and confidentiality so that they feel secure to denounce acts of corruption.
- Reinforce the Professional Career Service (SPC) to encourage professional hiring and meritocratic promotions of public employees.
- Adopt fiscal austerity, monitoring and assessment of governance performance to use the available resources more efficiently, avoid superfluous expenses, and get feedback from private citizens.

Experiences from other countries highlight that new laws and regulations *per se* are insufficient for cultivating sustained adherence to integrity values (OECD, 2017[85]). Indeed, there are few international examples in recent times of countries where corruption has been successfully tackled in a wholesale fashion – the two often-cited exceptions are Hong Kong and Singapore. The experience in these countries highlights that how well the institutional and legal frameworks are implemented and operate in practice depends on the political will to implement them, including by providing adequate resources and tools (OECD, 2013[98]).

A great deal of the value-added from NACS is in bringing together key players to better align policies and approaches and to cooperate in implementation. While the implementation of NACS has been slow and is not yet complete, the present government is committed to completing its implementation and have undertaken important steps. This includes the recent appointment of the Special Anticorruption Prosecutor, and the magistrates charged with investigating and prosecuting administrative misconduct are currently in the process of being appointed. Going forward, it will be key to ensure full autonomy of the Special Anticorruption Prosecutor, and provide it with adequate resources to ensure it can effectively carry out its mandate.

Addressing corruption at the state and municipality level is crucial for improving integrity given that many of the opportunities for corruption take place at the subnational level. Recognising this, the General Law of NACS requires states to create local anticorruption systems consistent with the federal system. Under the reforms, mandatory local anticorruption systems were supposed to be in place by July 2017. However, several states have not yet fully implemented their state-level system, but important progress has been made. As of March 2019, 27 states had completed the required legislative changes, 29 had appointed an Anticorruption Prosecutor, 28 had created their Coordination Committee, and 22 had completed the state structures (Sistema Nacional Anticorrupción, 2019[99]). In 2017, the Committee of Administrative Participation filed a constitutional challenge (*amparo*) against several states for the delay in undertaking legislative changes required by the system. The OECD Integrity Review therefore recommended that the Coordination Committee dedicate specific resources to monitoring subnational legislation to ensure that they have the strength of the federal anticorruption laws in order to operate efficiently and to avoid shielding the subnational executive branches from sanctions (OECD, 2017[85]). Local anticorruption systems that are in line with the General Law should be adopted and implemented, and monitored by an anticorruption agency (if established – see below) or otherwise the Coordination Committee.

Going forward, the outcomes of NACS should be monitored and evaluated. If it is not achieving the desired results, Mexico should consider introducing a specialist anticorruption agency, with a clear mandate, specialist staff and sufficient resourcing. Anticorruption agencies have been established in several countries, although different countries have taken different approaches to the scope and institutional structure of these agencies (OECD, 2013[98]). In Mexico, such an agency would need to take account of the government's federal structure, and the consequent devolution of power to subnational governments.

Malaysia offers a recent example of a country making efforts to improve its anticorruption governance framework. In 2018, the new government established the National Centre for Governance, Integrity and Anti-Corruption (GIACC). The GIACC has the mandate to coordinate and monitor all initiatives related to governance, integrity and combating corruption. The National Anticorruption Plan 2019-2023 was launched in January 2019. It envisions making Malaysia a corruption-free country through three specific goals: accountability and credibility of judiciary, prosecution and law enforcement agencies; efficiency and responsiveness in public service delivery; and integrity in business. Taking lessons from the past efforts to combat corruption, monitoring and evaluation have been prioritised.

Table 7. Past OECD recommendations on institutional quality

Recommendations	Actions taken since the 2017 Survey
Build capacity of the sub-national level entities involved in the new anti-corruption system (2017).	27 states have concluded the required legislative changes, 29 have appointed an Anticorruption Prosecutor, 28 have created their Coordination Committee and 22 have completed the state structures.
Extend oral trials to all civil and commercial cases. Boost training, resources and technology for the judiciary (2017).	Oral commercial trials are now applied in almost half of commercial and civil cases, and on average, mercantile matters are resolved in 164 days.
Reform justice institutions, strengthen the rule of law, address security issues and reduce widespread corruption with reforms centred on the efficiency of judicial resolution of civil, commercial and criminal matters, and a strengthening of the transparency of public procurement (2015).	The transition period to oral, adversarial criminal trials was completed in mid-2017. The new General Law on Administrative Responsibilities came into force in July 2017. Implementation of the National and Local Anticorruption Systems is ongoing. A constitutional reform to remove presidential immunity whereby presidents are protected from criminal prosecution has been submitted to the Senate. The Chamber of Deputies has approved a reform expanding the crimes for which the government can confiscate property to include, among others, corruption and fuel theft, and the reforms will now be considered by state legislatures. The creation of a National Guard has been approved. A plan to fight fuel theft is being implemented.

Effective climate mitigation policies can help move Mexico to a strong and sustainable growth path

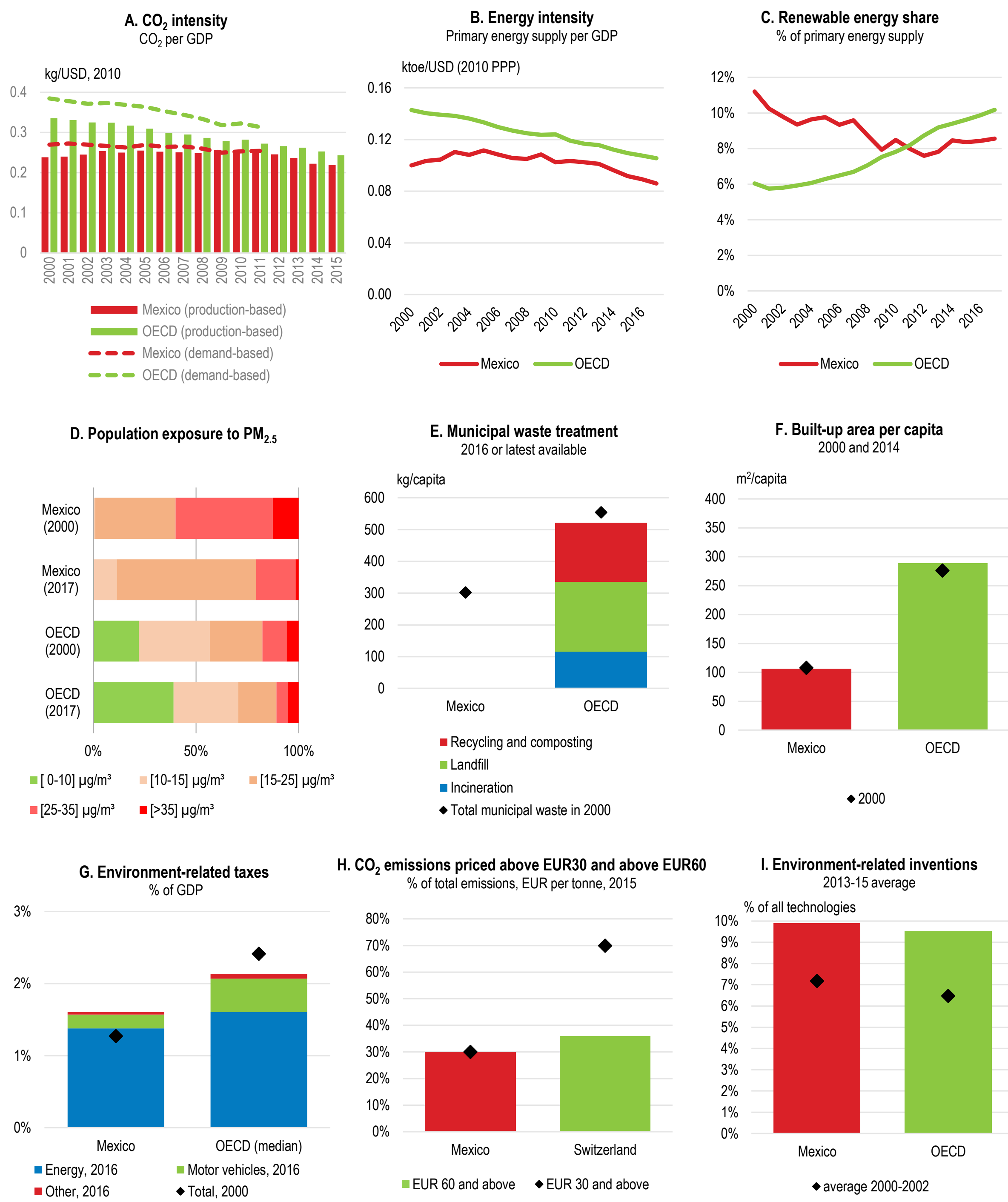
Mexico has supported climate change mitigation early and vigorously

Mexico was the first emerging economy country to submit its intended nationally defined contribution (INDC), marking its commitment to the Paris Climate Agreement. It committed to reducing greenhouse gas emissions (GHGs) by 22% relative to a business-as-usual scenario by 2030. It pledged a reduction of up to 36%, conditional on the provision of adequate financial and technological support from developed countries (IEA, 2017[100]). Mexico also adopted the General Law on Climate Change in 2012, one of the world's first climate laws. It introduced a long-term target of 50% GHG emission reductions compared to 2000. On current policies, Mexico as many other OECD countries, will not meet its emissions targets (IEA, 2017[100]). Further emission reductions need not be costly and can bring additional benefits in terms of lower air pollution and lower congestion for example in urban transport.

Mexico's CO_2 emissions have risen less than GDP in recent years, which may be the result of the reduction in subsidies to fossil fuel use (see below). The energy intensity of the economy has declined (Figure 38). However, fossil fuels still account for 90% of primary energy supply, reflecting Mexico's status as a major oil producer, and the share of renewables has risen modestly in recent years, although solar energy has picked up.

CO_2 emissions have increased the most in electricity generation and transport. Mexico has the highest transport CO_2 emissions per unit of GDP in the OECD. Boosting Mexico's economic development while reducing demand for high-carbon fossil fuels will be an important challenge to meet commitments to climate mitigation.

Figure 38. Green growth indicators for Mexico



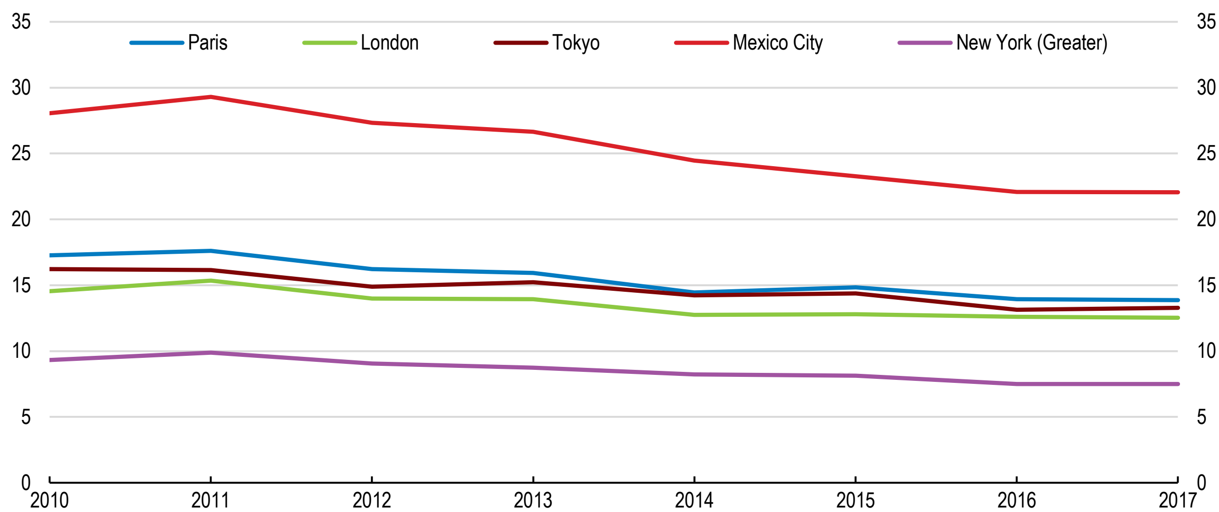
Source: OECD (2018) Green Growth Indicators.

StatLink http://dx.doi.org/10.1787/888933956812

Mexicans are exposed to higher levels of air pollution than the population in other OECD countries. In Mexico City exposure to small particles remains high (Figure 39), reflecting strong car use (ITF, 2017[101]). In part this reflects Mexico City's inland location, which makes it more vulnerable to high pollution exposure than coastal cities. As elsewhere in the OECD, outdoor air pollution impacts labour productivity, health expenditures and agricultural crop yields. Estimated premature mortality from outdoor air pollution has risen to 28 000 per year (Roy and Braathen, 2017[102]). Children are particularly strongly affected. For example, air pollution appears to affect education outcomes of young children markedly and lastingly (Heissel, Persico and Simon, 2019[103]).

Figure 39. Small particle emissions in Mexico City are still high

Mean population exposure to PM 2.5 emissions, 3-year averages, 2010-2017.



Source: OECD Environment Database.

StatLink http://dx.doi.org/10.1787/888933956831

A wide range of policies, discussed below and in Chapter 1, could help Mexico meet its international climate policy commitments and reduce air pollution while boosting economic performance. Reforming urban policies offers an opportunity to reduce pollution and transport CO_2 emissions while boosting productivity. They can also help improve health and well-being and so make Mexico's cities more attractive to businesses and workers, drawing in high-value added, knowledge-intensive services.

Recent estimates suggest that in key policy areas, emission reduction measures would result in cost savings, as upfront investment needs would be more than offset by subsequent savings on fossil fuels and on high-carbon infrastructure spending (INECC, 2018[104]). To reap these benefits, public action is required to expand low-emission electricity generation, move to low-emission transport and improve urban transport and planning.

Progress in pricing would help reduce carbon emissions efficiently

Mexico has made progress in including the costs of energy use more fully in its energy prices. Further progress will be necessary to meet climate policy objectives and lower air pollution. Steps are needed to make sure low-income households and low-skill workers benefit. This would also help gain broad citizens' support.

As part of the 2014 energy reforms, Mexico moved away from subsidies and increased taxes on transport fuels. It also introduced carbon taxes, and competitive elements into energy markets, making them more accessible to new entrants (OECD, 2017[6]). These reforms have increased tax revenues and are expected to improve energy efficiency, raise GDP and reduce CO_2 emissions. However, electricity prices for the residential and agriculture sectors are still far below cost (OECD, 2017[105]). Authorities have recently re-instated subsidies to some types of gasoline by reducing excise taxes above a defined threshold (19.58 pesos at November 2018 pesos) adjusted for inflation, to be reviewed every two weeks. This may constitute a potential implicit subsidy if the international price of gasoline plus domestic mark-ups and transportation costs exceeds the threshold.

The reform makes substantial progress in the effective taxation of carbon emissions, although the overall taxation of emissions remains low, at about one euro per tonne of emissions. This is much lower than the low-end estimate of climate-related cost of carbon emissions of around 30 euros per tonne (Arlinghaus and van Dender, 2017[106]). Coal is taxed at a reduced rate and natural gas is exempt. Uneven carbon pricing reduces efficiency in achieving Mexico's greenhouse gas emission targets. Carbon taxes are an attractive source of tax revenue for economies where a large share of economic activity is not declared to the tax authorities because energy taxes are difficult to avoid. Simulations for the United States Spain, China and India suggest that the economic gains from reducing the informal sector through higher energy taxation are substantial (Bento, Jacobsen and Liu, 2014[107]) (Markandya, Gonzalez-Eguino and M. Escapa, 2013[108]). It is therefore also important to make sure subsidies of fossil fuel and electricity use are fully phased out in the future.

Removing subsidies and increasing taxes on transport fuels are likely to be progressive, as cars are mostly owned by high-income households (Arlinghaus and van Dender, 2017[106]). However low-income households may have less resources to adapt. To maintain unsubsidised prices, it is therefore important to compensate them for the loss of purchasing power with effective income transfers (OECD, 2017[105]). Research in European economies suggests that one third of the revenues from higher energy taxation is sufficient to provide compensation for low-income households. For example, in Bogotá targeted public transport subsidies for poor households increased use of public transport and hourly wages of workers benefiting from the subsidy, suggesting they increased their productivity by giving them access to better jobs. Macroeconomic simulations, including for the Mexican economy, indicate that substantial carbon taxes (around EUR 40 per ton CO_2) worldwide, including in Mexico, would have no long-term effect on aggregate employment in Mexico (Chateau, Bibas and Lanzi, 2018[109]).

To convince citizens of the benefits of reforms to remove energy subsidies and raise carbon taxes, survey evidence suggests that the government should state clearly how budgetary resources gained from such reforms are used. Using carbon tax revenues to further improve environmental outcomes and reduce poverty strengthen citizens' support (Kallbekken and Aasen, 2010[110]; Kallbekken, Kroll and Cherry, 2011[111]; Baranzini and Carattini, 2017[112]). On the other hand, revenue earmarking would introduce additional budgetary rigidities. Good quality governance, notably the absence of corruption, also strengthens support. Moreover, it is important that the relief is front-loaded and clearly visible.

A near-term priority is to reduce coal use and boost renewable energy

Mexico plans to add new coal-fired electricity generation capacity (Climate Action Tracker, 2018[113]). To decarbonise coal-fired electricity generation, it would need to be combined with carbon capture, use and storage (CCUS). CCUS technologies have the potential to play an important role in reducing emissions from the use of fossil fuels. Mexico's energy reforms recognise that fossil fuels will continue to contribute to social and economic development, but must do so in a way that is compatible with the country's ambitious climate goals. The government considers research, development and demonstration projects in CCUS as an integral part of its climate policy. The International Energy Agency (IEA) has welcomed this focused and practical approach.

Mexico has developed a comprehensive CCUS Technology Roadmap published in 2014. The Roadmap articulates a 10-year strategy, including a multi-staged approach to development and deployment. It provides a framework for a range of activities, including: co-ordinating research activity, building capacity, establishing regulations; encouraging private-sector investment; developing pilot projects for CO_2 capture (including on coal or gas-fired power generation); and ultimately the commissioning of a large-scale CCUS demonstration project around 2020. The Roadmap was developed in conjunction with the World Bank and the IEA has commended all parties on a well-considered strategy that could serve as a model for other countries looking to develop CCUS technologies.

Meeting its climate goals in the context of the announced expansion in coal-fired generation would, however, require significant deployment of CCUS on a scale that has not yet been seen in Mexico. Unless Mexico is prepared to commit to such an expansion in CCUS deployment, Mexico should carefully assess the construction of new coal-fired power generating capacity against the trade-off between energy security and climate goals.

Mexico's energy reform also provides support for the deployment of "clean" energies, through two mechanisms. First, electricity retailers have to acquire clean energy certificates, which they obtain from purchasing clean energy or certificates, for example, from other retailers. The price of the certificates will raise profitability and incentives to produce clean energy. Second, suppliers can sell clean energy to retailers at prices fixed in auctions. Clean energy includes renewable energy as well as nuclear power, efficient cogeneration and fossil-fired generation with carbon capture and storage. The required share of clean energy was fixed at 5% in 2018 rising to 5.8% in 2019 and 13.9% in 2022. However, the long-term auctions have been suspended.

It may be cost-effective to combine carbon pricing with support to renewables. The deployment of renewables reduces costs over time as a result of "learning by doing" but also because climate objectives require putting a quick end to building new fossil-fuel fired power (Baldwin, Cai and Kuralbayeva, 2018[114]). Moreover, in an environment characterised by uncertainty about how electricity systems will adapt, transferring all associated risks to low-carbon generators inhibits investment (IEA, 2016[115]). It would therefore be welcomed if the auctions were resumed. This would also reinforce the effectiveness of current plans to develop green financing (Box 5). To provide incentives for suppliers to integrate renewable capacity into networks well, remuneration of electricity produced from intermittent renewable sources should respond to market prices (IEA, 2016[115]). Provision of land for project development and grid connections support auction success.

Box 5. Climate finance policies for Mexico

As part of the public policy for climate mitigation, the government is in the process of implementing a sustainable finance strategy, which includes:

- **Carbon tax.** The government will analyse the performance of the current carbon tax scheme to identify potential reform initiatives that can be part of the comprehensive tax reform planned by the government in the medium term.
- **Carbon Emission Trading System**. Mexico has been working towards establishing a carbon market in the medium term. The initiative plans to work under market-based mechanisms and it has intended that, at the least, a pilot market would be operational by 2020 and fully operational by 2021.
- **Sustainable finance**. The Ministry of Finance has created a directorate, within its organisational structure, to develop a holistic strategy and key actions for financing sustainable growth. The action plan includes:
- **Standardised sustainable taxonomy**. The Ministry of Finance, in collaboration with the central bank, plans to define and develop a standardised sustainable taxonomy across the financial sector to promote the design of financial instruments that will catalyse private investment into low-carbon and climate-resilient technologies.
- **Disclosure and management of climate change risks**. Regulatory reforms to promote the disclosure and management of financial risks stemming from climate change (transitional and physical risks), resource depletion, environmental degradation and social issues, particularly for the pension and insurance schemes.
- **Green budgeting**. The government has finalised the methodology for green budgeting and plans to conclude the mapping exercise by the first semester of this year. This initiative will allow the mainstreaming of climate change aspects into budget planning and will contribute to the calculation of the existing financial gap to support climate change adaptation and mitigation investments.
- **High-impact projects pipeline**. As part of the sustainable finance strategy, the government is developing a high-impact projects pipeline to be financed with green international funds to ensure an efficient use of these resources into high-impact projects for sustainable development; and the design of the financial architecture that will support the project pipeline in the long term.
- **Accountability**. Review the performance of existing trust funds (*fondos y fideicomisos*) directed towards environmental and climate change projects and include results-based criteria to track progress of national commitments and accountability of financial flows.

References

Acemoglu, D. and J. Robinson (2008), "The role of institutions in growth and development", *Working Paper*, No. 10, Commission on Growth and Development, Washington DC, http://www.growthcommission.org. [71]

Ahmad, E., M. Best and C. Pöschl (2012), "Tax reforms in the presence of informality in developing countries: Incentives to cheat in Mexico", *Asia Research Centre Working Paper*, No. 56, http://www.lse.ac.uk/collections/AsiaResearchCentre. [53]

Ajzenman, N., S. Galiani and E. Seira (2015), "On the distributive costs of drug-related homicides", *The Journal of Law and Economics*, Vol. 58/4, pp. 779-803, http://dx.doi.org/10.1086/685075. [95]

Akgun, O., D. Bartolini and B. Cournède (2017), "The capacity of governments to raise taxes", *OECD Economics Department Working Papers*, No. 1407, OECD Publishing, Paris, https://dx.doi.org/10.1787/6bee2df9-en. [51]

Alcaraz, C. (2019), "Effects of inflation on poverty in Mexico", *Banco de México Working Paper*, No. forthcoming, Banco de México. [28]

Alcaraz, C. (2019), "Income inequality and inflation: Evidence from Mexico", *Banco de México Working Paper*. [29]

Alcaraz, C., D. Chiquiar and A. Salcedo (2012), "Remittances, schooling, and child labor in Mexico", *Journal of Development Economics*, Vol. 97/1, pp. 156-165, http://dx.doi.org/10.1016/J.JDEVECO.2010.11.004. [5]

Andrews, D., A. Caldera Sánchez and Å. Johansson (2011), "Towards a better understanding of the informal economy", *OECD Economics Department Working Papers*, No. 873, OECD Publishing, Paris, https://dx.doi.org/10.1787/5kgb1mf88x28-en. [14]

Aranda, L. (2019), "New technologies and their potential applications to old social problems in Mexico: A preamble for discussion", in *OECD Economic Survey of Mexico: Key Research Findings*, OECD Publishing, Paris, (forthcoming). [58]

Araújo, S. (2019), "OECD indicators of trade policies: How does Mexico compare?", in *OECD Economic Survey of Mexico: Key Research Findings*, OECD Publishing, Paris, (forthcoming). [24]

Araújo, S., T. Chalaux and D. Haugh (2018), "Who's in your export market?: The changing pattern of competition in world trade", *OECD Economics Department Working Papers*, No. 1526, OECD Publishing, Paris, https://dx.doi.org/10.1787/d777efc3-en. [1]

Araújo, S. and M. Hitschfeld Arriagada (2019), "A bird's eye view of Mexico's recent trade performance", in *OECD Economic Survey of Mexico: Key Research Findings*, OECD Publishing, Paris, (forthcoming). [2]

Arlinghaus, J. and K. van Dender (2017), "The environmental tax and subsidy reform in Mexico", *OECD Taxation Working Papers*, No. 31, OECD Publishing, Paris, https://dx.doi.org/10.1787/a9204f40-en. [106]

Baldwin, E., Y. Cai and K. Kuralbayeva (2018), "To build or not to build? Capital stocks and climate polic", *Centre for Climate Change Economies and Policy Working Paper*, No. 325, Gratham Research Institute on Climate Change and the Environment, http://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2018/01/Working-Paper-290-Baldwin-et-al-1.pdf. [114]

Banco de México (2018), *Informe trimestral julio-septiembre 2018*, Banco de México, http://www.banxico.org.mx/publicaciones-y-prensa/informes-trimestrales/%7B59EC89F8-15C7-9526-8E46-48B52C302626%7D.pdf. [30]

Banco de México (2018), *Reporte sobre el sistema financiero octubre 2018*, Banco de México, http://www.banxico.org.mx/publicaciones-y-prensa/reportes-sobre-el-sistema-financiero/%7B0B4861B7-2810-7FE9-88FE-2427C182512A%7D.pdf. [32]

Banco de México (2018), *Reporte sobre las economías regionales octubre-diciembre 2017*, Banco de México, http://www.anterior.banxico.org.mx/publicaciones-y-discursos/publicaciones/informes-periodicos/reportes-sobre-las-economias-regionales/%7B04EAE050-A8B1-DA42-9060-2BC2664ACBAA%7D.pdf. [22]

Banco de México (2015), *Informe trimestral abril-junio 2015*, Banco de México, http://www.anterior.banxico.org.mx/publicaciones-y-discursos/publicaciones/informes-periodicos/trimestral-inflacion/%7B38767B01-F0B6-9749-4A00-A5FD82E7BABA%7D.pdf. [21]

Baranzini, A. and S. Carattini (2017), "Effectiveness, earmarking and labeling: Testing the acceptability of carbon taxes with survey data", *Environmental Economics and Policy Studies*, Vol. 19/1, pp. 197-227, http://dx.doi.org/10.1007/s10018-016-0144-7. [112]

Bartolini, D., S. Stossberg and H. Blöchliger (2016), "Fiscal decentralisation and regional disparities", *OECD Economics Department Working Papers*, No. 1330, OECD Publishing, Paris, https://dx.doi.org/10.1787/5jlpq7v3j237-en. [68]

Baumol, W. (1990), "Entrepreneurship: Productive, unproductive, and destructive", *Journal of Political Economy*, Vol. 98/5, pp. 893-921. [78]

Bento, A., M. Jacobsen and A. Liu (2014), *Environmental policy in presence of an informal sector*, http://works.bepress.com/antonio_bento/25. [107]

Bilbiie, F. (2008), "Limited asset markets participation, monetary policy and (inverted) aggregate demand logic", *Journal of Economic Theory*, Vol. 140/1, pp. 162-196, http://dx.doi.org/10.1016/J.JET.2007.07.008. [36]

Bilbiie, F. and R. Straub (2013), "Asset market participation, monetary policy rules, and the great inflation", *Review of Economics and Statistics*, Vol. 95/2, pp. 377-392, http://dx.doi.org/10.1162/REST_a_00254. [38]

Blinder, A. et al. (2008), “Central bank communication and monetary policy: A survey of theory and evidence”, *Journal of Economic Literature*, Vol. 46/4, pp. 910-945, http://dx.doi.org/10.1257/jel.46.4.910. [31]

Chang, H. (2006), “Understanding the relationship between institutions and economic development: Some key theoretical issues”, *WIDER Working Paper*, No. 2006/5, UNU-WIDER, Helsinki, https://www.wider.unu.edu/publication/understanding-relationship-between-institutions-and-economic-development. [70]

Chateau, J., R. Bibas and E. Lanzi (2018), “Impacts of green growth policies on labour markets and wage income distribution: A general equilibrium application to climate and energy policies”, *OECD Environment Working Papers*, No. 137, OECD Publishing, Paris, https://dx.doi.org/10.1787/ea3696f4-en. [109]

Climate Action Tracker (2018), *Climate Action Tracker*, https://climateactiontracker.org/. [113]

COFECE (2018), *Plan estratégico 2018-2021*, Comisión Federal de Competencia Económica,, https://www.cofece.mx/wp-content/uploads/2017/12/PLAN-ESTRATEGICO-2018-2021.pdf. [43]

COFECE (2014), *Trabajo de investigación y recomendaciones sobre las condiciones de competencia en el sector financiero y sus mercados: Resumen ejecutivo*, Comisión Federal de Competencia Económica, Mexico City, https://www.cofece.mx/cofece/images/Estudios/ResumenEjecutivo26-09-14.pdf#pdf. [42]

Colciago, A. (2011), “Rule-of-thumb consumers meet sticky wages”, *Journal of Money, Credit and Banking*, Vol. 43/2-3, pp. 325-353. [37]

CONAIF (2018), *Reporte nacional de inclusión financiera 9*, Consejo Nacional de Inclusión Financiera, https://www.cnbv.gob.mx/Inclusi%C3%B3n/Documents/Reportes%20de%20IF/Reporte%20de%20Inclusion%20Financiera%209.pdf. [39]

CONAIF (2017), *Reporte nacional de inclusión financiera 8*, Consejo Nacional de Inclusión Financiera, https://www.cnbv.gob.mx/inclusi%C3%B3n/Documents/Reportes%20de%20IF/Reporte%20de%20Inclusion%20Financiera%208.pdf. [41]

CONEVAL (2018), *Evolución del valor de la canasta alimentaria*, Consejo Nacional de Evaluación de la Política de Desarrollo Social, https://www.coneval.org.mx/Medicion/MP/Paginas/Lineas-de-bienestar-y-canasta-basica.aspx. [65]

CONEVAL (2016), *Informe de evaluación de la política de desarrollo social 2016*, Consejo Nacional de Evaluación de la Política de Desarrollo Social, https://www.coneval.org.mx/Evaluacion/IEPSM/IEPSM/Paginas/IEPDS-2016.aspx. [56]

Cox-Edwards, A. and E. Rodríguez-Oreggia (2009), “Remittances and labor force participation in Mexico: An analysis using propensity score matching”, *World Development*, Vol. 37/5, pp. 1004-1014, http://dx.doi.org/10.1016/J.WORLDDEV.2008.09.010. [4]

Daude, C. and E. Stein (2007), "The quality of institutions and foreign direct investment", *Economics & Politics*, Vol. 19/3, pp. 317-344, http://dx.doi.org/10.1111/j.1468-0343.2007.00318.x. [73]

Di Bartolomeo, G. and L. Rossi (2007), "Effectiveness of monetary policy and limited asset market participation: Neoclassical versus Keynesian effects", *International Journal of Economic Theory*, Vol. 3/3, pp. 213-218, http://dx.doi.org/10.1111/j.1742-7363.2007.00056.x. [35]

Diario Oficial de la Federación (2015), *Lineamentos para la elaboración y presentación de los análisis costo beneficio de los programas y proyectos de inversión*, https://www.gob.mx/cms/uploads/attachment/file/21174/Lineamientos_costo_beneficio.pdf. [10]

Diario Oficial de la Federación (2012), *Ley de Asociaciones Público Privadas*, http://www.dof.gob.mx/nota_detalle.php?codigo=5230740&fecha=16/01/2012. [12]

Diaz-Cayeros, A. (2016), "Fiscal federal and redistribution in Mexico", in Greer, S., A. Trench and H. Elliott (eds.), *Federalism in Good Times and Bad*. [66]

Dougherty, S. (2014), "Legal reform, contract enforcement and firm size in Mexico", *Review of International Economics*, Vol. 22/4, pp. 825-844, http://dx.doi.org/10.1111/roie.12136. [76]

Easterly, W. and S. Fischer (2001), "Inflation and the poor", *Journal of Money, Credit and Banking*, Vol. 33/2, pp. 160-78. [27]

Égert, B. and P. Gal (2017), "The quantification of structural reforms in OECD countries: A new framework", *OECD Journal: Economic Studies*, Vol. 2016/1, https://dx.doi.org/10.1787/eco_studies-2016-5jg1lqspxtvk. [117]

Ennis, S., P. Gonzaga and C. Pike (2017), "The effects of market power on inequality", *Competition Policy International*, https://www.competitionpolicyinternational.com/the-effects-of-market-power-on-inequality/. [9]

Federal Law on Budget and Treasury Responsibility (2015), *Ley Federal de Presupesto y de Responsabilidad Hacendaria*, http://www.diputados.gob.mx/LeyesBiblio/regley/Reg_LFPRH_300316.pdf. [11]

Finkelstein Shapiro, A. and F. Mandelman (2016), "Remittances, entrepreneurship, and employment dynamics over the business cycle", *Journal of International Economics*, Vol. 103, pp. 184-199, http://dx.doi.org/10.1016/j.jinteco.2016.10.001. [3]

Fournier, J. and F. Fall (2015), "Limits to government debt sustainability", *OECD Economics Department Working Papers*, No. 1229, OECD Publishing, Paris, https://dx.doi.org/10.1787/5jrxv0fctk7j-en. [46]

Gali, J., J. Lopez-Salido and J. Valles (2004), "Rule-of-thumb consumers and the design of interest rate rules", *Journal of Money, Credit, and Banking*, Vol. 36/4, pp. 739-763, http://dx.doi.org/10.1353/mcb.2004.0064. [34]

Gann, A. (2016), *The impact of judicial quality on firm size in Mexico*, Paris School of Economics. [77]

Guillemette, Y. and D. Turner (2018), "The Long View: Scenarios for the World Economy to 2060", *OECD Economic Policy Papers*, No. 22, OECD Publishing, Paris, https://dx.doi.org/10.1787/b4f4e03e-en. [89]

Gupta, S., H. Davoodi and R. Alonso-Terme (1998), "Does corruption affect income inequality and poverty?", *IMF Working Paper*, No. WP/98/76, International Monetary Fund, Washington DC, https://www.imf.org/external/pubs/ft/wp/wp9876.pdf. [84]

Hanappi, T. (2018), "Corporate effective tax rates: Model description and results from 36 OECD and non-OECD countries", *OECD Taxation Working Papers*, No. 38, OECD Publishing, Paris, https://dx.doi.org/10.1787/a07f9958-en. [49]

Hanson, G. (2010), "Why isn't Mexico rich?", *Journal of Economic Literature*, Vol. 48/4, pp. 987-1004, https://www.jstor.org/stable/29779707. [13]

Heissel, J., C. Persico and D. Simon (2019), "Does pollution drive achievement? The effect of traffic pollution on academic performance", *NBER Working Paper*, No. 25489, National Bureau of Economic Research, http://dx.doi.org/10.3386/w25489. [103]

Herman, A. and A. Klemm (2017), "Financial deepening in Mexico", *IMF Working Paper*, No. 17/19, IMF, https://www.imf.org/en/Publications/WP/Issues/2017/01/30/Financial-Deepening-in-Mexico-44602. [40]

IEA (2017), *Energy Policies Beyond IEA Countries: Mexico 2017*, International Energy Agency, Paris, https://webstore.iea.org/energy-policies-beyond-iea-countries-mexico-2017. [100]

IEA (2016), *Re-powering markets: Market design and regulation during the transition to low-carbon power systems*, International Energy Agency, https://webstore.iea.org/re-powering-markets. [115]

IMF (2018), "Mexico: 2018 Article IV", *Country Report*, No. 18/307, International Monetary Fund, Washington DC, https://www.imf.org/en/Publications/CR/Issues/2018/11/07/Mexico-2018-Article-IV-Consultation-Press-Release-Staff-Report-and-Staff-Statement-46343. [18]

IMF (2018), "Mexico: Fiscal transparency evaluation", *Country Report*, No. 18/289, International Monetary Fund, https://www.imf.org/en/Publications/CR/Issues/2018/10/03/Mexico-Fiscal-Transparency-Evaluation-46282. [47]

IMF (2016), *Financial system stability assessment: Mexico*, International Monetary Fund, Washington DC, http://imf.org/external/np/fsap/fssa.aspx. [33]

INECC (2018), *Costos de las contribuciones nacionalmente determinadas de México: Medidas sectoriales no condicionadas*, INECC, http://www.gob.mx/inecc. [104]

Institute for Economics & Peace (2018), *Mexico Peace Index 2018: Mapping the evolution of peace and its drivers*, http://www.economicsandpeace.org. [94]

ITF (2017), "Income inequality, social inclusion and mobility", *Roundtable Report*, No. 164, International Transport Forum, Paris, https://www.itf-oecd.org/sites/default/files/docs/income-inequality-social-inclusion-mobility.pdf. [101]

ITF (2017), *Strategic Infrastructure Planning: International Best Practice*, International Transport Forum, Paris, https://www.itf-oecd.org/strategic-infrastructure-planning. [88]

Jaitman, L. and I. Torre (2017), "A systematic approach to measuring the costs or crime in 17 Latin American and Caribbean Countries", in Jaitman, L. (ed.), *The Costs of Crime and Violence New Evidence and Insights in Latin America and the Caribbean*, Inter-American Development Bank. [93]

Javorcik, B. and S. Wei (2009), "Corruption and cross-border investment in emerging markets: Firm-level evidence", *Journal of International Money and Finance*, Vol. 28/4, pp. 605-624, http://dx.doi.org/10.1016/J.JIMONFIN.2009.01.003. [74]

Kallbekken, S. and M. Aasen (2010), "The demand for earmarking: Results from a focus group study", *Ecological Economics*, Vol. 69/11, pp. 2183-2190, http://dx.doi.org/10.1016/J.ECOLECON.2010.06.003. [110]

Kallbekken, S., S. Kroll and T. Cherry (2011), "Do you not like Pigou, or do you not understand him? Tax aversion and revenue recycling in the lab", *Journal of Environmental Economics and Management*, Vol. 62/1, pp. 53-64, http://dx.doi.org/10.1016/J.JEEM.2010.10.006. [111]

Kurul, Z. and A. Yalta (2017), "Relationship between institutional factors and FDI flows in developing countries: New evidence from dynamic panel estimation", *Economies*, Vol. 5/2, p. 17, http://dx.doi.org/10.3390/economies5020017. [75]

Laeven, L. and C. Woodruff (2007), "The quality of the legal system, firm ownership, and firm size", *Review of Economics and Statistics*, Vol. 89/4, pp. 601-614, http://dx.doi.org/10.1162/rest.89.4.601. [16]

Le Clercq, J. and G. Rodríguez Sánchez Lara (2016), *Global Impunity Index Mexico IGI-MEX 2016*, Center of Studies on Impunity and Justice (CESIJ), http://www.udlap.mx/cesij. [86]

Liu, C., T. Moldogaziev and J. Mikesell (2017), "Corruption and state and local government debt expansion", *Public Administration Review*, Vol. 77/5, pp. 681-690, http://dx.doi.org/10.1111/puar.12711. [82]

Markandya, A., M. Gonzalez-Eguino and M. Escapa (2013), "From shadow to green: Linking environmental fiscal reforms to the informal economy", *Energy Economics*, Vol. 40Sup. 1, pp. 108-118. [108]

Martínez Trigueros, L. (1998), "El efecto de la inflación en la distribución del ingreso", *Documento de Investigación*, No. 9806, Banco de México, http://www.anterior.banxico.org.mx/publicaciones-y-discursos/publicaciones/documentos-de-investigacion/banxico/%7B5713C133-3FA7-179E-F854-8FF84F108BB2%7D.pdf. [25]

McKinsey Global Institute (2017), *Bridging infrastructure gaps: Has the world made progress?*, McKinsey & Company, https://www.mckinsey.com/~/media/McKinsey/Industries/Capital%20Projects%20and%20Infrastructure/Our%20Insights/Bridging%20infrastructure%20gaps%20has%20the%20world%20made%20progress/Bridging%20infrastructure%20gaps%20How%20has%20the%20world%20made%20progre. [118]

Meehan, L. (2019), "Selected competition issues in Mexico", in *OECD Economic Survey of Mexico: Key Research Findings*, OECD Publishing, Paris, (forthcoming). [20]

Meehan, L. (2019), "Selected infrastructure issues in Mexico", in *OECD Economic Survey of Mexico: Key Research Findings*, OECD Publishing, Paris, (forthcoming). [87]

O'Reilly, P. (2018), "Tax policies for inclusive growth in a changing world", *OECD Taxation Working Papers*, No. 40, OECD Publishing, Paris, https://dx.doi.org/10.1787/1fdafe21-en. [52]

OECD (2019), *From Poverty to Prosperity? Mexico's Poverty Reduction Strategy in Comparative Perspective*, OECD Publishing (forthcoming), Paris. [57]

OECD (2018), *Digital Platforms and Competition in Mexico*, OECD, http://www.oecd.org/daf/competition/EN-WEB-REPORT-Digital-platforms-and-competition-in-Mexico.pdf. [44]

OECD (2018), *Financing SMEs and Entrepreneurs 2018: An OECD Scoreboard*, OECD Publishing, Paris, https://dx.doi.org/10.1787/fin_sme_ent-2018-en. [45]

OECD (2018), *Getting it Right: Strategic Priorities for Mexico*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264292062-en. [59]

OECD (2018), *OECD Economic Outlook, Volume 2018 Issue 2*, OECD Publishing, Paris, https://dx.doi.org/10.1787/eco_outlook-v2018-2-en. [23]

OECD (2018), *OECD Territorial Reviews: Morelos, Mexico: Monitoring Progress and Special Focus on Accessibility*, OECD Territorial Reviews, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264304482-en. [67]

OECD (2018), *Summary of the Proceedings of the OECD-Mexico Tax Policy Workshop October 2018*. [50]

OECD (2018), *Taxing Wages 2018*, OECD Publishing, Paris, https://dx.doi.org/10.1787/tax_wages-2018-en. [55]

OECD (2017), *Mexico's efforts to phase out and rationalise its fossil-fuel subsidies*, https://www.oecd.org/site/tadffss/Mexico-Peer-Review.pdf. [105]

OECD (2017), *OECD Economic Surveys: Mexico 2017*, OECD Publishing, Paris, https://dx.doi.org/10.1787/eco_surveys-mex-2017-en. [6]

OECD (2017), *OECD Integrity Review of Mexico: Taking a Stronger Stance Against Corruption*, OECD Public Governance Reviews, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264273207-en. [85]

OECD (2017), *Pensions at a Glance 2017: OECD and G20 Indicators*, OECD Publishing, Paris, https://dx.doi.org/10.1787/pension_glance-2017-en. [63]

OECD (2016), *OECD Reviews of Health Systems: Mexico 2016*, OECD Reviews of Health Systems, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264230491-en. [60]

OECD (2016), *OECD Reviews of Pension Systems: Mexico*, OECD Reviews of Pension Systems, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264245938-en. [64]

OECD (2015), *Measuring Well-being in Mexican States*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264246072-en. [8]

OECD (2015), *OECD Economic Surveys: Mexico 2015*, OECD Publishing, Paris, http://dx.doi.org/10.1787/eco_surveys-mex-2015-en. [116]

OECD (2015), *OECD Guidelines on Corporate Governance of State-Owned Enterprises, 2015 Edition*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264244160-en. [19]

OECD (2015), *OECD Urban Policy Reviews: Mexico 2015: Transforming Urban Policy and Housing Finance*, OECD Urban Policy Reviews, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264227293-en. [69]

OECD (2014), *Recommendation of the Council on Principles for Independent Fiscal Institutions*, OECD, Paris, http://www.oecd.org/gov/budgeting/OECD-Recommendation-on-Principles-for-Independent-Fiscal-Institutions.pdf. [48]

OECD (2013), *Specialised Anti-Corruption Institutions: Review of Models: Second Edition*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264187207-en. [98]

OECD/IDB/CIAT (2016), *Taxing Wages in Latin America and the Caribbean 2016*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264262607-en. [54]

OECD/IMCO (2013), *Strengthening Evidence-based Policy Making on Security and Justice in Mexico*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264190450-en. [72]

OECD et al. (2014), *Achieving stronger growth by promoting a more gender-balanced economy, Report prepared for the G20 Labour and Employment Ministerial Meeting*, https://www.oecd.org/g20/topics/employment-and-social-policy/ILO-IMF-OECD-WBG-Achieving-stronger-growth-by-promoting-a-more-gender-balanced-economy-G20.pdf. [7]

Quah, J. (2017), “Singapore’s success in combating corruption: lessons for policy makers”, *Asian Education and Development Studies*, Vol. 6/3, pp. 263-274, http://dx.doi.org/10.1108/AEDS-03-2017-0030. [92]

Ríos, V. (2018), “The Missing Reform: Strengthening the Rule of Law in Mexico”, in Ríos, V. and D. Wood (eds.), *The Missing Reform: Strengthening the Rule of Law in Mexico*, Wilson Center, Washington DC, https://www.wilsoncenter.org/publication/the-missing-reform-strengthening-the-rule-law-mexico. [90]

Ríos, V. (2017), “Crime and violence effects on economic diversity: The case of Mexico’s drug war”, https://scholar.harvard.edu/files/vrios/files/crimeanddiver2017_v4.pdf. [83]

Romer, C. and D. Romer (1999), “Monetary policy and the well-being of the poor”, *Economic Review* Q I, pp. 21-49. [26]

Rothstein, B. and J. Teorell (2015), “Getting to Sweden, Part II: Breaking with corruption in the nineteenth century”, *Scandinavian Political Studies*, Vol. 38/3, pp. 238-254, http://dx.doi.org/10.1111/1467-9477.12048. [91]

Roy, R. and N. Braathen (2017), “The Rising Cost of Ambient Air Pollution thus far in the 21st Century: Results from the BRIICS and the OECD Countries”, *OECD Environment Working Papers*, No. 124, OECD Publishing, Paris, http://dx.doi.org/10.1787/d1b2b844-en. [102]

SEGOB (2018), *Modelo Óptimo de la Función Policial: Diagnóstico Nacional Sobre las Policías Preventivas de las Entidades Federativas*, Secretaría de Governación, Mexico City, https://www.gob.mx/sesnsp/articulos/actualizacion-del-modelo-optimo-de-la-funcion-policia. [96]

SHCP (2018), *Presupuesto de Gastos Fiscales 2018*, Secretaría de Hacienda y Crédito Público, https://www.gob.mx/cms/uploads/attachment/file/340074/PGF_2018.pdf. [62]

Shleifer, A. and R. Vishny (1993), “Corruption”, *The Quarterly Journal of Economics*, Vol. 108/3, pp. 599-617, http://dx.doi.org/10.2307/2118402. [81]

Sistema Nacional Anticorrupción (2019), *Seguimiento Sistemas Locales Anticorrupción de las Entidades Federativas: Actualización del 8 de febrero de 2019*, http://sna.org.mx/wp-content/uploads/2019/02/Seguimiento_32SLA-08.02.2019.pdf. [99]

Sobel, R. (2008), “Testing Baumol: Institutional quality and the productivity of entrepreneurship”, *Journal of Business Venturing*, Vol. 23/6, pp. 641-655, http://dx.doi.org/10.1016/J.JBUSVENT.2008.01.004. [79]

Suárez-Enríquez, X. and Ú. Indacochea (2018), *A Fiscalía that Works in Mexico*, Washington Office on Latin America (WOLA), Washington DC, https://www.wola.org/wp-content/uploads/2018/04/Report-Fiscalia-ENG.pdf. [97]

Sukiassyan, G. and J. Nugent (2008), “Associations versus registration as alternative strategies of small firms”, *Small Business Economics*, Vol. 31/2, pp. 147-161, http://dx.doi.org/10.1007/s11187-007-9085-7. [17]

Sukiassyan, G. and J. Nugent (2005), “Efficiency of the legal system, regulation costs and firm strategies for achieving formality”, Department of Economics, University of Southern California, https://arefiles.ucdavis.edu/uploads/filer_public/2014/03/27/firm_formality.pdf. [15]

Wasilczuk, J. and K. Stankiewicz (2017), “Unproductive entrepreneurship - The case of the Polish economy”*, GUT FME Working Paper Series A*, https://ideas.repec.org/p/gdk/wpaper/45.html. [80]

World Bank (2016), *Mexico Public Expenditure Review*, World Bank, http://documents.worldbank.org/curated/en/284151472615491033/pdf/AUS10694-WP-P150646-PUBLIC-UnitedMexicanStatesPublicExpenditureReviewFinalReportEnglish.pdf. [61]

Annex A. Recent policy reforms

Table A.1. Details of recent policy reforms

Policy area	Reform area/actions
Tax policy	Personal Income Tax: Top personal income tax rate increased to 35% and limits imposed on tax deductions. A capital gains and dividend tax of 10% was introduced. Corporate Income Tax: limits on depreciation allowances were imposed and the fiscal regime that allowed firms belonging to a business group to file taxes jointly was eliminated. A number of loopholes and exemptions that allowed for accelerated deduction of investment expenses were removed or reformed. The preferential tax treatment of maquiladoras was revised to make it more neutral. In 2019, CIT in the northern border zone was reduced as a temporary, two-year measure to stimulate local economic activity. Value-added Tax: base broadening: reduced VAT rates in the border region were abolished in 2014, but reintroduced in 2019 as a temporary measure, and special exemptions for maquiladoras were removed. A tax on high-caloric foods and sweetened drinks was introduced. Informality: Fiscal (the RIF – Régimen de Incorporación Fiscal) and social security regimes for incorporation introduced in 2014 to fight informality. Moved away from transport fuel subsidies and increased special taxation on these fuels. Introduced carbon tax for fuels outside the transport sector in 2014. In 2017, an R&D tax credit was re-introduced. In 2019, universal compensation whereby taxpayers could automatically compensate other tax credits against VAT was eliminated. Digital economy: from April 2019, digital platform providers will be required to withhold VAT and income tax of 'gig economy' workers using their platforms.
Fiscal federalism	An incentive for municipalities to transfer the administration of the property tax to the state government was established in the Fiscal Federalism Law in 2014. VAT rates were unified across states. In 2016, the Federal Financial Discipline Law for States and Municipalities was passed to promote sustainable public finances, a responsible use of public design, and reinforce subnational accountability and transparency. In 2019, some components of Ramo 23 (discretionary transfers fund) were removed.
Financial sector	2014 reforms to strengthen the regulatory powers of CNBV and CONDUSEF, increase banking competition, strengthen development banks, improve and streamline bankruptcy procedures and formalise the incorporation of Basel III rules. A National Financial Inclusion Strategy was finalised 2016. In 2017, a regulatory framework for FinTech was established, and initial secondary regulatory issued in September 2018, with additional secondary regulation due to be issued in March 2019 and March 2020. In January 2019, an eight point financial sector plan was announced.
Competition policy	In 2013, two new autonomous competition authorities were created – COFECE and IFT – with greater independence, resourcing and powers. In 2014, a new Federal Economic Competition Law was enacted, granting the authorities new powers. This included the ability to regulate access to essential facilities, undertake market studies and conduct "dawn raids". Criminal sanctions for cartels have been reinforced. Specialised competition courts were created. Appeals regarding the legality of the proceedings of COFECE and IFT no longer have suspensive effects. However, as part of broad authority measures, the 2019 budget reduced for all ministries and public entities their resources and salary caps were introduced also for COFECE and IFT.
Regulatory reform	Several measures that formed part of the *Justicia Cotidiana* programme, which was implemented in all states (including federal government engaging with state and municipal governments to simplify business licences and construction permits, reduce local administrative burdens and diagnose regulatory reform in key sectors). Constitutional reform to establish a national policy on regulatory improvement was approved in February 2017. The General Law for Regulatory Improvement was passed in May 2018, which establishes the duties and responsibilities that state and municipal governments must follow to improve their regulatory frameworks.
Telecommunications and broadcasting	A new regulator (IFT) with exclusive authority for regulation and competition enforcement in the telecommunications and media industries was formed in 2013, and has a range of new regulatory capabilities to promote competition. IFT was granted the responsibility of determining the existence of preponderant operators and impose the necessary measures to ensure competition. In 2019, the *Red Troncal* tender was suspended, and the *Internet para Todos* initiative was launched, aiming to improve connectivity in underprivileged locations that have low or no connectivity.

Energy market	As part of the 2013 energy reforms, new sector regulators were created (with legal independence and budgetary autonomy). In 2019, their budgets were reduced and announcements made that they will be reviewed. In 2016, CFE's network and generation activities were legally separated. In 2014, PEMEX and CFE were turned into a "productive state enterprise" with improved governance. In 2019, plans to strengthen PEMEX and reinforce its budget were announced. The 2013 energy reforms opened domestic and foreign investors can enter oil and gas exploration, production and transportation sectors, and the refining and marketing of hydrocarbons. In late 2018, it was announced that existing contracts would be respected, but further tenders would be postponed. Retail fuel prices were liberalised in 2017. In late 2018, a National Refining Plan was created, aiming to achieve self-sufficient energy generation by rehabilitating PEMEX's 6 refineries and constructing a new one. In early 2019, the 4th clean energy auction was cancelled.
Labour market and tackling informality	The 2012 Labour Reform acknowledge new modalities of hiring and employment as temporary work, teleworking, hourly work and outsourcing. In June 2014, a constitutional reform raised the minimum working age from 14 to 15 years. In 2016, a constitutional amendment was approved to reform collective bargaining and the guarantee of union representation. The reform transfers the administration of employment matters from the conciliation and arbitration boards to the labour courts. It also proposes the creation of a decentralised federal agency for conciliation, with autonomy of management and budget, with national powers for the registration of all collective labour contracts and trade union organisations. In a follow-up to the constitutional reform approved in February 2017, regarding the administration of labour justice, initiatives to reform the secondary legislation were presented to advance this issue.
Election system	Following the 2014 reform to Article 41 of the Constitution, re-election of federal deputies, senators, mayors and local deputies is now allowed. Rules were established to increase gender equality (e.g., national lists for proportional representation in each party).
Education quality	In 2012, a constitutional reform made quality education a right for all Mexicans. Constitutional autonomy over the evaluation of Mexico's compulsory education system was granted to the National Institution for Education Evaluation (INEE) in 2012. In 2013, three complementary legislative proposals were approved: the General Law of the Professional Teaching Service, the Law of the National Institute for Evaluation of Education and reforms to the General Law of Education. The 2013 Professional Teaching Service (*Servicio Profesional Docente*) established a teacher evaluation system. A New Education Model was introduced in 2017, which reforms the curriculum for compulsory education to ensure that students are able to develop the skills required in the 21st century. Other policy actions included continued efforts to increase coverage at all educational levels with an emphasis on transitions, permanence and completion of studies; strengthening of school management autonomy through increased participation of parents by augmenting the number of active social participation councils; continued to invest in educational infrastructure; implementation of the Strategy for the Strengthening and Transformation of the Normal Schools, aligning the curriculum and teaching practices to the requirements of the New Educational Model; constitution of a National System of Upper Secondary Education that integrates and articulates the 33 existing subsystems aimed at strengthening the continuity of educational trajectories, as well as reducing administrative burdens. In 2019 the model for teacher evaluation has been replaced by a new one based on teaching observation in the class-room, and the analysis of practices to improve student learning.
Judicial system and security	Measures that are part of the *Justicia Cotidiana* programme (e.g., commercial oral trials). A new unified National Code of Criminal Procedure was adopted in all states and at the federal level in 2014, with further amendments to the Code in 2016. In 2014, the Constitution was amended to replace the Attorney General's Office with a more autonomous Prosecutor General. Mexico's first Prosecutor General was appointed in January 2019. The transition period to oral, adversarial criminal trials was completed in mid-2017. A constitutional reform to remove presidential immunity whereby presidents are protected from criminal prosecution has been submitted to the Senate. The Chamber of Deputies has approved a reform expanding the crimes for which the government can confiscate property to include, among others, corruption and fuel theft, and the reforms will now be considered by state legislatures. The creation of a National Guard has been approved in the lower house. A plan to fight fuel theft is being implemented.
Anticorruption and transparency	The National Anticorruption system was created to improve and facilitate co-ordination in the prevention, detection and sanctioning of corruption. However, it has not been fully implemented. The General Law of Administrative Responsibilities (GLAR) heightened penalties for those engaged in corruption, and obliges public servants to disclose their tax returns, submit asset declarations and declare conflicts of interest. A national auditing system was established to harmonise anti-corruption and integrity policies and capacities across Mexico. A system to allow citizens to submit complaints and allegations of corruption and follow cases was launched. A General Law of Transparency was enacted in 2015 and states have compiled with the new requirements.
Innovation system	Creation of Coordination of STI in the Office of the President in January 2013, which has been coordinating the National Digital Strategy. Increase of CONACYT's budget by about 20% in 2014. Goal of increasing R&D spending to 1% of GDP by 2018 set out in Special Programme for STI 2014-2018. The Law of Special Economic Zones was approved in 2016 and agreements for seven SEZs have been signed. Roll-out of Red Compartida wholesale mobile network is underway.

Modernisation of agriculture	PROAGRO programme introduced in 2013 reformed agricultural subsidies. Technical upgrading of irrigated lands (*Programa de Tecnificación del Riego*), which provides subsidies for the introduction of irrigation technology in agricultural plots. Programme of agri-parks and agricultural clusters (*Sistema Nacional de Agroparques*) was established to provide subsidies for the design, building and operation of agri-parks in areas with agricultural potential. In 2019, guaranteed minimum prices for small producers of 5 agricultural products were introduced.
Unemployment insurance, pensions and social benefits	Prospera launched in 2014 (revamped cash transfer programme), with better links to education, training and formal employment to promote self-sufficiency. The scheme of social programmes (including PROSPERA) is currently under review. Initiatives that have been announced as of early 2019 include a scholarship and training programme for young people, a universalisation of pensions and a double of payment amounts, microcredits without interest to small entrepreneurs and a special programme of cash transfers and scholarhsips for residents of communities where there is a high incidence of fuel theft.
Health system	Increased health care access through *Sistema de Protección Social en Salud* (including the insurance scheme Seguro Popular). A National Strategy for the Prevention and Control of Overweight, Obesity and Diabetes was launched in 2013. In 2016, the National Agreement Towards Health Service Universalisation was signed by Ministry of Health, ISSSTE, IMSS and 3 states. The number of agreements to exchange health services between institutions has increased. Further integration and improvement of the purchasing function of the health system through the activities of the Interinstitutional Commission for Price Negotiation of Medicines and other Medical Inputs of monopolistic nature, as well as the consolidate purchase of medicines and medical devices for all public institutions that IMSS coordinates.
Urban planning	Establishment of National Urban Development Programme 2014-2018 and National Housing Programme 2014-2018.

Source: Various sources including OECD (2015[116]); OECD (2017[6]); OECD (2018[59]).

Annex B. Quantification of the impact of structural reforms

The OECD long-term model includes projections based on different policy scenarios (Guillemette and Turner, 2018[89]). This encompasses policy choices in areas where Mexico and other emerging economies tend to lag (eg, education and institutional quality), and in areas where advanced OECD countries display substantial heterogeneity (eg, product market regulations and innovation policies).

The long-term model integrates recent OECD empirical work on the impacts of structural reforms (Égert and Gal, 2017[117]), but examines a longer reform window and more general policy shocks. The long-term model is used here as many of the specific policy shocks in reforms in the shorter-term model are more relevant for high-income OECD countries.

A baseline scenario establishes the projected growth path in a "no policy change" situation, although this does incorporate the likely evolution of education levels based on demographics and the average path of educational expansion in other countries (which would increase Mexico's average years of schooling from 9.2 in 2017 to 11.8 years by 2060). In areas where Mexico currently performs well below the OECD median, the policy shock brings Mexico up to the this level, while in other areas where Mexico is closer to the OECD median, the policy shock brings Mexico up to the current level of leading OECD countries. The size of the public investment shock is based on estimates of the additional infrastructure spending needed to close the infrastructure gap by 2035 (McKinsey Global Institute, 2017[118]). Thus, the following reform scenarios are compared with the baseline:

- Improve governance to the OECD median by 2060 (measured by the World Bank's rule of law indicator)
- Increase educational attainment to the leading OECD countries (average of top five countries) by 2040 and reduce the Gini coefficient to the OECD median by 2060
- Improve product market regulations to the leading OECD countries by 2030
- Increase research and development spending to the OECD median by 2030
- Increase public investment by 1.3 percentage points of GDP from 2025

These scenarios suggest that the combined implementation of these reforms could increase Mexico's GDP per capita by 12% by 2030 compared with the "no policy change" scenario (Figure 37). The gains are mainly driven by improved labour efficiency (ie, productivity) (Figure 37), with capital per worker also making a large contribution. The contribution from increased employment is much smaller. While Mexico still has significant room to increase employment levels, particularly among women (Figure 7), productivity and capital intensity are more important channels for the particular policies examined. Labour market reforms, which would have a greater impact on employment rates, are not examined using the long-term model in the case of Mexico. First, the policy interventions that can be modelled are often less relevant given the particular features of the Mexican system. For example, the model estimates that increasing the unemployment benefit replacement rate would have a negative impact on the employment rate. However, Mexico does not have an unemployment benefit or insurance system, and it could in fact be a growth-enhancing alternative to mitigate the personal costs of job loss compared with the current system of high and uncertain dismissal costs and narrow conditions for justified dismissals for permanent formal workers. Moreover, all of the modelled labour market policies apply only to formal workers. However, given that more than half of Mexico's workforce are informal, the modelled labour market policies will affect the relative costs and therefore incentives to hire formal versus informal workers.

There are also some important caveats to the presented results. Policy complementarities are not explicitly accounted for. For example, the improvements to governance may have an even bigger impact than the model suggests given the importance of institutional quality to the implementation of other policy reforms.

A more specific caveat relates to the size of the estimated payoff from increased public investment. The size of the chosen policy change was an increase in public investment of 1.3 percentage points of GDP a year, which was based on McKinsey Global Institute (2017[118]) estimates of what would be needed to close the infrastructure gap in Mexico. This increase delivers a very small payoff in terms of GDP per capita in the model. The model estimates a relationship between a flow measure of public investment and GDP per capita. However, given the low starting stock of infrastructure in Mexico, this is likely to underestimate the marginal return from public investment. Once again, important complementarities are also not captured in the model, as lack of infrastructure can create a bottleneck that prevents improvements across several areas. For example, improved digital infrastructure can contribute to inclusive growth by facilitating the development of the digital economy, fostering innovation and technology adoption and opening options for better delivery of numerous services from financial to social and educational services, among others. Improved transport can support green growth, boost productivity, enhance educational and good quality job opportunities for citizens.

Thematic chapter

Chapter 1. Boosting inclusive growth

Mexico's GDP per capita levels remain the lowest in the OECD, reflecting low growth rates stemming mainly from poor labour productivity performance. To allow convergence towards higher living standards and well-being, Mexico needs structural policy reforms that can deliver robust, sustainable and inclusive growth. This chapter, therefore, focuses on win-win policies to boost productivity and reduce inequalities in order to deliver prosperity for all Mexicans.

Reducing high informality is a priority area and will require coordinated actions in taxation, business and labour regulations and the social safety net to better align incentives to formalise and drive resources towards more productive (formal) firms. Increasing educational outcomes will set the foundations for quality, formal jobs and higher value-added production and exports. While access to education has improved, more efforts are needed to raise quality, especially in early childhood education and care, shift resources towards lower education levels and prioritise schools in poor areas and students from disadvantaged backgrounds. Improvements in urban planning and transport would help raise the productivity potential of Mexico's cities and improve environmental outcomes. The creation of joint metropolitan governance arrangements to deliver integrated public services would also increase the efficiency of public spending and improve the well-being of citizens.

Women's skills remain a source of untapped potential to lift growth, inclusion and reduce poverty. Inequalities start early, as the high share of young women not in education, employment, or training (NEETs) prevents them from accessing good quality formal jobs later in life. Current policies to reduce the high share of NEETs should have a focus on women. Expanding early childhood education and care would increase both women's labour market participation as well as enhance educational outcomes.

Boosting productivity and sharing the benefits of growth more widely to raise prosperity for all

Mexico's GDP per capita levels remain the lowest in the OECD, reflecting low growth rates stemming mainly from poor labour productivity performance. After losing ground, Mexico's GDP per capita has been slowly converging towards the OECD average over the last decade. However, this recent improvement has been driven by relatively large increases in labour utilisation, while labour productivity growth has not been strong enough to drive convergence towards other OECD countries (Figure 1.1). Boosting productivity is therefore of crucial importance to raising the living standards of all Mexicans.

Moreover, the role of productivity will be increasingly important as Mexico's demographic dividend fades. The old-age dependency ratio is set to increase from 9.8 in 2015 to 29.2 in 2050. In short, productivity gains are needed in order to achieve more robust growth. Furthermore, it will be important to share these gains more widely in order to bring down the very high levels of inequality (Figure 1.2a).

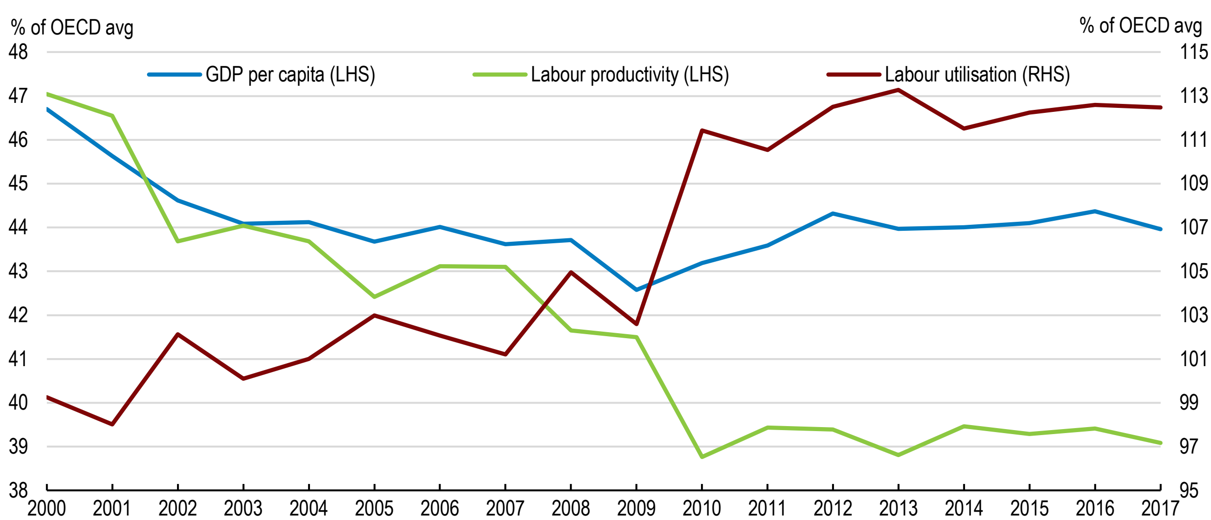
There is, however, room to raise growth by also increasing women labour force participation. Some progress has been made over the years as women's participation rate has raisen from 36% in 1990 to 47% in 2017. Still, it remains the second lowest among OECD countries, and significantly lower than men's participation rate of 82% (Figure 1.2b). Many barriers prevent Mexican women from engaging in the labour force. Inequalities start early as young people not in education, employment or training (NEET) are predominantly women. Policies to reduce high dropout rates should be particularly geared towards women (see the section "Raising educational outcomes to combat informality and boost human capital"). The plan should include expanding early childhood education and care (ECEC), as motherhood is a key driver of NEET status and Mexico's teen pregnancy rate remains the highest among OECD countries (OECD, 2017[1]). Reducing high levels of insecurity could also help improve school attendance and labour market participation (Figure 1.3).

Another hurdle women face in the labour market is the still low supply of ECEC services. Mexico has made significant progress in expanding access to ECEC but demand still far outstrips supply (OECD, 2017[1]). Enrolment rates for children under four years of age are particularly low. Expanding good quality ECEC services is a priority. This is a win-win policy, conducive to higher growth via the inclusion of women in the labour market, lower gender inequalities and reduced poverty rates (including among children, as maternal employment is strongly correlated with child poverty across countries), as well as boosting educational outcomes and reducing income inequalities in the future (see education section). The length of the pre-school day for three- to five-year olds also needs to be increased, as most programmes are currently only half-a-day long. Against this background, the halving of the government budget line for *Estancias Infantiles* - a programme to finance the care of children of mothers working in the informal sector – is particularly worrying. The budget cuts were motivated by detected abuse in the use of funds by the Supreme Audit Institution (ASF) and corruption in some facilities. The government intends to move to a unified ECEC system delinked from parent's labour market status, increase coverage in marginalised areas and raise participation of disabled and indigenous children, which is welcome. However, the budgetary cut is very likely to reduce women's participation in the labour market, further reducing the incomes of the most vulnerable households and leaving some children without educational care.

Culture norms also matter. Women are traditionally seen as caregivers. Mexican women perform over three-quarters of all unpaid housework and childcare in their homes – one of the highest burdens of unpaid work in the OECD – and these hours in unpaid work restrict the time that could be spent in paid work. The culture of long working hours reinforces the traditional gender roles as fathers are more likely than mothers to be able to spend long days at work (OECD, 2017[1]).

Going forward, the government could also move to a more gender-equitable use of parental leave as recommended in the 2017 OECD Economic Survey of Mexico (OECD, 2017[2]). Eligible mothers in formal jobs are entitled to 12 weeks of publicly-funded paid maternity leave, while eligible fathers are entitled to five days of employer-sponsored paternity leave. These are among the lowest entitlements in the OECD, and the fact that paternity leave is paid for by employers rather than the government likely reduces fathers' take-up. More OECD countries are moving towards reserving non-transferable periods of paid parental leave exclusively for use by fathers (OECD, 2016[3]). This would also help reduce the traditional role of women as caregivers. Mexico could also strengthen enforcement of recent changes in legislation that discourage gender discrimination in the workplace, as recommended in the 2017 OECD Economic Survey of Mexico (OECD, 2017[2]).

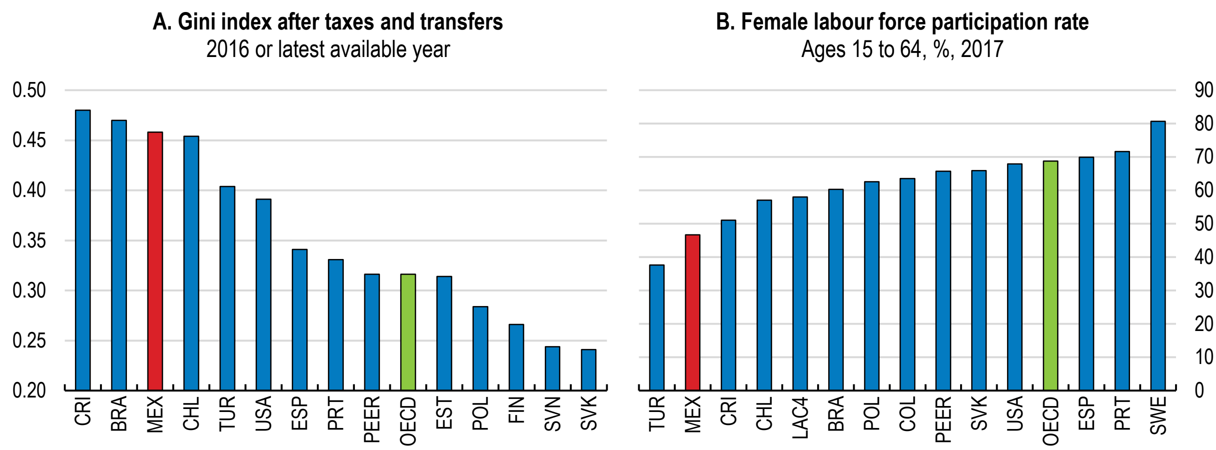
Figure 1.1. Growth has not been strong enough to allow for convergence to higher living standards



Note: GDP per capita and labour productivity relative to the OECD average in constant PPP-adjusted USD terms. Labour productivity is GDP per hour worked. Labour utilisation is hours worked per capita.
Source: OECD Productivity Database.

StatLink https://doi.org/10.1787/888933956850

Figure 1.2. Inequality is high and the labour market could be more inclusive

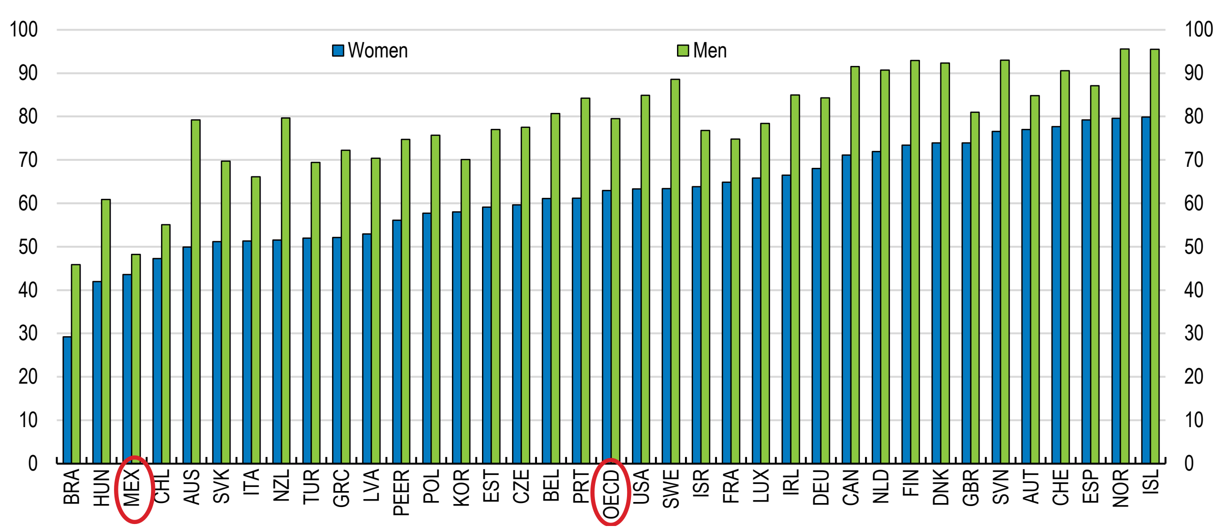


Note: OECD refers to the simple average across all OECD countries for the latest year with available data. LAC4 refers to the simple average of Brazil, Chile, Colombia and Costa Rica. PEER refers to the simple average of the 10 non-Latin American OECD countries with the lowest PPP-adjusted GDP per capita: Estonia, Greece, Hungary, Latvia, Lithuania, Poland, Portugal, Slovak Republic, Slovenia and Turkey.
Source: OECD Income Distribution and Poverty Database; and OECD Social Protection and Well-being Database.

StatLink https://doi.org/10.1787/888933956869

Figure 1.3. Security is low, hurting women in particular

Percentage of people who report feeling safe walking alone at night

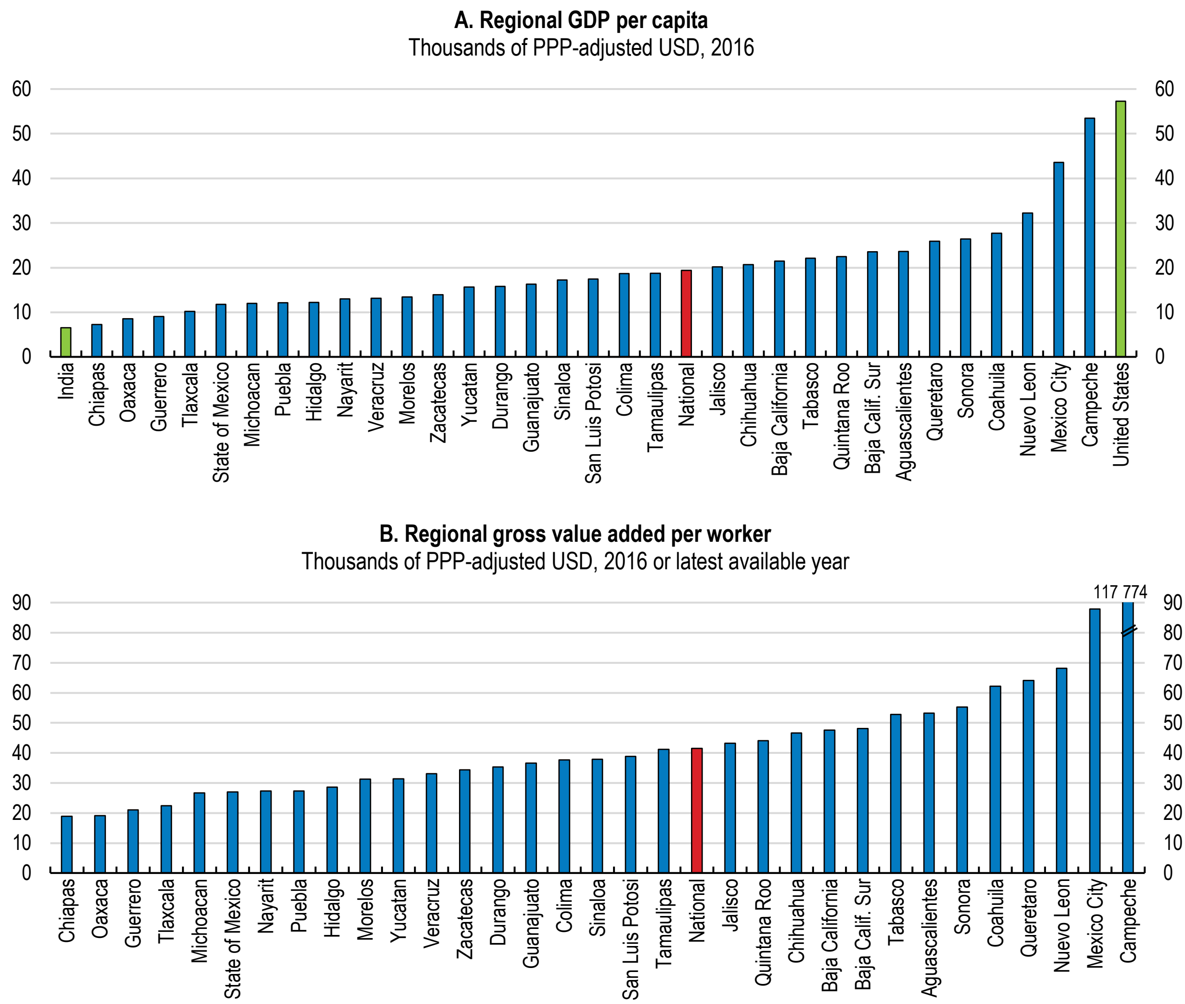


Note: PEER is an unweighted average of the 10 non-Latin American OECD countries with the lowest PPP-adjusted GDP per capita: Estonia, Greece, Hungary, Latvia, Lithuania, Poland, Portugal, Slovak Republic, Slovenia and Turkey. The reference period is the 3-year average 2014-2016 for all countries.
Source: OECD Better Life Index.

StatLink https://doi.org/10.1787/888933956888

The stark diversity of GDP per capita and productivity performance across regions is also contributing to Mexico's high levels of inequality. Campeche's levels are almost as high as those of the United States, and more than six times those of Chiapas (Figure 1.4). This partly reflects differences in industrial structures. States with capital-intensive, non-renewable resource sectors, such as Campeche, tend to have high levels of income and productivity. Some states, particularly those in the north, have also tended to benefit disproportionately from trade and investment ties with the United States, whereas southern states tend to be less developed and more reliant on traditional activities and economic structures.

Figure 1.4. Regional GDP per capita and productivity differences are large



Source: OECD Regional Statistics and Productivity databases.

StatLink https://doi.org/10.1787/888933956907

Unequal access to opportunities for Mexico's indigenous people is another obstacle to more inclusive growth. Indigenous people represent a significant share of the population, with 21.5% self-identifying as indigenous (about 28 million people) and 6.5% of Mexicans aged three or over speaking an indigenous language (over 8 million people) (OECD, 2019[4]).

Over three-quarters of indigenous people live in poverty, compared with 41% of non-indigenous people, and the rate of extreme poverty is about six times higher among indigenous people (CONEVAL, 2017[5]). Indigenous people have much lower educational outcomes than the non-indigenous population. Almost a fifth of indigenous people aged over 15 are illiterate compared with 6% of non-indigenous people (OECD, 2018[6]). Despite improvements, indigenous 15-year-old students who speak a language other than Spanish at home have a language assessment score that is 64 points lower than other students according to the OECD's Programme for International Student Assessment (PISA). Among indigenous 25-64 year olds in 2015, only 6.6% had completed tertiary education and only 9.7% had completed upper secondary, compared with 18.7% and 19.6% respectively for the rest of the population (OECD, 2019[4]). Labour market outcomes are also poorer among indigenous people. The national activity rate was 50.3% in 2015, while it was 43.9% among indigenous people (CDI, 2015[7]). About 53% of the employed population earn over twice the minimum wage, while only 30% of indigenous people earn this amount (OECD, 2019[4]). The new government has a strong commitment to boost the inclusion of the indigenous people and future policy initiatives should be assessed against specific outcome targets.

Structural policy reforms are needed to avoid poverty traps whereby individuals with low skills and poor access to opportunities are confined to low-productivity and low-wage jobs, which in turn reduces aggregate productivity and further worsens inequality. Setting in motion a "virtuous cycle" will require co-ordinated and concerted reforms across a range of policy areas that provide win-win opportunities for both productivity and inclusion. This chapter focuses on two policy areas that will help individuals fulfil their potential and lay the foundations for stronger future productivity growth: making labour markets more inclusive, particularly by reducing informality, and improving outcomes and equity in education. Moreover, it discusses how urban policies can be improved to bolster sustainable development and productivity while improving environmental outcomes and the well-being of citizens.

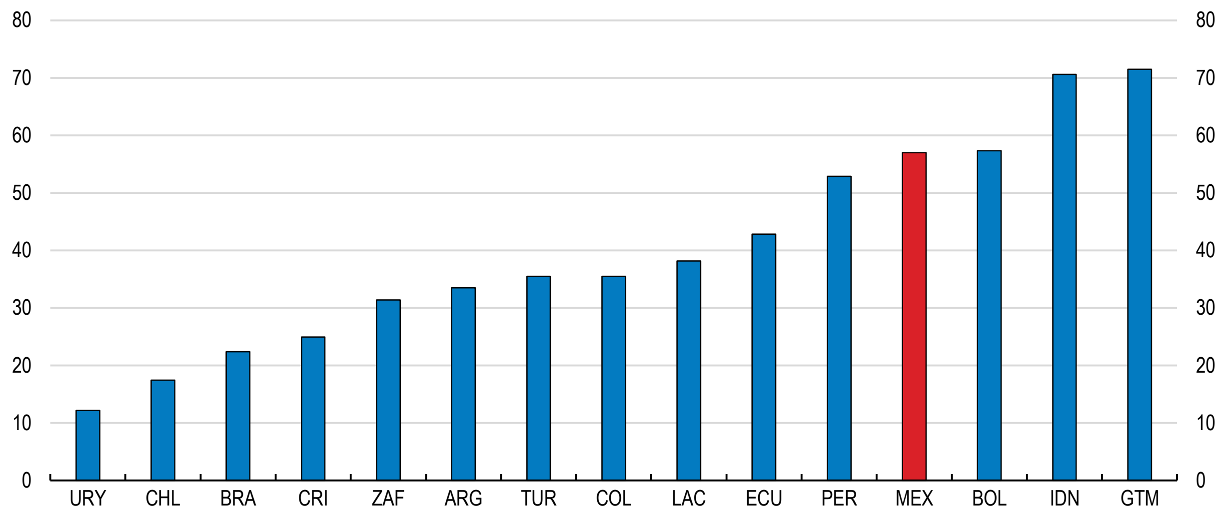
Informality is a major driver of resource misallocation

At 60% of workers, informality remains high by international standards despite gradual improvements over time (Figure 1.5, Figure 1.6) and the informal economy represents almost one quarter of Mexico's GDP. Although informality is widespread, it is particularly high among low-skilled workers and other vulnerable groups such as part-time and older workers. Structural transformation from agriculture to industry and then services has not reduced informality (Aranda and Araújo, 2019[8]). There are also significant inter-state variations in the share and characteristics of informal workers ranging from 30% in northern states to nearly 90% in the south. This persistently high level of informality is hindering worker mobility, productivity-enhancing resource allocation and workers' access to quality jobs (López-Calva and Lustig, 2010[9]; Busso, Fazio and Levy, 2012[10]; Hoeller et al., 2012[11]; Hsieh, 2015[12]; OECD, 2018[13]; Dougherty and Escobar, 2019[14]; OECD, 2019[15]).

Informality limits productivity-enhancing resource allocation, whereby resources flow to firms with high productivity and away from those with low productivity (Hsieh, 2015[12]). Productivity losses from resource misallocation in Mexico are high compared not only with other OECD countries, but also other emerging markets and Latin American countries (Busso, Madrigal and Pagés, 2013[16]; IMF, 2017[17]). This resource misallocation among Mexican firms also has a regional dimension with strikingly large variation across states in the degree of potential productivity gains from improving allocation (Misch and Saborowski, 2018[18]). Misallocation is higher in poorer, southern states, and is linked to higher levels of informality, crime, corruption, ineffective legal systems and market concentration as well as insufficient access to financial and digital infrastructure (Dougherty, 2014[19]; Gann, 2016[20]; IMF, 2017[17]; Misch and Saborowski, 2018[18]).

Figure 1.5. Informality is high by international standards

% of workers, 2017 or latest available year

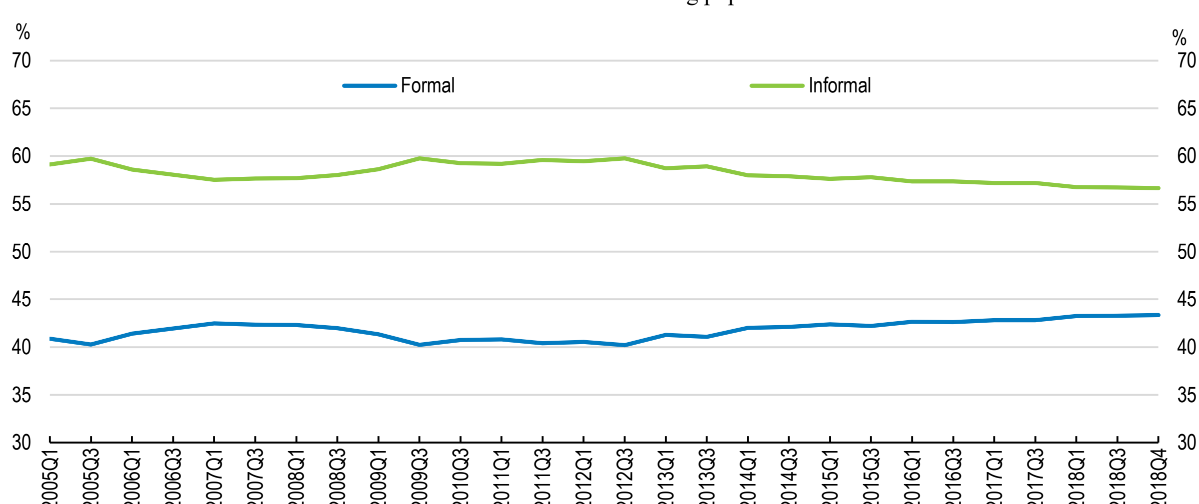


Source: SEDLAC and INEGI.

StatLink https://doi.org/10.1787/888933956926

Figure 1.6. Informality remains stubbornly high

As a share of the total working population



Note: There is a break in the informality data for Q1 2010.
Source: OECD calculations based on INEGI data (ENOE).

StatLink https://doi.org/10.1787/888933956945

Improvements in productivity will also reduce informality as more firms will be able to survive while bearing the additional costs of formality in terms of taxation and regulation. This highlights the importance of the broader, complementary policy settings that are conducive to productivity growth. However, given the strong regulatory incentives to stay informal in Mexico, and that some forms of informality are legal, the channel from informality to low-productivity is important.

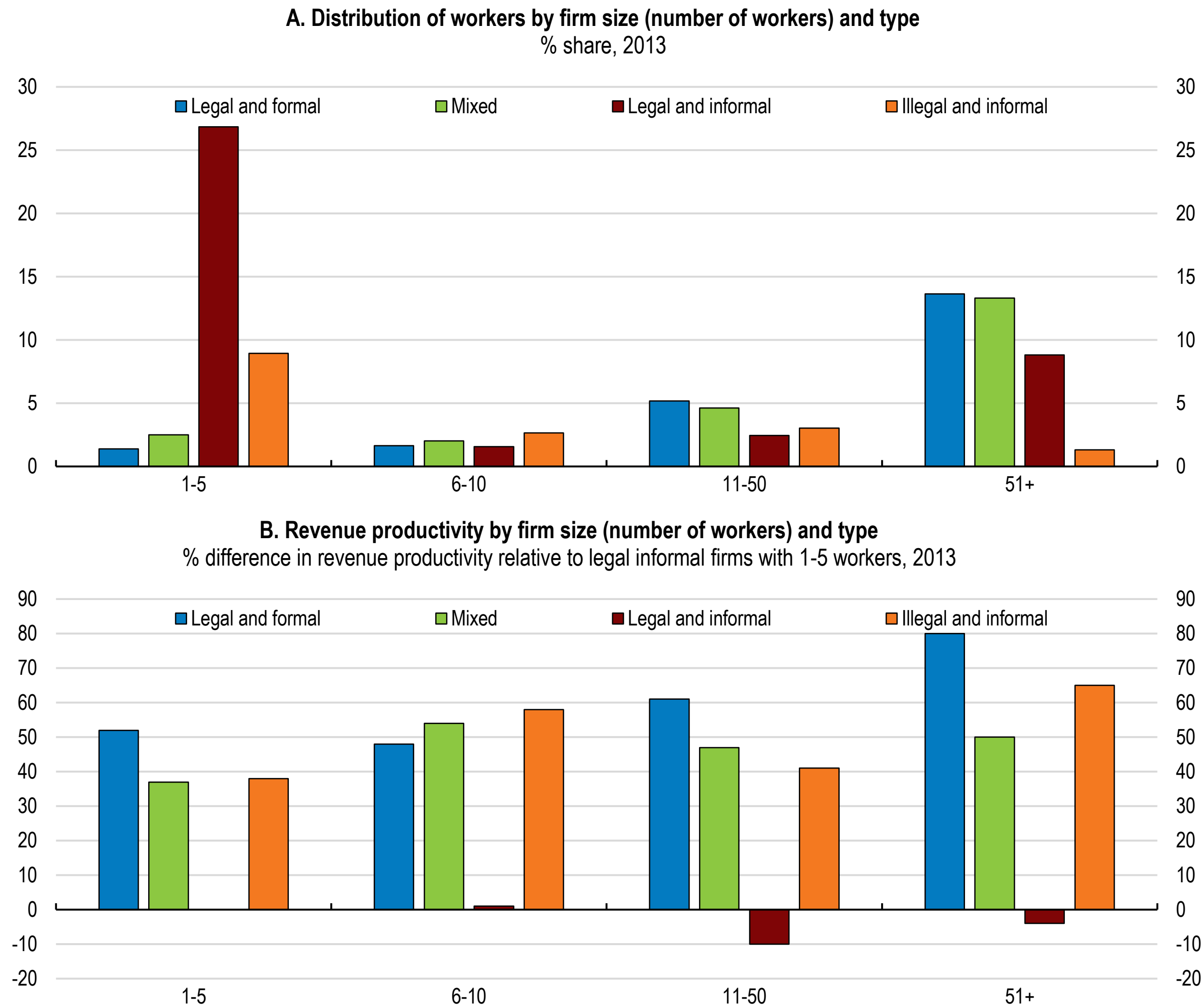
The different forms of informality in Mexico further underscores the complexity of the issue and the need for a multi-pronged policy approach. There are three general types of workers in Mexico: formal workers, informal but legal workers and workers who are both informal and illegal. Salaried workers who have a contract with a firm that complies with labour regulation and tax obligations are formal. Salaried workers hired by firms that do not comply with these obligations are informal and illegal. Non-salaried workers are informal, either because they are self-employed or because they have a contract type that does not oblige the firm they work for to comply with regulations that apply only to salaried workers (Levy, 2018[21]).

In turn, there are four types of firms: those that hire only formal workers (fully formal), those that employ a mix of salaried and non-salaried contracts (mixed), those that hire all non-salaried workers (informal and legal) and those that hire all salaried workers but do not comply with their obligations (informal and illegal). Informal but legal firms account for almost three-quarters of firms, although employ only about 40% of workers due to their small average size (Figure 1.7a). Even though the workers of these firms enjoy no labour rights nor social protections, the firms are not breaking any legal obligations in this respect. These firms also have extremely low productivity compared with other firms (Figure 1.7b), suggesting that they would not survive if they were competing on a level playing field with formal firms and highlighting the issue of resource misallocation that stems from informality. A further worrying sign is that, on average, workers and capital in these firms have grown faster than in other types of firms, suggesting that this resource misallocation has worsened over time (Figure 1.8).

Further highlighting policy interactions, some recent actions may contribute to informality if not complemented by reforms to make formalisation more appealing. Increases in the minimum wage, and intentions to increase social protection with a universal healthcare system, higher universal pensions (*Pensión para Adultos Mayores*, PAM) and other public services currently fragmented according to labour market status, such as early childhood education and care, will increase the relative costs/reduce the relative benefits of formal employment. While these policies aim to improve inclusiveness and reduce inequality, their effectiveness will be undermined if they have the unintended effect of increasing informality.

Making formality more attractive and stepping up enforcement would mitigate these risks. Plans to strengthen the capacity of the tax administration (SAT) are welcome and coordination of existing databases, such as between social security and tax collection agencies would also help (see the Key Policy Insights). Greater coordination between tax and labour inspections would also help, for example, by obliging tax inspectors to report suspected breaches of labour regulations and establishing stronger coordination mechanisms. Reducing informality in the public sector would also set an example for others as 17% of public workers are informal with large differences across states (Aranda and Araújo, 2019[8]). As discussed in this section, reducing regulatory burdens for businesses, improving employment protection regulations, lowering taxes on labour and monitoring and evaluating past efforts to reduce informality should also form part of the comprehensive strategy that is needed to incentivise formalisation.

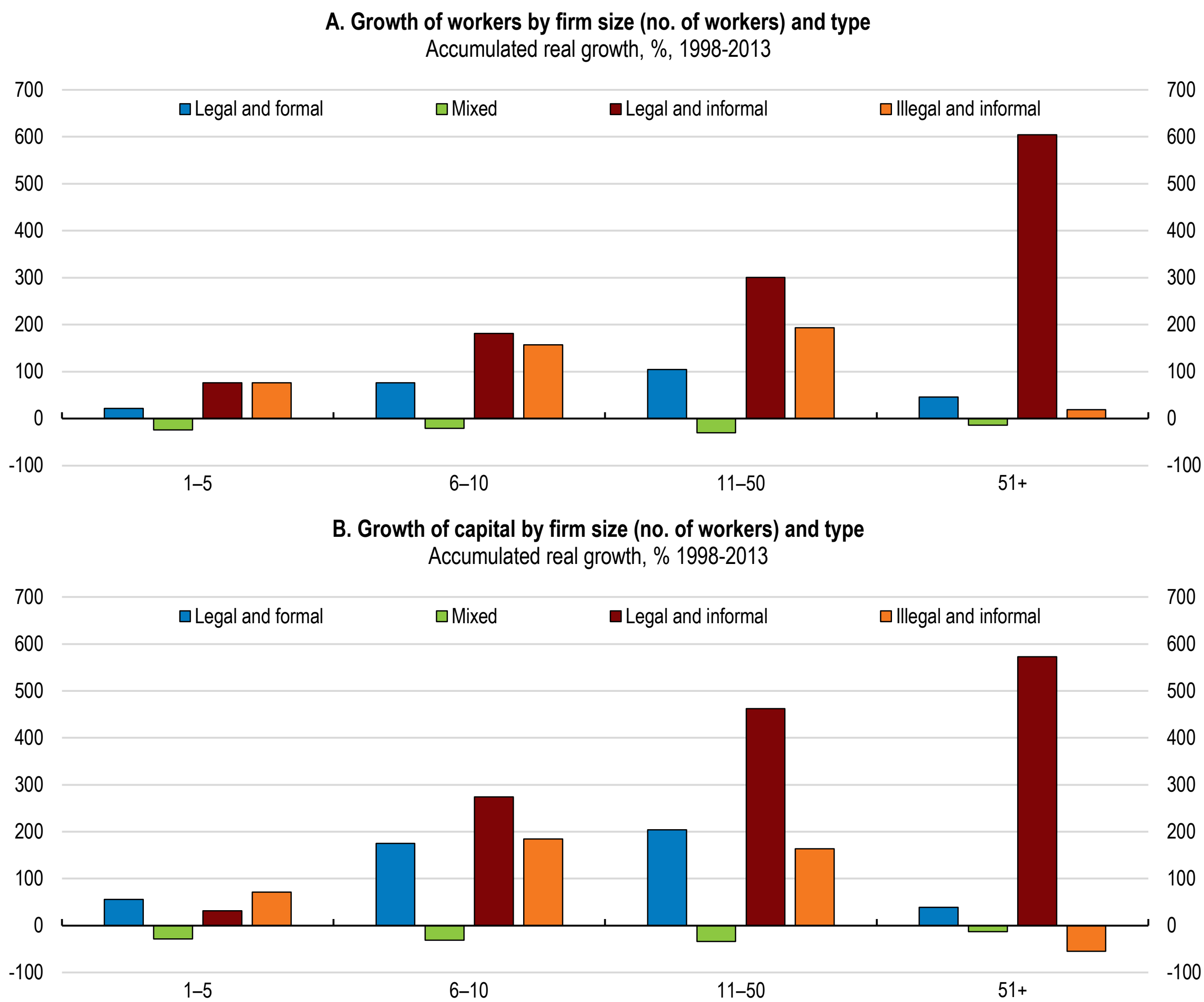
Figure 1.7. Informal but legal firms account for a large share of resources but have the lowest productivity levels



Note: 'Legal and formal' firms employ only legal, salaried workers. 'Mixed' firms employ some legal, salaried workers and some non-salaried, informal workers. 'Legal and informal' firms employ non-salaried, informal workers. 'Illegal and informal' firms hire illegal salaried workers.
Source: Levy (2018[21]), *Under-rewarded Efforts: The Elusive Quest for Prosperity in Mexico*.

StatLink https://doi.org/10.1787/888933956964

Figure 1.8. Low productivity informal but legal firms have the fastest resource growth



Note: 'Legal and formal' firms employ only legal, salaried workers. 'Mixed' firms employ some legal, salaried workers and some non-salaried, informal workers. 'Legal and informal' firms employ non-salaried, informal workers. 'Illegal and informal' firms hire illegal salaried workers.
Source: Levy (2018[21]), *Under-rewarded Efforts: The Elusive Quest for Prosperity in Mexico*.

StatLink https://doi.org/10.1787/888933956983

Reducing informality by reducing barriers to entrepreneurship and streamlining regulatory procedures

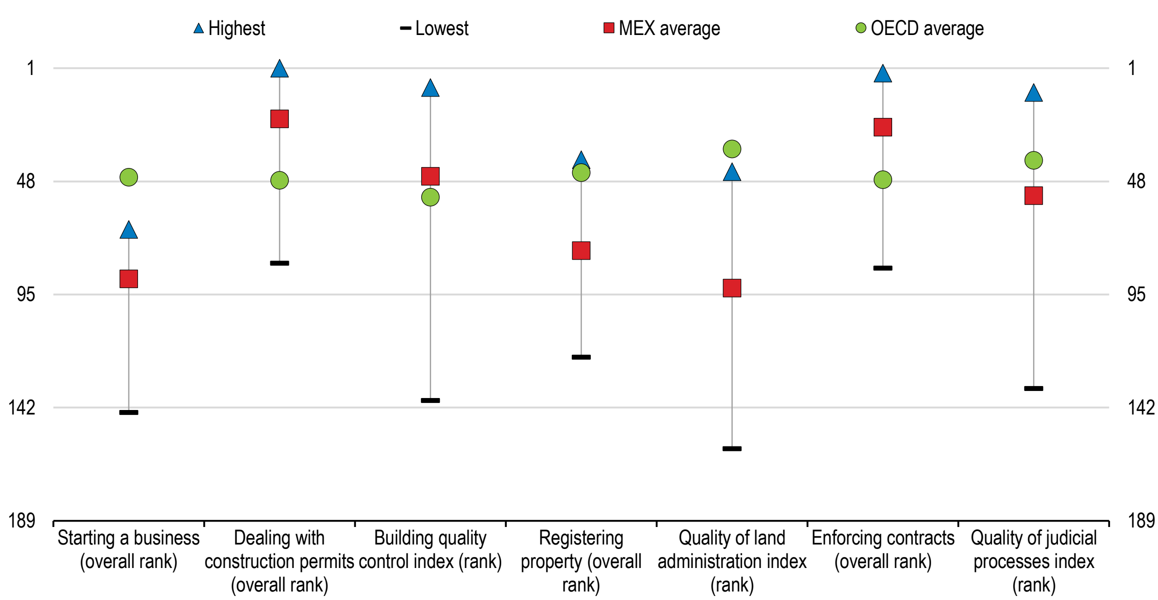
Mexico has taken important steps to reduce barriers to entrepreneurship and streamline regulatory procedures, including by making more use of electronic platforms. Most progress has been at the federal level (COFEMER, 2017[22]), while many regulatory burdens remain at the subnational level with large regional variation (Figure 1.9). The recent General Law of Regulatory Improvement will extend reforms to the subnational level, and will include a comprehensive database of business administrative procedures at all levels of government. Implementation of the reform is the next challenge. Going forward, Mexico could explore harmonisation of regulatory procedures across states and municipalities to reduce compliance costs.

Figure 1.9. The ease of doing business varies greatly across Mexican states

A. Overall Doing Business ranking

B. Ease of Doing Business Indicators

Ranking, 1-189 economies, 2016 or latest available year

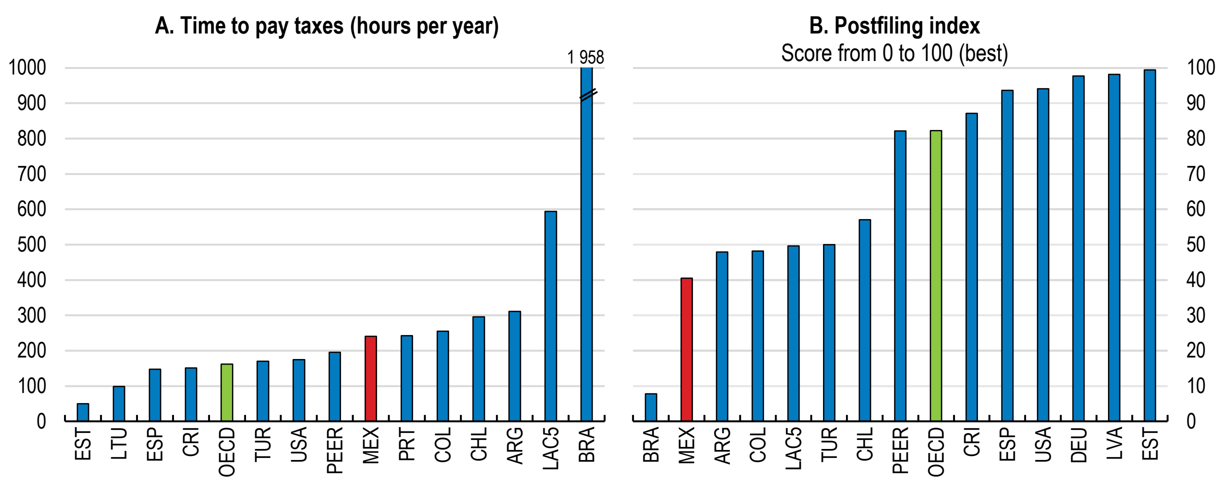


Note: "Highest" and "lowest" refer to rankings for Mexican states. Data for Mexican states are for 2016.
Source: World Bank Doing Business Indicators; and World Bank Doing Business in Mexico 2016.

StatLink https://doi.org/10.1787/888933957002

A particular area where there is significant scope for improvement is tax compliance. According to the World Bank's Doing Business indicators, it takes about 241 hours a year for a medium-sized Mexican business to prepare, file and pay taxes and social security contributions (Figure 1.10a). Post-filing compliance costs are also high, covering the time to comply with a VAT refund, obtain a VAT refund, comply with a corporate income tax correction and complete a corporate income tax correction (Figure 1.10b). For example, it takes 42 weeks to obtain a VAT refund. Making it easier for businesses to comply with their tax obligations would lower one of the administrative barriers to formalisation.

Figure 1.10. Tax compliance costs are high



Note: LAC5 is an unweighted average of Argentina, Brazil, Chile, Colombia, and Costa Rica. PEER is an unweighted average of the 10 non-Latin American OECD countries with the lowest PPP-adjusted GDP per capita: Estonia, Greece, Hungary, Latvia, Lithuania, Poland, Portugal, Slovak Republic, Slovenia, and Turkey.
Source: World Bank Doing Business 2019.

StatLink https://doi.org/10.1787/888933957021

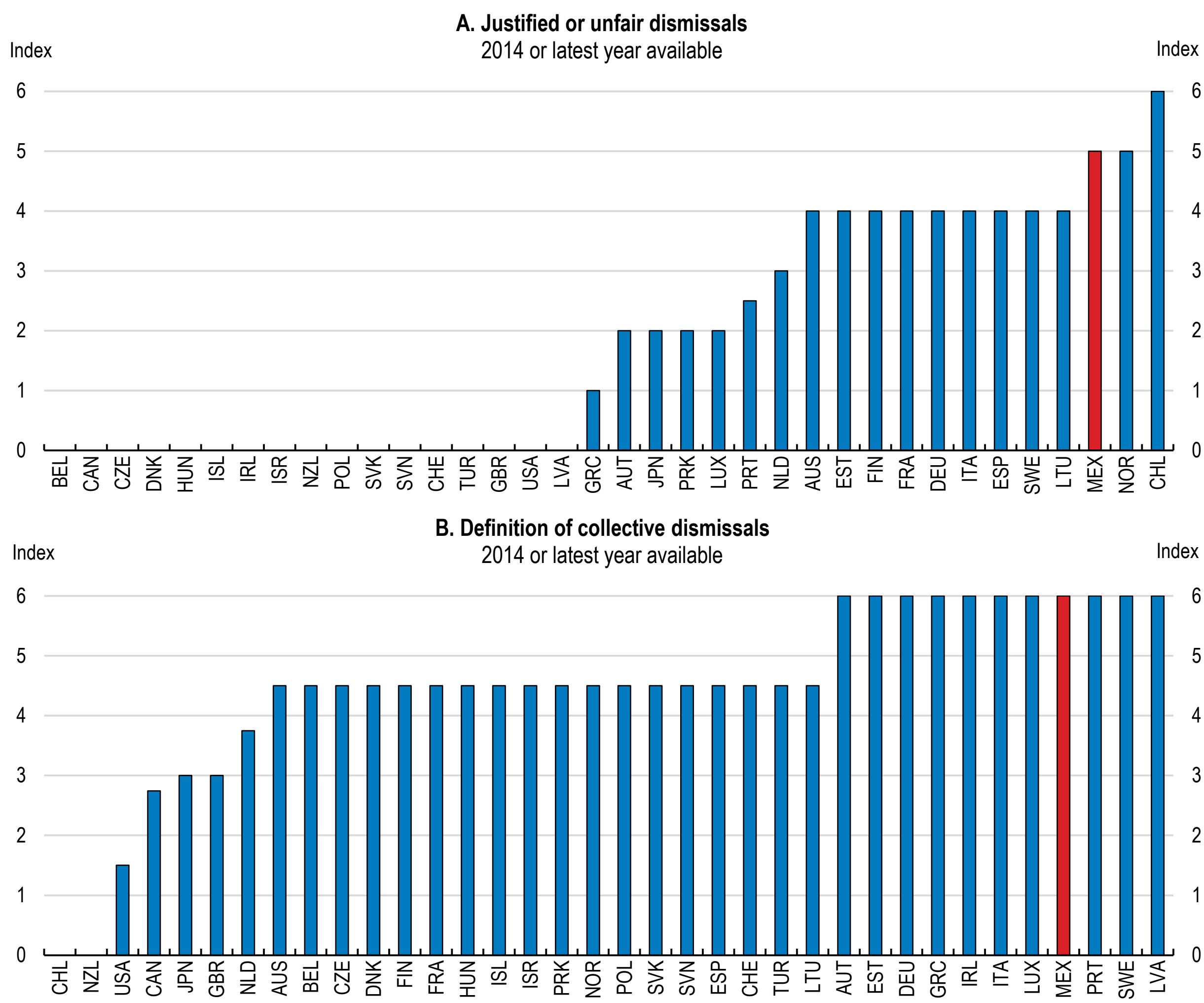
Improving employment protection regulations

There is a large regulatory gap between non-salaried workers, a legal form of informality, who have no labour protections such as dismissal restrictions and minimum wage regulations, and formal workers. This is a widely used form of employment, and firms employing these workers have low average productivity levels (Figure 1.7). Similarly, outsourcing is used at a high and growing rate in Mexico, which is also likely to avoid the high costs of hiring formal workers. The law is ambiguous about whether the direct employer or the subcontracting firm is obliged to pay social security contributions for outsourced workers (resulting in few contributions being made). The civil nature of outsourced contracts means that these workers are not subject to labour regulations, including severance payment entitlements. They are also not entitled to profit-sharing arrangements that are obligatory for formal workers, nor to seniority rights that many formal workers receive. They cannot organise into trade unions, and are not even subject to basic health and safety standards. There are some legal provisions to prevent the abuse of outsourcing; however, these are not enforced in practice.

Moreover, a more effective way to address the issue of the high cost of hiring formal workers relative to non-salaried and subcontracted workers would be to reduce the regulatory gap among these groups. For example, this could involve reforms to the labour contracts system to allow for non-salary forms of remuneration (such as commissions) with tax and minimum wage obligations that are more consistent with those of salaried workers. It could also involve further improving the ability of firms to use fixed term contracts to boost flexibility, although careful design would be needed to minimise regulatory differences between fixed-term and permanent contracts.

Broader reforms, including to employment protection regulations, will also be needed as otherwise illegal informality would simply replace this legal form. The costs of dismissing a formal worker are high (Figure 1.11). Workers can only be dismissed for performance reasons, not for economic ones, discouraging employers from hiring formal workers in the first place. The judicial processes for claiming compensation or reinstatement are also lengthy and the outcomes very uncertain and inconsistent, which is costly for both workers and employers (Levy, 2018[21]).

Figure 1.11. High dismissal costs discourage formal job creation



Note: Scale: 0 (least stringent regulation) to 6 (most stringent).
Source: OECD/IAB Employment Protection Database.

StatLink https://doi.org/10.1787/888933957040

Reducing high dismissal costs while introducing unemployment insurance would reduce the personal costs of job loss and improve skills matching by providing displaced workers with the opportunity to find suitable employment. Extending just dismissals to incorporate economic reasons would encourage firms to create formal jobs, expand their operations and innovate. Implementing labour resolution procedures that are efficient and enforced, including alternative dispute resolution mechanisms such as arbitration would reduce the time, costs and uncertainty of dismissals.

Raising the employment protections for informal workers would also reduce the regulatory gap between formal and informal workers. As a first step, health and safety regulations should apply to all workers. To be effective, this would need to be coupled with stronger enforcement.

Reducing taxes on labour

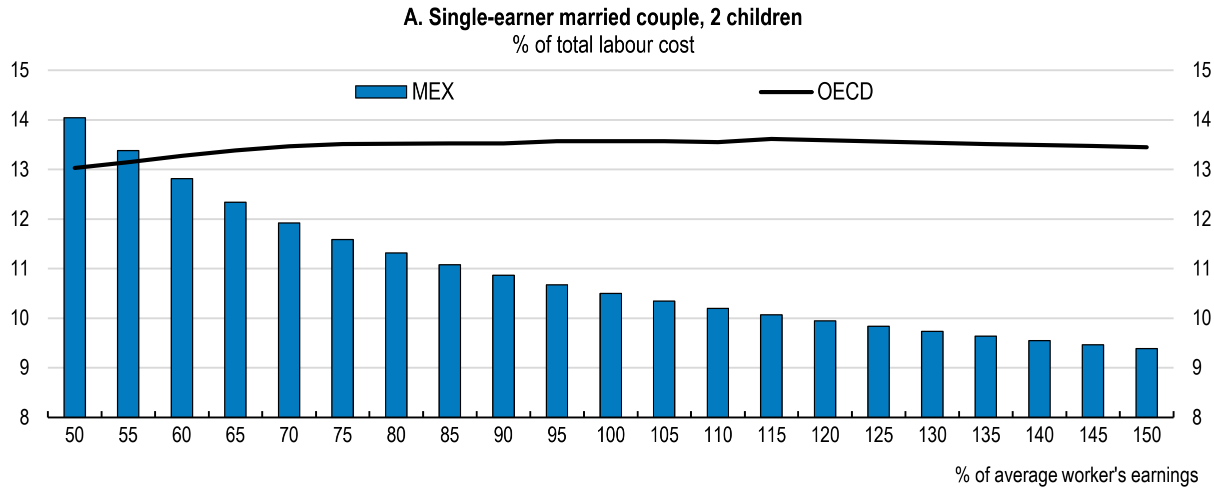
Relatively high taxes on labour for low-wage earners can be a disincentive to job formalisation. In Mexico, social security contributions (SSCs) are a high share of total labour costs. The costs of formalisation are particularly high for second-income earners as formal worker social security benefits are extended to spouses, with the exception of pension rights. As replacement rates are low (see the Key Policy Insights), this does not constitute a powerful incentive to second-earner job formalisation. Increasing replacement rates and reducing the minimum contribution period to enjoy pension rights would strengthen formalisation incentives.

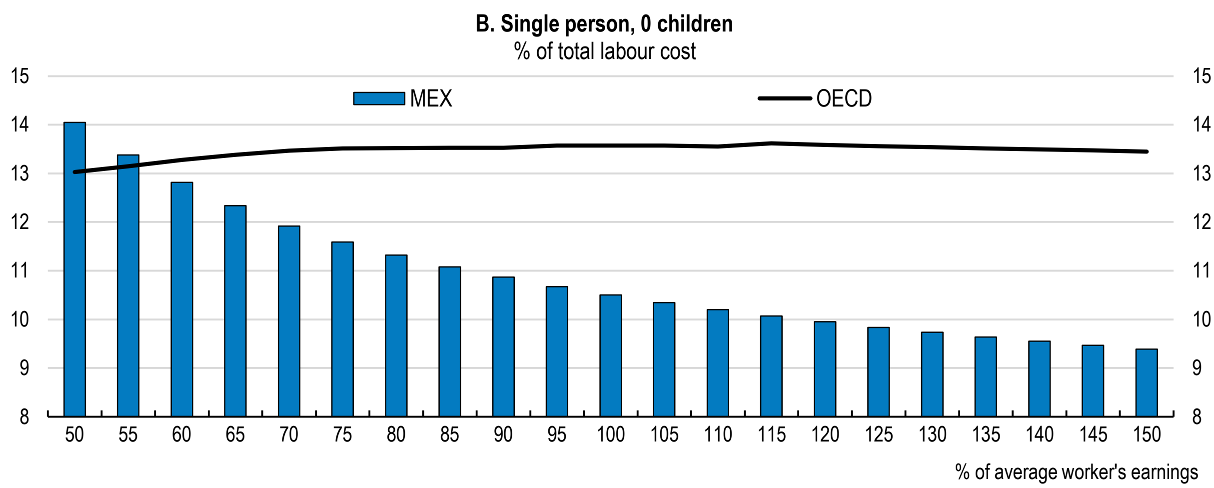
Mexican firms hiring low-income earners face high social-security contributions (SSCs) compared with the OECD average (Figure 1.12). The low skills of many workers and associated low productivity may not compensate for existing labour costs and firms may opt to hire informal workers legally instead. Furthermore, SSCs also decline as a share of total labour costs as earnings increase, resulting in a regressive system and further disincentivising the hiring of formal low-skilled workers relative to those with higher skills. The employer SSC base contribution rate is 20.4% of the minimum wage, resulting in a total employer SSC rate of about 26.9% of earnings for worker on the minimum wage (and employed in a sector with an average workplace risk classification). In comparison, for a worker earning 50% of average earnings (almost three times the minimum wage), employer SSCs account for 14.0% of total labour costs, and for workers earning more than 120% of the average, they account for less than 10% of labour costs (Figure 1.12). This concurs to explain the high levels of informality, given the high share of low-skilled workers (see below). Lowering SSCs for low-wage earners would reduce regressivity and disincentives to hiring formal, low-wage earners. Moreover, as discussed above, in the case of outsourcing, it should be clarified who is liable to pay SSCs (the direct employer or the subcontracting firm). These steps should be complemented in tandem with stronger enforcement.

SSC payments for high-income earners are also low compared with the OECD average (Figure 1.12), although benefits stemming from SSCs in Mexico are also relatively low. Unlike low-income earners, higher-income earners are more likely to self-select into informality on the basis that the costs of formality outweigh the benefits. Therefore, while increasing SSCs for higher-income earners would reduce regressivity, it would strengthen the incentives for higher-income earners to self-select into informality.

Figure 1.12. Employers' social security contributions are high for low-income earners

Employers' social security costs as a share of total labour costs by workers' earning level , 2018





Note: OECD refers to simple average across OECD members with available data. For Mexico, the average worker's earnings are calculated using data on IMSS (ie, formal) workers, and amounted to MXN 122 208 in 2018 (OECD, 2019[23]), which was about 5½ times the 2018 minimum wage.
Source: OECD Public Sector, Taxation and Market Regulation Database.

StatLink https://doi.org/10.1787/888933957059

Monitoring and policy evaluation

The government implemented important tax and labour reforms to incentivise labour formalisation in 2013 (Box 1.1) with some success at the bottom of the salary scale (two minimum wages or less). However, the informality rate has remained high, which may be related to high transitions in-and-out of informality. It would be useful to evaluate the impact of the recent reforms on creating stable, durable and good quality formal jobs.

Box 1.1. Mexico's labour and tax reforms to incentivise formalisation

- Elimination of "Impuesto Empresarial a Tasa Única", and the "Impuesto a los Depósitos en Efectivo". The tax base of the new corporate income tax (*Impuesto corporativo*, ISR) was widened to ensure similar tax revenues. The Ministry of Finance estimates that the number of administrative burdens has been cut in half.
- The creation of the RIF (*Régimen de Incorporación Fiscal*), which replaced the REPECO, a size-contingent policy that to led to tax evasion. The RIF allows for progressivity in taxation for own-account workers for the first10 years, after which full personal income taxes apply.
- The creation of the RISS (*Régimen de Incorporación a la Seguridad Social*) to smooth payments to social security by micro-entrepreneurs and their workers. Similarly to the RIF, subsidies are reduced progressively over time until participants join the general regime.

Source: SHCP (2018[24]).

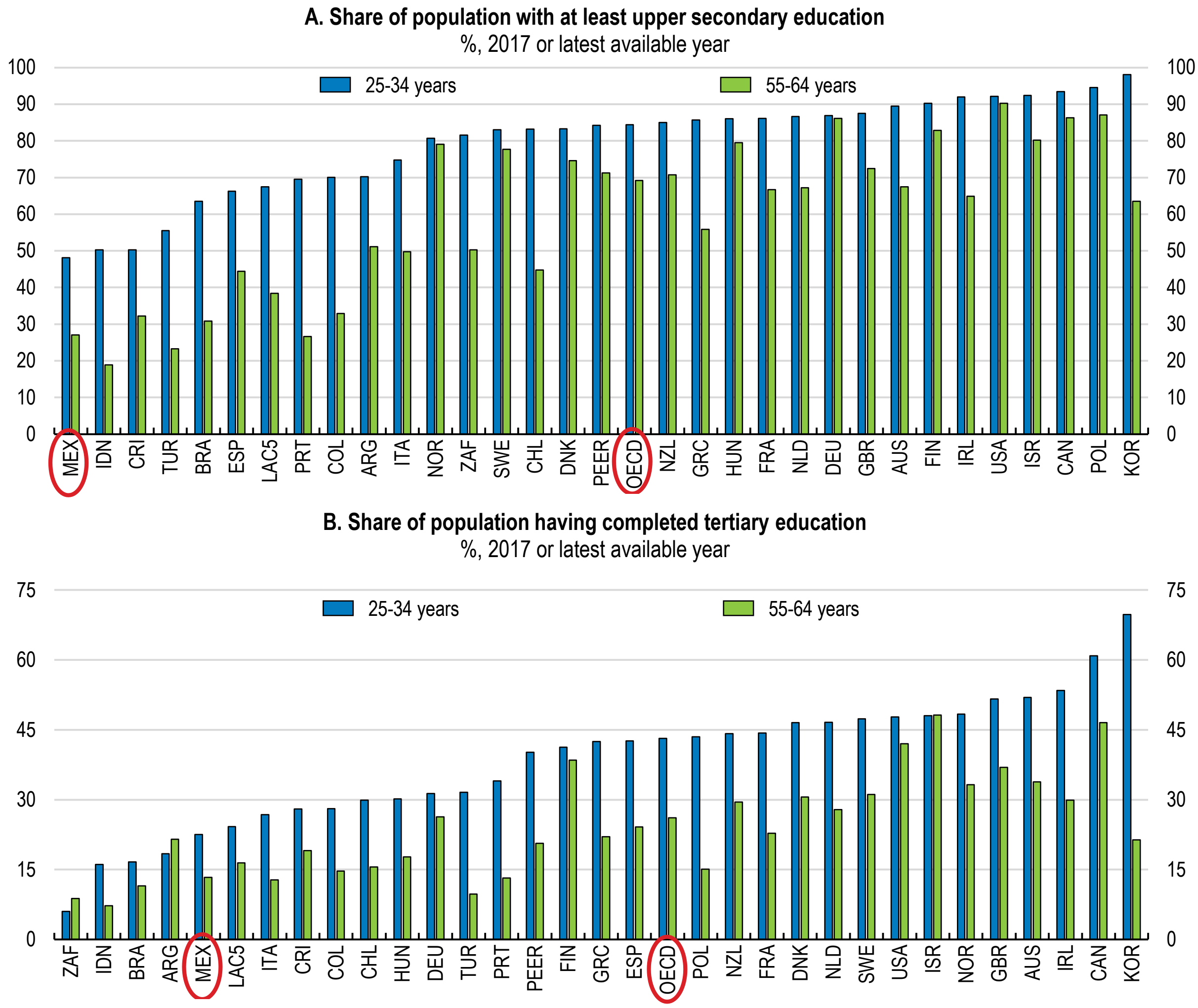
Raising educational outcomes to combat informality and boost human capital

Educational attainment and outcomes are low

Low level of skills are an obstacle to higher productivity and material living standards. Informality disproportionally affects the low skilled leaving them without access to social security, which is one of the main drivers of social deprivation (Figure 4). Investing in skills is also important in addressing potentially rising inequalities related to automation, digitalisation and greater importance of knowledge in work. These trends will raise the returns to skills, potentially leaving the incomes of the low-skilled further behind (Nedelkoska and Quintini, 2018[25]; OECD, 2018[26]).

In spite of considerable progress, educational attainment and the skills of Mexico's population remain low in international comparison. Only 48% of those aged 25-34 years old has completed secondary education, in sharp contrast with the OECD average of 84%. In addition, only 23% of 25-34 year olds have a tertiary education degree, in contrast with the OECD average of 43% (Figure 1.13).

Figure 1.13. Mexico needs to continue to raise educational attainment

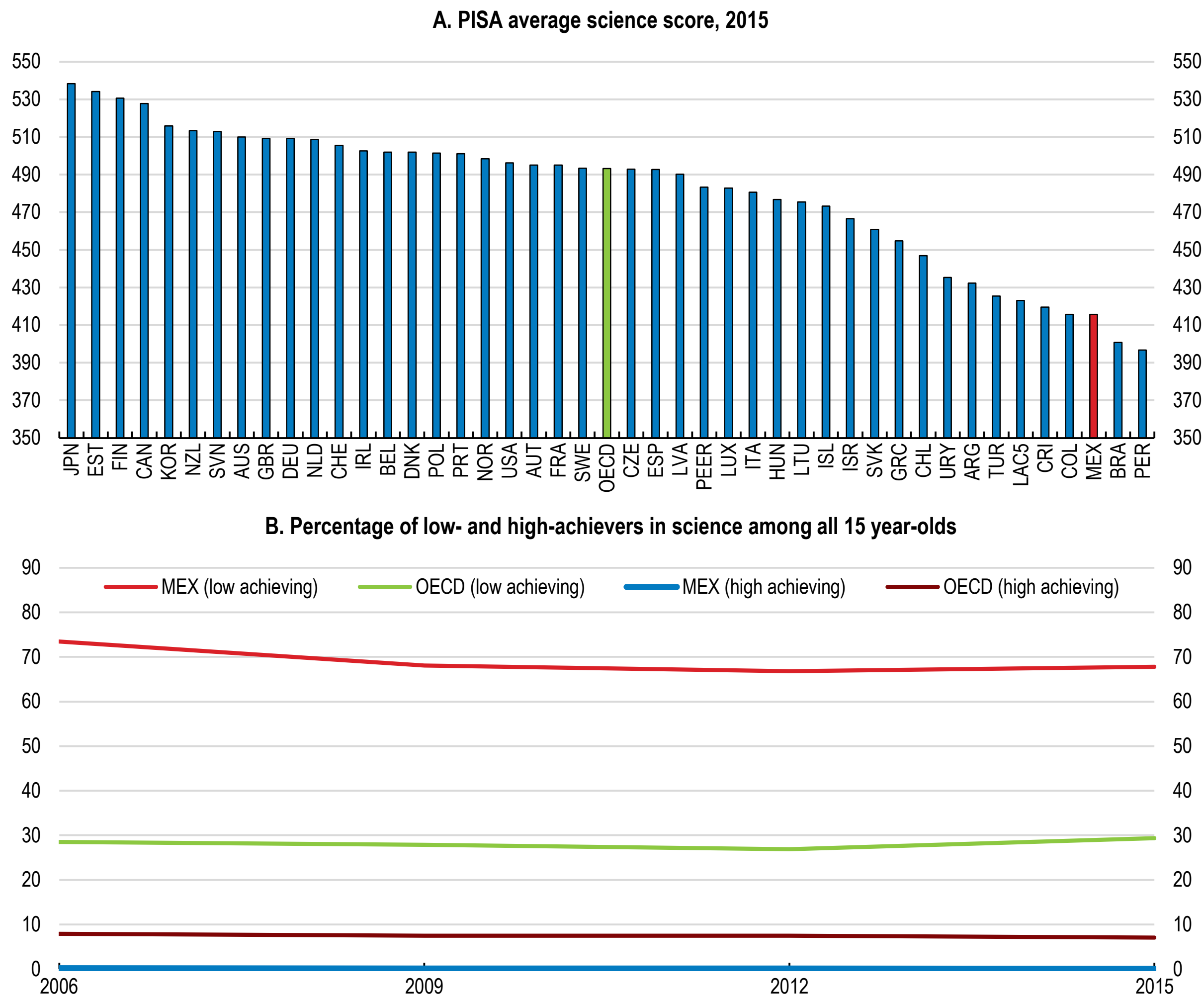


Note: PEER is an unweighted average of the 10 non-Latin American OECD countries with the lowest PPP-adjusted GDP per capita: Estonia, Greece, Hungary, Latvia, Lithuania, Poland, Portugal, Slovak Republic, Slovenia, and Turkey. LAC5 is an unweighted average of Argentina, Brazil, Chile, Colombia, and Costa Rica.
Source: OECD Education at a Glance Database.

StatLink https://doi.org/10.1787/888933957078

Mexico also performs below the OECD average in international tests of educational outcomes such as PISA (Figure 1.14a). Average performance has not changed significantly in recent years. Less than 1% of students are top performers, in contrast to 10% on average in the OECD. The share of low performers is also considerably higher than the OECD average (Figure 1.14b). Although these results are related to the continuous expansion of school enrolment and educational opportunities to students from disadvantaged backgrounds, they illustrate the challenges ahead.

Figure 1.14. PISA scores are low



Note: "Low performers" is defined as those who are not in school, excluded from PISA, or achieving below Level 2 (409.54 points). "Top performers" scored Level 5 or above (633.33 points or higher).
Source: OECD PISA Database.

StatLink https://doi.org/10.1787/888933957097

The likely effects of raising education attainment are large. Gradually raising education attainment to the average of the top five OECD countries would increase GDP per capita by 10% by 2040 (see the Key Policy Insights). With about half of the population less than 25 years old (INEE, 2018[27]), education policies are of prime importance to lift growth and provide better living standards for all Mexicans.

Mexico has undertaken important efforts to raise educational attainment and outcomes

Improving educational outcomes has featured high in the agenda of Mexican authorities in recent years. Mexico made pre-primary education compulsory in 2008-9 and raised the compulsory-school-leaving age to 17 (to the completion of upper-secondary education) in

2012. ECEC has expanded and there has been considerable investment in educational infrastructure across the country.

Mexico also embarked on an ambitious and comprehensive programme of reforms that put student learning and quality at the centre of education system. These reforms included: i) developing and implementing a new curriculum to equip students with the skills needed to succeed in the labour market, ii) improving learning environments, upgrading school infrastructure and upscaling full-time schools, which have proven successful in raising educational outcomes, iii) creating a professional teacher service with a career structure that includes clear entry, permanence and promotion mechanisms and iv) providing constitutional autonomy and responsibility to the National Institute for Education Evaluation (INEE) over the national evaluation system of compulsory education. The development of evaluation and assessment frameworks such as the National Plan for Learning Assessment (PLANEA) meant moving from an inputs-based system to one based on quality and outcomes (OECD, 2018[28]) (Key Policy Insights, Annex A).

These reforms are in line with international best practices and were developed with the support of the OECD. Despite progress, many of these reforms take time to implement and mature. The government intends to introduce changes to some of these reforms, including reducing the autonomy of INEE and placing greater emphasis on formative elements in teacher evaluation such as observation in the classroom by an evaluator and the production of evidence by teachers of initiatives taken to improve educational outcomes and adopt best learning practices. The new school curriculum, introduced in 2017-18 is also likely to be overhauled but the details are not yet defined. The independence of the INEE acts as a guarantee of the accountability of the education system to monitor and evaluate outcomes of education policies. Its autonomy and ability to contribute to improving education policy should be preserved.

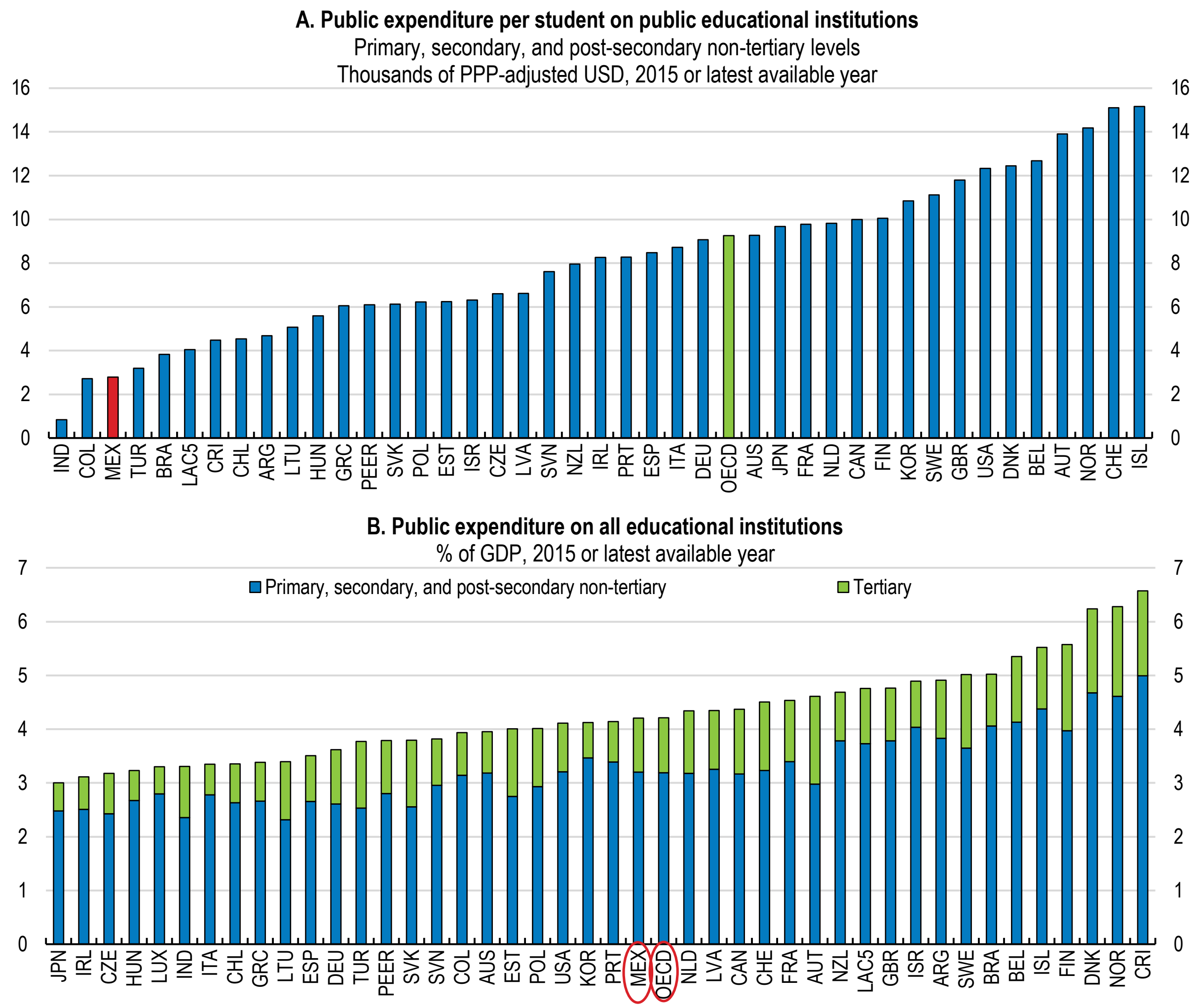
The education system needs to do more to reach disadvantaged students and schools

Shift resources towards compulsory education and ECEC

Mexico's annual expenditure per student remains low, while education expenditures are a relatively large share of GDP, above the OECD average (Figure 1.15). The structure of spending is biased towards tertiary education, where spending per student is three times higher than in primary education institutions – the highest differential across all countries with available data in the OECD (OECD, 2018[28]). With low tax intake and a rigid budget (see the Key Policy Insights), Mexico should refocus spending on compulsory education and expanding access to ECEC, which has the highest returns in terms of skill accumulation, social mobility and reducing inequalities (Cunha et al., 2006[29]; Currie and Almond, 2011[30]; Heckman, Pinto and Savelyev, 2013[31]).

As in other OECD countries, children from disadvantaged backgrounds are overrepresented among low performers (OECD, 2018[28]). Disadvantaged schools receive fewer resources than needed for quality education (Luschei and Chudgar, 2015[32]; INEE, 2016[33]). Mexico had the largest socioeconomic gap among OECD countries in access to education materials in PISA 2015 (OECD, 2016[34]). Resources should shift to provide additional support to disadvantaged groups in terms of infrastructure, teaching resources, and educational material.

Figure 1.15. Public expenditure on education is low



Source: OECD Education at a Glance Database.

StatLink https://doi.org/10.1787/888933957116

Students in small remote areas also need more attention. Around 20% of the Mexican population live in disperse, remote and small communities of no more than 2 500 inhabitants (INEGI, 2017[35]). This is a challenge for the provision of adequate infrastructure services, not only education. Students in small, marginalised areas perform considerably worse in PLANEA tests. They are also more likely to attend schools with multiple deficiencies and challenges, including multi-grade schools with a single teacher (OECD, 2018[28]).

Investment in school infrastructure is another priority. Schools' infrastructure and equipment affects educational quality (Cheng, English and Filardo, 2011[36]; OECD, 2014[37]). Mexico has invested significantly in renewing school infrastructure, including through the programme *Escuelas al Cien*. Still, many schools are in dire conditions and differences between schools and states reinforce inequalities (OECD, 2018[28]). Ensuring that all schools have at least of some minimum facilities such as safe buildings, restrooms and electricity is thus crucial to improve learning opportunities for all students.

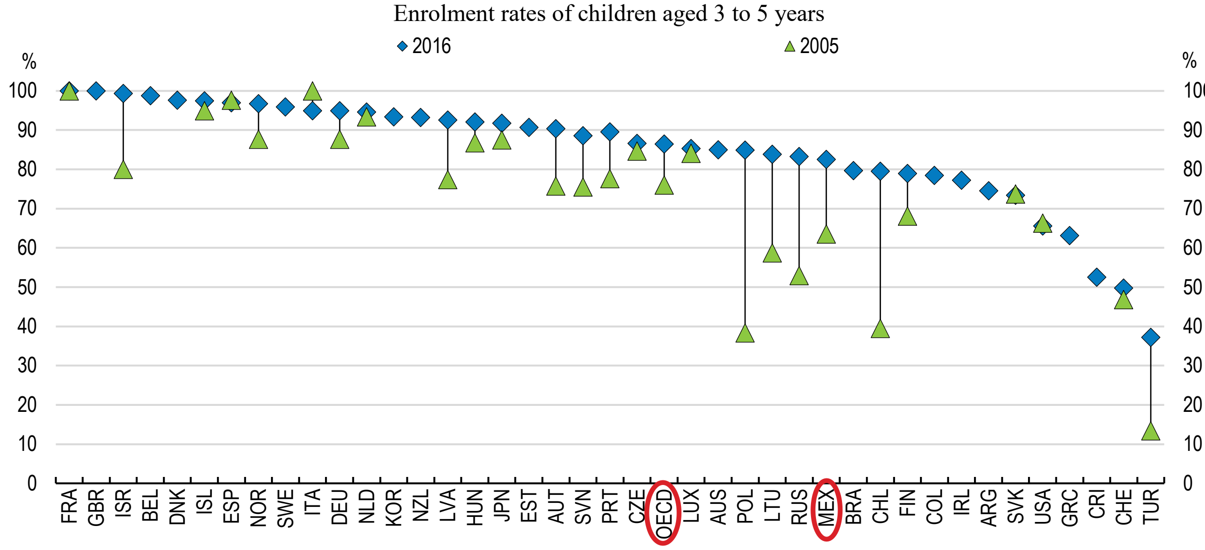
Overall, solving discrepancies in school infrastructure, pedagogical material and teaching is a priority and will require a change in the allocation of resources. Schools in disadvantaged contexts usually have less financial resources to operate (Cortés Macías, 2015[38]), and infrastructure and equipment are of relatively poor quality (INEE, 2016[33]). Allocating resources equitably means that the schools attended by socio-economically disadvantaged students are at least as well-equipped as the schools attended by more privileged students, to compensate for inequalities in the home environment (OECD, 2016[34]). There are two broad approaches when designing mechanisms to allocate funding according to different needs across schools. First, including additional funding in the main allocation mechanisms for schools (e.g. including weights in the funding formula to allocate additional resources according to certain categories). The second one consists in providing targeted funding through grants external to the main allocation mechanism. Countries such as Chile have developed effective school funding formulas (Santiago et al., 2017[39]).

Expand ECEC and increase quality

Mexico has made significant progress in expanding access to ECEC in recent years. However, enrolment rates remain low (Figure 1.16). Only about half of three-year olds are enrolled versus an OECD average of over three-quarters. The enrolment rate among four-year olds is close to 90%, which is a little above the OECD average. Participation varies widely by region, ranging from over 90% in Tabasco to about 60% in Quintana Roo (OECD, 2018[6]).

Figure 1.16. Early childhood education and care has been expanding but enrolment rates are still low

Enrolment rates of children aged 3 to 5 years



Source: OECD Education at a Glance Database.

StatLink https://doi.org/10.1787/888933957135

Overall, children who attended pre-primary education perform better at school and achieve higher PISA results (OECD, 2013[40]). However, this is not the case in Mexico (OECD, 2017[41]). Equal access to good quality early childhood and care remains a challenge . ECEC is one of the areas where there is the greatest social disparity in Mexico. First, disadvantaged populations are less likely to send their children to pre-primary education.

Second, pre-primary education still receives a small portion of education spending. Third, initial education services are offered according to the labour market status of parents, where discrepancies of care exist and add to inequalities. A worrying development has been the halving of the budget for *Estancias Infantiles*, the government's programme for children of working parents who are not in the formal labour market. Although there were discrepancies in the quality of care, especially when compared to facilities receiving children whose parents work in the formal sector, the cut in the budget, on the grounds of corruption concerns, is likely to leave some children without formal educational care, and it is also likely to lead to lower female labour market participation when gender labour market gaps are already high.

Mexico has taken steps to improve quality in ECEC by aligning guidelines used in initial education with the new school curriculum, and by developing a pedagogical programme for 0-3 year olds (*Programa de educación inicial: un buen comienzo*, Programme for initial education: a good start, 2017) that aims to help young children develop basic skills and slowly get ready for pre-school (SEP, 2013[42]). Moving forward, Mexico should adopt this early ECEC programme nationwide and move to a more integrated ECEC system, granting access to good quality education services independently of parents' labour market status.

Improving governance of the education system

As a federal state composed of 32 federal entities (31 states and Mexico City) and 2 457 municipalities, education responsibilities are shared across the different levels of government. However, the decentralisation of education services initiated in 1992 has not evolved into a fully consolidated system and, in practice, federal and state-level institutions overlap or interact in uncoordinated ways while other functions are underprovided (OECD, 2018[28]). One result is that there is no common scheme for school funding (OECD, 2018[28]). Some schools are financed by state-level authorities, while others receive funds directly from the federal government – including from the Ministry of Public Education (*Secretaría de Educación Pública*, SEP) as well as other ministries and federal agencies – in return for which they are put under federal supervision.

Federal spending on compulsory education (*Gasto Federal Ejercido en Educación Obligatoria*, GFEO) is the largest expenditure (INEE, 2018[27]). It is allocated to the states through two main channels: the Federalised Spending Programmes (*Programas de Gasto Federalizado*, or *aportaciones*), which are earmarked to education; and budgetary participations (*participaciones*), which are transferred as part of the states' sovereign budget and can be used partly for education, depending on each state's decision. A third part of federal funds completes the overall budget for education through Federal Programmes (*Programas Federales*), which are directly administered by the central government. As a result of the different subnational authorities (state governments) in charge of implementing education policy at the school level having different resources and capacities, there are asymmetries in the delivery of education services across the territory (OECD, 2018[28]).

Each state can decide, each year, if they contribute additional resources to education. Resources may also come to schools through programmes with specific goals and an attached budget. OECD and national evidence show that programme-based funding has been a source of inequity across schools and municipalities (OECD, 2018[28]).

Mexico's schools could benefit from a less complex budget allocation, by reducing the number of budget lines and programmes with specific goals. This would lead to greater spending efficiency, release resources to other education areas where they are needed, introduce more transparency and a better understanding of how much the allocation mechanisms can contribute to equity.

Developing standardised practices for states to disclose their budgets would also improve transparency and allow a better linkage between resources and outcomes. These do not currently exist, which makes it hard to form a detailed picture of how federal and state funding transmits to schools (INEE, 2018[27]). This is one of the main information gaps detected in the system as it is very difficult to identify the specific education expenditure from states other than transfers or programmes from the federal authority and then, in turn, how these resources are channelled to schools (OECD, 2018[28]).

This calls for more monitoring and evaluation of results. Mexico's PLANEA evaluation tool could be systematically used to improve policies and school practices, identify vulnerable student groups and schools and to inform policies to better support them. At the same time, INEE and the Ministry of Education should continue their efforts to step up monitoring and evaluation capacities at the subnational level, as suggested by the OECD.

Expanding and building effective VET systems

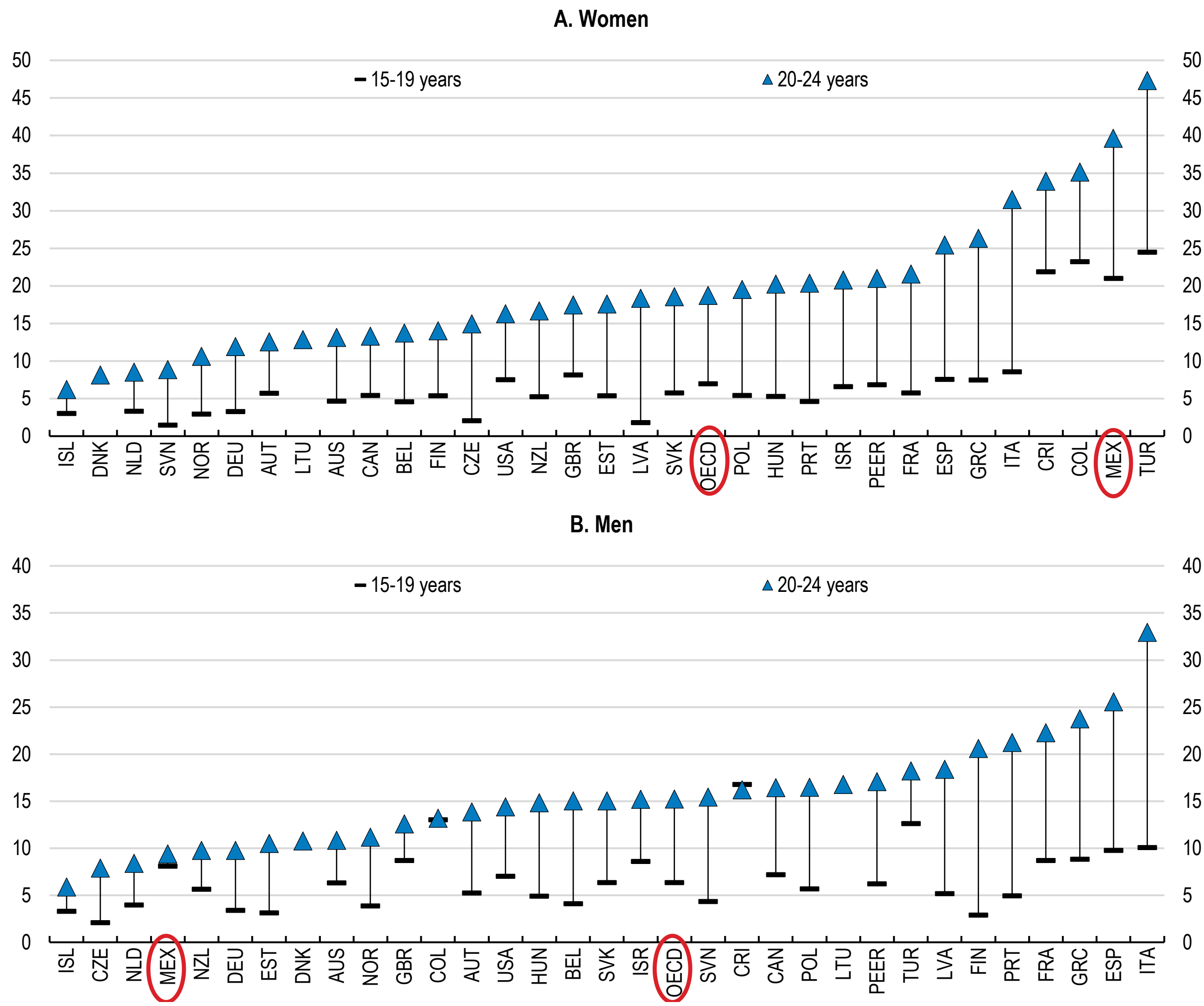
Vocational education and training (VET) often leads to better employment prospects than academic-oriented courses for students not in tertiary education studies. Enrolment in vocational programmes at the upper secondary level in Mexico (38.2% of students) is lower than the average across OECD countries (45.7%). Unlike most countries in PISA, in Mexico, 15-year-olds in pre-vocational or vocational programmes scored 20 points higher in science than those in general or modular programmes (after accounting for student and school socio-economic background).

Recent education reforms have aimed to boost technical education, such as through the implementation of the dual training system in 2015, by expanding the private sector's involvement, increasing the number of apprenticeships with on-the-job training, and strengthening the model's vocational component. The VET system at secondary level includes initiatives, such as mobile training units (*unidades móviles*) for remote regions where there are fewer learning opportunities, while at the post-secondary level, VET is provided through short courses in specialised technical professional institutes. The National Productivity Committee has led efforts to facilitate the immersion of students in the labour market and the development of skills required by productive sectors and major clusters, such as the aerospace and automotive industries. These programmes allow young people to simultaneously continue into higher education and work.

The government is seeking to address the high student drop-out rate by implementing a programme of scholarships in upper secondary and tertiary education and internships in companies. The drop-out rate for youth aged 15-19 is 14%, above the OECD average of 6%. Likewise, the drop-out rate for 20-24 year olds is high - 25% compared with the OECD average of 16.5%. However, these rates are driven primarily by high rates among women (Figure 1.17). Motherhood is a key driver of NEET status. Mexico's adolescent pregnancy rate remains the highest among OECD countries (OECD, 2017[1]), often leading to young women dropping out of school. Authorities should make sure that women are integrated in initiatives to step-up apprenticeships and VET programmes, not only as a strategy to reduce drop-out rates and boost human capital accumulation but also to reduce the large labour market gender gap (OECD, 2017[2]; OECD, 2018[6]). This needs to be complemented with additional education services such as expanding ECEC. Going forward, authorities should consider the impact of the scholarship programmes in raising attendance, especially for women, who are about four times more likely to be NEETs than men. On efficiency grounds, authorities should also consider means testing these subsidies, also given large needs in other areas, such as school infrastructure investment and ECEC, which is receiving much less attention in spite of its potential to raise educational outcomes.

Figure 1.17. Youth not in education, employment or training are predominantly women

Percentage of youth not in education, employment or training by gender and age, 2016



Note: PEER is an unweighted average of the 10 non-Latin American OECD countries with the lowest PPP-adjusted GDP per capita: Estonia, Greece, Hungary, Latvia, Lithuania, Poland, Portugal, Slovak Republic, Slovenia, and Turkey.
Source: OECD Education at a Glance Database.

StatLink https://doi.org/10.1787/888933957154

The programme "Youths Building the Future" (*Jóvenes Construyendo el Futuro*), in place since January 2019, seeks to strengthen human capital accumulation by providing internships for 18-29 year olds not working or studying, with placements in firms, NGOs or the public sector. The programme provides a training scholarship of MXN 3 600 per month (slightly higher than the minimum wage) for up to one year. To enhance skills, the programme should be complemented by the acquisition of general skills in school-based learning, in the same vein as the existing dual VET system. General skills are important in supporting lifelong learning and adapting to new technologies and innovations throughout careers. Strengthening the general education component in apprenticeship programmes does not necessarily require an extensive time for instruction but rather more effective ways of teaching. Teaching of abstract concepts should be combined with practical applications. In this regard, innovative practices should be explored, such as the approach developed in the United States by the National Research Center for Career and Technical Education, which adapted math concepts to the curricula of different VET courses and has proven successful in raising students' ability (Kuczera, 2010[43]). Also, the programme needs to ensure that it reaches women and youth not living in urban areas.

Instead of paying interns directly, many OECD countries provide direct subsidies to employers (e.g. the United Kingdom), tax credits or social security rebates (e.g. Canada and France) involved in apprentichesips programmes. Strong evaluation of outcomes would allow the "Youth Building the Future" programme to adapt to labour market needs and ensure it includes an adequate training component. Evaluation should also track the performance of interns in the labour market over time, as is done for instance, in the Czech Republic where a large battery of indicators on labour market outcomes is collected (e.g. job formalisation, duration, job quality indicators, indicators of occupation and skill mismatches). As the government is also introducing scholarships for staying in education at the upper secondary and tertiary education levels but of lower monetary value, it is important to verify that students are not leaving education to qualify for an internship, without pursuing their studies later on. Adding a follow-up strategy for the NEETs involved in the Youth Building the Future programme would further contribute to positive labour market outcomes.

The government is devising a system of alerts to check that the internship program is not abused by, for instance, checking whether private firms are reducing the number of formal job positions and hiring subsidised interns instead. In parallel, it is running periodic surveys of trainees to seek their views on the quality of training. Going forward, and in addition the government should strengthen the quality of training by developing, in cooperation with the private sector, strong guidelines for training and skill acquisition, as in some OECD countries (Box 1.2).

Box 1.2. Guidelines for workplace training in dual VET programmes in OECD countries

Countries with strong dual VET programmes combine learning of competencies at school with strong work-based learning. To be effective, work-based learning requires a high degree of engagement and ownership by employers and social partners. Strong dual systems also ensure that the short-term needs of employers do not distort broader education and economic goals.

Some OECD countries with strong VET systems have developed, in partnership with the private sector, strong guidelines to ensure good quality training:

- In Germany, a training directive specifies the professional competences in the occupation that should be acquired during in-company training to guarantee uniform national standards irrespective of current enterprise needs. The training enterprise also draws up an in-company training plan for trainees.
- In Switzerland, ordinances require the establishment of a training plan for each occupational field that defines the curriculum and organisation of in-company

training. Training plans are set up by organisations including social partners and approved by the Federal Office for Professional Education and Technology. Cantons license companies and periodically evaluate provided training against national standards. Cantonal inspectors ensure that the training received is up to standard. If a problem is detected, the cantonal staff intervenes through coaching to assist the company. The companies see that this is to their advantage, in that if they train apprentices better, the apprentices do better work for them. A list of 28 criteria of good training, prepared in co-operation with social partners, guides companies in their work with students.

- In Denmark, trade committees with employee and employer representation approve and inspect enterprises that want to take on trainees on the basis of defined criteria. To be approved, an enterprise must have a certain level of technology, and a variety of tasks to be performed to ensure that the trainee carries out a full range of occupation-related activities (Danish Ministry of Education, 2005[44]).
- In Austria, the apprenticeship offices (Lehrlingsstellen) that are attached to the chambers of commerce and industry (employer organisations), examine if enterprises are able to offer apprenticeship training with regard to corporate and legal conditions and human resource requirements. They examine and record apprenticeship contracts, and are competent in principle for all issues that are in the interests of the apprentice and training providers. The apprenticeship offices are supported in their work by the apprenticeship and youth welfare units of the chambers of labour (employees' organisations).

Source: Kuczera, M. (2010[43]), OECD Reviews of Vocational Education and Training: A Learning for Jobs Review of the Czech Republic 2010, OECD Publishing, Paris.

Improving well-being, economic and environmental performance with better metropolitan governance

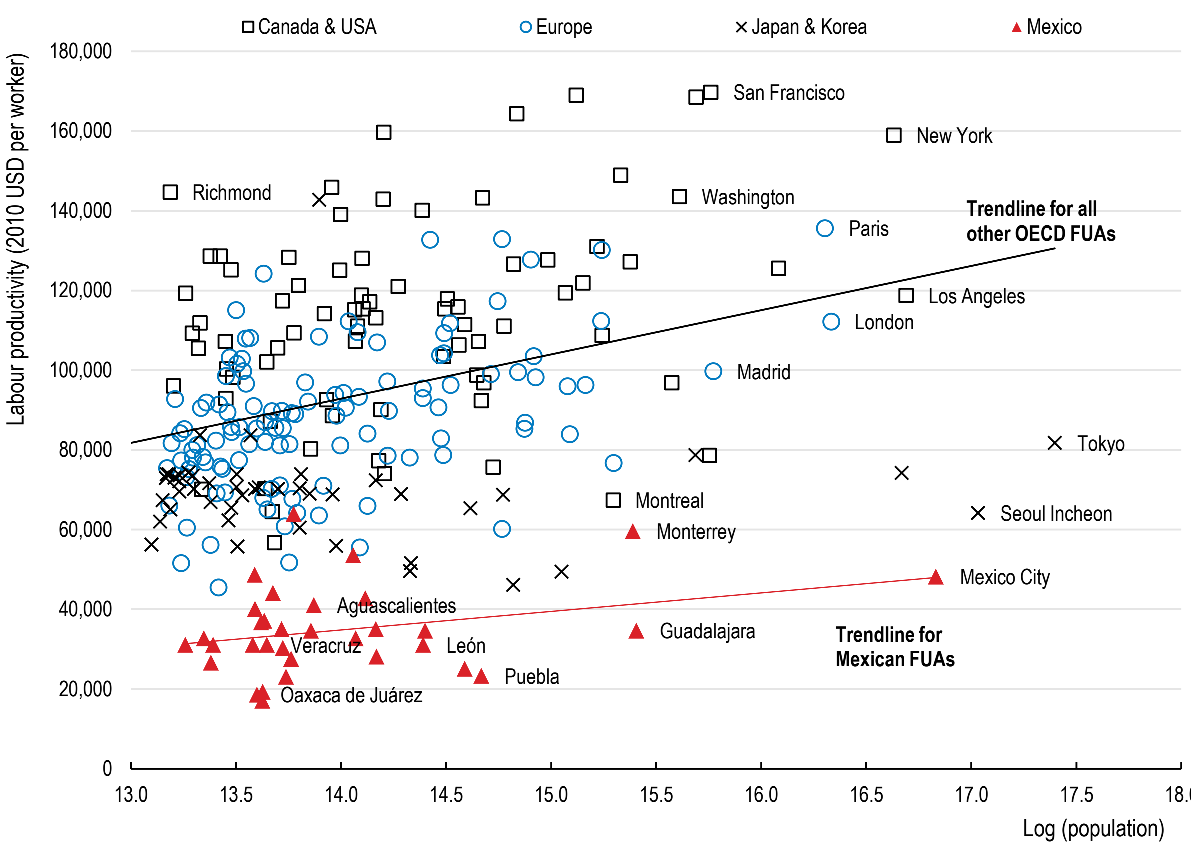
Metropolitan areas can be key drivers of sustainable development (OECD, 2015[45]). Good metropolitan policies are an opportunity to reduce pollution and CO_2 emissions. They make cities healthier, more pleasant places to live in, and thereby also more attractive and competitive. They can also improve access to jobs and reduce the costs of exchanging goods and services. Such policies can also reduce the cost of infrastructure deployment. Good metropolitan governance can also make the most of the boost agglomeration benefits bring to productivity. Agglomeration benefits arise because well-managed metropolitan areas can provide more competition, deeper labour markets, a faster spread of ideas and a more diverse intellectual and entrepreneurial environment. Good metropolitan governance can thus unleash a virtuous cycle of better environmental performance, quality of life and economic performance. This applies especially to metropolitan areas of developing countries, as recently shown for Asian cities, for example (Gouldson et al., 2016[46]).

In Mexico, many cities fail to leverage these benefits (Figure 1.18). Mexico's largest metropolitan area, *Valle de México*, which includes Mexico City, is one of the largest in the OECD, but remains among the 10% with the lowest GDP per capita (OECD, 2015[47]). What's more, this is purely driven by the high share of highly educated workers in the city, "agglomeration benefits" are low or even completely missing (Ahrend, Gamper and Schumann, 2014[48]). Productivity in *Valle de Méxic*o has also barely increased since the early 2000s (Figure 1.19). Mexico City suffers from ozone episodes which break national health protection regulations as well as WHO-recommended limits (International Transport Forum, 2017[49]). The impact of air pollution on productivity is generally large, with a 10% reduction boosting labour productivity by roughly 1% (Dechezleprêtre, Stadler and Nicolas, forthcoming[50]). This can be explained by health impacts and the impact on cognitive performance.

A key factor for the underperformance of Mexican cities is their fragmented governance. Taking the *Valle de México* as example, the OECD definition of the metropolitan area spans across 51 municipalities in Mexico City and the State of Mexico, but many policies are limited to the boundaries of the individual municipality, e.g. land use planning, or by the border between Mexico City and the State of Mexico, e.g. public transport.

Figure 1.18. Agglomeration benefits are limited in Mexico

Labour productivity in OECD metropolitan areas, 2014 or latest available year

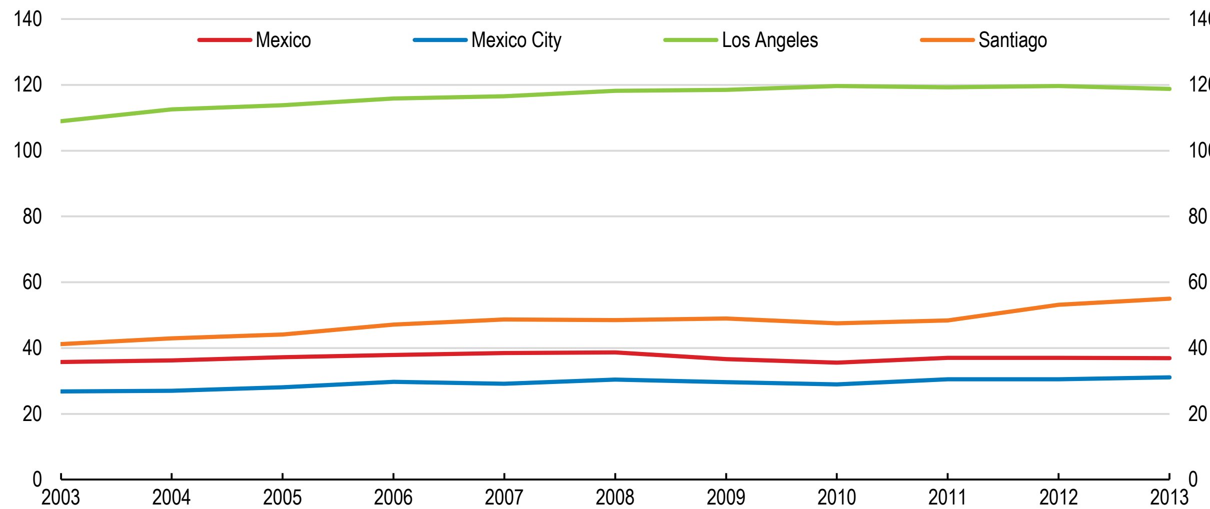


Note: FUA: Functional Urban Area.
Source: OECD Regions and Cities Database.

StatLink https://doi.org/10.1787/888933957173

Figure 1.19. Productivity has grown little in the metropolitan area of Mexico City (*Valle de México*)

GDP per worker, thousands of USD 2010 PPP



Source: OECD Metropolitan Database.

StatLink https://doi.org/10.1787/888933957192

Transport and urban planning are key for the growing population to live in a healthy environment and for economic agglomeration benefits to materialise. Intensive car use and road congestion are key drivers of pollution, reducing productivity. Mexico City's road traffic congestion in the metropolitan zone ranks among the highest in the world. Congestion is estimated to cause an annual loss of 3.1% of GDP in *Valle de México* (OECD, 2015[47]). Reducing congestion would substantially lower prices of goods and services and improve access to jobs, with a substantial positive impact also on long-term employment. Car drivers have been estimated to face only two-thirds of the costs of driving in large cities even in less congested cities of high-income countries (Arnold (2013[51]), for the example of Vancouver, Canada). Air pollution, greenhouse gases, noise, adverse health impacts, and congestion account for the remaining third.

Near-term action to reduce pollution and congestion includes improving the mandatory vehicle inspection programme, adopting state-of-the-art emissions standards and extending speed limits (International Transport Forum, 2017[49]). The local authorities could improve incentives to use low-emission vehicles by aligning driving restrictions for vehicles more closely with their emission performance. Raising parking fees in areas well-served by public transport would reduce congestion, favour the use of mass transit, and take better account of the opportunity cost of urban public space. Taxing car ownership depending on their emission performance could also help curb purchases of high-emissions cars. Ideally, this measure would be targeted to highly-polluted metropolitan areas. All of these measures would raise the cost of operating or owning a car. Low-income households typically do not own cars, so these measures would be consistent with inclusive policy-making. Moreover, evidence from the United States suggests that, within metropolitan areas, low-income households are the most exposed to air pollution and suffer the worst health consequences. They would therefore gain the most from reduced pollution (Hsiang, Oliva and Walker, 2017[52]).

In the longer term, strategic urban planning, integrating the planning of housing, transport and commercial development (OECD, 2015[47]), is necessary to ensure the metropolitan area provides access to jobs and services to its citizens. Effective metropolitan governance is key for achieving these objectives. Across the OECD, good metropolitan governance has contributed to lower air pollution, lower CO_2 emissions, higher productivity, durably higher wages and better quality of life (Ahrend, Gamper and Schumann, 2014[48]; OECD, 2015[45]). Integrated planning of housing, commercial development and transport also helps to improve access to jobs and key social services, such as health and education, especially for low-income households, helping to overcome poverty traps (OECD, 2019[53]). It therefore offers opportunities to reduce CO_2 emissions and air pollution while improving well-being and performance along several sustainable development indicators.

Metropolitan areas and their governance need to be defined to match the daily realities of its residents and powers assigned at the right scale. Some countries have used municipal mergers to ensure that administration covers the right scale, other use metropolitan governance bodies. Governance needs to ensure co-ordination across municipalities within the metropolitan area as well as across policy areas, notably transport and land use. This should include creating a metropolitan transport authority in charge of the whole metro area (International Transport Forum, 2017[49]). Transport authorities that plan and regulate mobility across the whole of a metropolitan area and have authority over different transport modes tend to be more successful. This is the case of Curitiba, London, Paris and Singapore. Transport authorities can strengthen combined use of different transport modes, which tends to encourage mass transit use. For example, investment to improve safe walking and cycling is often cheap and may not only reduce mortality but also encourage the use of mass transit.

Mexican metropolitan zones are not managed as an integrated economic urban area, but rather at the municipal level in an uncoordinated fashion (OECD, 2015[54]). In *Valle de México*, for example, the area in which its businesses and residents live and work and the administrative boundaries of jurisdictions do not match (OECD, 2015[47]). Often, these municipalities are heterogeneous in terms of technical and financial capacities, priorities and regulatory instruments which makes coordination more difficult. For example, legislation for Mexico City prescribes priorities for allocating investment and road space in favour of pedestrians, cyclists and public transport, then freight delivery and lastly private vehicles (International Transport Forum, 2017[49]). Indeed, prioritising soft and public transport modes in transport investment can reduce long-term investment costs, especially in the light of long-term decarbonisation needs (OECD, 2017[55]). However, legislation in other municipalities of the metropolitan area does not establish these priorities.

There is generally no legal provision to allow municipalities to create a metropolitan governance structure, so collaboration must be achieved through the federal government. (OECD, 2015[47]). While municipalities have powers to take land-use decisions, for example to decide on housing development, they are not involved in large urban transport projects (such as inter-urban trains, metros and rapid bus transit systems, for instance). These involve the federal and state governments. The problem is exacerbated by separate legal frameworks for housing and urban development.

The fragmented local governance generates fragmented settlement patterns in Mexico's metropolitan areas (OECD, 2018[56]). The resulting urban sprawl lengthens distances to jobs and services and makes it harder and more expensive to meet transport demand with mass transit. In addition, doubling the density of urban development has been shown to reduce energy demand by around 25%. Cities which sprawl less emit substantially less CO_2 (OECD, 2017[55]).

To foster inter-municipal co-operation, Mexico, like many other OECD countries, could adopt arrangements that allow local jurisdictions to work together for certain common services or investments (OECD, 2015[54]). A strategy for the creation of metropolitan structures would help ensure that public service delivery and urban planning occur at the metropolitan level. State and federal transport authorities should involve municipal land-use planning authorities (OECD, 2015[54]). Experience across OECD countries also shows that co-ordination seems to occur when legal mechanisms are implemented to force policy sectors to address the interests of another sector at the metropolitan level (OECD, 2015[54]).

Metropolitan governance institutions would be well placed to adopt policies reducing congestion, pollution and urban sprawl. This could include integrated mass transit systems, deploying more urban space for walking and cycling, and developing time- and location-contingent road use charging systems. Policies to integrate land use with transport could include making building permits contingent on developers contributing to providing access to public transport. Developing accessibility indicators can improve the integrated planning of transport and housing. For example, location accessibility indicators measure the average time or monetary cost that is needed to access key locations, such as job locations and education and health services. Transport for London, for instance, has developed a number of accessibility-based indicators which have helped to double public transport's modal share between 1995 and 2012 (OECD, 2019[53]).

Recommendations to boost sustainable development and inclusive growth

MAIN CHALLENGES	KEY RECOMMENDATIONS
Reducing informality	
Informality is high, leading to severe resource misallocation, low productivity and access to social services.	**Lower social security contributions for low wage earners. Step up enforcement.** **Implement a coordinated approach to reduce informality, comprising lower administrative burdens to doing business, including tax compliance costs, and reduced dismissal costs while stepping up social protection.** **Lead by example and progressively reduce the number of informal workers in the public sector.** Ensure the implementation of the General Law of Regulatory Improvement at the subnational level to reduce compliance costs. **Link the tax administration (SAT) and the social security databases to improve tax surveillance and compliance.** Set minimum protection standards for all type of labour relationships. Improve the efficiency of the judicial system to accelerate the implementation of labour resolution procedures.
Increasing female labour market participation	
Female labour market participation is low.	**Expand access to good quality, affordable childcare. Increase the length of the pre-school day for three- to five-year olds.** **Reduce high female drop-out rates in education.**
Improving access to and the quality of education	
Education outcomes are low contributing to high and persistent inequalities and holding back productivity growth.	**Raise the quality and coverage of early childhood education and care programmes and delink them from parents' labour market status.**
Resources to education are limited and underprivileged schools received lower resources.	Ensure that funding resources are distributed equitably among schools. Provide additional support to students from lower socio-economic backgrounds.
The governance of the education system is complex, with overlapping functions and un-coordination across levels of government.	Clarify fiscal federal relationships in the delivery of education services, simplify funding mechanisms and increase transparency in the allocation of resources at the state level. Continue efforts to step up monitoring and evaluation at the subnational level.
Drop-out rates are high.	**Continue to expand VET coverage, assess the results of the internship programmes and encourage female participation.**
Getting more out of agglomeration	
High pollution in metropolitan areas raises sickness and mortality, especially among the poor, and reduces productivity and is strongly related to car use.	**Invest in integrated public transport systems focusing on improving access in low-income areas.** **Allow and encourage municipalities to create joint metropolitan governance arrangements on their own initiative, in particular metropolitan transport authorities.** Take near-term action to reduce pollution and congestion, by improving the mandatory vehicle inspection programme, adopting state-of-the-art emissions standards, and extending lower speed limits. Create a metropolitan transport authority responsible for all transport policy in every metropolitan area. Foster integrated planning of housing, transport and urban planning by requiring policy makers in each sector to take into account the views of policy makers in other sectors, integrating legal frameworks and involving local governments in the planning of large urban mass transit infrastructure. Develop accessibility indicators for all metropolitan areas and use them to integrate housing and transport planning.

References

Ahrend, R., C. Gamper and A. Schumann (2014), "The OECD metropolitan governance survey: A quantitative description of governance structures in large urban agglomerations", *OECD Regional Development Working Papers*, No. 2014/4, OECD Publishing, Paris, https://dx.doi.org/10.1787/5jz43zldh08p-en. [48]

Aranda, L. and S. Araújo (2019), "Recent trends in informality in Mexico", in *OECD Economic Survey of Mexico: Key Research Findings*, OECD Publishing, Paris, (forthcoming). [8]

Arnold, J. (2013), *Congested and nowhere to go: Congestion, road infrastructure, and road pricing in metro Vancouver*, Business Council of British Columbia, http://www.fonvca.org/agendas/feb2014/RoadPricingPaper_FINAL.pdf. [51]

Busso, M., M. Fazio and S. Levy (2012), "(In)formal and (un)productive: The productivity costs of excessive informality in Mexico", *IDB Working Paper Series*, Inter-American Development Bank, https://publications.iadb.org/bitstream/handle/11319/4047/%28In%29Formal%20and%20%28Un%29Productive%3A%20The%20Productivity%20Costs%20of%20Excessive%20Informality%20in%20Mexico.pdf?sequence=1. [10]

Busso, M., L. Madrigal and C. Pagés (2013), "Productivity and resource misallocation in Latin America", *The B.E. Journal of Macroeconomics*, Vol. 13/1, pp. 1-30. [16]

CDI (2015), *Indicadores socioeconómicos de los pueblos indígenas de México*, Comisión Nacional para el Desarrollo de los Pueblos Indígenas, https://www.gob.mx/cdi/articulos/indicadores-socioeconomicos-de-los-pueblos-indigenas-demexico-2015-116128?idiom=es. [7]

Cheng, G., S. English and M. Filardo (2011), *Facilities: Fairness and effects: Evidence and recommendations concerning the impact of school facilities on civil rights and student achievement*, 21st Century School Fund, http://www.21csf.org/csf-home/publications/ImpactSchoolFacilitiesCivilRightsAug2011.pdf. [36]

COFEMER (2017), *Informe anual de desempeño - COFEMER 2016-2017*, COFEMER, Mexico City, http://www.cofemer.gob.mx/docs-bin/dg/Informe_anual_2017.pdf. [22]

CONEVAL (2017), *Medición de la pobreza*, Consejo Nacional de Evaluación de la Política de Dessarrollo Social, https://www.coneval.org.mx/Medicion/Paginas/PobrezaInicio.aspx. [5]

Cortés Macías, O. (2015), "Evaluación del gasto educativo en México", *Reporte de Investigación*, No. 9, Centro de Estudios Sociales y de Opinión Pública, http://www5.diputados.gob.mx/index.php/esl/content/download/31549/158531/file/Reporte-9_Evaluacion%20Gasto%20Educativo.pdf. [38]

Cunha, F. et al. (2006), "Interpreting the evidence on life cycle skill formation", in Hanushek, E. and F. Welch (eds.), *Handbook of the Economics of Education Volume 1*, Elsevier B.V., Amsterdam, http://dx.doi.org/10.1016/S1574-0692(06)01012-9. [29]

Currie, J. and D. Almond (2011), "Human capital development before age five", in *Handbook of Labor Economics*, Elsevier, http://dx.doi.org/10.1016/S0169-7218(11)02413-0. [30]

Danish Ministry of Education (2005), *The Danish approach to quality in vocational education and training*, Danish Ministry of Education, http://static.uvm.dk/publikationer/2008/vetquality2/hel.html. [44]

Dechezleprêtre, A., B. Stadler and R. Nicolas (forthcoming), *The impact of air pollution on productivity. Evidence from Europe*, Working Party No. 1 on Macroeconomic and Structural Policy Analysis. [50]

Dougherty, S. (2014), "Legal reform, contract enforcement and firm size in Mexico", *Review of International Economics*, Vol. 22/4, pp. 825-844, http://dx.doi.org/10.1111/roie.12136. [19]

Dougherty, S. and O. Escobar (2019), "What policies to combat labour informality? Evidence from Mexico", *Applied Economics*, pp. 1-15, http://dx.doi.org/10.1080/00036846.2019.1591597. [14]

Gann, A. (2016), *The impact of judicial quality on firm size in Mexico*, Paris School of Economics. [20]

Gouldson, A. et al. (2016), "Cities and climate change mitigation: Economic opportunities and governance challenges in Asia", *Cities*, Vol. 54, pp. 11-19, http://dx.doi.org/10.1016/J.CITIES.2015.10.010. [46]

Heckman, J., R. Pinto and P. Savelyev (2013), "Understanding the mechanisms through which an influential early childhood program boosted adult outcomes", *American Economic Review*, Vol. 103/6, pp. 2052-2086, http://dx.doi.org/10.1257/aer.103.6.2052. [31]

Hoeller, P. et al. (2012), "Less income inequality and more growth – Are they compatible? Part 1. Mapping income inequality across the OECD", *OECD Economics Department Working Papers*, No. 924, OECD Publishing, Paris, https://dx.doi.org/10.1787/5k9h297wxbnr-en. [11]

Hsiang, S., P. Oliva and R. Walker (2017), "The distribution of environmental damages", *NBER Working Paper*, No. 23882, National Bureau of Economic Research, http://dx.doi.org/10.3386/w23882. [52]

Hsieh, C. (2015), "Policies for productivity growth", *Global Dialogue on the Future of Productivity Growth Background Paper*, OECD, https://www.oecd.org/eco/growth/Policies%20for%20productivity%20growth_Chang%20Tai%20Hsieh.pdf. [12]

IMF (2017), *IMF Fiscal Monitor April 2017: Achieving more with less*, International Monetary Fund, http://www.imf.org/en/Publications/FM/Issues/2017/04/06/fiscal-monitor-april-2017. [17]

INEE (2018), *La educación obligatoria en México: Informe 2018*, Instituto Nacional para la Evaluación de la Educación, https://www.inee.edu.mx/portalweb/informe2018/index.html. [27]

INEE (2016), *La educación obligatoria en México: Informe 2016*, Instituto Nacional para la Evaluación de la Educación, https://publicaciones.inee.edu.mx/buscadorPub/P1/I/241/P1I241.pdf. [33]

INEGI (2017), *Anuario estadístico y geográfico de los Estados Unidos Mexicanos 2017*, Instituto Nacional de Estadística y Geografía, http://internet.contenidos.inegi.org.mx/contenidos/Productos/prod_serv/contenidos/espanol/bvinegi/productos/nueva_estruc/AEGEUM_2017/702825097912.pdf. [35]

International Transport Forum (2017), *Strategies for Mitigating Air Pollution in Mexico City, International Best Practice*, International Transport Forum, https://www.itf-oecd.org/strategies-mitigating-air-pollution-mexico-city. [49]

Kuczera, M. (2010), *OECD Reviews of Vocational Education and Training: A Learning for Jobs Review of the Czech Republic 2010*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264113756-en. [43]

Levy, S. (2018), *Under-Rewarded Efforts: The Elusive Quest for Prosperity in Mexico*, Inter-American Development Bank, http://dx.doi.org/10.18235/0001189. [21]

López-Calva, L. and N. Lustig (2010), *Declining Inequality in Latin America: A Decade of Progress?*, Brookings Institution Press, Washington DC, https://www.jstor.org/stable/10.7864/j.ctt6wpdkq. [9]

Luschei, T. and A. Chudgar (2015), "Evolution of policies on teacher deployment to disadvantaged areas", *Education for All Global Monitoring Report 2015*, No. ED/EFA/MRT/2015/PI/07, United Nations Educational, Scientific and Cultural Organization, http://unesdoc.unesco.org/images/0023/002324/232401E.pdf. [32]

Misch, F. and C. Saborowski (2018), "Resource misallocation and productivity: Evidence from Mexico", *IMF Working Paper*, No. 18/112, International Monetary Fund, Washington DC, http://www.imf.org/en/Publications/WP/Issues/2018/05/15/Resource-Misallocation-and-Productivity-Evidence-from-Mexico-45837. [18]

Nedelkoska, L. and G. Quintini (2018), "Automation, skills use and training", *OECD Social, Employment and Migration Working Papers*, No. 202, OECD Publishing, Paris, https://dx.doi.org/10.1787/2e2f4eea-en. [25]

OECD (2019), *Boosting Productivity and Inclusive Growth in Latin America*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264269415-en. [15]

OECD (2019), *Climate Change Mitigation through a Well-being Lens*, OECD Publishing (forthcoming), Paris. [53]

OECD (2019), *Taxing Wages 2019*, OECD Publishing, Paris, https://dx.doi.org/10.1787/tax_wages-2019-en. [23]

OECD (2019), *The Future of Mexican Higher Education: Promoting Quality and Equity*, Reviews of National Policies for Education, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264309371-en. [4]

OECD (2018), *Achieving inclusive growth in the face of digital transformation and the future of work: OECD report to the G-20 finance ministers*, OECD, https://www.oecd.org/g20/OECD_Achieving%20inclusive%20growth%20in%20the%20face%20of%20FoW.pdf. [26]

OECD (2018), *Getting it Right: Strategic Priorities for Mexico*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264292062-en. [6]

OECD (2018), *Rethinking Urban Sprawl: Moving Towards Sustainable Cities*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264189881-en. [56]

OECD (2018), *Strong foundations for quality and equity in Mexican schools*, OECD, Paris, https://spec.sep.gob.mx/web/wp-content/uploads/2018/11/OECD-Mexico-Schools-Report-FINAL.pdf. [28]

OECD (2018), *The Productivity-Inclusiveness Nexus*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264292932-en. [13]

OECD (2017), *Building an Inclusive Mexico: Policies and Good Governance for Gender Equality*, OECD Publishing, Paris, http://dx.doi.org/9789264265493-en. [1]

OECD (2017), *Investing in Climate, Investing in Growth*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264273528-en. [55]

OECD (2017), *OECD Economic Surveys: Mexico 2017*, OECD Publishing, Paris, https://dx.doi.org/10.1787/eco_surveys-mex-2017-en. [2]

OECD (2017), *Starting Strong 2017: Key OECD Indicators on Early Childhood Education and Care*, Starting Strong, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264276116-en. [41]

OECD (2016), *Background brief on fathers' leave and its use*, OECD, Paris, https://www.oecd.org/els/family/Backgrounder-fathers-use-of-leave.pdf. [3]

OECD (2016), *PISA 2015 Results (Volume II): Policies and Practices for Successful Schools*, PISA, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264267510-en. [34]

OECD (2015), *OECD Territorial Reviews: Valle de México, Mexico*, OECD Territorial Reviews, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264245174-en. [47]

OECD (2015), *OECD Urban Policy Reviews: Mexico 2015: Transforming Urban Policy and Housing Finance*, OECD Urban Policy Reviews, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264227293-en. [54]

OECD (2015), *The Metropolitan Century: Understanding Urbanisation and its Consequences*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264228733-en. [45]

OECD (2014), *Effectiveness, efficiency and sufficiency: An OECD framework for a physical learning environments module: Draft*, OECD, http://www.oecd.org/education/LEEP-Conceptual-Framework-2014.pdf. [37]

OECD (2013), *PISA 2012 Results: Excellence through Equity (Volume II): Giving Every Student the Chance to Succeed*, PISA, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264201132-en. [40]

Santiago, P. et al. (2017), *OECD Reviews of School Resources: Chile 2017*, OECD Reviews of School Resources, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264285637-en. [39]

SEP (2013), *Modelo de atención con enfoque integral para la educación inicial*, Secretaría de Educación Pública, Mexico City, http://archivo.siteal.iipe.unesco.org/sites/default/files/mex_-educacion_inicial.pdf. [42]

SHCP (2018), *Reforma de la hacienda pública*, Secretaría de Hacienda y Crédito Público, https://www.gob.mx/cms/uploads/attachment/file/66458/7_Hacendaria.pdf. [24]

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

The OECD is a unique forum where governments work together to address the economic, social and environmental challenges of globalisation. The OECD is also at the forefront of efforts to understand and to help governments respond to new developments and concerns, such as corporate governance, the information economy and the challenges of an ageing population. The Organisation provides a setting where governments can compare policy experiences, seek answers to common problems, identify good practice and work to co-ordinate domestic and international policies.

The OECD member countries are: Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Latvia, Lithuania, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The European Union takes part in the work of the OECD.

OECD Publishing disseminates widely the results of the Organisation’s statistics gathering and research on economic, social and environmental issues, as well as the conventions, guidelines and standards agreed by its members.

OECD PUBLISHING, 2, rue André-Pascal, 75775 PARIS CEDEX 16
ISBN 978-92-64-37818-6 – 2019

OECD Economic Surveys

MEXICO

Mexico's robust macroeconomic policy framework has supported moderate growth despite several headwinds in recent years. However, low productivity growth has hindered Mexico's convergence to higher-income OECD countries and inequalities remain high. These factors call for a renewed strategy to boost productivity and inclusiveness. Rising crime and insecurity are negatively affecting economic activity and citizens' wellbeing, particularly the underprivileged and women. Strengthening institutional quality is a priority. Improving the weak rule of law will also facilitate the effective implementation of policy initiatives in other areas. In spite of recent achievements, tax revenues remain low and fiscal policy has little redistributive impact. In the near term, improving the efficiency of tax collection and spending will allow the public debt-to-GDP ratio to stabilise and provide some room for greater social and infrastructure spending. In the medium term, raising tax revenues and modifying the tax mix will allow reductions in public debt, create further fiscal space and increase progressivity. Reducing high informality will require coordinated actions in enforcement, taxation, business and labour regulations and the social safety net to better align incentives to formalise and drive resources towards more productive (formal) firms. Increasing educational outcomes for all will increase equality of opportunities and build the foundations for higher productivity. Raising access to quality early childhood education and care will also encourage greater female labour market participation. Improving urban planning and transportation would raise the productivity potential of cities and improve environmental outcomes.

SPECIAL FEATURE: STRENGTHENING INCLUSIVE GROWTH

Consult this publication on line at ***https://doi.org/10.1787/a536d00e-en***.

This work is published on the OECD iLibrary, which gathers all OECD books, periodicals and statistical databases.
Visit ***www.oecd-ilibrary.org*** for more information.

Volume 2019/11
May 2019

ISSN 0376-6438
SUBSCRIPTION
(18 ISSUES)

ISBN 978-92-64-37818-6

OECD*publishing*
www.oecd.org/publishing

9 789264 378186